LA-UR-23-20533

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Title:	Semi-Annual Monitoring Report for Los Alamos National Laboratory, AI No. 856, Title V Operating Permit P100-R2M4 for July 1 - December 31, 2022
Author(s):	Carretti, Vincent Anthony
Intended for:	Environmental Regulatory Document
Issued:	2023-02-08 (rev.1)

Los Alamos
NATIONAL LABORATORY







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Los Alamos NATIONAL LABORATORY

Environmental Protection & Compliance Division
Los Alamos National Laboratory
P.O. Box 1663, M969
Los Alamos, NM 87545

National Nuclear Security Administration
Los Alamos Field Office
3747 West Jemez Road, A316
Los Alamos, NM 87544
505-665-7314/Fax 505-667-5948

Symbol: EPC-DO: 23-010
LA-UR: 23-20533
Locates Action No.: N/A
Date: Feb 07 2023

Mr. Shea Schleman
Compliance Reporting Manager
New Mexico Environment Department, Air Quality Bureau
525 Camino de los Marquez, Suite 1
Santa Fe, NM 87505-1816

Subject: Semi-Annual Monitoring Report for Los Alamos National Laboratory, AI No. 856, Title V Operating Permit P100-R2M4 for July 1 – December 31, 2022

Dear Mr. Schleman:

Enclosed is Los Alamos National Laboratory's (LANL) Semi-Annual Monitoring Report for the second half of 2022 for Operating Permit P100-R2M4, effective July 18, 2019. This Semi-Annual Monitoring Report covers the July 1 – December 31, 2022 (2022H2) reporting period.

This submission is required by permit condition A109.A. of the Title V Operating Permit P100-R2M4, and is submitted within 45 days following December 31, 2022, the end of the six-month reporting period. LANL's Air Quality Compliance team obtained approval from Ms. Carina Munoz-Dyer, Reports Group Staff Manager at the New Mexico Environment Department, Air Quality Bureau, to submit attachments to this report in E-files only without paper copies.

This Semi-Annual Monitoring Report includes:

1. Printed copies of:
    - Cover Letter (Signed original)
    - Reporting Submittal Form for P100-R2M4 (Signed original)
    - Title V Report Certification Form for P100-R2M4 (Signed original)
    - Title V Semi-Annual Monitoring Report for July 1– December 31, 2022 (2022H2)
        - Part 1 – Monitoring Activity Reporting Requirements
        - Part 2 – Deviation Summary Report
2. E-files of:

- Cover Letter
- Reporting Submittal Form for P100-R2M4
- Title V Report Certification Form for P100-R2M4
- Title V Semi-Annual Monitoring Report for July 1– December 31, 2022 (2022H2)
  - Part 1 – Monitoring Activity Reporting Requirements
  - Part 2 – Deviation Summary Report
- Monitoring Report Attachments A.607.A through A.1507.B

There were no deviations from permit conditions during this reporting period.

If you have any questions or comments regarding this submittal or would like to discuss the submittal in greater detail, please contact Adrienne Nash at (505) 665-5026 or Marjorie Stockton at (505) 695-4508.

Sincerely,

JENNIFER PAYNE (Affiliate)
Digitally signed by JENNIFER PAYNE (Affiliate)
Date: 2023.01.25 17:17:52 -07'00'

Jennifer E. Payne
Division Leader
Environmental Protection and Compliance
Triad National Security, LLC
Los Alamos National Laboratory

Sincerely,

THEODORE WYKA
Digitally signed by THEODORE WYKA
Date: 2023.02.06 16:43:46 -07'00'

Theodore A. Wyka
Manager, Los Alamos Field Office
National Nuclear Security Administration
U.S. Department of Energy
Los Alamos Field Office

Attachment(s): Attachment 1 Communication with NMED Regarding Electronic Attachments
Attachment 2 Semi-Annual Monitoring Report for Los Alamos National Laboratory, AI No. 856, Title V Permit P100-R2M4 for July 1 – December 31, 2022

Copy: Theodore A. Wyka, NA-LA, theodore.wyka@nnsa.doe.gov
Erika Baeza-Wisdom, NA-LA, erika.baeza-wisdom@nnsa.doe.gov
Brian Rhodes, NA-LA, brian.rhodes@nnsa.doe.gov
Adrienne L. Nash, NA-LA, adrienne.nash@nnsa.doe.gov
Silas DeRoma, NA-LA, silas.deroma@nnsa.doe.gov
Stephen Jochem, NA-LA, stephen.jochem@nnsa.doe.gov
Michael Mikolanis, EM-LA, michael.mikolanis@em.doe.gov
M. Lee Bishop, EM-LA, lee.bishop@em.doe.gov
David Nickless, EM-LA, david.nickless@em.doe.gov
Hai Shen, EM-LA, hai.shen@em.doe.gov
John H. Evans, EM-LA, john.h.evans@em.doe.gov
Kelly J. Beierschmitt, Triad, DDOPS, beierschmitt@lanl.gov
James P. Johnson, Triad, DDOPS, jpj@lanl.gov
Steven A. Coleman, Triad, ALDESHQ, scoleman@lanl.gov
James D. Coy, Triad, ALDESHQ, jcoy@lanl.gov
Jeannette T. Hyatt, Triad, EWP, jhyatt@lanl.gov
Maxine M. McReynolds, Triad, GC-ESH, mcreynolds@lanl.gov
Christopher C. Stoneback, Triad, GC-ESH, stoneback@lanl.gov

Jennifer E. Payne, Triad, EPC-DO, jpayne@lanl.gov
Kristen A. Honig, Triad, EPC-DO, khonig@lanl.gov
Deepika Saikrishnan, Triad, EPC-DO, deepika@lanl.gov
Steven L. Story, Triad, EPC-CP, story@lanl.gov
Marjorie B. Stockton, Triad, EPC-CP, mstockton@lanl.gov
Vincent A. Carretti, Triad, EPC-CP, vcarretti@lanl.gov
Taylor A. Valdez, Triad, PCIP-DO, tvaldez@lanl.gov
Erik Lochell, N3B, erik.lochell@em-la.doe.gov
Kim LeBak, N3B, kim.lebak@em-la.doe.gov
Robert MacFarlane, N3B, robert.macfarlane@em-la.doe.gov
Christian Maupin, N3B, christian.maupin@em-la.doe.gov
Dana Lindsay, N3B, dana.lindsay@em-la.doe.gov
Triad, EPC-CP Title V Permit File
Triad, EPC-CP Title V Monitoring Report File
Triad, EPC-CP Correspondence File
lasomailbox@nnsa.doe.gov
aldeshqcorrespondence@lanl.gov
epccorrespondence@lanl.gov
eshq-dcrm@lanl.gov
gc-esh@lanl.gov
interface@lanl.gov

New Mexico Environment Department
Air Quality Bureau
Compliance and Enforcement Section
525 Camino de los Marquez, Suite 1
Santa Fe, NM 87505
Phone (505) 476-4300

Version 07.20.18

NMED USE ONLY	
TEMPO	

REPORTING SUBMITTAL FORM

NMED USE ONLY	
Staff	
Admin	

PLEASE NOTE: ® - Indicates required field

SECTION I - GENERAL COMPANY AND FACILITY INFORMATION

A. ® Company Name: Department of Energy, National Nuclear Security Administration			**D. ® Facility Name:** Los Alamos National Laboratory		
B.1 ® Company Address: 3747 West Jemez Road			**E.1 ® Facility Address:** P.O. Box 1663 MS J978		
B.2 ® City: Los Alamos	**B.3 ® State:** NM	**B.4 ® Zip:** 8 7 5 4 4	**E.2 ® City:** Los Alamos	**E.3 ® State:** NM	**E.4 ® Zip:** 87545
C.1 ® Company Environmental Contact: Adrienne L. Nash	**C.2 ® Title:** Program Manager		**F.1 ® Facility Contact:** Marjorie B. Stockton	**F.2 ® Title:** Meteorology & Air Quality Team Leader	
C.3 ® Phone Number: (505) 665-5026	**C.4 ® Fax Number:** (505) 667-9998		**F.3 ® Phone Number:** (505) 695-4508	**F.4 ® Fax Number:** NA	
C.5 ® Email Address: adrienne.nash@nnsa.doe.gov			**F.5 ® Email Address:** mstockton@lanl.gov		
G. Responsible Official: (Title V only): Theodore A. Wyka	**H. Title:** Manager		**I. Phone Number:** (505) 667-5105	**J. Fax Number:** NA	
K. ® AI Number: 856	**L. Title V Permit Number:** P100-R2M4	**M. Title V Permit Issue Date:** July 18, 2019	**N. NSR Permit Number:** 2195	**O. NSR Permit Issue Date:** Various	
P. Reporting Period: From: July 1, 2022 To: December 31, 2022					

Do NOT submit NSPS OOOO or OOOOa well completion or flowback notifications to the Air Quality Bureau. See https://www.env.nm.gov/air-quality/notices-and-faqs-for-compliance-and-enforcement/ for explanation.

SECTION II – TYPE OF SUBMITTAL (check one that applies)

A. ☐	**Title V Annual Compliance Certification**	**Permit Condition(s):**	**Description:**	
B. ☒	**Title V Semi-Annual Monitoring Report**	**Permit Condition(s):** A109.A	**Description:** LANL Semi-Annual Monitoring Report for July 1 - December 31, 2022	
C. ☐	**NSPS Requirement (40CFR60)**	**Regulation:**	**Section(s):**	**Description:**
D. ☐	**MACT Requirement (40CFR63)**	**Regulation:**	**Section(s):**	**Description:**
E. ☐	**NMAC Requirement (20.2.xx) or NESHAP Requirement (40CFR61)**	**Regulation:**	**Section(s):**	**Description:**
F. ☐	**Permit or Notice of Intent (NOI) Requirement**	**Permit No. ☐: or NOI No. ☐:**	**Condition(s):**	**Description:**
G. ☐	**Requirement of an Enforcement Action**	**NOV No. ☐: or SFO No. ☐: or CD No. ☐: or Other ☐:**	**Section(s):**	**Description:**

SECTION III - CERTIFICATION

After reasonable inquiry, I Theodore A. Wyka **certify that the information in this submittal is true, accurate and complete.**
(Name of Certifier)

® Signature of Certifier:	**® Title:**	**® Date**	**® Responsible Official for Title V?**
THEODORE WYKA Digitally signed by THEODORE WYKA Date: 2023.02.06 16:44:14 -07'00'	Manager		☒ Yes ☐ No

Reviewed By: _____ Date Reviewed: _____

Title V Report Certification Form

I. Report Type

☐ **Annual Compliance Certification**

☒ **Semi-Annual Monitoring Report**

☐ **Other Specify:**

II. Identifying Information

Facility Name: Los Alamos National Laboratory		
Facility Address: P.O. Box 1663, MS J978	State: NM	Zip: 87545
Responsible Official (RO): Theodore A. Wyka	Phone: (505) 667-5105	Fax: NA
RO Title: Manager	RO e-mail: theodore.wyka@nnsa.doe.gov	
Permit No.: P100-R2M4	Date Permit Issued: 7/18/2019	
Report Due Date (as required by the permit): 2/14/2023	Permit AI number: 856	
Time period covered by this Report: From: 7/1/2022	To: 12/31/2022	

III. Certification of Truth, Accuracy, and Completeness

I am the Responsible Official indicated above. I, (Theodore A. Wyka) certify that I meet the requirements of 20.2.70.7.AE NMAC and that I have been identified to the Department as such through a permitting action or notification. I certify that, based on information and belief formed after reasonable inquiry, the statements and information contained in the attached Title V report are true, accurate, and complete.

Signature THEODORE WYKA Digitally signed by THEODORE WYKA Date: 2023.02.06 16:44:30 -07'00' Date: _____.

ATTACHMENT 1
Communication with NMED Regarding Electronic Attachments

EPC-DO: 23-010

LA-UR-23-20533

Date: Feb 07 2023

From: Munoz, Carina, NMENV
To: Ramanathan, Brinda
Subject: RE: Template for Los Alamos National Laboratory"s semi-annual monitoring report
Date: Monday, July 3, 2017 9:22:48 AM

That will be okay. Just provide a CD with the attachments. And include this email with your submittal.

Thanks
Carina

Carina G. Munoz-Dyer
Reports Group Staff Manager
Compliance and Enforcement Section
NMED Air Quality Bureau
Ph. 505-476-4368

The Four-Way Test
Of the Things We Think, Say or Do:

1. Is it the **TRUTH**?
2. Is it **FAIR** to all concerned?
3. Will it build **GOODWILL** and **BETTER FRIENDSHIPS**?
4. WIll it be **BENEFICIAL** to all concerned?

From: Ramanathan, Brinda [mailto:brindar@lanl.gov]
Sent: Monday, July 03, 2017 9:20 AM
To: Munoz, Carina, NMENV <Carina.Munoz@state.nm.us>
Subject: RE: Template for Los Alamos National Laboratory's semi-annual monitoring report

Hi Carina,

Good morning.

Thank you for the forms.

I do have one question. LANL's monitoring report attachments are 1500-1700 pages long. The previous compliance manager, Renae Held allowed us to submit electronic files only for the attachments. Is this acceptable to you? We will submit paper copies for the submittal form, certification form and the report. We would like to avoid printing so many pages.

Let me know.

Thank you again for your help with this.

Brinda

From: Munoz, Carina, NMENV [mailto:Carina.Munoz@state.nm.us]
Sent: Monday, July 3, 2017 9:09 AM
To: Ramanathan, Brinda <brindar@lanl.gov>; aqb, Submittals, NMENV <Submittals.aqb@state.nm.us>
Subject: RE: Template for Los Alamos National Laboratory's semi-annual monitoring report
Importance: High

Brinda,

Here are the template for AI 856 – LANL Semi-Annual and ACC reports. The forms are a combined version that include TV Permit P100-R2 and R2M1. Please read the instructions on the first page of each form. Let me know if you have any questions.

Thanks
Carina

Carina G. Munoz-Dyer
Reports Group Staff Manager
Compliance and Enforcement Section
NMED Air Quality Bureau
Ph. 505-476-4368

The Four-Way Test
Of the Things We Think, Say or Do:

1. Is it the **TRUTH**?
2. Is it **FAIR** to all concerned?
3. Will it build **GOODWILL** and **BETTER FRIENDSHIPS**?
4. WIll it be **BENEFICIAL** to all concerned?

From: Ramanathan, Brinda [mailto:brindar@lanl.gov]
Sent: Wednesday, June 28, 2017 8:51 AM
To: Munoz, Carina, NMENV <Carina.Munoz@state.nm.us>
Subject: Template for Los Alamos National Laboratory's semi-annual monitoring report

Hi Carina,

We spoke a month ago about getting a new template for the semi-annual monitoring report for Title V permit P100-R2M1.
I was wondering if the template is available so that I can get started on the monitoring report.

The AI for LANL is AI856.

Until Feb 3, 2017 LANL operated under permit P100-R2.
On Feb 3, 2017, LANL was issued a permit modification P100-R2M1. The modification was for the addition of Evaporative Sprayers in Section A1500.

Would you kindly let me know if LANL has to submit two monitoring reports or one for the Jan 1–Jun 30, 2017 monitoring period?

I will follow up this e-mail with a phone call to you.

Thank you.

With best regards,

Brinda Ramanathan
Air Quality Compliance
505-665-8879
Los Alamos National Laboratory

ATTACHMENT 2

Semi-Annual Monitoring Report for Los Alamos National Laboratory, AI No. 856, Title V Permit P100-R2M4 for July 1 – December 31, 2022

EPC-DO: 23-010

LA-UR-23-20533

Date: Feb 07 2023

Title V Semi - Annual Monitoring Report for Permits P100-R2M4

Part 1 – Monitoring Activity Reporting Requirements

A Semi-Annual Report of monitoring activities is due within 45 days following the end of every 6-month reporting period. The six month reporting periods start on January 1st and July 1st of each year.

A responsible official (as defined in 20.2.70.7.AE NMAC) shall certify the accuracy, truth and completeness of every report and compliance certification submitted to the Department as required by this permit. These certifications shall be part of each document. (20.2.70.300.E NMAC)

Compliance Certification Reports, Semi-Annual monitoring reports, compliance schedule progress reports, and any other compliance status information required by this permit shall be certified by the responsible official and submitted to:

Manager, Compliance and Enforcement Section
New Mexico Environment Department
Air Quality Bureau
525 Camino De Los Marquez, Suite 1
Santa Fe, NM 87505-1816

B108 General Monitoring Requirements

(20.2.70. 302.A and C NMAC)

A. These requirements do not supersede or relax requirements of federal regulations.

B. The following monitoring and/or testing requirements shall be used to determine compliance with applicable requirements and emission limits. Any sampling, whether by portable analyzer or EPA reference method, that measures an emission rate over the applicable averaging period greater than an emission limit in this permit constitutes noncompliance with this permit. The Department may require, at its discretion, additional tests pursuant to EPA Reference Methods at any time, including when sampling by portable analyzer measures an emission rate greater than an emission limit in this permit; but such requirement shall not be construed as a determination that the sampling by portable analyzer does not establish noncompliance with this permit and shall not stay enforcement of such noncompliance based on the sampling by portable analyzer.

C. If the emission unit is shutdown at the time when periodic monitoring is due to be accomplished, the permittee is not required to restart the unit for the sole purpose of performing the monitoring. Using electronic or written mail, the permittee shall notify the Department's Enforcement Section of a delay in emission tests prior to the deadline for accomplishing the tests. Upon recommencing operation, the permittee shall submit any pertinent pre-test notification requirements set forth in the current version of the Department's Standard Operating Procedures For Use Of Portable Analyzers in Performance Test, and shall accomplish the monitoring.

D. The requirement for monitoring during any monitoring period is based on the percentage of time that the unit has operated. However, to invoke monitoring period exemptions at B108.D(2), hours of operation shall be monitored and recorded.

   (1) If the emission unit has operated for more than 25% of a monitoring period, then the permittee shall conduct monitoring during that period.

   (2) If the emission unit has operated for 25% or less of a monitoring period then the monitoring is not required. After two successive periods without monitoring, the permittee shall conduct monitoring during the next period regardless of the time operated during that period, except that for any monitoring period in which a unit has operated for less than 10% of the monitoring period, the period will not be considered as one of the two successive periods.

   (3) If invoking the monitoring period exemption in B108.D(2), the actual operating time of a unit shall not exceed the monitoring period required by this permit before the required monitoring is performed. For example, if the monitoring period is annual, the operating hours of the unit shall not exceed 8760 hours before monitoring is conducted. Regardless of the time that a unit actually operates, a minimum of one of each type of monitoring activity shall be conducted during the five year term of this permit.

E. The permittee is not required to report a deviation for any monitoring or testing in a Specific Condition if the deviation was authorized in this General Condition B108.

F. For all periodic monitoring events, except when a federal or state regulation is more stringent, three test runs shall be conducted at 90% or greater of the unit's capacity as stated in this permit, or in the permit application if not in the permit, and at additional loads when requested by the Department. If the 90% capacity cannot be achieved, the monitoring will be conducted at the maximum

achievable load under prevailing operating conditions except when a federal or state regulation requires more restrictive test conditions. The load and the parameters used to calculate it shall be recorded to document operating conditions and shall be included with the monitoring report.

G. When requested by the Department, the permittee shall provide schedules of testing and monitoring activities. Compliance tests from previous NSR and Title V permits may be re-imposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions.

H. If monitoring is new or is in addition to monitoring imposed by an existing applicable requirement, it shall become effective 120 days after the date of permit issuance. For emission units that have not commenced operation, the associated new or additional monitoring shall not apply until 120 days after the units commence operation. All pre-existing monitoring requirements incorporated in this permit shall continue to apply from the date of permit issuance. All monitoring periods, unless stated otherwise in the specific permit condition or federal requirement, shall commence at the beginning of the 12 month reporting period as defined at condition A109.B.

B109 General Recordkeeping Requirements

(20.2.70.302.D NMAC)

A. The permittee shall maintain records to assure and verify compliance with the terms and conditions of this permit and any applicable requirements that become effective during the term of this permit. The minimum information to be included in these records is (20.2.70.302.D.1 NMAC):
   (1) equipment identification (include make, model and serial number for all tested equipment and emission controls);
   (2) date(s) and time(s) of sampling or measurements;
   (3) date(s) analyses were performed;
   (4) the company or entity that performed the analyses;
   (5) analytical or test methods used;
   (6) results of analyses or tests; and
   (7) operating conditions existing at the time of sampling or measurement.

B. The permittee shall keep records of all monitoring data, equipment calibration, maintenance, and inspections, Data Acquisition and Handling System (DAHS) if used, reports, and other supporting information required by this permit for at least five (5) years from the time the data was gathered or the reports written. Each record shall clearly identify the emissions unit and/or monitoring equipment, and the date the data was gathered. (20.2.70.302.D.2 NMAC)

C. If the permittee has applied and received approval for an alternative operating scenario, then the permittee shall maintain a log at the facility, which documents, contemporaneously with any change from one operating scenario to another, the scenario under which the facility is operating. (20.2.70.302.A.3 NMAC)

D. The permittee shall keep a record describing off permit changes made at this source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes. (20.2.70.302.I.2 NMAC)

E. Unless otherwise indicated by Specific Conditions, the permittee shall keep the following records for malfunction emissions and routine and predictable emissions during startup, shutdown, and scheduled maintenance (SSM):

(1) The owner or operator of a source subject to a permit, shall establish and implement a plan to minimize emissions during routine or predictable startup, shutdown, and scheduled maintenance through work practice standards and good air pollution control practices. This requirement shall not apply to any affected facility defined in and subject to an emissions standard and an equivalent plan under 40 CFR Part 60 (NSPS), 40 CFR Part 63 (MACT), or an equivalent plan under 20.2.72 NMAC - Construction Permits, 20.2.70 NMAC - Operating Permits, 20.2.74 NMAC - Permits - Prevention of Significant Deterioration (PSD), or 20.2.79 NMAC - Permits - Nonattainment Areas. (20.2.7.14.A NMAC) The permittee shall keep records of all sources subject to the plan to minimize emissions during routine or predictable SSM and shall record if the source is subject to an alternative plan and therefore, not subject to the plan requirements under 20.2.7.14.A NMAC.

(2) If the facility has allowable SSM emission limits in this permit, the permittee shall record all SSM events, including the date, the start time, the end time, a description of the event, and a description of the cause of the event. This record also shall include a copy of the manufacturer's, or equivalent, documentation showing that any maintenance qualified as scheduled. Scheduled maintenance is an activity that occurs at an established frequency pursuant to a written protocol published by the manufacturer or other reliable source. The authorization of allowable SSM emissions does not supersede any applicable federal or state standard. The most stringent requirement applies.

(3) If the facility has allowable malfunction emission limits in this permit, the permittee shall record all malfunction events to be applied against these limits. The permittee shall also include the date, the start time, the end time, and a description of the event. **Malfunction means** any sudden and unavoidable failure of air pollution control equipment or process equipment beyond the control of the owner or operator, including malfunction during startup or shutdown. A failure that is caused entirely or in part by poor maintenance, careless operation, or any other preventable equipment breakdown shall not be considered a malfunction. (20.2.7.7.E NMAC) The authorization of allowable malfunction emissions does not supersede any applicable federal or state standard. The most stringent requirement applies. This authorization only allows the permittee to avoid submitting reports under 20.2.7 NMAC for total annual emissions that are below the authorized malfunction emission limit.

(4) The owner or operator of a source shall meet the operational plan defining the measures to be taken to mitigate source emissions during malfunction, startup or shutdown. (20.2.72.203.A(5) NMAC)

B110 General Reporting Requirements

(20.2.70.302.E NMAC)

A. Reports of required monitoring activities for this facility shall be submitted to the Department on

the schedule in section A109. Monitoring and recordkeeping requirements that are not required by a NSPS or MACT shall be maintained on-site or (for unmanned sites) at the nearest company office, and summarized in the semi-annual reports, unless alternative reporting requirements are specified in the equipment specific requirements section of this permit.

B. Reports shall clearly identify the subject equipment showing the emission unit ID number according to this operating permit. In addition, all instances of deviations from permit requirements, including those that occur during emergencies, shall be clearly identified in the reports required by section A109. (20.2.70.302.E.1 NMAC)

C. The permittee shall submit reports of all deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. These reports shall be submitted as follows:
   (1) Deviations resulting in excess emissions as defined in 20.2.7.7 NMAC (including those classified as emergencies as defined in section B114.A) shall be reported in accordance with the timelines specified by 20.2.7.110 NMAC and in the semi-annual reports required in section A109. (20.2.70.302.E.2 NMAC)
   (2) All other deviations shall be reported in the semi-annual reports required in section A109. (20.2.70.302.E.2 NMAC).

D. The permittee shall submit reports of excess emissions in accordance with 20.2.7.110.A NMAC.

E. Results of emission tests and monitoring for each pollutant (except opacity) shall be reported in pounds per hour (unless otherwise specified) and tons per year. Opacity shall be reported in percent. The number of significant figures corresponding to the full accuracy inherent in the testing instrument or Method test used to obtain the data shall be used to calculate and report test results in accordance with 20.2.1.116.B and C NMAC. Upon request by the Department, CEMS and other tabular data shall be submitted in editable, MS Excel format.

F. At such time as new units are installed as authorized by the applicable NSR Permit, the permittee shall fulfill the notification requirements in the NSR permit.

G. Periodic Emissions Test Reporting: The permittee shall report semi-annually a summary of the test results.

H. The permittee shall submit an emissions inventory for this facility annually. The emissions inventory shall be submitted by the later of April 1 or within 90 days after the Department makes such request. (20.2.73 NMAC and 20.2.70.302.A.1 NMAC)

I. Emissions trading within a facility (20.2.70.302.H.2 NMAC)
   (1) For each such change, the permittee shall provide written notification to the department and the administrator at least seven (7) days in advance of the proposed changes. Such notification shall state when the change will occur and shall describe the changes in emissions that will result and how these increases and decreases in emissions will comply with the terms and conditions of the permit.
   (2) The permittee and department shall attach each such notice to their copy of the relevant permit.

FACILITY SPECIFIC REQUIREMENTS:

A109 Facility: Reporting B. A Semi-Annual Report of actual emissions from all permitted sources unless otherwise specified in this permit is due within 90 days following the end of every 6-month reporting period as defined at Condition A109.A. Emission estimates of pollutants NOx, CO, SO2, VOC, TSP, PM10, and PM2.5 shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. Emission estimates shall not include Insignificant or Trivial Activities, except that facility-wide emissions from all natural gas combustion sources shall be estimated. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits at Table 106.B.
Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.
☒ **Yes** **Date report submitted:** September 27, 2022 **Tracking Number:** SBR20220005
☐ **No** **Provide comments and identify any supporting documentation as an attachment.**
Comments: The Semi-Annual Emissions Report for January 1 - June 30, 2022, was submitted on September 27, 2022 within 90 days from the end of the reporting period as defined at Condition A109.A. The Semi-Annual Emissions Report for July 1 - December 31, 2022 is not due until 90 days following December 31, 2022, which is after the submission of this report.

EQUIPMENT SPECIFIC REQUIREMENTS:

A605 Fuel Requirements – Asphalt Production

A. Asphalt Plant Combustion Sources

Requirement: Combustion sources located at the asphalt plant shall combust only those fuels allowed under condition III.A.3 of the NSR Permit GCP-3-2195G.

Monitoring: N/A

Recordkeeping: The permittee shall meet the recordkeeping requirements of GCP-3 and maintain records in accordance with Section B109.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: The asphalt plant was previously disassembled and did not operate during this reporting period.

Requirement: Pipeline quality natural gas is used at the asphalt plant and is allowed under condition III.A.3 of the NSR permit GCP-3-2195G.

Recordkeeping: Records are maintained in accordance with Section B109.

Reporting: A109.A: This Semi-Annual Monitoring Report is submitted within 45 days allowed after the reporting period.

A109.B: The January 1 - June 30, 2022 Semi-Annual Emissions Report was submitted on September 27, 2022 (SBR No. 20220005) within the 90 days allowed. The July 1 - December 31, 2022 Semi-Annual Emissions Report for Operating Permit P100-R2M4 is due 90 days following December 31, 2022, which is after the submission of this report.

A109.C: The 2022 Annual Compliance Certification Report for operating permit P100-R2M4 (January 1 –December 31, 2022) will be submitted to NMED AQB and the U.S. Environmental Protection Agency (EPA) by January 30, 2023, within 30 days of December 31, 2022, the end of the 12-month reporting period.

All reporting requirements are completed and submitted in accordance with Section B110.

A607 Asphalt Production – Other

A. Asphalt Plant Baghouse – Differential Pressure

Requirement: The baghouse shall be equipped with a device to continually measure the pressure drop across the baghouse.

Monitoring: The permittee shall monitor the differential pressure (inches of water) across the filters by the use of a differential pressure gauge. Pressure gauge readings and the time period the rotary dryer drum operates shall be recorded by a datalogger each time the rotary dryer drum is operating. The pressure data shall confirm whether the filter(s) are operating within the unit's specifications.

Recordkeeping: The permittee shall manually record the baghouse pressure drop readings at least once each day the rotary drum dryer operates and maintain records of all baghouse differential pressure readings in accordance with Section B109.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: The asphalt plant was previously disassembled and did not operate during this reporting period.

Requirement: The baghouse is equipped with a magnehelic gauge connected to a data-logger to continually monitor the differential pressure across the baghouse.

Monitoring: The differential pressure data is used to confirm proper operation of the baghouse. The differential pressure is measured during rotary dryer drum operation as described below:

1. A datalogger records differential pressure readings every two minutes and transmits the pressure drop data through a leased phoneline to a remote terminal unit.
2. A chart recorder records differential pressure readings and serves as a backup when there is a problem with the remote data-transmission phone communication.
3. The asphalt plant operator manually records the differential pressure readings at each start-up and shut-down daily.

Recordkeeping: Recordkeeping conditions are met using a datalogger, backup chart recorder, and operator's differential pressure entries at the start and end of each operation daily. The Asphalt Plant did not operate during this reporting period, so no pressure data or chart recorder is provided. See ATTACHMENT A607.A.
Records are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification is submitted on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A607 Asphalt Production – Other

B. Asphalt Plant Baghouse - Stack Height (Unit TA-60-BDM)

Requirement: The rotary dryer/baghouse exhaust stack shall be no less than 10 meters in height.

Monitoring: N/A

Recordkeeping: The permittee shall maintain records in accordance with Section B109.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes**	**Date report submitted:**	**Tracking Number:**
☒ **No**	**Provide comments and identify any supporting documentation as an attachment.**	

Comments: The asphalt plant was previously disassembled and did not operate during this reporting period.

Requirement: The height of the asphalt plant stack has been measured and is no less than 10 meters. The stack is a permanent structure attached to the baghouse fan outlet and its height does not change.

Recordkeeping: Records are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A607 Asphalt Production – Other

C. Asphalt Plant Baghouse – Opacity

Requirement: Visible emissions from the rotary dryer/baghouse exhaust stack shall not exhibit an opacity of 20% or greater averaged over a (6) minute period.

Monitoring: During periods of drum dryer operation, the permittee shall perform six (6) minute opacity readings on the rotary dryer/baghouse stack. Opacity readings shall be performed at least once per month during any month the drum dryer operates. The observations shall be conducted according to 40 CFR 60, Appendix A, Method 9.

Recordkeeping: The permittee shall maintain records of all opacity observations and in accordance with Section B109.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes**	**Date report submitted:**	**Tracking Number:**
☒ **No**	**Provide comments and identify any supporting documentation as an attachment.**	

Comments: The asphalt plant was previously disassembled and did not operate during this reporting period.

Requirement/Monitoring: LANL has certified visible emissions (opacity) readers on-site who perform monthly six

(6) minute opacity readings using the procedures in 40 CFR Part 60, Appendix A, Reference Method 9 to determine compliance with the opacity limitation when the Asphalt Plant is operational. No visible emissions exhibited an opacity of 20% or greater and no Method 9 opacity reports were required as the Asphalt Plant was not operational during this reporting period. See Attachment A607.C.

Recordkeeping: Records are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A607 Asphalt Production – Other

D. Asphalt Plant Baghouse – Fines Cleanout

Requirement: The permittee shall sequester or remove particulates collected by the control equipment to prevent wind-blown particulate emissions. Recycled baghouse fines shall be recycled into the drum mixer via a closed-loop system.

Monitoring: N/A

Recordkeeping: The permittee shall maintain records in accordance with Section B109.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: The asphalt plant was previously disassembled and did not operate during this reporting period.

Requirement: Baghouse fines (particulates) are removed from the baghouse and cyclone by a screw conveyor. The removed fines are recycled into the asphalt production process via a closed loop system. Visible emissions from this system were not observed during this reporting period as the Asphalt Plant was not operational.

Recordkeeping: Records are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification is submitted on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A607 Asphalt Production – Other

E. Asphalt Plant Production Rate (Unit TA-60-BDM)

Requirement: To avoid Compliance Assurance Monitoring (CAM) requirements under 40 CFR 64, the asphalt plant shall limit uncontrolled potential PM emissions by limiting asphalt production to less than or equal to 6,000 tons per year.

Monitoring: The permittee shall monitor the total daily production rate.

Recordkeeping: The permittee shall calculate a weekly rolling, 12-month total production rate and maintain records in accordance with Section B109.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: The asphalt plant was previously disassembled and did not operate during this reporting period.

Requirement: The asphalt plant production rate did not exceed 6,000 tons per year as the Asphalt Plant was not operational.

Monitoring: Asphalt production is monitored and recorded on a daily basis when the Asphalt Plant is operational. The weekly rolling 12-month total is calculated and compared to the production limit set in this permit condition. Asphalt production amount is recorded daily in an operation log when the Asphalt Plant is operational. The asphalt production rate for this reporting period did not exceed 6,000 tons per year as the Asphalt Plant was not operational. The 12-month rolling totals are provided in ATTACHMENT A607.E. The Asphalt Plant did not operate during this reporting period, so no daily operation log is provided.

Recordkeeping: Records are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification is submitted on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A607 Asphalt Production – Other

F. Asphalt Plant Operations – General

Requirement: The permittee shall:

1) Install, operate, and maintain equipment in accordance with standard operating procedures, and

2) equip and operate the asphalt processing equipment such as screens, conveyor belts, and conveyor transfer points with dust control systems to control particulate matter emissions, and

3) operate the Plant in accordance with NSR Permit GCP-3-2195G, Section III, A, B, C, D, E, F, and H.

4) Ensure that no visible emissions from the facility are observed crossing the perimeter of the restricted area for no more than 5 minutes during any 2 consecutive hours during facility operations.

Monitoring: The permittee shall perform all monitoring required under NSR Permit GCP-3-2195G.

Recordkeeping: The permittee shall maintain records of all standard operating procedures, records of all maintenance and/or replacement of dust control systems, and all records required under NSR Permit GCP-3-2195G, Section IV.B, and including records of actual hours of operation, records of all required monitoring, daily and weekly total asphalt production and the weekly rolling 12 month total production, number of haul truck trips daily including materials delivery and product, frequency of haul road sweeping, and copies of the applicant's proposed maintenance requirements and records demonstrating conformance with said requirements. The permittee shall maintain records of all compliance test results for total suspended particulates (TSP), particulate matter (PM10), nitrogen oxides, carbon monoxide, and records of all opacity/visible emissions observations performed.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: The asphalt plant was previously disassembled and did not operate during this reporting period.

Requirement:

1) No new equipment was installed during this monitoring period. Operational and maintenance requirements are contained in internal plant procedures that are followed by plant operation staff.

2) Dust collection and control systems are in place on screens, conveyor belts, and transfer points to control particulate matter emissions.

3) The asphalt plant is operated in accordance with NSR Permit GCP-3-2195G, Section III A,B,C,D,E,F, and H.

4) Both EPA Reference Methods 9 and 22 are used at the plant to determine the extent of visible emissions. Fugitive dust emissions from the plant did not cross the property boundary or exceed the five (5) minute visible emissions limit during any two consecutive hours of operation as the Asphalt Plant was not operational. The Asphalt Plant did not operate during this reporting period, so no EPA Method 9 or Method 22 reports are provided. See ATTACHMENT A607.C and ATTACHMENT A607.G.

Monitoring: The Asphalt Plant did not operate during this reporting period, so no preventative maintenance records are provided. See ATTACHMENT A607.F.

Recordkeeping: Recordkeeping conditions are met using the following methods: Standard operating procedures are in place and available on site; maintenance and calibrations are performed annually. The asphalt plant was previously disassembled and did not operate so no calibration nor maintenance took place during this reporting period. The plant's operations logs contain the start time, stop time, daily and monthly hours of operation; asphalt production amounts; day when paved road was swept; and the number of truck trips when the Asphalt Plant is operational. The rolling 12-month totals for production are calculated on the emissions calculation spreadsheet. The rolling 12-month totals are provided in ATTACHMENT A607.E. The Asphalt Plant did not operate during this reporting period, so no operation log is provided. Records located at the facility include fuel delivery tickets for fuel oil and asphalt oil, frequency of road sweeping, calibration procedures, and a procedure that outlines required maintenance.

All compliance test results have been provided to NMED and are available on site.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification is submitted on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A607 Asphalt Production – Other

G. Asphalt Plant Fugitive Dust

Requirement: Fugitive dust emissions from asphalt processing equipment, including the system used to recycle fabric filter fines, shall exhibit no more than five (5) minutes of visible emissions during any two consecutive hours. This condition does not apply to fugitive dust emissions from other support operations such as storage piles, front end loaders, or materials handling around the asphalt process equipment.

Monitoring: The permittee shall perform a Method 22 test at least once per month on all screens, conveyor drop points, and hoppers during the months the asphalt plant operates. The duration of the test shall be a minimum of ten (10) minutes. If visible emissions are observed for more than two (2) minutes, the Method 22 test shall continue for two (2) hours or until scheduled operation of the plant ends.

Recordkeeping: The permittee shall maintain records of all equipment standard operating procedures, records of all maintenance and/or replacement of dust control systems, results of all visible emissions observations, and all records required under NSR Permit GCP-3-2195G.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: The asphalt plant was previously disassembled and did not operate during this reporting period.

Requirement: The asphalt plant did not emit fugitive dust that exceeded five (5) minutes of visible emissions during any two (2) consecutive hours as the Asphalt Plant was not operational during this reporting period.

Monitoring: EPA Method 22 tests are performed once per month when the plant operates. The Asphalt Plant did

not operate during this reporting period, so no EPA Method 22 readings are provided. See ATTACHMENT A607.G. LANL has certified visible emission (opacity) readers on-site who perform monthly ten (10) minute readings using 40 CFR Part 60, Appendix A, Reference Method 22 to determine compliance with the opacity limitation when the Asphalt Plant is operational. No visible emissions exhibited an opacity of 20% or greater as the Asphalt Plant was not operational during this reporting period.

Recordkeeping: The standard operating procedure, maintenance and repair records, and visible emissions observations are maintained at the plant site. All other records required under the NSR permit are also available on site.

Reporting: Emissions and monitoring reports are submitted on a six-month basis, and compliance certification on an annual basis, in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A707 Other – Beryllium Activities

A. Operational Requirements – Beryllium Activities

Source	Operating Requirements	Process Limits	Control Equipment Requirements
Sigma Facility TA-3-66	Beryllium operations will consist of registered metallographic operations, electroplating /chemical milling, and relocated machining, and arc melting/casting sources.	None	Metallographic operations and electroplating /chemical milling operations shall be conducted in aqueous solution or lubricant bath. Emissions from machining and arc melting/casting operations shall be exhausted through a HEPA filtration system prior to entering the atmosphere.
Beryllium Technology Facility TA-3-141	The continuous emission monitor will be maintained in accordance with the Laboratory's quality program.	Beryllium processed by the facility will not exceed 10,000 pounds per calendar year. Beryllium processed by the facility will not exceed 1000 pounds per day.	All processes shall be exhausted through a HEPA filtration system prior to entering the atmosphere. Powder operations, other than closed glovebox operations, and machining operations, other than the processes used in metallographic preparation shall be exhausted through a cartridge filtration system then through the HEPA filtration system. Metallographic preparation activities shall be conducted in lubricating baths or equivalent. (NSR permit 634-M2)

Target Fabrication Facility TA-35-213	Beryllium operations will consist of only beryllium machining and associated cleanup activities.	None	All processes shall be exhausted through a HEPA filtration system prior to entering the atmosphere.
Plutonium Facility TA-55-PF4	Regulated beryllium activities will be ducted through the pollution control equipment and out the north or south stack of PF-4. (NSR Permit 1081-M1-R3, Specific Condition 1.b., partial, revised) The electric furnace shall be enclosed in a glove box, have a maximum operating temperature of 1600 degrees centigrade, and an inside volume space less than 1.1 cubic feet. (NSR Permit 1081-M1-R6, Specific Condition 1.d., partial, revised)	44 pounds of beryllium (20 kg) in any 24 hour period; 1100 pounds/year (500 kg/year) using a rolling total. (NSR Permit 1081-M1-R3, Specific Condition 1.c.)	Weld cutting, weld dressing, metallography, and electric furnace operations shall be controlled with 4 HEPA filters with a control efficiency of 99.95% each. (NSR Permit 1081-M1-R1, Condition 3, partial, revised) The non-accessible filters shall be replaced when the pressure drop across the filter either falls to levels indicating filter breakthrough or increases to levels indicative of excessive loading. (NSR Permit 1081-M1-R1, Condition 3, partial, revised)

B. Emissions Monitoring Requirements – Beryllium Activities

Source	Monitoring Requirements
Sigma Facility TA-3-66	A log shall be maintained during operations, which shows the number of metallographic specimens used in the metallographic operation and the weight or volume of Be samples processed in the electroplating/chemical milling, machining, and arc melting/casting operations.
Beryllium Technology Facility TA-3-141	Facility exhaust stack will be equipped with a continuous emission monitor used to measure beryllium emissions. Cartridge and HEPA filters shall be equipped with differential pressure gauges that measure the differential pressure across the cartridge and HEPA filters while the exhaust fans are in operation. (NSR permit 634-M2)
Target Fabrication Facility	Records of the stack emission test results (see Condition 2 of NSR Permit No. 632) and other data needed to determine total emissions shall be retained at the source and made

TA-35-213	available for inspection by the Department.
Plutonium Facility TA-55-PF4	The HEPA filtration systems shall be equipped with a differential pressure gauge that measures the differential pressure (inches of water) across the HEPA filters while the exhaust fans are in operation. (NSR Permit 1081-M1-R3, Condition 11) Control efficiency shall be verified by daily HEPA filter pressure drop tests and annual HEPA filter challenge tests of accessible filters. (NSR Permit 1081-M1-R1, Condition 3, partial, revised) The furnace temperature shall be continuously monitored and the flow rate from the glove box containing the furnace shall be measured once during each metal melt operation. (NSR Permit 1081-M1-R6, Condition 11, revised)

C. Recordkeeping Requirements – Beryllium Activities

Source	Recordkeeping Requirements
Sigma Facility TA-3-66	Recordkeeping for this source is specified in Condition A707.B.
Beryllium Technology Facility TA-3-141	Generate and maintain beryllium inventory records to demonstrate compliance with the 10,000 pounds of beryllium per calendar year and the 1000 pounds of beryllium per day processing limit. Record pressure drop across the cartridge and HEPA filters once per day that the exhaust fans are in operation and the facility is occupied. Record control equipment maintenance and repair activities. (NSR permit 634-M2)
Target Fabrication Facility TA-35-213	Recordkeeping for this source is specified in Condition A707.B.
Plutonium Facility TA-55-PF4	Stack emission test results and facility operating parameters including a daily record of the pressure drop measured across each appropriate HEPA plenum filtration stage, when the exhaust fans are operating. (NSR Permit 1081-M1-R3, Condition 9, partial, revised) A copy of the annual HEPA test, a log of the daily pressure drop readings and a control equipment maintenance log shall be kept. This documentation shall be provided upon request. (NSR Permit 1081-M1-R1, Condition 3, partial, revised) A log of the filter replacement shall be kept and shall be made available to the

	Department personnel upon request. (NSR Permit 1081-M1-R1, Condition 3, partial, revised) The permittee shall keep records of the number and weight of classified parts processed during a 24-hour period and year using a rolling total. Records shall be made available to properly cleared Department personnel upon request. (NSR Permit 1081-M1-R3, Condition 9, partial, revised) The permittee shall for each use of the furnace record the following operating parameters: metal type, theoretical melting point of the metal, metal melt duration once melting is commenced, maximum furnace temperature and glove box flow rate. (NSR Permit 1081-M1-R6, Condition 9, partial, revised) A record of the furnace's internal volume shall be maintained at the facility. (NSR Permit 1081-M1-R6, Condition 9, partial, revised)

D. Reporting Requirements – Beryllium Activities

Source	**Reporting Requirements**
Sigma Facility TA-3-66	The permittee shall submit reports described in Section A109 and in accordance with Section B110.
Beryllium Technology Facility TA-3-141	Anticipated date of initial startup of each new or modified source not less than thirty (30) days prior to the date. Actual date of initial startup of each new or modified source within fifteen (15) days after the startup date. Provide the date when each new or modified emission source reaches the maximum production rate at which it will operate within fifteen (15) days after that date. Notify the Department within 60 days after each calendar quarter of the facility's compliance status with the permitted emission rate from the continuous monitoring system. Provide any data generated by activities described in the Quality Assurance Project Plan (QAPP) that will assist the Air Quality Bureau's Enforcement Section in determining the reliability of the methodology used for demonstrating compliance with the permitted emission rate within 45 days of such a request. The permittee shall submit reports described in Section A109 and in accordance with Section B110.
Target Fabrication Facility TA-35-213	The permittee shall submit reports described in Section A109 and in accordance with Section B110.
Plutonium Facility TA-55-PF4	Stack emission test results and facility operating parameters will be made available to Department personnel upon request.

	Reports may be required to be submitted to the Department if inspections of the source indicate noncompliance with this permit or as a means of determining compliance. The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☒ **Yes** **Date report submitted:** July 27, 2022; November 22, 2022 **Tracking Number:**
Activity No.: 000856-07272022-01; Activity No.: 000856-11222022-01

☐ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: A707.A Operational Requirements - Beryllium Activities:

TA-3-66 Electroplating/chemical milling operations are conducted in aqueous solution or lubricant bath. Emissions from machining and arc melt/casting operations are exhausted through a HEPA filtration system prior to entering the atmosphere.

TA-3-141 The continuous emission monitor is maintained in accordance with LANL's quality program. Beryllium processing records are available on-site for inspection. No process limits were exceeded during this reporting period. All processes are exhausted through a HEPA filtration system prior to entering the atmosphere. Powder operations, other than closed glovebox operations, and machining operations, other than the processes used in metallographic preparation, are exhausted through a cartridge filtration system and then through the HEPA filtration system. Metallographic preparations are conducted in lubricating baths or equivalent.

TA-35-213 All processes are exhausted through a HEPA filtration system prior to entering the atmosphere. Beryllium operations consist of only beryllium machining and associated cleanup activities.

TA-55-PF4 All beryllium activities are ducted through the facility's pollution control equipment and out the north or south stack of PF-4. Weld cutting, weld dressing, and metallography operations are controlled using four (4) HEPA filters with a control efficiency of 99.95% each. The non-accessible filter is replaced when the pressure differential across the filter indicates breakthrough or excessive loading.

No process limits were exceeded during this reporting period.

The electric furnace did not operate during this reporting period.

A707.B - Emissions Monitoring Requirements - Beryllium Activities:

TA-3-66 Log books are maintained for the weight or volume of samples processed in the electroplating/chemical milling, machining, and arc melting/casting operations. The log books are kept on-site and are available for inspection. Data from the log books are included in ATTACHMENT A707.B.a.

TA-3-141 The facility exhaust stack has a built-in sampling system used to continuously sample beryllium emissions. Cartridge and HEPA filters are equipped with differential pressure gauges that measure differential pressure when exhaust fans are operating and the facility is occupied.

TA-35-213 A copy of stack emission test results as well as other data needed to determine total emissions are retained at the source and are available for inspection. Log books documenting beryllium processing are on-site and are available for inspection. Data from the beryllium processing logs are included in ATTACHMENT A707.B.b.

TA-55-PF4 The HEPA filtration system contains a differential pressure gauge that measures differential pressure across the HEPA filters while the exhaust fans are in operation. The control efficiency is verified by daily HEPA filter pressure drop tests. Annual HEPA filter challenge tests are performed to verify filter control efficiency. The HEPA filter challenge tests are included in ATTACHMENT A707.C.b.

The electric furnace did not operate during this reporting period.

A707.C Recordkeeping Requirements - Beryllium Activities:

TA-3-66 Recordkeeping for this source is specified in Condition A707.B.

TA-3-141 Inventory records are maintained to demonstrate compliance with beryllium process limits. Records of pressure drop across the cartridge and HEPA filters are performed daily when the exhaust fans are in operation and the facility is occupied. Control equipment maintenance and repair activities are recorded. HEPA filter differential pressure readings are included in ATTACHMENT A707.C.a. Differential pressure readings were not recorded on October 12-23, 2022, as the exhaust fans were in operation, but the facility was not occupied (no beryllium was being processed). Thus, HEPA filter differential pressure readings are not required on the above dates.

TA-35-213 Recordkeeping for this source is specified in Condition A707.B.

TA-55-PF4 A copy of the stack emission test results are retained at the source and available for inspection. HEPA filter challenge tests are performed annually. Daily differential pressure readings are provided in ATTACHMENT A707.C.c. Filter replacement and control equipment maintenance and repair records are kept and available on site for inspection. Process records are available that contain the number and weight of classified parts processed during a 24-hour period and annual rolling total.

The electric furnace did not operate during this reporting period.

A707.D Reporting Requirements - Beryllium Activities:

For all beryllium sources, reports are submitted in accordance with permit conditions A109 and in accordance with B110. For more information, see Section A605 in this report.
There were no new or modified emission sources during the reporting period.
TA-3-141 Quarterly beryllium reports, containing continuous monitoring system data from the Beryllium Technology Facility, are also submitted to NMED. Reports during this reporting period were submitted within 60 days following each calendar quarter. The reports were submitted on July 27, 2022 for 2022Q2 (Activity No.: 000856-07272022-01) and November 22, 2022 for 2022Q3 (Activity No.: 000856-11222022-01).

A805 Fuel Sulfur Requirements – External Combustion

A. All Boilers and Heaters (except Units RLUOB-BHW-1 through -4)

Requirement: All boilers and heaters, except Units RLUOB-BHW-1 through -4 and the Power Plant addressed in Section A1300 shall combust only natural gas containing no more than 2 grains of total sulfur per 100 dry standard cubic feet.

Monitoring: None.

Recordkeeping: The permittee shall demonstrate compliance with the natural gas limit on total sulfur content by maintaining records of a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, or fuel gas analysis, specifying the allowable limit or less. If fuel gas analysis is used, the analysis shall not be older than one year.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes**	**Date report submitted:**	**Tracking Number:**
☒ **No**	**Provide comments and identify any supporting documentation as an attachment.**	

Comments: Requirement: A natural gas transportation contract is in place, and states that gas provided to LANL will be pipeline quality and contain no more than three quarters (3/4) grains of total sulfur per one hundred (100) dry standard cubic feet.

Recordkeeping: A copy of LANL's natural gas transportation contract is maintained on-site.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A805 Fuel Sulfur Requirements – External Combustion

B. Units RLUOB-BHW-1 through -4

Requirement: Units RLUOB-BHW-1 through -4 shall combust either natural gas containing no more than 2.0 grains of total sulfur per 100 dry standard cubic feet or No. 2 fuel oil containing no more than 0.5 wt% total sulfur. (NSR Permit 2195N-R2, Specific Condition 1.c.)

Monitoring: None.

Recordkeeping: The permittee shall demonstrate compliance with the natural gas limit and/or fuel oil limit on total sulfur content by maintaining records of a current, valid purchase contract, tariff sheet or transportation contract for the gaseous or liquid fuel, or fuel analysis, specifying the allowable limit or less. If a fuel analysis is used, the analysis shall not be older than one year. (NSR Permit 2195N-R2, Specific Condition 3.c., revised) Alternatively, compliance may be demonstrated by keeping a receipt or invoice from a commercial fuel supplier with each fuel delivery, which shall include the delivery date, the fuel type delivered, and amount of fuel delivered, and the maximum sulfur content of the fuel.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes**	**Date report submitted:**	**Tracking Number:**
☒ **No**	**Provide comments and identify any supporting documentation as an attachment.**	

Comments: Requirement: A natural gas transportation contract is in place, and states that gas provided to LANL will be pipeline quality and contain no more than three quarters (3/4) grains of total sulfur per one hundred (100) dry standard cubic feet.

Fuel oil is not currently used as the fuel system for RLUOB BHW-1 through 3. If fuel oil is burned in the future, the boilers will use only Ultra Low Sulfur Diesel (ULSD) containing no more than 0.5 wt% total sulfur. Sulfur content will be documented in fuel manifests and bill of ladings.

Recordkeeping: A copy of the natural gas transportation contract is maintained on-site. Copies of the fuel manifests and bill of ladings for fuel oil are maintained in electronic files. No fuel oil was purchased for the RLUOB boilers during this reporting period.

Reporting: Emissions and monitoring reports are submitted on a six-month basis, and compliance certification is submitted on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A806 20.2.61 NMAC Opacity – External Combustion

A. All Boilers and Heaters (except Units RLUOB-BHW-1 through -4)

Requirement: Exhaust emissions from these external combustion sources shall not exceed 20% opacity averaged over a 10-minute period.

Monitoring: Use of natural gas fuel meeting the requirement at Condition A805.A constitutes compliance with 20.2.61 NMAC unless opacity exceeds 20% averaged over a 10-minute period. When any visible emissions are observed during steady state operation and are determined to be not due to condensed water vapor only, opacity shall be measured over a 10-minute period, in accordance with the procedures at 40 CFR 60, Appendix A, Method 9 as required by 20.2.61.114 NMAC.

Recordkeeping: The permittee shall record dates of any opacity measurements and the corresponding opacity readings.

Reporting: The permittee shall report dates of any opacity measurements and the corresponding opacity readings. The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: Requirement: LANL has certified visible emission readers on-site who perform observations using 40 CFR 60, Appendix A, Method 9 to determine compliance with the opacity limitation. No visible emissions were observed during steady state operations during this reporting period.

Monitoring: Use of natural gas for combustion meets the requirement of Condition A805.A.

Recordkeeping: A standard form is used for all opacity measurements. The form includes the date of measurement and opacity observed. Opacity readings were not required during this reporting period. See ATTACHMENT A806.A.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification is submitted on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A806 20.2.61 NMAC Opacity – External Combustion

B. Units RLUOB-BHW-1 through -4: Natural Gas-Fired

Requirement: Exhaust emissions from these external combustion sources shall not exceed 20% opacity averaged over a 10-minute period.

Monitoring: Use of natural gas fuel meeting the requirement at Condition A805.A constitutes compliance with 20.2.61 NMAC unless opacity exceeds 20% averaged over a 10-minute period. When any visible emissions are observed during steady state operation and are determined to be not due to condensed water vapor only, opacity shall be measured over a 10-minute period, in accordance with the procedures at 40 CFR 60, Appendix A, Method 9 as required by 20.2.61.114 NMAC.

Recordkeeping: The permittee shall record dates of any opacity measurements and the corresponding opacity readings.

Reporting: The permittee shall report dates of any opacity measurements and the corresponding opacity readings. The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: Requirement: LANL has certified visible emission readers on-site who perform observations using 40 CFR 60, Appendix A, Method 9 to determine compliance with the opacity limitation. No visible emissions were observed during steady state operations during this reporting period.

Monitoring: The natural gas used by these units meets the requirement of Condition A805.A.

Recordkeeping: A standard form is used for all opacity measurements. The form includes the date of measurement and opacity observed. No opacity readings were required during this reporting period.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A806 20.2.61 NMAC Opacity – External Combustion

C. Units RLUOB-BHW-1 through -4: Fuel Oil-Fired

Requirement: Exhaust emissions from these external combustion sources shall not exceed 20% opacity averaged over a 10-minute period.

Monitoring: The permittee shall perform a least one (1) opacity observation each day that fuel oil is used to fire any of Units RLUOB-BHW-1 through -4. Opacity shall be measured over a 10-minute period, in accordance with the procedures at 40 CFR 60, Appendix A, Method 9 as required by 20.2.61.114 NMAC. (NSR Permit 2195N-R2, Specific Condition 3.d., revised)

Recordkeeping: The permittee shall record dates of any opacity measurements and the corresponding opacity readings. (NSR Permit 2195N-R2, Specific Condition 4.b., revised)

Reporting: The permittee shall report dates of any opacity measurements and the corresponding opacity readings. The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes**	**Date report submitted:**	**Tracking Number:**
☒ **No**	**Provide comments and identify any supporting documentation as an attachment.**	

Comments: Requirement: LANL has certified visible emission readers on-site who perform observations using 40 CFR 60, Appendix A, Method 9 to determine compliance with the opacity limits.

Monitoring: No fuel oil was used in these units during this reporting period. No opacity measurements were taken during this reporting period.

Recordkeeping: The opacity form includes the date of measurement and opacity observed. No fuel oil was burned during this reporting period, and therefore, no opacity readings were taken and no records were generated. See ATTACHMENT A806.C. for details.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification submitted on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A807 Other – External Combustion

A. Natural Gas Fuel Usage (Sources listed in Table 800.A except RLUOB-BHW-1 through -4)

Requirement: The combined natural gas fuel usage shall be limited to 870 MMscf/y. This limitation shall apply to all boilers and heaters listed in Table 800.A except Units RLUOB-BHW-1 through -4, but including all other boilers and heaters at the Facility that qualify as Title V Insignificant Activities.

Monitoring: The permittee shall monitor the monthly total volumetric flow of natural gas to Units TA-55-6-BHW-1 and TA-55-6-BHW-2 through use of a totalizing flow meter.

Recordkeeping: The permittee shall:

1) Calculate the monthly rolling 12-month total natural gas fuel usage for the emission units listed in Table 800.A except Units RLUOB-BHW-1 through -4.

2) Calculate the actual emissions rate for the emission units listed in Table 800.A except Units RLUOB-BHW-1 through -4. The calculation shall be based on the actual fuel usage of Units equipped with individual flow meters and the Facility-Wide metered or estimated natural gas usage.

3) Calculate the semiannual and annual total emissions rate (tons/year) for this source category and compare them to the emission limits in Table 802.A. The permittee shall maintain records in accordance with Section B109.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: Requirement: For units listed under this permit condition, a 12-month rolling total of natural gas used is calculated and recorded each month. The rolling total is compared to the fuel use limit each month. Natural gas usage limits were not exceeded during this reporting period. Natural gas usage and rolling totals are provided in ATTACHMENT A807.A.

Monitoring: Units TA-55-6-BHW-1 and TA-55-6-BHW-2 have volumetric flow meters in place to monitor monthly natural gas use. Fuel use information for the TA-55 units listed in this condition is included in ATTACHMENT A807.A.

Recordkeeping:

1) Monthly rolling 12-month total natural gas fuel use is calculated for the permitted units listed in Table 800.A.

2) The actual emission rate is calculated for the units listed in Table 800.A. This calculation uses actual fuel use data from individual unit flow meters and facility wide metered natural gas.

3) The emissions rate is calculated every six months and annually for this source category, and compared to the permit limits. Records are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A807 Other – External Combustion

B. Natural Gas and Fuel Oil Usage (Units RLUOB-BHW-1 through -4)

Requirement: The permittee shall comply with the emission limits in Table 802.B for each fuel type.

Monitoring: The permittee shall:

1) Monitor the monthly total volumetric flow of natural gas to Units RLUOB-BHW-1 through -4 using a totalizing flow meter. (NSR Permit 2195N-R2, Specific Condition 3.a., partial, revised)

2) Monitor the daily fuel oil consumption during which any of the 4 RLUOB boilers are fired with this fuel type. (NSR Permit 2195N-R2, Specific Condition 3.a, partial, revised)

3) Monitor the hours of operation for each boiler when fired on fuel oil and during non-emergency maintenance and readiness testing.

Recordkeeping: The permittee shall:

1) Calculate and record the annual fuel oil usage for Units RLUOB-BHW-1 through -4 as a daily rolling 365-day total.

2) Calculate and record the semiannual and calendar year total emissions rate (tons/year) for each fuel type and for the combination of both fuels compare to the emission limits in Table 802.B.

3) Record the annual hours of operation of each boiler when fired on fuel oil during non-emergency maintenance and readiness testing and compare to the limitation at Condition A804.B.

4) The permittee shall maintain records in accordance with Section B109.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: Requirement: The initial compliance test was used to demonstrate compliance with the emission limits for natural gas use. Vendor data are also used to determine compliance with emission limits for fuel oil and natural gas. All concentrations and emission rates were below permitted limits in Table 802.B.

Monitoring:

1) A totalizing flow meter is in place and measures natural gas used by the RLUOB boilers. The natural gas fuel use data is provided in ATTACHMENT A807.A.

2) Daily fuel oil consumption is monitored by facility personnel using meter readings from each boiler. No fuel oil was burned during this reporting period. See ATTACHMENT A807.B for details.

3) The hours of operation of each boiler are recorded by facility personnel each time a boiler is run on fuel oil. The purpose of running the boilers is also recorded.

Recordkeeping:

1) Annual fuel oil usage is calculated and recorded on a daily rolling 365-day total. No fuel oil was burned during this reporting period.

2) The emissions rate is calculated on a six-month and annual basis for each fuel type and for both fuels combined. Emissions are compared to permit limits and data are provided to NMED in accordance with permit condition A109.

3) Annual hours of operation for each boiler are recorded when fired on fuel oil during non-emergency use.
The total hours are compared to the hour limit in permit condition A804.B. No fuel oil was used during this reporting period and no records were generated.
4) Records are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A807 Other – External Combustion

C. 40 CFR 60, Subpart Dc (Units TA-55-6-BHW-1, TA-55-6-BHW-2, RLUOB-BHW-1 through -3)

Requirement: The units are subject to 40 CFR 60, Subpart Dc and the permittee shall comply with the following applicable requirements:

1. When combusting oil in the affected boilers, meet the 0.5 weight percent fuel sulfur standard in 40 CFR 60.42c(d). This standard applies at all times per §60.42c(i). The permittee shall demonstrate compliance per the requirements of §60.42c(h).

Monitoring: The permittee shall comply with the fuel supplier certification requirements in 40 CFR 60.46c(e). The permittee shall monitor fuel usage to meet the recordkeeping requirements of 40 CFR 60.48c(g).

Recordkeeping: The permittee shall comply with the recordkeeping requirements of 40 CFR 60.48c(c), (f) and (g) 40 CFR 60.7(b) and (f) and maintain the records according to §60.48c(i) except when records are required to be maintained for a longer time period in accordance with Section B109.

Reporting: The permittee shall comply with the initial notification requirements of 40 CFR 60.48c(a) and 40 CFR 60.7(a)(1), (a)(4) and (g) and the periodic reporting requirements of 40 CFR 60.48c(b), (d), (e)(11) and (f). Reports shall be submitted according to §60.48c(j). The reporting period may be modified to coincide with the Semi-Annual reporting period in Section A109. The permittee shall report in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: Requirement: Units TA-55-6-BHW-1, TA-55-6-BHW-2, RLUOB-BHW-1, RLUOB-BHW-2, and RLUOB-BHW-3 meet the requirements of 40 CFR Part 60, Subparts A and Dc. Notification requirements were met through source startup notifications and initial permit applications.

Monitoring: Natural gas sulfur requirements are tracked and addressed in the natural gas transportation contract. The amount of fuel oil combusted is monitored and recorded on a monthly basis. Fuel oil is not currently used as the fuel system for RLUOB BHW-1 through 3, and units TA-55-6-BHW-1 & TA-55-6-BHW-2 only burn natural gas. If fuel oil is burned in the future, the boilers will use only Ultra Low Sulfur Diesel (ULSD) containing no more than 0.5 wt% total sulfur. Sulfur content will be documented in fuel manifests and bill of ladings. No fuel oil was purchased or used during this reporting period.

Recordkeeping: Fuel sulfur content information and fuel use records are maintained on site for at least five (5)

years as required by the operating permit.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A807 Other – External Combustion

D. 40 CFR 60, Subpart Dc (New Unit RLUOB-BHW-4)

Requirement: This unit is subject to 40 CFR 60, Subpart Dc and the permittee shall comply with the following applicable requirements:

1. When combusting oil in the affected boilers, meet the 0.5 weight percent fuel sulfur standard in 40 CFR 60.42c(d), and (g). This standard applies at all times per §60.42c(i). The permittee shall demonstrate compliance per the requirements of §60.42c(h).
2. For new boiler RLUOB-BHW-4, the permittee shall demonstrate initial compliance with the SO2 standard through a certification from the fuel supplier per 40 CFR 60.44c(h).

Monitoring: The permittee shall comply with the fuel supplier certification requirements in 40 CFR 60.46c(e). The permittee shall monitor fuel usage to meet the recordkeeping requirements of 40 CFR 60.48c(g).

Recordkeeping: The permittee shall comply with the recordkeeping requirements of 40 CFR 60.48c(c), (f) and (g) and 40 CFR 60.7(b) and (f) and maintain the records according to §60.48c(i) except when records are required to be maintained for a longer time period in accordance with Section B109.

Reporting: The permittee shall comply with the initial notification requirements of 40 CFR 60.48c(a) and 40 CFR 60.7(a)(1), (a)(3) and (g) and the periodic reporting requirements of 40 CFR 60.48c(b), (d), (e)(11) and (f). Reports shall be submitted according to §60.48c(j). The reporting period may be modified to coincide with the Semi-Annual reporting period in Section A109.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: Requirement: LANL purchases only fuel oil with ultra low sulfur content; fuel oil was not used during this reporting period. See ATTACHMENT 807.C.& D. for details.

RLUOB-BHW-4 has not been installed. When installed, the requirement, monitoring, recordkeeping, and reporting will be conducted in accordance with the requirements listed in the current permit.

A807 Other – External Combustion

E. Initial Compliance Testing (Units RLUOB-BHW-4)

Requirement: Initial compliance tests are required for boiler, Unit RLUOB-BHW-4. The tests shall be conducted for NOx and CO while burning natural gas fuel only. This condition applies only if boiler Unit RLUOB-BHW-4 is not an identical make and model to boiler units RLUOB-BHW-1 through -3. (NSR Permit 2195N-R2, Specific Condition 6.a., revised)

Monitoring: The permittee shall conduct EPA Method tests for CO and NOx within six (6) months of any new boiler start up. Method 19 may be used for determining stack flow rates. This requirement supersedes Condition B111.A(2). Initial compliance testing shall be conducted in accordance with Section B111.

Recordkeeping: The permittee shall maintain records in accordance with Section B109.

Reporting: The permittee shall report in accordance with Section B110 and Section B111.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: Requirement: Unit RLUOB-BHW-4 has not been installed. When installed, the requirement, monitoring, recordkeeping, and reporting will be conducted in accordance with the requirements listed in the current permit. See ATTACHMENT A807.E. for details.

A807 Other – External Combustion

F. Operational Inspection (Sources listed in Table 800.A)

Requirement: Compliance with the allowable emission limits in Table 802.A shall be demonstrated by performing periodic inspections to ensure proper operations.

Monitoring: The permittee shall conduct annual operational inspections to determine that the boilers are operating properly. The operational inspections shall include operational checks for indications of insufficient excess air, or too much excess combustion air. These operational checks shall include observation of common physical indications of improper combustion, including indications specified by the boiler manufacturer, and indications based on operational experience with these units.

Recordkeeping: The permittee shall maintain records of operational inspections, describing the results of all operational inspections noting chronologically any adjustments needed to bring the boilers into compliance. The permittee shall maintain records in accordance with Section B109.

Reporting: The permittee shall report in accordance with Section B110.

Within ninety (90) days of permit issuance, the permittee shall submit for Department approval a procedure which the permittee will use to carry out the operational inspections. The permittee may at any time submit revisions for Department approval.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: Requirement/Monitoring: LANL conducts annual operational inspections and preventive maintenance on the permitted boilers listed in the current permit to ensure proper operations.

Recordkeeping: The records of operational inspections and preventive maintenance are maintained in the compliance folders and e-files stored on air quality servers. Copies of annual inspections for 2022 are included in ATTACHMENT A807.F.a.

Reporting: LANL submitted two procedures that are used to carry out the operational inspections: "Preventive Maintenance Instruction (PMI) 403-A.006: Hot Water Boiler Yearly Fireside/Waterside Inspection and Maintenance" for boilers at TA-53 and TA-55 and "Maintenance Procedure UIDO-PROC-76-28-010-R0: TA-09/16 Steam Plants – Annual Boiler Waterside/Fireside Checklist" for boilers located at TA-16. The procedures were submitted to NMED AQB on May 14, 2015 (SBR20150006) within 90 days after permit P100-R2 issuance. Revisions were last made to PMI 403-A.006 on October 24, 2018, and to Maintenance Procedure UIDO-PROC-76-28-010-R0 on October 8, 2021. No revisions were made to these procedures during this reporting period. See ATTACHMENT A807.F.b.

A907 Other – Chemical Usage

A. Emission calculations (Unit LANL-FW-CHEM)

Requirement: The permittee shall comply with the facility-wide VOC and HAP emission limits at Table 106.B.

Monitoring: The permittee shall monitor facility-wide chemical purchasing and site location using an electronic chemical tracking system. The quantity of chemicals that are vented to the atmosphere shall be estimated on a semi-annual basis, and categorized as VOC, HAP, or a combination of these categories.

Recordkeeping: The permittee shall record the quantity of total VOC emitted and the quantity of each individual and total HAPs on a semi-annual basis. These records shall be maintained in accordance with Section B109.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110. With respect to individual HAPs, reports shall include any HAP emitted in a quantity greater than 0.5 tons per year.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☒ **Yes** **Date report submitted:** September 27, 2022 **Tracking Number:** SBR20220005

☐ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: Requirement: Facility-wide emissions did not exceed the VOC or HAP emission limits in Table 106.B.

Monitoring/Recordkeeping: Facility-wide chemical purchases are monitored using ChemDB, an electronic chemical tracking system. The chemical purchase information is used to calculate emissions. Chemical emission information is submitted to NMED every six months in accordance with permit condition A109.B. The semi-annual emissions report for January 1 - June 30, 2022 was submitted to NMED on September 27, 2022 (SBR20220005), within 90 days of the end of the reporting period. Records of chemical purchases for this monitoring period are provided in ATTACHMENT A907.A.

Reporting: Facility-wide VOC and HAPs emissions are calculated, recorded, and reported on a six-month basis in accordance with permit conditions A109.B, B109, and B110. The semi-annual emissions report includes individual HAPs emitted in a quantity greater than 0.5 tons per year.

A907 Other – Chemical Usage

B. Emission calculations (Unit RLUOB-CHEM)

Requirement: The permittee shall comply with the source-specific VOC emission limit at Table 902.A and the facility-wide VOC and HAP emission limits at Table 106.B. (NSR Permit 2195N-R2, Specific Condition 2.a., revised)

Monitoring: The permittee shall monitor chemical purchasing for the RLUOB-CHEM facility using an electronic chemical tracking system. The quantity of chemicals that are vented to the atmosphere shall be estimated on a monthly basis, and categorized as VOC, HAP, TAP, or a combination of these categories. (NSR Permit 2195N-R2, Specific Condition 4.c., revised)

Recordkeeping: The permittee shall record the quantity of total VOC and TAP, each individual HAP,and the total HAPs emitted on a monthly rolling, 12-month total basis. These records shall be maintained in accordance with Section B109. (NSR Permit 2195N-R2, Specific Condition 4.c., revised)

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110. With respect to individual HAPs, reports shall include any HAP emitted in a quantity greater than 0.5 tons per year.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: Requirement: Source specific VOC and facility-wide VOC and HAP emissions are in compliance with emission limits set in Tables 902.A and 106.B in NSR Permit 2195N-R2.

Monitoring: Chemical purchasing for the RLUOB-CHEM facility are monitored using ChemDB, an electronic chemical tracking system. Records of chemical purchases for the reporting period are provided in ATTACHMENT A907.B.a. The quantities of chemicals that are vented to the atmosphere are estimated on a monthly basis and are categorized as VOC, HAP, TAP, or a combination of these categories. The quantities of chemicals for this reporting period are provided in ATTACHMENT A907.B.b.

Recordkeeping: The quantity of total VOC and TAP, individual HAP, and the total HAPs emitted are recorded on a monthly rolling, 12–month total basis. Records are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. The semi-annual emission report includes individual HAPs emitted in a quantity greater than 0.5 tons per year. For more information, see comments in Section A605 of this report.

A1007 Other – Degreasers

A. Operational Requirements (Degreasers)

Requirement: The permittee shall comply with the applicable requirements according to 40 CFR 63, Subpart T, including, but not limited to:

1) Ensure the degreaser is closed with a tight fitting cover whenever not in use, and
2) Maintain a freeboard ratio of 0.75 or greater, and
3) Collect and store all waste solvent and wipe rags in closed containers, and
4) Perform flushing within the freeboard area only, and
5) Allow cleaned parts to drip for 15 seconds or until dripping stops, and
6) Do not exceed the fill line on the solvent level, and
7) Wipe up spills immediately, and
8) Do not create observable splashing with agitation device, and
9) Ensure that the degreaser is not exposed to drafts greater than 40 meters/min, and
10) Do not clean sponges, fabric, wood, or paper.

Monitoring: The permittee shall monitor and record the amount of solvent added to the degreaser.

Recordkeeping: The permittee shall:

1) Calculate the actual emissions rate (pounds/month) of VOC and HAPs based on the quantity of solvent lost to evaporation on a monthly basis.
2) Calculate the semi-annual emissions rate (tons/year) for this source category and add to the facility-wide emission rates in Table 106.B.
3) Maintain records of the degreaser solvent content and quantity added and work practice checklists.
4) The permittee shall maintain records in accordance with Section B109.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes**	**Date report submitted:**	**Tracking Number:**
☒ **No**	**Provide comments and identify any supporting documentation as an attachment.**	

Comments: An exemption notice was submitted on April 9, 2018 and was approved by NMED on May 8, 2018 for a non-halogenated solvent to be used in the degreaser. LANL intends to keep the flexibility to use the halogenated solvent in the future and therefore is continuing to comply with all permit requirements, regardless of which solvent is being used.

Requirement:

1) The degreaser is kept closed with a tight fitting cover when it is not being used.

2) A freeboard ratio of 0.75 or greater is maintained.

3) All waste solvent and solvent contaminated wipe rags are collected and stored in closed containers.

4) Flushing operations are performed only within the freeboard area.

5) Cleaned parts are allowed to drip for 15 seconds or until dripping stops.

6) The fill line has not been exceeded.

7) Spills are wiped up immediately.

8) Administrative controls are in place to prevent observable splashing with an agitation device.

9) The degreaser is located in a glove box with a set ventilation flow rate. Exhaust flows do not exceed 40 meters/min.

10) Sponges, fabric, wood, or paper are not cleaned in the degreaser.

Monitoring and Recordkeeping: A Degreaser Recordkeeping database is used to track the amount of degreaser solvent added, removed, and lost. This system is used to calculate emissions. The "Degreaser Solvent Usage" report for this period is provided in ATTACHMENT A1007.A.a.

1) The actual emission rate (pounds/month) of VOC and HAPs is automatically calculated by the database when data is entered on a monthly basis.

2) The semi-annual emissions (tons/year) are also calculated by the database. These emissions are included in the facility-wide totals.

3) Checklists for work practice standards have been completed for this reporting period. Records of solvent content and quantity added are maintained on site. A copy of the work practice checklists are provided in ATTACHMENT A1007.A.b.

4) Records for this source category are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A1104 Operational Limitations – Internal Combustion

A. Hours of Operation and Emission Limits for Unit TA-33-G-1P

Requirements:

1) Unit TA-33-G-1P is limited to eight (8) hours of daily operation at full capacity. Operation shall occur between the hours of 7:00 AM and 5:00 PM. (NSR Permit 2195F-R4, Condition A1104.A)

2) Unit TA-33-G-1P is limited to the emissions limits stated in Table 1102.A. (NSR Permit 2195F-R4, Condition A1104.A)

Monitoring: The permittee shall monitor the time(s) of operation each day, and the daily and monthly rolling 12-month total hours of operation for Unit TA-33-G-1P using a non-resettable hour meter. Hours that do not represent hours the unit is operated at the TA-33 site may be monitored separately for subsequent subtraction from the daily and monthly rolling 12-month totals

Recordkeeping: The permittee shall maintain the following records and in accordance with Section B109:

1) The permittee shall keep records of the time(s) of operation each day, and the daily, monthly, and the monthly rolling 12-month total hours of operation of the genset listed above, as indicated on the non-resettable hour meter. The permittee may record and subtract hours of operation that do not represent operating hours at the TA-33 site.

2) The permittee shall calculate the annual emissions of all criteria and hazardous air pollutants from Unit TA-33-G-1P. The permittee may subtract emissions that are not the result of operations at TA-33.

Reporting: The permittee shall submit reports in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: Requirement: Unit TA-33-G-1P operated for a total of 7.3 hours during this reporting period. Emissions are lower than the limits stated in Table 1102.A. in NSR permit 2195F-R4.

Monitoring: The times of operations are monitored and the generator is equipped with a non-resettable hour meter. The purpose of equipment use at TA-33 and elsewhere are identified in the log sheet provided in ATTACHMENT A1104.A.

Recordkeeping: A log book is located in the trailer that contains the unit. The log book includes hours of operation recorded daily when the equipment operates. The monthly rolling 12-month total hours of operation are calculated in a spreadsheet. Operations at areas outside TA-33 are recorded.
The annual emissions of criteria and HAPs are calculated based on the hours of operation.

Reporting: Reports are submitted as required by permit conditions in accordance with Section B110.

A1104 Operational Limitations – Internal Combustion

B. Hours of Operation and Emission Limits for Units TA-33-G-2 through -4

Requirements:

1) Units TA-33-G-2 through -4 are authorized to operate 500 hours per generator per calendar year. (NSR Permit 2195P, Specific Condition 1.b.)

2) Units TA-33-G-2 through -4 shall each be certified to be in compliance with applicable non-road emission standards in 40 CFR 89. (NSR Permit 2195P, Specific Condition 1.c.)

Monitoring: The permittee shall monitor the total hours of operation for each genset, Units TA-33-G-2 through -4, using a non-resettable hour meter.

Recordkeeping: The permittee shall:

1) Record the total hours operation of the gensets listed above, as indicated on the non-resettable hour meter. (NSR Permit 2195P, Specific Condition 4.a., revised)

2) Calculate and record the semi-annual emissions of criteria and hazardous air pollutants from each genset, Units TA-33-G-2 through -4.

3) Maintain a copy of the engine certification to the applicable non road emission standards in 40 CFR 89. (NSR Permit 2195P, Specific Condition 4.c.)

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: Requirement/Monitoring: The operating hour readings are collected twice a year to verify the hour limit is not approached. The hour limits for these units were not exceeded during this reporting period. Hours of generator operation are provided in ATTACHMENT A1104.B.
The hour meters on these units are non-resettable.

Recordkeeping:

1) Equipment operating hours are recorded.

2) The emissions of regulated pollutants from Units TA-33-G-2, TA-33-G-3 and TA-33-G-4 are calculated and recorded on a six-month basis.

3) Certificates of compliance with applicable non-road emission standards are maintained on-site.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification is submitted on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A1105 Fuel Sulfur Requirements – Internal Combustion

A. Fuel Sulfur Requirement for Unit TA-33-G-1P

Requirement: Unit TA-33-G-1P while in use at TA-33 shall combust only diesel fuel containing no more than 500 ppmw total sulfur.

Monitoring: None.

Recordkeeping: The permittee shall demonstrate compliance with the limit on total fuel sulfur content by maintaining records of a current, valid purchase contract, tariff sheet or transportation contract for the fuel, or fuel analysis, specifying the fuel grade and certification or allowable sulfur limit. If fuel analysis is used, the analysis shall not be older than one year. Alternatively, compliance may be demonstrated by keeping a receipt or invoice from a commercial fuel supplier with each fuel delivery, which shall include the delivery date, the fuel type delivered, and amount of fuel delivered, and the maximum sulfur content of the fuel.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: Requirement: Only Ultra Low Sulfur Diesel (ULSD) is used at the facility and it contains no more than 15 ppm sulfur. Sulfur content is documented in fuel manifests and bill of ladings.

Recordkeeping: Only ULSD fuel containing no more than 15 ppm sulfur is used in this unit. Copies of the fuel manifests and bill of ladings are maintained in electronic files.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification is submitted on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A1106 20.2.61 NMAC Opacity – Internal Combustion

A. CI-RICE - TA-33-G-1P, TA-33-G-2, TA-33-G-3, TA-33-G-4, RLUOB-GEN-1, RLUOB-GEN-2, RLUOB-GEN-3, TA-48-GEN-1, TA-55-GEN-1 TA-55-GEN-2 and TA-55-GEN-3

Requirement: Visible emissions from the stacks of the above listed sources shall not equal or exceed an opacity of 20 percent.

Monitoring: During steady state operation, opacity shall be measured over a 10-minute period in accordance with the procedures at 40 CFR 60, Appendix A, Method 9 as required by 20.2.61.114 NMAC. Opacity measurements shall be conducted on a quarterly basis per calendar year as qualified by the Section B108.D monitoring provisions. This requirement excludes Insignificant and Trivial Activities.

Recordkeeping: The permittee shall maintain records of all Method 9 observations, and in accordance with Section B109.

Reporting: The permittee shall report date, time, and results of all Method 9 observations. The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: Requirement: No visible emissions were observed to exceed 20% opacity during this reporting period.

Monitoring: During this reporting period, opacity measurements were conducted on generators TA-33-G-2, TA-33-G-3, and TA-33-G-4. The opacity observations for these generators were conducted within the five year period allowed by Section B108.D(2). The opacity observation forms for this reporting period are located in ATTACHMENT A1106.A. Section B108.D(2) of the permit allows for reduced frequency of opacity monitoring if the unit operates 25% (547.5 hours in a quarter) or less of a monitoring period (calendar quarter). After two successive periods without monitoring, monitoring is required during the next period, unless the unit has operated less than 10% (219 hours in a quarter) of the monitoring period. If the unit runs less than 10%, that period is not considered as one of the two successive periods. No applicable CI-RICE units operated more than 25% for two successive monitoring periods during this reporting period, and the other permitted generators were not due for an opacity measurement during this reporting period.

Recordkeeping: Records are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A1107 Other – Internal Combustion

A. 40 CFR 60, Subpart IIII (Emergency Generators Units RLUOB-GEN-1 through -3)

Requirement: The units are subject to 40 CFR 60, Subpart IIII and the permittee shall comply with the applicable emissions standards and fuel requirements in §60.4205(a), §60.4206 and §60.4207(b) and Table 1102.B. In addition the permittee shall follow the compliance requirements stated in §60.4211(a, b, and f) and the general provisions of 40 CFR 60 Subpart A as required in §60.4218.

Monitoring: None

Recordkeeping: The permittee shall maintain records in accordance with Section B109.

Reporting: The permittee shall comply with all applicable reporting requirements of 40 CFR 60, Subpart A as required in §60.4218 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: Requirement: The manufacturer's emissions certifications as required by §60.4205(a) are available on site.

Diesel sulfur requirements of 15 ppm are met by fuel manifests and bill of ladings documenting ULSD purchases. §60.4211 (a) (b) and (f) - Manufacturer's certifications for nonroad engines are on-site; non-emergency maintenance checks and readiness testing of such units is limited to 100 hours per year per §60.4211(f)(3).

Recordkeeping: Hours of non-emergency and emergency operation are recorded at the facility during generator operation. The units subject to this condition operated less than 100 hours to date on non-emergency maintenance and readiness checks in accordance with condition §60.4211(f)(3).

Reporting: Hours of operations are reported in accordance with Section B110. See ATTACHMENT A1107.A. for operating records.

A1107 Other – Internal Combustion

B. 40 CFR 60, Subpart IIII (Emergency Generators Unit TA-48-GEN-1, TA-55-GEN-1 TA-55-GEN-2 and TA-55-GEN-3)

Requirement: The units are subject to 40 CFR 60, Subpart IIII and the permittee shall comply with the applicable emissions standards and fuel requirements in §60.4205(b), §60.4202(a)(2), §60.4206 and §60.4207(b) and Table 1102.B. In addition, the permittee shall follow the compliance requirements stated in §60.4211(a, c and f) and the general provisions of 40 CFR 60 Subpart A as required in §60.4218.

Monitoring: None

Recordkeeping: The permittee shall maintain records in accordance with Section B109.

Reporting: The permittee shall comply with all applicable reporting requirements of 40 CFR 60, Subpart A as required in §60.4218 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: Requirement: The manufacturer's emissions certifications as required by §60.4205(b) are available on site.
Diesel sulfur requirements of 15 ppm are met by fuel manifests and bill of ladings documenting ULSD purchases.
§60.4211 (a) (c) and (f) - Manufacturer's certifications for non-road engine are on-site to demonstrate compliance with standards; non-emergency maintenance checks and readiness testing of such units are limited to 100 hours per year per §60.4211(f)(3).

Recordkeeping: Hours of non-emergency and emergency operation are recorded at the facility during generator operation. The units subject to this condition operated less than 100 hours to date on non-emergency maintenance and readiness checks.

Reporting: Hours of operations are reported in accordance with Section B110. See ATTACHMENT A1107.B.

A1204 Operational Limitations – Data Disintegrator

A. Operational Throughput Limitation (Unit Data Disintegrator)

Requirement: The Unit Data Disintegrator is limited processing no more than 25,000 boxes or 565 tons per year media. To avoid Compliance Assurance Monitoring (CAM) requirements under 40 CFR 64, the Data Disintegrator shall limit uncontrolled potential PM emissions by limiting media processing no more than 25,000 boxes or 565 tons per year.

Monitoring: The permittee shall perform the monitoring required in Condition A1207.A.

Recordkeeping: The permittee shall perform the recordkeeping required in Condition A1207.A.

Reporting: The permittee shall perform the reporting required in Condition A1207.A.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes**	**Date report submitted:**	**Tracking Number:**
☒ **No**	**Provide comments and identify any supporting documentation as an attachment.**	

Comments: Requirement: A log is kept to ensure that no more than 25,000 boxes or 565 tons per year of media are processed.

Monitoring, recordkeeping and reporting are discussed in Condition A1207.A.

A1207 Other – Data Disintegrator

A. Emission calculations (Data Disintegrator)

Requirement: The permittee shall calculate Data Disintegrator emissions based on the records of the number of boxes of media that are destroyed.

Monitoring: The permittee shall monitor the quantity of media destroyed on a monthly basis. The total weight shall be based on a previously determined average box weight. This average weight determination shall be maintained as part of the records for this facility.

Recordkeeping: The permittee shall calculate the actual emissions rate (tons per reporting period) for the emission units listed in Table 1200.A on a semi-annual basis. The emission rate in tons per year shall be calculated by summing the emissions from the previous reporting period with the current period. Records shall be maintained in accordance with Section B109.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes**	**Date report submitted:**	**Tracking Number:**
☒ **No**	**Provide comments and identify any supporting documentation as an attachment.**	

Comments: Requirement: A log is kept to record the number of boxes of media destroyed monthly and is used to calculate emissions on a six-month basis.

Monitoring: The number of boxes destroyed is provided in ATTACHMENT A1207.A. The average box weight has been determined and is maintained as part of the facility records.

Recordkeeping: The actual emissions rate is calculated for the emission unit on a six-month basis and is included in the semi-annual emissions report. These records are maintained on-site. The emission rate in tons per year is calculated by summing the emissions from the previous reporting period with the current period. The emissions are compared to the allowable emissions for the unit. Records are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification submitted on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A1207 Other – Data Disintegrator

B. Cyclone/Cloth Tube Filters (Data Disintegrator)

Requirement: The permittee shall perform regular maintenance and repair on the cyclone and cloth tube filter(s) per manufacturer's recommendations. (NSR Permit 2195H, Specific Condition 1.d.)

Monitoring: N/A

Recordkeeping: The permittee shall maintain adequate records on site to demonstrate compliance with manufacturer's recommended repair and maintenance schedules for the cyclone and the cloth tube filter(s). (NSR Permit 2195H, Specific Condition 4.a.) Records shall be maintained in accordance with Section B109.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes**	**Date report submitted:**	**Tracking Number:**
☒ **No**	**Provide comments and identify any supporting documentation as an attachment.**	

Comments: Requirement: Preventive maintenance and repair are performed on the data disintegrator cyclone and cloth tube filter(s) following manufacturer's recommendations. Preventative maintenance was performed in July 2022.

Recordkeeping: Records of maintenance performed on the cyclone and cloth tube filter(s) are provided in ATTACHMENT A1207.B. Manufacturer recommended repair and maintenance information are available on site. Records are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A1207 Other – Data Disintegrator

C. Compliance Testing (Data Disintegrator)

Requirement: If upon notification by the Department, compliance testing is required, it shall be conducted in accordance with EPA Reference Methods 1 through 4, Method 5 for TSP, and conducted in accordance with 450 CFR 60, Appendix A. For combined TSP and PM10, testing shall be in accordance with 40 CFR 51, Appendix M, Method 201. Alternative test method(s) may be used if the Department approves the change. (NSR Permit 2195H, Specific Condition 6.b., revised)

Monitoring: N/A

Recordkeeping: The permittee shall maintain records in accordance with Section B109.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: Requirement: No compliance test was required or performed during this reporting period.

Recordkeeping: Records are maintained in accordance with Section B110. No tests were conducted and no records were generated during this reporting period.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification submitted on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A1305 Fuel Sulfur Requirements – TA-3 Power Plant

A. Boilers (Units TA-3-22-1 through -3)

Requirement: External combustion sources at the TA-3 Power Plant shall combust only natural gas containing no more than 2 gr/100 scf total sulfur or No. 2 fuel oil containing no more than 0.05 wt% total sulfur. (NSR Permit 2195B-M2, Specific Condition A110.A)

Monitoring: N/A

Recordkeeping: The permittee shall demonstrate compliance with the limit on total fuel sulfur content by maintaining records of a current, valid purchase contract, tariff sheet or transportation contract for the gaseous or liquid fuel, or fuel analysis, specifying the fuel grade and certification or allowable sulfur limit. If fuel analysis is used, the analysis shall not be older than one year. Alternatively, compliance may be demonstrated by keeping a receipt or invoice from a commercial fuel supplier with each fuel delivery, which shall include the delivery date, the fuel type delivered, and amount of fuel delivered, and the maximum sulfur content of the fuel.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: Requirement: The natural gas transportation contract states that gas provided to LANL will be pipeline quality with total sulfur content of no more than three quarters (3/4) grains of total sulfur per one hundred (100) standard cubic feet. Fuel oil for this source is located in a tank on-site and only Ultra Low Sulfur Diesel (ULSD) is delivered to the facility. ULSD contains less than 0.0015 wt% total sulfur.

Recordkeeping: A copy of the natural gas transportation contract is maintained on-site. Copies of the fuel manifests and bill of ladings for fuel oil are maintained in electronic files. No fuel oil was purchased for the TA-3 power plant during this reporting period.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A1305 Fuel Sulfur Requirements – TA-3 Power Plant

B. Combustion Turbine (Unit TA-3-22-CT-1)

Requirement: The combustion turbine at the TA-3 Power Plant shall combust only natural gas containing no greater than 2 gr/100 scf total sulfur. (NSR Permit 2195B-M2, Specific Condition A110.B)

Monitoring: N/A

Recordkeeping: The permittee shall demonstrate compliance with the limit on total fuel sulfur content by maintaining records of a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, or fuel analysis, specifying the fuel grade and certification or allowable sulfur limit. If fuel analysis is used, the analysis shall not be older than one year. (NSR Permit 2195B-M2, Specific Condition A110.B and 40 CFR 60.334(h))

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: Requirement: This requirement is met as the natural gas transportation contract states that gas provided to LANL will be pipeline quality with total sulfur content of no more than three quarters (3/4) grains of total sulfur per one hundred (100) dry standard cubic feet.

Recordkeeping: LANL's natural gas transportation contract is kept on-site.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A1306 20.2.61 NMAC Opacity – TA-3 Power Plant

A. Sources Combusting Natural Gas

Requirement: All combustion units shall not exceed 20% opacity. (NSR Permit 2195B-M2, Specific Condition A111.A)

Monitoring: Use of natural gas fuel meeting the requirement at Condition A1305.A or B constitutes compliance with 20.2.61 NMAC unless opacity exceeds 20% averaged over a 10-minute period. When any visible emissions are observed during steady state operation and are determined to be not due to condensed water vapor only, opacity shall be measured over a 10-minute period, in accordance with the procedures at 40 CFR 60, Appendix A, Method 9 as required by 20.2.61.114 NMAC.

Recordkeeping: The permittee shall record dates of any opacity measures and the corresponding opacity readings.

Reporting: The permittee shall report dates of any opacity measures and the corresponding opacity readings. The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes**	**Date report submitted:**	**Tracking Number:**
☒ **No**	**Provide comments and identify any supporting documentation as an attachment.**	

Comments: Requirement: LANL has certified opacity readers on-site who perform opacity readings using 40 CFR 60, Appendix A, Method 9 to determine compliance with the opacity limitation.

Monitoring: Natural gas fuel meets the requirement specified in Condition A1305.A and B. Use of natural gas fuel constitutes compliance with the 20% opacity limit. No visible emissions were observed during steady state operation during this reporting period. See ATTACHMENT A1306.A. for details.

Recordkeeping: A standard form is used for all opacity measurements. The form includes the date of measurement and opacity observed. No opacity readings were required during this reporting period.

Reporting: A standard form is used for all opacity measurements. The form includes the date and time of the Method 9 observation and opacity observed. Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A1306 20.2.61 NMAC Opacity – TA-3 Power Plant

B. Boilers Combusting No. 2 Fuel Oil

Requirement: All combustion units shall not exceed 20% opacity. (NSR Permit 2195B-M2, Specific Condition A111.B)

Monitoring: During steady state operation, opacity shall be measured over a 10-minute period in accordance with the procedures at 40 CFR 60, Appendix A, Method 9 as required by 20.2.61.114 NMAC. Opacity measurements shall be conducted on a quarterly basis per calendar year whenever the boiler(s) are operational during the monitoring period. This requirement is subject to the monitoring provisions of Condition B108.D.

Recordkeeping: The permittee shall maintain records of all Method 9 observations, and in accordance with Section B109.

Reporting: The permittee shall report date, time, and results of all Method 9 observations. The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: Requirement: Certified opacity readers are located on-site who perform opacity readings using 40 CFR 60, Appendix A, Method 9 to determine compliance with the opacity limitation. Fuel oil was not used during this reporting period.

Monitoring: Opacity is read at least once per quarter when boilers are combusting fuel oil and when required by monitoring provisions in condition B108.D. Opacity readings are measured over a 10-minute period and in accordance with 40 CFR 60, Appendix A, Method 9. A standard form is used for all opacity measurements. The form includes the date of measurement and opacity observed. Fuel oil was not used during this reporting period and therefore Method 9 opacity measurements were not conducted. See ATTACHMENT A1306.B.

Recordkeeping: Records are maintained in accordance with Section B109.

Reporting: A standard form is used for all opacity measurements. The form includes the date and time of the Method 9 observation and opacity observed. Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A1307 Other – TA-3 Power Plant

A. Emission calculations (TA-3 Power Plant)

Requirement: The permittee shall comply with the hourly and annual emission limits at Table1302.A. and Conditions A1302.B, C, and D for the combustion turbine and boilers. The boiler annual emission limit shall be expressed as the combined emissions from all 3 boilers. (NSR Permit 2195B-M2, Specific Condition A801.A)

Monitoring: The permittee shall perform the following calculations on a monthly basis:

1) Calculate the average hourly emissions rates (pph) for each emissions unit based on the monthly total fuel consumption and monthly actual hours of operation.

2) Calculate the actual annual emissions rates (tpy) for all emissions units based on the monthly rolling 12-month total fuel consumption and the monthly rolling 12-month total hours of operation.

3) All NOx emission rates for the boilers shall also be calculated in terms of lb/MMBtu heat input.

(NSR Permit 2195B-M2, Specific Condition A801.A)

Recordkeeping: The permittee shall maintain records in accordance with Section B109.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes**	**Date report submitted:**	**Tracking Number:**
☒ **No**	**Provide comments and identify any supporting documentation as an attachment.**	

Comments: Requirement: All emissions calculations required by this section are performed for the emission units listed. The emission units did not exceed the hourly or annual emission limits.

Monitoring: Emissions spreadsheets are in place that calculate all required emissions and are used for monitoring and reporting purposes. See ATTACHMENT A1307.A for details.

1) The average hourly emission rates are included in the spreadsheet.

2) The actual annual emission rates are included in the spreadsheet.

3) The emission rates are based on the emission factor for NOx (lb/MMscf), which is 58 lb/MMscf, this emission factor is an average of source tests conducted on all 3 boilers in September 2002 burning natural gas after flue gas recirculation (FGR) installed. This factor is converted to lbs/MMBtu by dividing by the high heat value of natural gas (the number of Btu in a scf). As the HHV of natural gas ranges in value, the following emission range was calculated using the low and high values at LANL between 2011 and 2022, the lowest was 939.97 Btu/scf and the highest was 1079.3 Btu/scf, therefore the NOx emission rate will range from 0.0537 to 0.0617 lbs/MMBtu. These NOx emission rates are well below the 0.3 lb/MMBtu heat input limit in A1302.B.

Recordkeeping: Records are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a semi-annual basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A1307 Other – TA-3 Power Plant

B. Fuel Usage (Boilers, Units TA-3-22-1 through -3)

Requirement: Combined boiler operation shall not consume more than 1000 MMscf of natural gas and no more than 500,000 gallons of No. 2 fuel oil in any 12-month period. Volumetric natural gas fuel flow shall be measured using gas flowmeters installed on the natural gas fuel inlet to each respective unit (3 separate gas flowmeters). Fuel oil usage shall be measured using a single inventory meter located at a storage tank that is dedicated for use by the TA-3 power plant boilers. (NSR Permit 2195B-M2, Specific Condition A803.A, revised)

Monitoring: The liquid fuel flow rate shall be continuously monitored whenever liquid fuel is combusted. The natural gas fuel flow rate for each boiler shall be continuously monitored whenever natural gas is combusted. The hours of operation of each boiler shall be continuously monitored. (NSR Permit 2195B-M2, Specific Condition A803.A, revised)

Recordkeeping: The permittee shall record the monthly total of liquid fuel (gallons) for all boilers combined and gaseous fuel (scf) for each boiler on a monthly basis, to include a monthly total. Annual fuel usage shall be calculated and recorded on a monthly rolling 12-month total basis. The permittee shall record the hours of operation of each boiler on a monthly basis, to include a monthly total. The record shall include the monthly rolling 12-month total hours of operation for all 3 boilers combined. The permittee shall maintain records in accordance with Section B109. (NSR Permit 2195B-M2, Specific Conditon A803.A, revised)

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: Requirement: The combined boiler natural gas use did not exceed 1,000 MMscf or 500,000 gallons of No. 2 fuel oil in any 12-month period. Volumetric flow is measured using the liquid or gas fuel flowmeters installed on the natural gas fuel inlet to each respective unit and on the combined fuel oil inlet to the boilers. All fuel use data are tracked monthly in a spreadsheet used for emission calculations.

Monitoring: Natural gas fuel meters are in place on each boiler. Fuel oil is measured using control panel readings. Both natural gas and fuel oil are continuously monitored when being combusted. A monthly and 12-month rolling total of natural gas and fuel oil use are recorded and reviewed monthly to verify usage does not exceed allowable limits. See ATTACHMENT 1307.B for monthly and 12-month rolling totals for each fuel.

Recordkeeping: Total monthly liquid fuel for all boilers and gaseous fuel for each boiler were recorded on a monthly basis. The annual fuel usage was calculated and recorded on a monthly rolling 12-month total basis. Total hours of operation of each boiler are recorded monthly and included in a monthly rolling 12-month total hours for all boilers combined. Hours of operation of each boiler are continuously monitored. This data is collected monthly from the power plant operations staff. Monthly and 12 month rolling hours are provided in ATTACHMENT A.1307.B. Records are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in

Section A605 of this report.

A1307 Other – TA-3 Power Plant

C. Fuel Usage (Combustion Turbine, Unit TA-2-22-CT-1)

Requirement: The combustion turbine shall not consume more than 1400 MMscf of natural gas in any 12-month period. Volumetric flow shall be measured using a gas fuel flowmeter installed on the fuel inlet of the combustion turbine. (NSR Permit 2195B-M2, Specific Condition A802.A)

Monitoring: The natural gas fuel flow rate for the combustion turbine shall be continuously monitored whenever natural gas is combusted. (NSR Permit 2195B-M2, Specific Condition A802.A)

Recordkeeping: The permittee shall record the daily total of gaseous fuel (scf) for the turbine on a monthly basis, to include a monthly total. Annual fuel usage shall be calculated and recorded on a monthly rolling 12-month total basis. The permittee shall record the daily hours of operation of the combustion turbine on a monthly basis, to include a monthly total. The record shall include the monthly total hours and monthly rolling 12-month total hours of operation. The permittee shall maintain records in accordance with Section B109. (NSR Permit 2195B-M2, Specific Condition A802.A)

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: Requirement: A 12-month rolling total for natural gas use is maintained to verify usage does not exceed 1400 MMscf. The daily and monthly total fuel use is collected and recorded in a spreadsheet used for calculating emissions. See ATTACHMENT A1307.C.

Monitoring: The natural gas flowmeter is installed on the turbine inlet. The fuel flowmeter continuously measures natural gas being delivered to the combustion turbine.

Recordkeeping: Daily hours of operation are collected monthly and entered into the spreadsheet. A 12-month rolling total hours of operation is calculated using this information. Rolling total hours are provided in ATTACHMENT A1307.C. Records are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A1307 Other – TA-3 Power Plant

D. Load Requirement (Combustion Turbine, Unit TA-3-22-CT-1)

Requirement: The combustion turbine shall be operated at no less than 80% and no greater than 100% load as determined by the manufacturer's supplied algorithm, except for minimal periods during startup and shutdown conditions. The permittee shall follow the manufacturer's recommended startup/shutdown procedures in order to minimize the duration of these events. (NSR Permit 2195B-M2, Specific Condition A802.B)

Monitoring: The operating load of the combustion turbine shall be monitored once daily during normal operations of that unit. (NSR Permit 2195B-M2, Specific Condition A802.B)

Recordkeeping: The permittee shall record the daily monitored operating load for the combustion turbine. The permittee shall maintain a record of the manufacturer's recommended startup/shutdown procedure and the manufacturer's criteria for the determination of turbine load. The permittee shall maintain a record for each startup/shutdown or malfunction event for the combustion turbine. The record shall include the date, the start/end time and duration for each event, which is defined as the length of time the combustion turbine is operating at less than 80% or greater than 100% load. For any malfunction event, the record shall also include the nature of the malfunction and any corrective action taken. The permittee shall maintain records in accordance with Section B109. (NSR Permit 2195B-M2, Specific Condition A802.B)

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes**	**Date report submitted:**	**Tracking Number:**
☒ **No**	**Provide comments and identify any supporting documentation as an attachment.**	

Comments: Requirement: The combustion turbine load was maintained between 80% and 100% during this reporting period.
Load range is calculated by the turbine operating system and is manually recorded during each operation.
Startup/shutdown procedures are in place and are followed by the unit operators.

Monitoring: Load range is calculated by the turbine operating system and is manually recorded each hour during normal operation. The operating load is recorded at least once daily during normal operations. This data is collected in the daily operating log. Startup/shutdown procedures are in place and are followed by the unit operators. Each time the unit is started or shut down, the data is entered into a daily operating log, which is maintained on-site. The record includes the date, start/end times, and duration. See ATTACHMENT A.1307.D.

Recordkeeping: The operating load is recorded at least once daily during normal operations. This data is collected in the daily operating log. Startup/shutdown procedures are in place and are followed by the unit operators. Each time the unit is started or shut down, the data is entered into a daily operating log, which is maintained on-site. The record includes the date, start/end times, and duration. Records are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A1307 Other – TA-3 Power Plant

E. Control Device Operation (Boilers, Units TA-3-22-1 through -3)

Requirement: Each boiler (Units TA-3-22-1 through -3) shall only be operated with a properly operating flue gas recirculation fan (Units F-1 through -3, respectively). Any malfunction of the flue gas recirculation system during boiler operation may be subject to the excess emissions requirements of 20.2.7 NMAC. (NSR Permit 2195B-M2, Specific Condition A803.B)

Monitoring: The flue gas recirculating fans shall be inspected for proper operation and maintenance once during each calendar month that the unit was operating. (NSR Permit 2195B-M2, Specific Condition A803.B)

Recordkeeping: The permittee shall record all inspections of the flue gas recirculating fans and any event during which a fan malfunctions. The record shall include the date, time, name of operator conducting the inspection, and any discrepancies noted. For malfunction events, the record shall also include the nature and duration of the malfunction, and any corrective action taken. The permittee shall maintain records in accordance with Section B109. (NSR Permit 2195B-M2, Specific Condition A803.B)

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: Requirement: When a boiler is operating, the associated Flue Gas Recirculation (FGR) fan is operating. A fan speed indicator is located on the control panel in the operator control room. This fan speed is monitored and recorded during boiler operation. No malfunctions of the FGR systems have occurred during this reporting period.

Monitoring: The FGR fans are inspected for proper operation and maintenance each month the unit is operating. Preventive maintenance forms are provided in ATTACHMENT A1307.E.

Recordkeeping: Records of inspection and maintenance of the FGR fans are completed monthly. No malfunctions occurred during this reporting period. All inspection records contain the required data found in this section. Records are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A1307 Other – TA-3 Power Plant

F. Control Device Operation (Combustion Turbine, Unit TA-3-22-CT-1)

Requirement: The combustion turbine shall be equipped with Rolls-Royce Dry Low Emissions (DLE) control technology (pre-mix, lean-burn series staged combustion system) to control NOx emissions. (NSR Permit 2195B-M2, Specific Condition A802.C)

Monitoring: N/A

Recordkeeping: The permittee shall maintain a record of the DLE system associated with the combustion turbine. The permittee shall maintain records in accordance with Section B109. (NSR Permit 2195B-M2, Specific Condition A802.C)

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: Requirement: The combustion turbine is equipped with the Dry Low Emissions (DLE) control technology. The DLE control was evaluated during unit start-up and determined to be working as designed. Manufacturer data are available on the DLE system.

Recordkeeping: Records of the DLE system associated with the combustion turbine were all maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

A1307 Other – TA-3 Power Plant

G. 40 CFR 60, Subparts A and GG (Combustion Turbine, Unit TA-3-22-CT-1)

Requirement: The combustion turbine is subject to 40 CFR 60, Subpart GG and the permittee shall comply with the applicable requirements of 40 CFR 60, Subpart A and Subpart GG. (NSR Permit 2195B-M2, Specific Condition A802.D)

Monitoring: The permittee shall comply with the monitoring and testing requirements of 40 CFR 60.334 and 60.335. (NSR Permit 2195B-M2, Specific Condition A802.D)

Recordkeeping: The permittee shall comply with the recordkeeping requirements of 40 CFR 60.334 and 40 CFR 60.7. (NSR Permit 2195B-M1-R2, Specific Condition A802.D)

Reporting: The permittee shall comply with the reporting requirements of 40 CFR 60.7. (NSR Permit 2195B-M1-R2, Specific Condition A802.D)

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: Requirement: The combustion turbine is in compliance with 40 CFR Part 60 Subpart A and 40 CFR Part 60 Subpart GG.

Monitoring: The combustion turbine is in compliance with the monitoring and test requirements of 40 CFR 60.334 and 60.335.

Recordkeeping: The combustion turbine is in compliance with the monitoring, notification, and record keeping requirements of 40 CFR 60.334 and 40 CFR 60.7.

Reporting: The combustion turbine is in compliance with the reporting requirements of 40 CFR 60.7.

A1307 Other – TA-3 Power Plant

H. Periodic Emissions Tests (Combustion Turbine, Unit TA-3-22-CT-1)

Requirement: The permittee shall comply with the allowable emission limits at Table A1302.A, including the NOx ppmv limitation. (NSR Permit 2195B-M2, Specific Condition A802.E)

Monitoring: The permittee shall test using a portable analyzer or EPA Reference Methods subject to the requirements and limitations of Section B108, General Monitoring Requirements. For periodic testing of NOx and CO emissions tests shall be carried out as described below.

Test results that demonstrate compliance with the NOx and CO emission limits shall also be considered to demonstrate compliance with the VOC emission limits.

(1) The test period shall be annually, based on a calendar year.
(2) The tests shall continue based on the existing testing schedule.
(3) All subsequent monitoring shall occur in each succeeding monitoring period. No two monitoring events shall occur closer together in time than 25% of a monitoring period.
(4) The permittee shall follow the General Testing Procedures of Section B111.
(5) Performance testing required by 40 CFR 60, Subpart GG or 40 CFR 60, Subpart KKKK may be used to satisfy these periodic testing requirements if they meet the requirements of this condition and are completed during the specified monitoring period.

Recordkeeping: The permittee shall maintain records in accordance with Section B109. The permittee shall also record the results of the periodic emissions tests, including the turbine's fuel flow rate and horsepower at the time of the test, and the type of fuel fired (natural gas, field gas, etc.).

If a combustion analyzer is used to measure excess air in the exhaust gas, records shall be kept of the make and model of the instrument and instrument calibration data. If an ORSAT apparatus or other gas absorption analyzer is used, the permittee shall record all calibration results.

The permittee shall also keep records of all raw data used to determine exhaust gas flow and of all calculations used to determine flow rates and mass emissions rates.

Reporting: The permittee shall report in accordance with Section B109, B110, and B111.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes**	**Date report submitted:**	**Tracking Number:**
☒ **No**	**Provide comments and identify any supporting documentation as an attachment.**	

Comments: Requirement: The facility is in compliance with the allowable emission limits in Table A1302.A, including the NOx ppmv limitation, as demonstrated in the monitoring and reporting sections below.

Monitoring: The test followed the requirements and limitations required in Section B108. A combustion analyzer is used for this periodic emissions test. Instrument and calibration data are included in the final test report. An ORSAT or other similar gas absorption analyzer is not used. Results from the test demonstrate compliance with NOx and CO emission limits and thus the VOC emission limits. No limits were exceeded. See ATTACHMENT

A1307.H. for the test report.
1) An emission stack test was conducted on November 29, 2022; the test results demonstrated that the actual emissions were less than the allowable emissions.
2) No additional stack testing was required during this monitoring period.
3) The tests are performed annually if required, or at a frequency as specified in General Condition B108.D based on the percentage of time the unit has operated.
4) The stack test was performed following the monitoring requirements required in Section B108 and general testing procedures found in Section B111. Records of periodic emissions test include all data required by this section.
5) Performance testing met the requirements of this condition and were completed during the specified monitoring period.

Recordkeeping: The test followed the requirements and limitations required in Section B109. Records are kept of the periodic emissions test results, including the turbine's fuel flow rate and horsepower, and the type of fuel fired. A combustion analyzer is used for this periodic emissions test. Instrument and calibration data are included in the final test report. An ORSAT or other similar gas absorption analyzer is not used. Raw data and calculations are included in the test report.

Reporting: Emission and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109, B110, and B111. For more information, see comments in Section A605 of this report.

A1407 Other – Open Burning

A. Operational

Requirement: The permittee shall comply with the applicable requirements of 20.2.60 NMAC and 20.2.65 NMAC, including, but not limited to:

1) Prior to initiating a burn consisting of vegetative material, the permittee shall submit to the Department a sampling and analysis plan and upon approval conduct representative sampling of the intended burn material and analyze samples for radionuclides, target analyte list (TAL) inorganic elements, polychlorinated biphenyls (PCBs), and high explosives (HE); and

2) The permittee shall submit to the Department a background concentration report for the contaminants listed in Condition A1407.A, Requirement (1). The report shall indicate locations where background concentrations were taken and compare sample results with background concentrations of the constituents; and

3) The permittee shall not burn vegetative material which includes any contaminant above the relevant background concentration; and

4) Upon receiving Department approval, the permittee shall conduct public notification in a display ad in at least four newspapers: Los Alamos Monitor, Rio Grande Sun, Santa Fe New Mexican, and the Albuquerque Journal, no less than 21 days in advance of a planned burn.

Monitoring: The permittee shall monitor all open burning as required by Department regulation or burn approval.

Recordkeeping: The permittee shall maintain records of all sampling and analysis plans and any representative sampling conducted. Records shall be kept in accordance with Section B109.

Reporting: The permittee shall submit reports as outlined in the Condition 1407.A Requirements, as described in Section A109, and in accordance with Section B110.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes**	**Date report submitted:**	**Tracking Number:**
☒ **No**	**Provide comments and identify any supporting documentation as an attachment.**	

Comments: No open burning occurred during this reporting period. See ATTACHMENT A1407.A. for details.

P100-R2M1 - A1507 Evaporative Sprayers–Work Practice Standards

A. Operational Requirements (Evaporative Sprayers)

Requirement: Compliance with the allowable emission limits in Table 106.B shall be demonstrated by calculating the annual total HAPs emissions in tons per year. The emissions shall be calculated based on the most recent water analysis and hours of operation for the evaporative sprayers.

Monitoring: The permittee shall conduct an analysis of the basin water, including analytical results (water concentrations) for all HAPs and TAPs, at the Sanitary Effluent Reclamation Facility (SERF) every two years beginning no later than calendar year 2018. The permittee shall monitor the hours of operation for each sprayer.

Recordkeeping: The permittee shall record a monthly rolling, 12-month total of HAPs emissions based on the sum of emissions from all the evaporative sprayers. The emission factors for the HAPs shall be based on the values from the most recent water analysis.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B111. An electronic copy of the required water analysis including analytical results (water concentrations) for all HAPs, TAPs, and the total dissolved solids (TDS) shall be sent to AQB with the Semi-annual Monitoring Report specified in A109.A for any year in which the water sampling is conducted.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: Requirement: The facility is in compliance with the allowable emissions limits in Table 106.B by calculating the annual total HAP emissions in tons per year. The most recent water analysis results and hours of operation are used to calculate the emissions.

Monitoring: The facility conducts analysis of the basin water for HAPs and TAPs every two years effective 2018. Basin water sampling was conducted in December of 2022. The hours of operation are monitored and tabulated. See ATTACHMENT A1507.A.b. for details.

Recordkeeping: Records are kept on-site and include the monthly rolling and 12-month total of HAPs emissions based on the sum of emissions from all the evaporative sprayers. The emission factors are based on the values from the most recent water analysis.

Reporting: Reporting is done in accordance with the Title V requirements specified in Section A109.A and Section B111. Water analysis results will be included in the Semi-Annual Monitoring Report for any year in which the water sampling is conducted. Basin water sampling was conducted in December of 2022. See ATTACHMENT A1507.A.a. for details.

P100-R2M1 - A1507 Evaporative Sprayers–Work Practice Standards

B. Maintenance and Repair Requirements

Requirement: Compliance with the allowable emission limits in Table 106.A shall be demonstrated by properly maintaining and repairing the units.

Monitoring: Maintenance and repair shall meet the minimum manufacturer's or permittee's recommended maintenance schedule. Activities that involve maintenance, adjustment, replacement, or repair of functional components with the potential to affect the operation of an emission unit shall be documented as they occur.

Recordkeeping: The permittee shall maintain records in accordance with Section B109, including records of maintenance and repairs activities and a copy of the manufacturer's or permittee's recommended maintenance schedule.

Reporting: The permittee shall maintain records in accordance with Section B109, including records of maintenance and repairs activities and a copy of the manufacturer's or permittee's recommended maintenance schedule.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: Requirement: Compliance with the allowable emissions limits is demonstrated by properly maintaining and repairing the units.

Monitoring: Equipment maintenance and repair are conducted in accordance with the manufacturer's recommended schedule and LANL procedures, and documented in Table 106.A. See ATTACHMENT A1507.B. for work practice standards and maintenance and repair records.

Recordkeeping: Records are maintained in accordance with Section B109. Maintenance and repair records are kept on-site, and include maintenance and repairs activities, and the maintenance schedule.

Reporting: Records are maintained in accordance with Section B109. Maintenance and repair records are kept on-site, and include maintenance and repairs activities, and the maintenance schedule.

P100-R2M4 - A1507 Evaporative Sprayers–HAPs Calculations, Maintenance, and Repair

A. HAPs Calculations (Evaporative Sprayers)

Requirement: Compliance with the facility-wide allowable emission limits in Table 106.B (P100-R2M1) shall be demonstrated by calculating the annual total HAPs emissions in tons per year. The emissions shall be calculated based on the most recent water analysis and hours of operation for the evaporative sprayers.

Monitoring: The permittee shall conduct an analysis of the basin water, including analytical results (water concentrations) for all HAPs and New Mexico TAPs, at the Sanitary Effluent Reclamation Facility (SERF) every two years beginning no later than calendar year 2018. The permittee shall monitor the

hours of operation for each sprayer.

Recordkeeping: The permittee shall record a monthly rolling, 12-month total of HAPs emissions based on the sum of calculated actual emissions from all the evaporative sprayers. The emission factors for the HAPs shall be based on the values from the most recent water analysis.

Reporting: The permittee shall submit reports according to Section A109 and in accordance with Section B111 (P100-R2M1). An electronic copy of the required water analysis including analytical results (water concentrations) for all HAPs, TAPs, and the total dissolved solids (TDS) shall be sent to AQB with the Semi-annual Monitoring Report specified in Condition A109.A (P100-R2M1) for any year in which the water sampling is conducted.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

☐ **Yes** **Date report submitted:** **Tracking Number:**

☒ **No** **Provide comments and identify any supporting documentation as an attachment.**

Comments: Requirement: The facility demonstrates compliance with the allowable emissions limits in Table 106.B by calculating the annual total HAP emissions in tons per year. The most recent water analysis results and hours of operation are used to calculate the emissions.

Monitoring: The facility conducts analysis of the basin water for HAPs and TAPs every two years effective 2018. Basin water sampling was conducted in December of 2022. The hours of operation are monitored and tabulated.

Recordkeeping: Records are kept on-site and include the monthly rolling and 12-month total of HAPs emissions based on the sum of emissions from all the evaporative sprayers. The emission factors are based on the values from the most recent water analysis.

Reporting: Reporting is done in accordance with the Title V requirements specified in Section A109.A and Section B111. Water analysis results will be included in the Semi-Annual Monitoring Report for any year in which the water sampling is conducted. Basin water sampling was conducted in December of 2022.

P100-R2M4 - A1507 Evaporative Sprayers–HAPs Calculations, Maintenance, and Repair

B. Maintenance and Repair Requirements

Requirement: Compliance with the facility-wide allowable emission limits in Table 106.B (P100-R2M1) shall be demonstrated by properly maintaining and repairing the units.

Monitoring: Maintenance and repair shall meet the minimum manufacturer's or permittee's recommended maintenance schedule. Activities that involve maintenance, adjustment, replacement, or repair of functional components with the potential to affect the operation of an emission unit shall be documented as they occur.

Recordkeeping: The permittee shall maintain records in accordance with Section B109 (P100-R2M1), including records of maintenance and repairs activities and a copy of the manufacturer’s or permittee’s recommended maintenance schedule.

Reporting: The permittee shall maintain records in accordance with Section B109 (P100-R2M1), including records of maintenance and repairs activities and a copy of the manufacturer’s or permittee’s recommended maintenance schedule.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.		
☐ **Yes**	**Date report submitted:**	**Tracking Number:**
☒ **No**	**Provide comments and identify any supporting documentation as an attachment.**	

Comments: Requirement: Compliance with the allowable emissions limits is demonstrated by properly maintaining and repairing the units.

Monitoring: Equipment maintenance and repair are conducted in accordance with the manufacturer's recommended schedule and LANL procedures, and documented in Table 106.A.

Recordkeeping: Records are maintained in accordance with Section B109. Maintenance and repair records are kept on-site, and include maintenance and repairs activities, and the maintenance schedule.

Reporting: Records are maintained in accordance with Section B109. Maintenance and repair records are kept on-site, and include maintenance and repairs activities, and the maintenance schedule.

Part 2

Deviation Summary Report

1. Were any deviations reported to the Air Quality Bureau during this reporting period? If NO, answer question 2 below. If YES, complete the "Summary of Deviations Previously Reported" table below, then answer question	☐ Yes ☒ No

SUMMARY OF DEVIATIONS PREVIOUSLY REPORTED

Unit # and description	Date deviation reported	Tracking Number

2. Are there any deviations not yet reported? If No, no further information is required on the Deviation Summary Report. If Yes, answer question 3 below and enter the required information in the Deviation Summary Table.	☐ Yes ☒ No
3. Did any of the deviations result in excess emissions? For deviations resulting in excess emissions a completed Excess Emission Form for each deviation must be attached to this report.	☐ Yes ☐ No

Deviation Summary Table for deviations not yet reported.

No.	Applicable Requirement (Include Rule Citation)	Emission Unit ID(s)	Cause of Deviation	Corrective Action Taken
1				
2				
3				
4				
5				

Deviation Summary Table (cont.)

	Deviation Started		Deviation Ended					Did you attach an excess emission form?
No.	Date	Time	Date	Time	Pollutant	Monitoring Method	Amount of Emissions	
1								☐ Yes ☐ No
2								☐ Yes ☐ No
3								☐ Yes ☐ No
4								☐ Yes ☐ No
5								☐ Yes ☐ No

AI 856 | Los Alamos National Laboratory

Operating Permit P100-R2M4

Monitoring Period July 1–December 31, 2022

ATTACHMENT A607.A.	Asphalt Plant – Differential Pressure Records
ATTACHMENT A607.C.	Asphalt Plant – Method 9 Opacity Reports
ATTACHMENT A607.E.	Asphalt Plant – Daily Operation Log and 12-Month Rolling Production
ATTACHMENT A607.F.	Asphalt Plant – Maintenance and Delivery Records
ATTACHMENT A607.G.	Asphalt Plant – Method 22 Opacity Reports
ATTACHMENT A707.B.a.	Beryllium – TA-03-0066 Beryllium Logs
ATTACHMENT A707.B.b.	Beryllium – TA-35-0213 Beryllium Operating Log
ATTACHMENT A707.C.a.	Beryllium – TA-03-0141 Beryllium HEPA Filter Differential Pressure Readings
ATTACHMENT A707.C.b.	Beryllium – TA-55-PF4 Annual HEPA Filter Challenge Test Reports
ATTACHMENT A707.C.c.	Beryllium – TA-55-PF4 HEPA Filtration Differential Pressure Readings
ATTACHMENT A806.A.	External Combustion – 20.2.61 NMAC Opacity
ATTACHMENT A806.C.	External Combustion – 20.2.61 NMAC Opacity – Units RLUOB-BHWs Fuel Oil-Fired
ATTACHMENT A807.A.	External Combustion – Natural Gas Usage and Rolling 12-Month Total
ATTACHMENT A807.B.	External Combustion – RLUOB Natural Gas and Fuel Oil Usage
ATTACHMENT A807.C. & D.	External Combustion – Fuel Oil Sulfur Content
ATTACHMENT A807.E.	External Combustion – Initial Compliance Testing (Unit RLUOB-BHW-4)
ATTACHMENT A807.F.a.	External Combustion – Operational Boiler Inspection
ATTACHMENT A807.F.b.	External Combustion – Revised Boiler Maintenance Procedures
ATTACHMENT A907.A.	Chemical Usage – Chemical Purchases (From ChemDB)
ATTACHMENT A907.B.a.	Chemical Usage – RLUOB-CHEM Chemical Purchases (From ChemDB)
ATTACHMENT A907.B.b.	Chemical Usage – RLUOB-CHEM Chemical Quantity Total
ATTACHMENT A1007.A.a.	Degreaser – Degreaser Solvent Usage (From Tracking Database)
ATTACHMENT A1007.A.b.	Degreaser – Completed Work Practice Checklists
ATTACHMENT A1104.A.	Internal Combustion – TA-33-G-1P Daily Operating Logs
ATTACHMENT A1104.B.	Internal Combustion – Permitted Generator Hours of Operation

AI 856 | Los Alamos National Laboratory

Operating Permit P100-R2M4

Monitoring Period July 1–December 31, 2022

ATTACHMENT A1106.A.	Internal Combustion – Method 9 Opacity Reports
ATTACHMENT A1107.A.	Internal Combustion – Operating Records for RLUOB Generators
ATTACHMENT A1107.B.	Internal Combustion – Operating Records for Permitted Emergency Generators
ATTACHMENT A1207.A.	Data Disintegrator – Operating Logs
ATTACHMENT A1207.B.	Data Disintegrator – Maintenance Performed
ATTACHMENT A1306.A.	TA-03 Power Plant – Opacity for Sources Combusting Natural Gas
ATTACHMENT A1306.B.	TA-03 Power Plant – Opacity for Boilers Combusting No. 2 Fuel Oil
ATTACHMENT A1307.A.	TA-03 Power Plant – Emission Rate Calculations
ATTACHMENT A1307.B.	TA-03 Power Plant – Boiler Fuel Use and Hours of Operation
ATTACHMENT A1307.C.	TA-03 Power Plant – Turbine Fuel Use and Hours of Operation
ATTACHMENT A1307.D.	TA-03 Power Plant – Turbine Operating Logs
ATTACHMENT A1307.E.	TA-03 Power Plant – FGR Fan Inspection and Maintenance
ATTACHMENT A1307.H.	TA-03 Power Plant – Combustion Turbine Emission Stack Test Report
ATTACHMENT A1407.A.	Open Burning
ATTACHMENT A1507.A.a.	Evaporative Sprayers – Analytical Data for Basin Water
ATTACHMENT A1507.A.b.	Evaporative Sprayers – Hours of Operation
ATTACHMENT A1507.B.	Evaporative Sprayers – Maintenance and Repair Requirements

ATTACHMENT A607.A.

Asphalt Plant

Differential Pressure Records

The Asphalt Plant did not operate during this reporting period and no differential pressure records were required.

ATTACHMENT A607.C.

Asphalt Plant

EPA Method 9 Opacity Reports

The Asphalt Plant did not operate during this reporting period and no EPA Method 9 opacity reports were required.

ATTACHMENT A607.E.

Asphalt Plant

Daily Operation Log and 12-Month Rolling Production

The Asphalt Plant did not operate during this reporting period and no daily operation logs were required.

2022 TA-60 BDM Asphalt Plant

Month	Asphalt Produced (Tons)	12-Month Rolling Total	Month	Asphalt Produced (Tons)	12-Month Rolling Total
January	0	0	July	0	0
February	0	0	August	0	0
March	0	0	September	0	0
April	0	0	October	0	0
May	0	0	November	0	0
June	0	0	December	0	0
6 mo. Total	0		6 mo. Total	0	

12-Month Rolling Production Permit Limit is 6,000 Tons

2022 Asphalt Produced (Tons)	0

Data Reviewed By / Date: Vince Carretti, 12/15/2022 (July-Dec)

Annual Hours			
Month	Hours	Month	Hours
Jan	0.0	Jul	0.0
Feb	0.0	Aug	0.0
Mar	0.0	Sep	0.0
Apr	0.0	Oct	0.0
May	0.0	Nov	0.0
Jun	0.0	Dec	0.0
Total:	0.0	Total:	0.0

Annual Total (to date)	0.0 Hours

Hours are Limited to 4,380 per Year

ATTACHMENT A607.F.

Asphalt Plant

Maintenance and Delivery Records

The Asphalt Plant did not operate during this reporting period and no maintenance and delivery records were required.

ATTACHMENT A607.G.

Asphalt Plant

EPA Method 22 Opacity Reports

The Asphalt Plant did not operate during this reporting period and no EPA Method 22 opacity reports were required.

ATTACHMENT A707.B.a.

Beryllium

TA-03-0066 Beryllium Logs

July 1, 2022 - December 31, 2022

Electroplating/Chemical Milling

Date	Weight of Beryllium Samples Processed (gm)	Controlled Emission Factor (gm emission/gm Used)	Controlled Be Emissions (gm)
7/26/2022	500.0	1.20E-05	6.00E-03
Total Beryllium Emissions from Electroplating/Chemical Milling			**6.00E-03**

Note: Information required under Title V Operating Permit P100-R2M4, Section A707.B, Emissions Monitoring Requirements and A707.D, Reporting Requirements

July 1, 2022 - December 31, 2022

Machining

Date	Weight Beryllium Samples Used (gm)	Controlled Emission Factor (gm emission/gm Used)	Be Emissions (gm)
No beryllium processed during this period.		1.75E-09	0.00E+00
		Total Beryllium Emissions from Machining	**0.00E+00**

Note: Information required under Title V Operating Permit P100-R2M4, Section A707.B, Emissions Monitoring Requirements and A707.D, Reporting Requirements

July 1, 2022 - December 31, 2022

Arc Melting/Casting

Date	Weight of Beryllium Samples Used (gm)	Controlled Emission Factor (gm emission/gm Used)	Be Emissions (gm)
No beryllium processed during this period.		1.75E-09	0.00E+00
		Total Beryllium Emissions from Arc Melting/Casting	**0.00E+00**

Note: Information required under Title V Operating Permit P100-R2M4, Section A707.B, Emissions Monitoring Requirements and A707.D, Reporting Requirements

ATTACHMENT A707.B.b.

Beryllium

TA-35-0213 Beryllium Operating Log

TA-35-0213 Beryllium Operating Log
July 1 - December 31, 2022

July		August		September		October		November		December	
Date	Hours	Date	Hours	Date	Hours	Date	Hours	Date	Hours	Date	Hours
		1-Aug-2022	4	12-Sep-2022	6	3-Oct-2022	4	2-Nov-2022	5	2-Dec-2022	5
		2-Aug-2022	6	13-Sep-2022	6	4-Oct-2022	5	3-Nov-2022	6	5-Dec-2022	6
		3-Aug-2022	5	14-Sep-2022	6	5-Oct-2022	3	4-Nov-2022	6	6-Dec-2022	5
		4-Aug-2022	5	15-Sep-2022	6	6-Oct-2022	6	7-Nov-2022	5	7-Dec-2022	5
		5-Aug-2022	6	16-Sep-2022	4	10-Oct-2022	3	8-Nov-2022	6	8-Dec-2022	6
		8-Aug-2022	6	19-Sep-2022	5	11-Oct-2022	6	9-Nov-2022	5	9-Dec-2022	4
		9-Aug-2022	5	20-Sep-2022	6	12-Oct-2022	5	10-Nov-2022	6	12-Dec-2022	3
		10-Aug-2022	4	21-Sep-2022	5	13-Oct-2022	5	11-Nov-2022	5	13-Dec-2022	4
		11-Aug-2022	4	22-Sep-2022	6	14-Oct-2022	3	14-Nov-2022	6	14-Dec-2022	5
		15-Aug-2022	5	26-Sep-2022	6	17-Oct-2022	4	15-Nov-2022	6	15-Dec-2022	6
		16-Aug-2022	5	27-Sep-2022	5	18-Oct-2022	4	16-Nov-2022	5	19-Dec-2022	6
		17-Aug-2022	6	28-Sep-2022	6	19-Oct-2022	5	17-Nov-2022	4	20-Dec-2022	5
		18-Aug-2022	4	29-Sep-2022	6	20-Oct-2022	6	21-Nov-2022	5	21-Dec-2022	6
		19-Aug-2022	3	30-Sep-2022	4	24-Oct-2022	6	22-Nov-2022	6	22-Dec-2022	6
		22-Aug-2022	5			25-Oct-2022	6	28-Nov-2022	6		
		23-Aug-2022	6			26-Oct-2022	5	29-Nov-2022	7		
		24-Aug-2022	6			27-Oct-2022	3	30-Nov-2022	6		
						28-Oct-2022	4				
						31-Oct-2022	5				
Total Hours	**0**		**85**		**77**		**88**		**95**		**72**

Total hours for July 1 - December 31, 2022: **417**

Reviewed by: Katelyn Mahoney, 1/11/2023

ATTACHMENT A707.C.a.

Beryllium

TA-03-0141 Beryllium HEPA Filter Differential Pressure Readings

NM STATE REPORTING

		HEPA 1	HEPA 2	DUST	YEAR
DAY 1	04:00	0.86	0.60	0.89	2022
	12:00	0.87	0.60	1.06	2022
	20:00	0.87	0.61	1.01	2022
DAY 2	04:00	0.87	0.60	0.87	2022
	12:00	0.86	0.61	0.94	2022
	20:00	0.87	0.60	0.99	2022
DAY 3	04:00	0.86	0.60	0.85	2022
	12:00	0.86	0.60	0.96	2022
	20:00	0.86	0.60	1.01	2022
DAY 4	04:00	0.86	0.61	0.81	2022
	12:00	0.85	0.59	0.95	2022
	20:00	0.87	0.60	0.93	2022
DAY 5	04:00	0.86	0.60	0.85	2022
	12:00	0.88	0.61	0.98	2022
	20:00	0.87	0.61	1.05	2022
DAY 6	04:00	0.86	0.60	0.89	2022
	12:00	0.83	0.58	1.10	2022
	20:00	0.86	0.60	0.98	2022
DAY 7	04:00	0.86	0.61	0.85	2022
	12:00	0.88	0.61	0.98	2022
	20:00	0.90	0.62	1.09	2022
DAY 8	04:00	0.89	0.62	0.98	2022
	12:00	0.88	0.62	1.07	2022
	20:00	0.90	0.62	1.11	2022
DAY 9	04:00	0.89	0.61	0.95	2022
	12:00	0.88	0.61	1.13	2022
	20:00	0.88	0.61	1.12	2022
DAY 10	04:00	0.86	0.60	0.96	2022
	12:00	0.89	0.61	1.09	2022
	20:00	0.89	0.61	1.16	2022

		HEPA 1	HEPA 2	DUST	YEAR
DAY 11	04:00	0.89	0.62	0.97	2022
	12:00	0.87	0.60	1.09	2022
	20:00	0.90	0.62	1.16	2022
DAY 12	04:00	0.89	0.62	0.94	2022
	12:00	0.87	0.60	1.08	2022
	20:00	0.89	0.62	1.07	2022
DAY 13	04:00	0.88	0.61	0.97	2022
	12:00	0.87	0.60	1.07	2022
	20:00	0.88	0.62	1.14	2022
DAY 14	04:00	0.88	0.62	1.00	2022
	12:00	0.87	0.61	1.15	2022
	20:00	0.90	0.62	1.17	2022
DAY 15	04:00	0.90	0.63	1.05	2022
	12:00	0.90	0.63	1.14	2022
	20:00	0.89	0.61	1.18	2022
DAY 16	04:00	0.89	0.62	1.06	2022
	12:00	0.91	0.63	1.18	2022
	20:00	0.90	0.63	1.21	2022
DAY 17	04:00	0.91	0.63	1.05	2022
	12:00	0.90	0.62	1.13	2022
	20:00	0.91	0.63	1.22	2022
DAY 18	04:00	0.90	0.63	1.08	2022
	12:00	0.91	0.63	1.25	2022
	20:00	0.88	0.61	1.23	2022
DAY 19	04:00	0.88	0.61	1.11	2022
	12:00	0.92	0.64	1.21	2022
	20:00	0.91	0.63	1.25	2022
DAY 20	04:00	0.90	0.62	1.13	2022
	12:00	0.88	0.60	1.24	2022
	20:00	0.89	0.61	1.15	2022

		HEPA 1	HEPA 2	DUST	YEAR
DAY 21	04:00	0.88	0.61	1.07	2022
	12:00	0.87	0.60	1.16	2022
	20:00	0.94	0.64	1.12	2022
DAY 22	04:00	0.93	0.64	1.01	2022
	12:00	0.91	0.62	1.16	2022
	20:00	0.94	0.64	1.15	2022
DAY 23	04:00	0.92	0.64	1.04	2022
	12:00	0.92	0.63	1.15	2022
	20:00	0.92	0.62	1.18	2022
DAY 24	04:00	0.91	0.62	1.05	2022
	12:00	0.92	0.63	1.11	2022
	20:00	0.94	0.64	1.12	2022
DAY 25	04:00	0.93	0.63	0.94	2022
	12:00	0.92	0.62	1.04	2022
	20:00	0.93	0.63	1.13	2022
DAY 26	04:00	0.90	0.62	0.93	2022
	12:00	0.91	0.63	1.08	2022
	20:00	0.92	0.64	0.96	2022
DAY 27	04:00	0.92	0.63	0.86	2022
	12:00	0.92	0.63	1.06	2022
	20:00	0.93	0.64	0.95	2022
DAY 28	04:00	0.91	0.63	0.87	2022
	12:00	0.89	0.61	0.97	2022
	20:00	0.90	0.62	1.02	2022
DAY 29	04:00	0.90	0.62	0.91	2022
	12:00	0.90	0.62	0.97	2022
	20:00	0.90	0.62	0.89	2022
DAY 30	04:00	0.90	0.62	0.86	2022
	12:00	0.89	0.62	0.92	2022
	20:00	0.89	0.61	0.89	2022

		HEPA 1	HEPA 2	DUST	YEAR
DAY 31	04:00	0.89	0.61	0.88	2022
	12:00	0.89	0.61	0.97	2022
	20:00	0.90	0.62	0.96	2022

JAN FEB MAR

APR MAY JUN

JUL AUG SEP

OCT NOV DEC

MONTH DISPLAYED IS
JULY

PRINT SCREEN MAIN

9:58:06 AM Tuesday, January 03, 2023

NM STATE REPORTING

		HEPA 1	HEPA 2	DUST	YEAR
DAY 1	04:00	0.89	0.61	0.88	2022
	12:00	0.91	0.63	1.02	2022
	20:00	0.93	0.64	0.99	2022
DAY 2	04:00	0.91	0.62	0.86	2022
	12:00	0.90	0.61	1.11	2022
	20:00	0.91	0.63	1.16	2022
DAY 3	04:00	0.89	0.61	1.03	2022
	12:00	0.89	0.61	1.14	2022
	20:00	0.94	0.63	1.14	2022
DAY 4	04:00	0.92	0.63	0.94	2022
	12:00	0.90	0.61	1.00	2022
	20:00	0.91	0.63	1.05	2022
DAY 5	04:00	0.90	0.62	0.97	2022
	12:00	0.90	0.61	1.11	2022
	20:00	0.90	0.62	1.08	2022
DAY 6	04:00	0.90	0.62	0.97	2022
	12:00	0.89	0.62	1.12	2022
	20:00	0.91	0.63	0.95	2022
DAY 7	04:00	0.90	0.62	0.90	2022
	12:00	0.90	0.62	1.03	2022
	20:00	0.91	0.62	1.04	2022
DAY 8	04:00	0.91	0.62	0.93	2022
	12:00	0.92	0.63	1.05	2022
	20:00	0.91	0.62	0.95	2022
DAY 9	04:00	0.90	0.62	0.91	2022
	12:00	0.91	0.63	1.04	2022
	20:00	0.93	0.63	1.05	2022
DAY 10	04:00	0.92	0.64	0.91	2022
	12:00	0.88	0.60	1.02	2022
	20:00	0.90	0.62	1.00	2022

		HEPA 1	HEPA 2	DUST	YEAR
DAY 11	04:00	0.89	0.62	0.89	2022
	12:00	0.88	0.60	1.18	2022
	20:00	0.90	0.62	0.92	2022
DAY 12	04:00	0.90	0.62	0.92	2022
	12:00	0.91	0.62	0.99	2022
	20:00	0.92	0.62	1.05	2022
DAY 13	04:00	0.91	0.63	0.90	2022
	12:00	0.90	0.61	1.03	2022
	20:00	0.90	0.62	1.05	2022
DAY 14	04:00	0.89	0.61	0.93	2022
	12:00	0.90	0.62	1.09	2022
	20:00	0.92	0.63	1.07	2022
DAY 15	04:00	0.91	0.62	0.94	2022
	12:00	0.90	0.61	1.06	2022
	20:00	0.95	0.65	1.07	2022
DAY 16	04:00	0.93	0.63	0.87	2022
	12:00	0.91	0.62	1.09	2022
	20:00	0.90	0.62	1.06	2022
DAY 17	04:00	0.90	0.62	0.84	2022
	12:00	0.90	0.61	0.98	2022
	20:00	0.90	0.62	0.92	2022
DAY 18	04:00	0.90	0.62	0.88	2022
	12:00	0.90	0.62	0.88	2022
	20:00	0.90	0.62	0.95	2022
DAY 19	04:00	0.90	0.61	0.82	2022
	12:00	0.90	0.62	0.93	2022
	20:00	0.91	0.62	0.95	2022
DAY 20	04:00	0.91	0.63	0.92	2022
	12:00	0.91	0.62	0.73	2022
	20:00	0.89	0.62	0.81	2022

		HEPA 1	HEPA 2	DUST	YEAR
DAY 21	04:00	0.90	0.62	0.75	2022
	12:00	0.89	0.62	0.84	2022
	20:00	0.91	0.62	0.89	2022
DAY 22	04:00	0.90	0.62	0.74	2022
	12:00	0.89	0.61	0.88	2022
	20:00	0.90	0.62	0.87	2022
DAY 23	04:00	0.90	0.62	0.79	2022
	12:00	0.89	0.61	0.86	2022
	20:00	0.93	0.64	0.91	2022
DAY 24	04:00	0.92	0.63	0.76	2022
	12:00	0.92	0.63	0.93	2022
	20:00	0.90	0.61	0.90	2022
DAY 25	04:00	0.90	0.61	0.78	2022
	12:00	0.89	0.62	0.92	2022
	20:00	0.90	0.62	0.94	2022
DAY 26	04:00	0.90	0.62	0.83	2022
	12:00	0.90	0.62	0.91	2022
	20:00	0.90	0.62	0.95	2022
DAY 27	04:00	0.90	0.62	0.77	2022
	12:00	0.91	0.62	0.92	2022
	20:00	0.94	0.64	0.96	2022
DAY 28	04:00	0.93	0.63	0.82	2022
	12:00	0.92	0.63	0.94	2022
	20:00	0.94	0.63	1.00	2022
DAY 29	04:00	0.93	0.63	0.84	2022
	12:00	0.95	0.64	0.96	2022
	20:00	0.96	0.65	1.01	2022
DAY 30	04:00	0.96	0.65	0.88	2022
	12:00	0.92	0.63	1.04	2022
	20:00	0.94	0.64	1.04	2022

		HEPA 1	HEPA 2	DUST	YEAR
DAY 31	04:00	0.93	0.64	0.92	2022
	12:00	0.92	0.62	1.04	2022
	20:00	0.92	0.63	1.08	2022

JAN FEB MAR

APR MAY JUN

JUL AUG SEP

OCT NOV DEC

MONTH DISPLAYED IS
AUGUST

PRINT SCREEN MAIN

9:58:30 AM Tuesday, January 03, 2023

NM STATE REPORTING

		HEPA 1	HEPA 2	DUST	YEAR
DAY 1	04:00	0.93	0.64	0.90	2022
	12:00	0.92	0.62	0.97	2022
	20:00	0.93	0.63	0.99	2022
DAY 2	04:00	0.92	0.63	0.94	2022
	12:00	0.92	0.63	1.04	2022
	20:00	0.92	0.62	1.02	2022
DAY 3	04:00	0.92	0.63	0.93	2022
	12:00	0.91	0.62	0.94	2022
	20:00	0.93	0.63	0.96	2022
DAY 4	04:00	0.92	0.62	0.89	2022
	12:00	0.92	0.62	0.93	2022
	20:00	0.92	0.62	0.98	2022
DAY 5	04:00	0.91	0.62	0.94	2022
	12:00	0.92	0.63	1.03	2022
	20:00	0.92	0.62	0.99	2022
DAY 6	04:00	0.92	0.63	0.94	2022
	12:00	0.94	0.64	1.05	2022
	20:00	0.93	0.62	1.03	2022
DAY 7	04:00	0.92	0.63	0.94	2022
	12:00	0.93	0.63	1.05	2022
	20:00	0.93	0.63	1.08	2022
DAY 8	04:00	0.91	0.62	0.96	2022
	12:00	0.91	0.62	1.03	2022
	20:00	0.94	0.64	1.06	2022
DAY 9	04:00	0.94	0.64	0.92	2022
	12:00	0.99	0.66	1.03	2022
	20:00	0.94	0.64	0.98	2022
DAY 10	04:00	0.92	0.63	0.85	2022
	12:00	0.92	0.62	0.89	2022
	20:00	0.92	0.63	0.96	2022

		HEPA 1	HEPA 2	DUST	YEAR
DAY 11	04:00	0.93	0.63	0.82	2022
	12:00	0.91	0.63	0.85	2022
	20:00	0.92	0.62	0.94	2022
DAY 12	04:00	0.90	0.62	0.82	2022
	12:00	0.92	0.62	1.07	2022
	20:00	0.92	0.62	1.07	2022
DAY 13	04:00	0.93	0.63	0.88	2022
	12:00	0.91	0.62	1.05	2022
	20:00	0.93	0.63	0.97	2022
DAY 14	04:00	0.91	0.62	0.82	2022
	12:00	0.91	0.62	0.92	2022
	20:00	0.94	0.64	0.94	2022
DAY 15	04:00	0.90	0.61	0.83	2022
	12:00	0.94	0.65	0.94	2022
	20:00	0.95	0.64	1.00	2022
DAY 16	04:00	0.94	0.64	0.89	2022
	12:00	0.95	0.65	0.99	2022
	20:00	0.95	0.65	1.01	2022
DAY 17	04:00	0.94	0.65	0.89	2022
	12:00	0.94	0.64	1.02	2022
	20:00	0.85	0.59	0.98	2022
DAY 18	04:00	0.85	0.60	0.93	2022
	12:00	0.89	0.62	1.03	2022
	20:00	0.89	0.62	1.00	2022
DAY 19	04:00	-0.0	0.00	-0.1	2022
	12:00	0.89	0.62	0.98	2022
	20:00	0.88	0.61	1.00	2022
DAY 20	04:00	0.87	0.60	0.93	2022
	12:00	0.87	0.60	1.01	2022
	20:00	-0.0	-0.0	0.09	2022

		HEPA 1	HEPA 2	DUST	YEAR
DAY 21	04:00	-0.0	-0.0	-0.1	2022
	12:00	0.85	0.59	0.97	2022
	20:00	0.87	0.60	1.04	2022
DAY 22	04:00	0.87	0.60	0.93	2022
	12:00	0.86	0.61	0.92	2022
	20:00	0.85	0.60	0.91	2022
DAY 23	04:00	0.86	0.60	0.86	2022
	12:00	0.85	0.59	0.90	2022
	20:00	0.88	0.61	0.97	2022
DAY 24	04:00	0.89	0.63	0.83	2022
	12:00	0.87	0.60	0.94	2022
	20:00	0.88	0.61	0.91	2022
DAY 25	04:00	0.87	0.62	0.87	2022
	12:00	0.89	0.62	0.94	2022
	20:00	0.89	0.62	0.88	2022
DAY 26	04:00	0.89	0.62	0.87	2022
	12:00	0.87	0.61	0.93	2022
	20:00	0.87	0.61	0.87	2022
DAY 27	04:00	0.87	0.61	0.87	2022
	12:00	0.87	0.61	1.13	2022
	20:00	0.87	0.61	0.98	2022
DAY 28	04:00	0.87	0.61	0.85	2022
	12:00	0.88	0.61	0.97	2022
	20:00	0.88	0.60	0.98	2022
DAY 29	04:00	0.86	0.60	0.88	2022
	12:00	0.89	0.62	0.96	2022
	20:00	0.84	0.59	0.94	2022
DAY 30	04:00	0.83	0.59	0.82	2022
	12:00	0.84	0.58	0.94	2022
	20:00	0.85	0.59	0.95	2022

JAN	FEB	MAR
APR	MAY	JUN
JUL	AUG	SEP
OCT	NOV	DEC

MONTH DISPLAYED IS
SEPTEMBER

PRINT SCREEN | MAIN

9:58:52 AM Tuesday, January 03, 2023

NM STATE REPORTING

		HEPA 1	HEPA 2	DUST	YEAR
DAY 1	04:00	0.85	0.59	0.89	2022
	12:00	0.83	0.57	1.00	2022
	20:00	0.85	0.59	0.93	2022
DAY 2	04:00	0.85	0.59	0.85	2022
	12:00	0.85	0.59	0.85	2022
	20:00	0.85	0.59	0.88	2022
DAY 3	04:00	0.84	0.59	0.86	2022
	12:00	0.82	0.57	0.87	2022
	20:00	0.84	0.59	0.82	2022
DAY 4	04:00	0.84	0.59	0.80	2022
	12:00	0.83	0.60	0.89	2022
	20:00	0.83	0.58	0.85	2022
DAY 5	04:00	0.84	0.59	0.81	2022
	12:00	0.84	0.60	0.97	2022
	20:00	0.83	0.59	0.80	2022
DAY 6	04:00	0.83	0.58	0.82	2022
	12:00	0.84	0.59	0.79	2022
	20:00	0.84	0.59	0.86	2022
DAY 7	04:00	0.84	0.59	0.80	2022
	12:00	0.83	0.58	0.88	2022
	20:00	0.63	0.45	0.76	2022
DAY 8	04:00	0.63	0.45	0.76	2022
	12:00	0.64	0.46	0.76	2022
	20:00	0.64	0.46	0.70	2022
DAY 9	04:00	0.64	0.46	0.75	2022
	12:00	0.64	0.45	0.77	2022
	20:00	0.64	0.46	0.75	2022
DAY 10	04:00	0.64	0.46	0.71	2022
	12:00	0.64	0.46	0.75	2022
	20:00	0.65	0.46	0.82	2022

		HEPA 1	HEPA 2	DUST	YEAR
DAY 11	04:00	0.64	0.46	0.77	2022
	12:00	0.64	0.46	0.84	2022
	20:00	0.64	0.46	-0.2	2022
DAY 12	04:00	0.61	0.44	-0.3	2022
	12:00	0.61	0.44	-0.2	2022
	20:00	0.60	0.44	-0.1	2022
DAY 13	04:00	0.59	0.43	-0.2	2022
	12:00	0.63	0.46	-0.2	2022
	20:00	0.62	0.45	-0.2	2022
DAY 14	04:00	0.64	0.47	-0.2	2022
	12:00	0.59	0.44	-0.2	2022
	20:00	0.60	0.44	-0.2	2022
DAY 15	04:00	0.63	0.46	-0.2	2022
	12:00	0.63	0.45	-0.2	2022
	20:00	0.62	0.45	-0.2	2022
DAY 16	04:00	0.60	0.44	-0.3	2022
	12:00	0.62	0.44	-0.3	2022
	20:00	0.60	0.44	-0.3	2022
DAY 17	04:00	0.65	0.47	-0.1	2022
	12:00	0.59	0.44	-0.1	2022
	20:00	0.62	0.45	-0.1	2022
DAY 18	04:00	0.61	0.44	-0.1	2022
	12:00	0.63	0.46	-0.1	2022
	20:00	0.61	0.45	-0.2	2022
DAY 19	04:00	0.63	0.45	-0.1	2022
	12:00	0.62	0.45	-0.2	2022
	20:00	0.60	0.44	-0.2	2022
DAY 20	04:00	0.60	0.44	-0.2	2022
	12:00	0.61	0.44	-0.2	2022
	20:00	0.61	0.45	-0.2	2022

		HEPA 1	HEPA 2	DUST	YEAR
DAY 21	04:00	0.60	0.44	-0.3	2022
	12:00	0.83	0.59	-0.2	2022
	20:00	0.83	0.59	-0.1	2022
DAY 22	04:00	0.85	0.60	-0.2	2022
	12:00	0.85	0.61	-0.2	2022
	20:00	0.85	0.59	-0.2	2022
DAY 23	04:00	0.84	0.60	-0.2	2022
	12:00	0.82	0.59	-0.2	2022
	20:00	0.85	0.61	-0.3	2022
DAY 24	04:00	0.84	0.60	-0.1	2022
	12:00	0.86	0.61	0.89	2022
	20:00	0.86	0.60	0.91	2022
DAY 25	04:00	0.86	0.61	0.90	2022
	12:00	0.86	0.60	1.04	2022
	20:00	0.86	0.60	1.00	2022
DAY 26	04:00	0.84	0.60	0.92	2022
	12:00	0.85	0.60	0.92	2022
	20:00	0.86	0.61	0.74	2022
DAY 27	04:00	0.84	0.59	0.69	2022
	12:00	0.86	0.60	0.68	2022
	20:00	0.86	0.62	0.78	2022
DAY 28	04:00	0.87	0.61	0.85	2022
	12:00	0.84	0.59	0.70	2022
	20:00	0.85	0.60	0.75	2022
DAY 29	04:00	0.85	0.60	0.63	2022
	12:00	0.84	0.59	0.73	2022
	20:00	0.85	0.60	0.77	2022
DAY 30	04:00	0.84	0.60	0.67	2022
	12:00	0.84	0.60	0.76	2022
	20:00	0.84	0.59	0.73	2022

		HEPA 1	HEPA 2	DUST	YEAR
DAY 31	04:00	0.85	0.60	0.80	2022
	12:00	0.85	0.59	0.65	2022
	20:00	0.85	0.59	0.73	2022

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Differential pressure readings were not recorded on October 12-23, 2022, as the exhaust fans were in operation, but the facility was not occupied (no beryllium was being processed). Thus, HEPA filter differential pressure readings are not required on the above dates.

PRINT SCREEN MAIN

9:59:09 AM Tuesday, January 03, 2023

NM STATE REPORTING

		HEPA 1	HEPA 2	DUST	YEAR
DAY 1	04:00	0.86	0.60	0.71	2022
	12:00	0.86	0.61	0.75	2022
	20:00	0.85	0.59	0.76	2022
DAY 2	04:00	0.85	0.59	0.72	2022
	12:00	0.88	0.62	0.77	2022
	20:00	0.86	0.61	0.79	2022
DAY 3	04:00	0.85	0.60	0.68	2022
	12:00	0.87	0.62	0.72	2022
	20:00	0.88	0.62	0.76	2022
DAY 4	04:00	0.87	0.61	0.84	2022
	12:00	0.89	0.62	0.73	2022
	20:00	0.86	0.60	0.75	2022
DAY 5	04:00	0.84	0.59	0.84	2022
	12:00	0.84	0.59	0.91	2022
	20:00	0.84	0.59	0.87	2022
DAY 6	04:00	0.84	0.60	0.92	2022
	12:00	0.85	0.60	0.93	2022
	20:00	0.83	0.59	0.98	2022
DAY 7	04:00	0.86	0.61	0.94	2022
	12:00	0.85	0.60	1.01	2022
	20:00	0.86	0.60	0.92	2022
DAY 8	04:00	0.85	0.59	0.81	2022
	12:00	0.85	0.60	0.94	2022
	20:00	0.86	0.60	0.97	2022
DAY 9	04:00	0.86	0.60	0.88	2022
	12:00	0.85	0.60	0.89	2022
	20:00	0.89	0.61	0.75	2022
DAY 10	04:00	0.85	0.60	0.79	2022
	12:00	0.88	0.61	0.92	2022
	20:00	0.87	0.60	0.76	2022

		HEPA 1	HEPA 2	DUST	YEAR
DAY 11	04:00	0.85	0.60	0.88	2022
	12:00	0.86	0.60	0.86	2022
	20:00	0.86	0.62	0.86	2022
DAY 12	04:00	0.85	0.60	0.83	2022
	12:00	0.85	0.59	0.88	2022
	20:00	0.85	0.61	0.92	2022
DAY 13	04:00	0.85	0.60	0.92	2022
	12:00	0.84	0.59	0.88	2022
	20:00	0.85	0.60	0.94	2022
DAY 14	04:00	0.85	0.60	0.94	2022
	12:00	0.86	0.61	0.92	2022
	20:00	0.86	0.60	0.94	2022
DAY 15	04:00	0.87	0.61	0.81	2022
	12:00	0.85	0.60	0.95	2022
	20:00	0.84	0.59	0.89	2022
DAY 16	04:00	0.84	0.60	0.86	2022
	12:00	0.87	0.60	0.88	2022
	20:00	0.87	0.61	0.82	2022
DAY 17	04:00	0.86	0.61	0.85	2022
	12:00	0.86	0.61	0.87	2022
	20:00	0.86	0.61	0.87	2022
DAY 18	04:00	0.86	0.61	0.83	2022
	12:00	0.84	0.60	0.87	2022
	20:00	0.85	0.60	0.83	2022
DAY 19	04:00	0.85	0.60	0.81	2022
	12:00	0.85	0.60	0.84	2022
	20:00	0.87	0.60	0.87	2022
DAY 20	04:00	0.85	0.60	0.83	2022
	12:00	0.85	0.60	0.83	2022
	20:00	0.85	0.60	0.92	2022

		HEPA 1	HEPA 2	DUST	YEAR
DAY 21	04:00	0.85	0.60	0.91	2022
	12:00	0.87	0.62	0.90	2022
	20:00	0.87	0.60	0.81	2022
DAY 22	04:00	0.86	0.61	0.90	2022
	12:00	0.85	0.60	0.71	2022
	20:00	0.85	0.60	0.67	2022
DAY 23	04:00	0.83	0.59	0.81	2022
	12:00	0.83	0.59	0.94	2022
	20:00	0.84	0.59	0.82	2022
DAY 24	04:00	0.86	0.60	0.88	2022
	12:00	0.84	0.60	0.87	2022
	20:00	0.85	0.59	0.89	2022
DAY 25	04:00	0.84	0.59	0.89	2022
	12:00	0.85	0.60	0.96	2022
	20:00	0.84	0.60	0.69	2022
DAY 26	04:00	0.84	0.60	0.88	2022
	12:00	0.84	0.60	0.86	2022
	20:00	0.86	0.61	0.66	2022
DAY 27	04:00	0.85	0.60	0.69	2022
	12:00	0.85	0.60	0.71	2022
	20:00	0.85	0.60	0.87	2022
DAY 28	04:00	0.85	0.60	0.88	2022
	12:00	0.85	0.60	0.86	2022
	20:00	0.87	0.62	0.73	2022
DAY 29	04:00	0.89	0.62	0.87	2022
	12:00	0.87	0.62	0.63	2022
	20:00	0.87	0.61	0.82	2022
DAY 30	04:00	0.88	0.61	0.88	2022
	12:00	0.86	0.61	0.89	2022
	20:00	0.85	0.60	0.70	2022

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PRINT SCREEN MAIN

9:59:24 AM Tuesday, January 03, 2023

NM STATE REPORTING

		HEPA 1	HEPA 2	DUST	YEAR
DAY 1	04:00	0.86	0.60	0.83	2022
	12:00	0.84	0.60	0.81	2022
	20:00	0.85	0.60	0.71	2022
DAY 2	04:00	0.86	0.60	0.63	2022
	12:00	0.90	0.64	0.68	2022
	20:00	0.86	0.61	0.68	2022
DAY 3	04:00	0.86	0.61	0.76	2022
	12:00	0.85	0.60	0.84	2022
	20:00	0.84	0.61	0.69	2022
DAY 4	04:00	0.85	0.59	0.82	2022
	12:00	0.86	0.60	0.94	2022
	20:00	0.86	0.60	0.71	2022
DAY 5	04:00	0.85	0.61	0.66	2022
	12:00	0.85	0.60	0.70	2022
	20:00	0.87	0.61	0.70	2022
DAY 6	04:00	0.86	0.61	0.90	2022
	12:00	0.86	0.60	0.75	2022
	20:00	0.86	0.61	0.68	2022
DAY 7	04:00	0.85	0.60	0.87	2022
	12:00	0.85	0.60	0.82	2022
	20:00	0.87	0.61	0.83	2022
DAY 8	04:00	0.87	0.61	0.92	2022
	12:00	0.86	0.61	0.94	2022
	20:00	0.85	0.60	0.95	2022
DAY 9	04:00	0.85	0.60	0.89	2022
	12:00	0.83	0.59	0.93	2022
	20:00	0.84	0.60	0.98	2022
DAY 10	04:00	0.85	0.60	0.92	2022
	12:00	0.85	0.60	0.90	2022
	20:00	0.85	0.60	0.95	2022

		HEPA 1	HEPA 2	DUST	YEAR
DAY 11	04:00	0.85	0.61	0.95	2022
	12:00	0.85	0.60	0.94	2022
	20:00	0.85	0.60	0.95	2022
DAY 12	04:00	0.84	0.60	0.94	2022
	12:00	0.85	0.61	0.93	2022
	20:00	0.86	0.61	0.91	2022
DAY 13	04:00	0.85	0.60	0.90	2022
	12:00	0.86	0.61	0.86	2022
	20:00	0.87	0.62	0.82	2022
DAY 14	04:00	0.86	0.61	0.77	2022
	12:00	0.86	0.62	0.78	2022
	20:00	0.87	0.61	0.82	2022
DAY 15	04:00	0.87	0.62	0.79	2022
	12:00	0.86	0.61	0.83	2022
	20:00	0.88	0.62	0.82	2022
DAY 16	04:00	0.86	0.61	0.78	2022
	12:00	0.85	0.61	0.75	2022
	20:00	0.85	0.60	0.76	2022
DAY 17	04:00	0.85	0.61	0.73	2022
	12:00	0.84	0.60	0.75	2022
	20:00	0.85	0.60	0.78	2022
DAY 18	04:00	0.84	0.60	0.80	2022
	12:00	0.83	0.59	0.75	2022
	20:00	0.85	0.59	0.85	2022
DAY 19	04:00	0.85	0.60	0.81	2022
	12:00	0.87	0.62	0.84	2022
	20:00	0.86	0.61	0.85	2022
DAY 20	04:00	0.86	0.61	0.82	2022
	12:00	0.86	0.61	0.84	2022
	20:00	0.85	0.60	0.91	2022

		HEPA 1	HEPA 2	DUST	YEAR
DAY 21	04:00	0.86	0.61	0.91	2022
	12:00	0.85	0.60	0.95	2022
	20:00	0.85	0.61	0.84	2022
DAY 22	04:00	0.87	0.61	0.86	2022
	12:00	0.87	0.61	0.85	2022
	20:00	0.86	0.61	0.89	2022
DAY 23	04:00	0.86	0.61	0.89	2022
	12:00	0.86	0.61	0.91	2022
	20:00	0.85	0.60	0.95	2022
DAY 24	04:00	0.85	0.60	0.90	2022
	12:00	0.85	0.60	0.88	2022
	20:00	0.86	0.60	0.92	2022
DAY 25	04:00	0.85	0.60	0.90	2022
	12:00	0.84	0.59	0.94	2022
	20:00	0.85	0.60	0.89	2022
DAY 26	04:00	0.87	0.61	0.93	2022
	12:00	0.84	0.60	0.96	2022
	20:00	0.86	0.60	0.95	2022
DAY 27	04:00	0.85	0.60	0.90	2022
	12:00	0.84	0.59	0.89	2022
	20:00	0.85	0.60	0.97	2022
DAY 28	04:00	0.86	0.61	0.96	2022
	12:00	0.85	0.60	0.92	2022
	20:00	0.86	0.61	0.89	2022
DAY 29	04:00	0.87	0.61	0.85	2022
	12:00	0.85	0.60	0.84	2022
	20:00	0.85	0.60	0.85	2022
DAY 30	04:00	0.85	0.61	0.82	2022
	12:00	0.86	0.60	0.90	2022
	20:00	0.85	0.61	0.87	2022

		HEPA 1	HEPA 2	DUST	YEAR
DAY 31	04:00	0.85	0.60	0.86	2022
	12:00	0.85	0.60	0.88	2022
	20:00	0.85	0.60	0.92	2022

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PRINT SCREEN MAIN

9:59:43 AM Tuesday, January 03, 2023

ATTACHMENT A707.C.b.

Beryllium

TA-55-PF4 Annual HEPA Filter Challenge Test Reports

Attachment B, Surveillance Training Checklist

(Page 1 of 2)

Procedure title:	100 AREA GLOVEBOX EXHAUST IN-PLACE HEPA FILTER TESTING
Procedure no.:	TA55-STP-104A, R4 EXT 1
Date of issue:	6-27-22
Working copy issued to:	KEVIN BRAUER
Working copy issued by:	JOHN CEDILLO
	Certified Operations Center Operator (OCO)

Procedure is the current revision listed in Documentum: ☒ Yes ☐ Documentum Unavailable

Performance Type: ☒ Scheduled ☐ Partial ☐ Other *If partial or other list reason in Comments below*

Comments: *(Document TSR Status Board tracking date here if different from completion date.)*

TRACK AS 6/27/22

Training Checklist:

Workers Performing Surveillance	Applicable Surveillance Training Current	
	OCO Initials	Date
KEVIN BRAUER	JSC	6-27-22
RICHARD MALTINEZ	JSC	6-27-22

OC Reviews Complete and TSR Status Board Updated

OCO Signature 7/1/22 Date

For Information Only

Attachment A, 100 Area Glovebox Exhaust FF-852 Data Sheet

(Page 1 of 3)

Step 3.1[2]	Obtain current copy of STP	**Initials** KB	**Step 3.1[3]**	Obtain Permission to conduct STP	**Initials** KB
Step 5.1[2]	Plenum (Circle One) **SAT** **UNSAT**	**Initial** KB			

Valve	Required Position	Initials Step 5.1[3]
V-852-H	**Closed and Locked**	KB
V-852-G	**Closed**	KB
V-852-F	**Closed**	KB
V-852-D	**Closed**	KB
V-852-C	**Closed**	KB
V-852-B	**Closed**	KB
V-852-A	**Closed**	KB
V-852-AA	**Closed**	KB
TP-852-1	**Closed and Capped**	KB
TP-852-2	**Closed and Capped**	KB
TP-852-3	**Closed and Capped**	KB

Step 5.1[4]	Visually inspect the bag-out doors between the air plenum and the bag-out boxes (both sides). Ensure that the seals are intact and the doors are securely **dogged shut.**	**Initials** KB

Date: 4/27/22 **5.1[6][a]** **Photometer Cal. Expiration Date:** 1/7/23 **5.1[6][b]** **Photometer File #** 104063 **5.1[6][c]**

For information only

Attachment A, 100 Area Glovebox Exhaust FF-852 Data Sheet

(Page 2 of 3)

Step	Item	FF-852
5.2[1][b]	First-stage HEPA Filter ΔP (PDI-815-2)	.55 Inches wc
5.2[1][c]	Second-Stage HEPA Filter ΔP (PDI-815-4)	.50 Inches wc
5.2[2][d]	Third-Stage HEPA Filter ΔP (PDI-815-5)	.55 Inches wc

$	PLENUM EFFICIENCY TEST [SR #4.1.3.1.A, #4.1.3.1.B]	
	Follow the HEPA test procedure	
Cu = 35 ug/l(%) Final Stable Upstream Meter reading		**Acceptance: ≥ 30 meter reading**
Stable Downstream (Cd%) Meter reading = 0.001 (%)		
Removal Efficiency (%) =.100% - Cd% = 100% - 0.001 Cd% = 99.999 %		
Acceptance: ≥ 99.95%	**Acceptable? (circle one)**	**YES** (circled) **NO**

FIRST STAGE TEST [defense-in-depth]		
Follow the HEPA test procedure		
Cu = 35 ug/l(%) Final Stable Upstream Meter reading		**Acceptance: ≥ 30 meter reading**
Stable Downstream (Cd%) Meter reading = 0.007 (%)		
Removal Efficiency (%) =.100% - Cd% = 100% - 0.007 Cd% = 99.993 %		
Acceptance: ≥ 99.95%	**Acceptable? (circle one)**	**YES** (circled) **NO**

For Information Only

Attachment A, 100 Area Glovebox Exhaust FF-852 Data Sheet

(Page 3 of 3)

Valve	Required Position	Initials Step 5.2[4][c]	Independent Verification Step 5.2[4][d]
V-852-A	**Closed**	KB	
V-852-AA	**Closed**	KB	
TP-852-1	**Closed and Capped**	KB	
TP-852-2	**Closed and Capped**	KB	
TP-852-3	**Closed and Capped**	KB	
6.1.1 ISI 3			
Step 5.2[4][e]	Visually inspect that the fire screens downstream of the first stage filters are structurally sound and bolted down (e.g. the zone 1 exhaust fire screens are to be visually inspected for signs of wear or degradation).	(SAT) / UNSAT	KB	N/A

S

Surveillance Test Procedure Acceptance			
Date of Test:	6/27/22	(unless already listed elsewhere on the attachment)	
Test Results:	**SATISFACTORY** / **UNSATISFACTORY** (circle one)		
Surveillance Personnel:	KB 352099 6/27/22 / 184122 6/27/22 Signature/Z#/date		
OC Operator:	320354 6-27-22 Signature / Z# / Date	**OC On-Duty Supervisor:**	3/9/22 Signature / Z# / Date
Surveillance Test Results Review			
System Engineer:	252921 6/30/22 Signature / Z# / Date		
Comments	184122 6/27/22		

For Information Only

Attachment B, 100 Area Glovebox Exhaust FF-853 Data Sheet

(Page 1 of 3)

Step 3.1[2]	Obtain current copy of STP	**Initials** KB	**Step 3.1[3]**	Obtain Permission to conduct STP	**Initials** KB
Step 5.1[2]	Plenum (Circle One) **SAT** **UNSAT**	**Initial** KB			

Valve	Required Position	Initials Step 5.1[3]
V-853-H	**Closed and Locked**	KB
V-853-G	**Closed**	KB
V-853-F	**Closed**	KB
V-853-D	**Closed**	KB
V-853-C	**Closed**	KB
V-853-B	**Closed**	KB
V-853-A	**Closed**	KB
V-852-AA	**Closed**	KB
TP-853-1	**Closed and Capped**	KB
TP-853-2	**Closed and Capped**	KB
TP-853-3	**Closed and Capped**	KB

Step 5.1[4]	Visually inspect the bag-out doors between the air plenum and the bag-out boxes (both sides). Ensure that the seals are intact and the doors are securely **dogged shut**.	**Initials** KB

Date: 6/27/22 **5.1[6][a]** **Photometer Cal. Expiration Date:** 1/7/23 **5.1[6][b]** **Photometer File #** 104063 **5.1[6][c]**

For Information Only

Attachment B, 100 Area Glovebox Exhaust FF-853 Data Sheet

(Page 2 of 3)

Step	Item	FF-853
5.3[1][b]	First-stage HEPA Filter ΔP (PDI-816-2)	.55 Inches wc
5.3[1][c]	Second-Stage HEPA Filter ΔP (PDI-816-4)	.50 Inches wc
5.3[1][d]	Third-Stage HEPA Filter ΔP (PDI-816-5)	.55 Inches wc

$	**PLENUM EFFICIENCY TEST [SR #4.1.3.1.A, #4.1.3.1.B]**
Follow the HEPA test procedure	
Cu = 35 ug/l(%) Final Stable Upstream Meter reading	**Acceptance: ≥ 30 meter reading**
Stable Downstream (Cd%) Meter reading = 0.001 (%)	
Removal Efficiency (%) =.100% - Cd% = 100% - 0.001 Cd% = 99.999 %	
Acceptance: ≥ 99.95%	**Acceptable? (circle one)** (YES) **NO**

FIRST STAGE TEST [defense-in-depth]	
Follow the HEPA test procedure	
Cu = 35 ug/l(%) Final Stable Upstream Meter reading	**Acceptance: ≥ 30 meter reading**
Stable Downstream (Cd%) Meter reading = 0.002 (%)	
Removal Efficiency (%) = 100% - Cd% = 100% - 0.002 Cd% = 99.998 %	
Acceptance: ≥ 99.95%	**Acceptable? (circle one)** (YES) **NO**

For Information Only

Attachment B, 100 Area Glovebox Exhaust FF-853 Data Sheet

(Page 3 of 3)

Valve	Required Position	Initials Step 5.3[4][c]	Independent Verification Step 5.3[4][d]
V-853-A	Closed	KB	[signature]
V-852-AA	Closed	KB	[signature]
TP-853-1	Closed and Capped	KB	[signature]
TP-853-2	Closed and Capped	KB	[signature]
TP-853-3	Closed and Capped	KB	[signature]

6.1.1 ISI 3

Step 5.3[4][e]	Visually inspect that the fire screens downstream of the first stage filters are structurally sound and bolted down (e.g. the zone 1 exhaust fire screens are to be visually inspected for signs of wear or degradation).	SAT / UNSAT	KB	N/A

$

Surveillance Test Procedure Acceptance			
Date of Test:	6/27/22 (unless already listed elsewhere on the attachment)		
Test Results:	SATISFACTORY / UNSATISFACTORY (circle one)		
Surveillance Personnel:	K.B 352499 6/27/22 [signature] 184122 6/22/22 Signature/Z#/date		
OC Operator:	[signature] 330354 6-27-22 Signature / Z# / Date	**OC On-Duty Supervisor:**	[signature] 319182 6/27/22 Signature / Z# / Date
Surveillance Test Results Review			
System Engineer:	[signature] 252921 6/30/22 Signature / Z# / Date		
Comments	[signature] 184122 6/22/22		

For Information Only

Attachment B, Surveillance Training Checklist

(Page 1 of 2)

Procedure title:	300 AREA GB EXHAUST HEPA FILTER TEST
Procedure no.:	TA55-STP-104C, R5
Date of issue:	8/5/2022
Working copy issued to:	M. ZREGH
Working copy issued by:	F. SECTERO
	Certified Operations Center Operator (OCO)

Procedure is the current revision listed in Documentum: ☒ Yes ☐ Documentum Unavailable

Performance Type: ☐ Scheduled ☐ Partial ☒ Other *If partial or other list reason in Comments below*

Comments: *(Document TSR Status Board tracking date here if different from completion date.)*

- FILTER REPLACEMENT
- STAGE ONE UNSAT

Training Checklist:

Workers Performing Surveillance	Applicable Surveillance Training Current	
	OCO Initials	Date
M. ZREGH	[signature]	8/5/22
D. GARCIA	[signature]	8/5/22

OC Reviews Complete and TSR Status Board Updated

[signature] 8.5.22

OCO Signature Date

For Information Only

Attachment A, Valve Alignment

(Page 1 of 1)

Verify that the following valves on the aerosol injection ductwork are in the designated position:

Valve	Required Position	Initials Step 3.4[6]	Valve	Required Position	Initials Step 3.4[6]
HV-854-J	**Closed and Locked**		855-J	**Closed and Locked**	
854-H	**Closed**		855-D	**Closed**	
854-G	**Closed**		855-C	**Closed**	
854-D	**Closed**		855-B	**Closed**	
854-C	**Closed**		855-A	**Closed**	
854-B	**Closed**		V-855-8	**Closed and Locked**	
854-A	**Closed**		859-7	**Closed**	
854-8	**Closed and Locked**		859-5	**Closed**	
858-7	**Closed**		859-3	**Closed**	
858-5	**Closed**		859-2	**Closed**	
858-3	**Closed**		859-1	**Closed**	
858-2	**Closed**				
858-1	**Closed**				
HV-854-AA	**Closed**				

Ensure that the maintenance valves/doors are in the correct operating position:

Step 3.4[7]	Visually inspect the bag-out doors between the air plenum and the bag-out boxes (both sides). Ensure that the seals are intact and the doors are securely **dogged shut**.	**Initials**

For Information Only

Attachment D, 300 Area Glovebox Exhaust FF-855 Data Sheet

(Page 1 of 3)

Step 3.1[3]	Obtain current copy of STP	Initials WMT	Step 3.1[3]	Obtain Permission to conduct STP	Initials DM
Step 5.1[2]	Plenum (Circle One) SAT UNSAT	Initial WM			

Date: 08/05/22 — 5.5[5][a]

Photometer Cal. Expiration Date: 01/07/23 — 5.5[5][b]

Photometer File # 104063 — 5.5[5][d]

Step	Item	FF-855
5.6[1]	First-stage HEPA Filter ΔP (PDI-818-2)	.05 Inches wc
5.6[2]	Second-Stage HEPA Filter ΔP (PDI-818-4)	.09 Inches wc
5.6[3]	Third-Stage HEPA Filter ΔP (PDI-818-5)	.09 Inches wc

PLENUM EFFICIENCY TEST

Follow the HEPA test procedure

Cu = 37 ug/l(%) Final Stable Upstream Meter reading — **Acceptance: ≥30 meter reading**

Stable Downstream (Cd%) Meter reading = .008 (%)

Removal Efficiency (%) =.100% - Cd% = 100% - .008 / 37 (Wgt 8/5/22) Cd% = 99.997 %

Acceptance: ≥ 99.95% **Acceptable? (circle one)** (YES) / NO **[SR #4.1.3.1.A, #4.1.3.1.B]**

$

FIRST STAGE TEST [defense-in-depth]

Follow the HEPA test procedure

Cu = 37 ug/l(%) Final Stable Upstream Meter reading — **Acceptance: ≥30 meter reading**

Stable Downstream (Cd%) Meter reading = 1.117 (%)

Removal Efficiency (%) =.100% - Cd% = 100% - 1.117 Cd% = 98.883 %

Acceptance: ≥ 99.95% **Acceptable? (circle one)** YES (NO)

For Information Only

Attachment D, 300 Area Glovebox Exhaust FF-855 Data Sheet

(Page 2 of 3)

Valve	Required Position	Initials Step 5.8[8]	Independent Verification Step 5.8[8][b]
855-A	**Closed**		
HV-854-AA	**Closed**		
HV-870B	**Open**		
HV-891	**Open**		
TP-855-1	**Closed and Capped**		
TP-855-2	**Closed and Capped**		
TP-855-3	**Closed and Capped**		
6.1.1 ISI 3			
Step 5.8[7]	Visually inspect that the fire screens downstream of the first stage filters are structurally sound and bolted down (e.g. the zone 1 exhaust fire screens are to be visually inspected for signs of wear or degradation).	(SAT) / UNSAT	N/A

$

For Information Only

Attachment D, 300 Area Glovebox Exhaust FF-855 Data Sheet

(Page 3 of 3)

Surveillance Test Procedure Acceptance			
Date of Test:	8/5/22		
Test Results:	SATISFACTORY/UNSATISFACTORY (circle one)		
Surveillance Personnel:	Michael M. Irish 182680 / 08/05/2022 Signature/Z#/date		
Surveillance Personnel:	Devan Garcia 314041 8/5/22 Signature/Z#/date		
Surveillance Personnel:	Signature/Z#/date		
Surveillance Personnel:	Signature/Z#/date		
Surveillance Personnel:	Signature/Z#/date		
Surveillance Personnel:	Signature/Z#/date		
OC Operator:	334315 8.5.22 Signature/Z#/date	**OC On-Duty Supervisor:**	8/5/22 212212 Signature/Z#/date
Surveillance & Inspection Test Results Review			
Cognizant System Engineer:	252921 8/9/22 Signature/Z#/date		
Comments			

For Information Only

Attachment B, Surveillance Training Checklist

(Page 1 of 2)

Procedure title:	300 AREA GLOVEBOX EXHAUST IN PLACE HEPA FILTER TEST
Procedure no.:	TA55-STP-104C, R 5
Date of issue:	8/6/22
Working copy issued to:	M. IRISH
Working copy issued by:	ISSACK JIMENEZ
	Certified Operations Center Operator (OCO)

Procedure is the current revision listed in Documentum: ☑ Yes ☐ Documentum Unavailable

Performance Type: ☐ Scheduled ☐ Partial ☑ Other *If partial or other list reason in Comments below*

Comments: *(Document TSR Status Board tracking date here if different from completion date.)*

FILTER REPLACEMENT

Training Checklist:

Workers Performing Surveillance	Applicable Surveillance Training Current	
	OCO Initials	Date
M. IRISH	IS	8/6/22
D. GARCIA	JJ	8/6/22
M. VIGIL	DJ	8/6/22
P. Connolly	TS	8.6.22

OC Reviews Complete and TSR Status Board Updated

OCO Signature — Date: 8.6.22

For Information Only

Attachment D, 300 Area Glovebox Exhaust FF-855 Data Sheet

(Page 1 of 3)

Step 3.1[3]	Obtain current copy of STP	**Initials** MM	**Step 3.1[3]**	Obtain Permission to conduct STP	**Initials** MM
Step 5.1[2]	Plenum (Circle One) **SAT** **UNSAT**	**Initial** MM			

Date: 8/6/22 **5.5[5][a]**

Photometer Cal. Expiration Date: 01/07/23 **5.5[5][b]**

Photometer File # 104063 **5.5[5][d]**

Step	Item	FF-855
5.6[1]	First-stage HEPA Filter ΔP (PDI-818-2)	.09 Inches wc
5.6[2]	Second-Stage HEPA Filter ΔP (PDI-818-4)	.09 Inches wc
5.6[3]	Third-Stage HEPA Filter ΔP (PDI-818-5)	.09 Inches wc

PLENUM EFFICIENCY TEST

Follow the HEPA test procedure

Cu = 40 ug/l(%) Final Stable Upstream Meter reading **Acceptance: ≥30 meter reading**

Stable Downstream (Cd%) Meter reading = .005 (%)

Removal Efficiency (%) =.100% - Cd% = 100% - .005 Cd% = 99.995 %

Acceptance: ≥ 99.95% **Acceptable? (circle one) YES / NO** **[SR #4.1.3.1.A, #4.1.3.1.B]**

$

FIRST STAGE TEST [defense-in-depth]

Follow the HEPA test procedure

Cu = 40 ug/l(%) Final Stable Upstream Meter reading **Acceptance: ≥30 meter reading**

Stable Downstream (Cd%) Meter reading = .001 (%) MM 8/6/22

Removal Efficiency (%) =.100% - Cd% = 100% - .001 Cd% = 99.999 %

Acceptance: ≥ 99.95% **Acceptable? (circle one)** **YES** **NO**

For Information Only

Attachment D, 300 Area Glovebox Exhaust FF-855 Data Sheet

(Page 2 of 3)

Valve	Required Position	Initials Step 5.8[8]	Independent Verification Step 5.8[8][b]
855-A	**Closed**		PJC
HV-854-AA	**Closed**		PJC
HV-870B	**Open**		PJC
HV-891	**Open**		PJC
TP-855-1	**Closed and Capped**		PJC
TP-855-2	**Closed and Capped**		PJC
TP-855-3	**Closed and Capped**		PJC
6.1.1 ISI 3			
Step 5.8[7]	Visually inspect that the fire screens downstream of the first stage filters are structurally sound and bolted down (e.g. the zone 1 exhaust fire screens are to be visually inspected for signs of wear or degradation).	(SAT) / UNSAT	N/A

$

For Information Only

Attachment D, 300 Area Glovebox Exhaust FF-855 Data Sheet

(Page 3 of 3)

Surveillance Test Procedure Acceptance			
Date of Test:	8/6/22		
Test Results:	SATISFACTORY/UNSATISFACTORY (circle one)		
Surveillance Personnel:	Michael M. Irish / 1626488 / 08/06/2022 Signature/Z#/date		
Surveillance Personnel:	Patrick 327245 8/6/22 Signature/Z#/date		
Surveillance Personnel:	Signature/Z#/date		
Surveillance Personnel:	Signature/Z#/date		
Surveillance Personnel:	Signature/Z#/date		
Surveillance Personnel:	Signature/Z#/date		
Surveillance Personnel:	Signature/Z#/date		
OC Operator:	354345 8.6.22 Signature/Z#/date	**OC On-Duty Supervisor:**	8/6/22 21044 Signature/Z#/date
Surveillance & Inspection Test Results Review			
Cognizant System Engineer:	252921 8/9/22 Signature/Z#/date		
Comments			

For Information Only

Attachment E, SRL Exhaust FF-859 Data Sheet

(Page 1 of 3)

Step 3.1[3]	Obtain current copy of STP	Initials	Step 3.1[3]	Obtain Permission to conduct STP	Initials
Step 5.1[2]	Plenum (Circle One) SAT UNSAT	Initial			

Date: 9/6/22 5.5[5][a]

Photometer Cal. Expiration Date: 09/07/23 5.5[5][b]

Photometer File # 104063 5.5[5][d]

Step	Item	FF-859
5.7[3]	First-stage HEPA Filter ΔP (PDI-821-1)	.12 Inches wc
5.7[4]	Second-Stage HEPA Filter ΔP (PDI-821-3)	.09 Inches wc
5.7[5]	Third-Stage HEPA Filter ΔP (PDI-821-4)	.09 Inches wc

PLENUM EFFICIENCY TEST
Follow the HEPA test procedure
Cu = 50 ug/l(%) Final Stable Upstream Meter reading **Acceptance: ≥30 meter reading**
Stable Downstream (Cd%) Meter reading = .006 (%)
Removal Efficiency (%) =.100% - Cd% = 100% - .006 Cd% = 99.994 %
Acceptance: ≥ 99.95% **Acceptable? (circle one) YES / NO** **[SR #4.1.3.1.A, #4.1.3.1.B]**

$

FIRST STAGE TEST [defense-in-depth]
Follow the HEPA test procedure
Cu = 50 ug/l(%) Final Stable Upstream Meter reading **Acceptance: ≥30 meter reading**
Stable Downstream (Cd%) Meter reading = .007 (%)
Removal Efficiency (%) =.100% - Cd% = 100% - .007 Cd% = 99.993 %
Acceptance: ≥ 99.95% **Acceptable? (circle one)** **YES** **NO**

For Information Only

Attachment E, SRL Exhaust FF-859 Data Sheet

(Page 2 of 3)

Valve	Required Position	Initials Step 5.8[8]	Independent Verification Step 5.8[8][b]
859-1	**Closed**		PJC
HV-854-AA	**Closed**		PJC
HV-870B	**Open**		PJC
HV-891	**Open**		PJC
TP-859-1	**Closed and Capped**		PJC
TP-859-2	**Closed and Capped**		PJC
TP-855-3	**Closed and Capped**		PJC
6.1.1 ISI 3			
Step 5.8[7]	Visually inspect that the fire screens downstream of the first stage filters are structurally sound and bolted down (e.g. the zone 1 exhaust fire screens are to be visually inspected for signs of wear or degradation).	(SAT) UNSAT	N/A

$

For Information Only

Attachment E, SRL Exhaust FF-859 Data Sheet

(Page 3 of 3)

Surveillance Test Procedure Acceptance			
Date of Test:	8/6/22		
Test Results:	SATISFACTORY/UNSATISFACTORY (circle one)		
Surveillance Personnel:	[signature] 182648 08/06/2022 Signature/Z#/date		
Surveillance Personnel:	[signature] 319691 8/6/22 Signature/Z#/date		
Surveillance Personnel:	[signature] 327243 8/6/22 Signature/Z#/date		
Surveillance Personnel:	Signature/Z#/date		
Surveillance Personnel:	Signature/Z#/date		
Surveillance Personnel:	Signature/Z#/date		
OC Operator:	[signature] 554315 8.6.22 Signature/Z#/date	**OC On-Duty Supervisor:**	[signature] 242942 8/6/22 Signature/Z#/date
Surveillance & Inspection Test Results Review			
Cognizant System Engineer:	[signature] 252921 8/9/22 Signature/Z#/date		
Comments			

For Information Only

Attachment A, Valve Alignment

(Page 1 of 1)

Verify that the following valves on the aerosol injection ductwork are in the designated position:

Valve	Required Position	Initials Step 3.4[6]	Valve	Required Position	Initials Step 3.4[6]
HV-854-J	**Closed and Locked**		855-J	**Closed and Locked**	
854-H	**Closed**		855-D	**Closed**	
854-G	**Closed**		855-C	**Closed**	
854-D	**Closed**		855-B	**Closed**	
854-C	**Closed**		855-A	**Closed**	
854-B	**Closed**		V-855-8	**Closed and Locked**	
854-A	**Closed**		859-7	**Closed**	
854-8	**Closed and Locked**		859-5	**Closed**	
858-7	**Closed**		859-3	**Closed**	
858-5	**Closed**		859-2	**Closed**	
858-3	**Closed**		859-1	**Closed**	
858-2	**Closed**				
858-1	**Closed**				
HV-854-AA	**Closed**				

Ensure that the maintenance valves/doors are in the correct operating position:

Step 3.4[7]	Visually inspect the bag-out doors between the air plenum and the bag-out boxes (both sides). Ensure that the seals are intact and the doors are securely **dogged shut**.	**Initials**

For Information Only

ATTACHMENT A707.C.c.

Beryllium

TA-55-PF4 HEPA Filtration Differential Pressure Readings

Tour Readings with Reading Times

Facility- FO01 1/6/2023

Sorted by Sequence, Date, Shift, Reading ID

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/1/2022 7:13:10
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/1/2022 19:15:01
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/2/2022 7:17:07
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	7/2/2022 19:17:47
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	7/3/2022 7:16:28
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/3/2022 19:20:45
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/4/2022 7:17:24
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/4/2022 19:06:56
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	7/5/2022 7:16:57
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/5/2022 19:15:17
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	7/6/2022 7:23:36
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	7/6/2022 19:17:15
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/7/2022 7:16:13
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	7/7/2022 19:23:47
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/8/2022 7:19:35
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	7/8/2022 19:12:52
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	7/9/2022 7:16:43
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/9/2022 19:18:43
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/10/2022 7:22:44
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	7/10/2022 19:10:55
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	7/11/2022 7:45:07

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	7/11/2022 19:21:21
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/12/2022 7:20:46
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/12/2022 19:27:51
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/13/2022 7:22:07
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/13/2022 19:07:56
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/14/2022 7:20:51
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/14/2022 19:12:38
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/15/2022 7:28:46
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/15/2022 19:09:33
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/16/2022 7:31:09
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/16/2022 19:15:54
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/17/2022 7:11:26
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	7/17/2022 19:31:42
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	7/18/2022 7:15:16
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/18/2022 19:11:49
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/19/2022 7:19:38
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-1.99	7/19/2022 19:23:46
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/20/2022 7:06:45
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/20/2022 19:32:17
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	7/21/2022 7:23:06
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/21/2022 19:28:14
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	7/22/2022 7:22:19
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/22/2022 19:14:55

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/23/2022 7:16:25
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/23/2022 19:06:56
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/24/2022 7:13:13
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/24/2022 19:23:26
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/25/2022 7:17:45
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/25/2022 19:16:50
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/26/2022 7:20:55
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/26/2022 19:16:53
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	7/27/2022 7:20:50
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	7/27/2022 19:13:20
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/28/2022 7:22:44
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/28/2022 19:16:01
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/29/2022 7:32:53
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/29/2022 19:20:45
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	7/30/2022 7:27:14
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/31/2022 7:23:22
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	7/31/2022 19:24:16
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/1/2022 7:14:23
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	8/1/2022 19:16:15
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/2/2022 7:16:03
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/2/2022 19:11:34
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/3/2022 7:24:28
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	8/3/2022 19:17:40

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/4/2022 7:32:00
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/4/2022 19:38:15
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	8/5/2022 7:11:43
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/5/2022 19:25:06
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/6/2022 7:14:17
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	8/6/2022 19:17:09
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/7/2022 7:11:53
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/7/2022 19:14:58
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/8/2022 7:23:44
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/8/2022 19:25:30
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/9/2022 7:28:29
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/9/2022 19:25:41
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	8/10/2022 7:13:12
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/10/2022 19:13:13
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/11/2022 7:15:48
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/11/2022 19:18:04
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	8/12/2022 7:27:36
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/12/2022 19:26:08
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/13/2022 7:22:59
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/13/2022 19:26:29
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/14/2022 7:19:31
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/14/2022 19:24:40
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/15/2022 7:13:28

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/15/2022 19:16:03
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/16/2022 7:15:44
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/16/2022 19:20:12
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/17/2022 7:24:41
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/17/2022 19:21:43
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/18/2022 7:25:44
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/18/2022 19:23:28
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/19/2022 7:14:49
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/19/2022 19:18:02
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	8/20/2022 7:29:46
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/20/2022 19:16:56
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/21/2022 7:12:38
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/21/2022 19:17:53
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/22/2022 7:15:08
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/22/2022 19:17:58
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/23/2022 7:16:56
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/23/2022 19:21:03
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/24/2022 7:17:30
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/24/2022 19:23:20
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/25/2022 7:17:56
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	8/25/2022 19:16:25
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/26/2022 7:21:37
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/26/2022 19:27:59

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/27/2022 7:17:55
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/27/2022 19:25:04
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/28/2022 7:08:23
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	8/28/2022 19:05:18
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/29/2022 7:11:57
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/29/2022 19:07:47
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-1.99	8/30/2022 6:56:47
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/30/2022 19:15:10
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/31/2022 7:18:49
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	8/31/2022 19:31:33
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/1/2022 7:14:17
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/1/2022 19:32:47
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	9/2/2022 7:00:30
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	9/2/2022 19:31:24
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/3/2022 7:12:50
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/3/2022 19:22:52
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	9/4/2022 7:01:01
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/4/2022 19:15:37
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/5/2022 7:23:21
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/5/2022 19:29:40
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/6/2022 7:12:38
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/6/2022 19:21:14
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	9/7/2022 7:22:06

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	9/7/2022 19:16:01
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	9/8/2022 7:22:54
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/8/2022 19:28:47
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/9/2022 7:24:44
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	9/9/2022 19:16:41
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/10/2022 7:14:00
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/10/2022 19:23:18
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/11/2022 7:13:00
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	9/11/2022 19:20:49
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	9/12/2022 7:27:36
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/12/2022 19:15:14
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/13/2022 7:19:41
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/13/2022 19:19:35
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/14/2022 7:19:47
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/14/2022 19:23:29
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/15/2022 7:19:57
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/15/2022 19:24:02
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/16/2022 7:22:40
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/16/2022 19:17:31
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/17/2022 7:24:46
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	9/17/2022 19:18:44
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	9/18/2022 7:17:59
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/18/2022 19:14:11

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/19/2022 7:27:50
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/19/2022 19:36:16
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/20/2022 7:37:58
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/20/2022 19:12:09
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/21/2022 7:23:08
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/21/2022 19:15:37
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/22/2022 7:21:20
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/22/2022 19:30:01
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	9/23/2022 7:26:50
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	9/23/2022 19:19:46
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	9/24/2022 7:21:35
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/24/2022 19:18:18
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/25/2022 7:21:30
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/25/2022 19:11:58
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/26/2022 7:20:50
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/26/2022 19:23:24
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	9/27/2022 7:15:33
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/27/2022 19:17:54
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	9/28/2022 7:21:18
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/28/2022 19:11:54
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/29/2022 7:20:41
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/29/2022 19:32:43
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/30/2022 7:13:59

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	9/30/2022 19:12:47
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/1/2022 7:13:16
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/1/2022 19:23:52
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/2/2022 7:16:48
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	10/2/2022 19:19:20
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/3/2022 7:25:26
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	10/3/2022 19:10:31
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/4/2022 7:28:14
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/4/2022 19:15:17
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/5/2022 7:18:57
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/5/2022 19:23:36
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/6/2022 7:19:36
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/6/2022 19:05:46
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/7/2022 7:17:37
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/7/2022 19:11:22
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/8/2022 7:23:56
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/8/2022 19:23:14
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	10/9/2022 7:21:48
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	10/9/2022 19:20:45
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/10/2022 7:20:35
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/10/2022 19:21:04
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/11/2022 7:14:55
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/11/2022 19:22:29

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	10/12/2022 7:13:02
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	10/12/2022 19:05:56
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-1.94	10/13/2022 7:31:05
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/13/2022 19:24:44
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	10/14/2022 7:15:51
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	10/14/2022 19:16:16
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	10/15/2022 7:13:40
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	10/15/2022 19:21:17
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	10/16/2022 7:32:55
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/16/2022 19:23:07
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/17/2022 7:22:18
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/17/2022 19:23:03
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/18/2022 7:15:05
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	10/18/2022 19:16:44
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	10/19/2022 7:13:30
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/19/2022 19:23:12
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/20/2022 7:19:27
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/20/2022 19:24:37
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/21/2022 7:22:51
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/21/2022 19:20:47
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/22/2022 7:21:30
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	10/22/2022 19:21:27
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/23/2022 7:26:32

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-1.99	10/23/2022 19:20:11
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/24/2022 7:17:20
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	10/24/2022 19:16:22
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/25/2022 7:15:55
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/25/2022 19:18:55
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	10/26/2022 7:17:55
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/26/2022 19:23:05
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/27/2022 7:06:17
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/27/2022 19:15:47
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	10/28/2022 7:14:01
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	10/28/2022 19:15:15
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	10/29/2022 7:23:04
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/29/2022 19:12:32
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/30/2022 7:10:23
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	10/30/2022 19:02:47
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/31/2022 7:30:40
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	10/31/2022 19:17:07
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	11/1/2022 7:27:33
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/1/2022 19:11:31
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	11/2/2022 7:20:08
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	11/2/2022 17:05:08
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	11/3/2022 7:14:37
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	11/3/2022 19:10:13

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/4/2022 7:35:53
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.02	11/4/2022 19:20:28
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/5/2022 7:28:23
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/5/2022 19:19:55
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/6/2022 7:17:57
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/6/2022 19:23:58
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	11/7/2022 7:19:27
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/7/2022 19:14:57
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	11/8/2022 7:17:39
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/8/2022 19:11:34
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/9/2022 7:18:53
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	11/9/2022 19:24:56
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	11/10/2022 7:19:09
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	11/10/2022 19:17:39
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	11/11/2022 7:13:43
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	11/11/2022 19:08:21
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	11/12/2022 7:16:35
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	11/12/2022 19:10:04
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	11/13/2022 7:19:05
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	11/13/2022 19:15:19
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	11/14/2022 7:22:12
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/14/2022 19:13:15
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/15/2022 7:06:00

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	11/15/2022 19:19:20
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	11/16/2022 7:21:52
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/16/2022 19:25:21
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/17/2022 7:15:01
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/17/2022 19:15:03
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/18/2022 7:25:44
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/18/2022 19:16:47
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/19/2022 7:21:49
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/19/2022 19:09:30
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/20/2022 7:17:49
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	11/20/2022 19:17:39
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-1.99	11/21/2022 7:27:17
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/21/2022 19:13:51
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	11/22/2022 7:18:26
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/22/2022 19:10:45
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/23/2022 7:14:25
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/23/2022 19:16:39
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/24/2022 7:15:01
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	11/24/2022 19:10:48
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/25/2022 7:16:14
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/25/2022 19:16:35
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/26/2022 7:16:17
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	11/26/2022 19:17:34

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/27/2022 7:12:13
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	11/27/2022 19:23:05
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/28/2022 7:30:02
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/28/2022 19:20:58
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	11/29/2022 7:17:37
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/29/2022 19:27:03
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/30/2022 7:12:06
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	11/30/2022 19:19:44
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/1/2022 7:14:29
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/1/2022 19:20:36
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/2/2022 7:25:28
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/2/2022 19:26:33
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	12/3/2022 7:16:55
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/3/2022 19:14:41
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/4/2022 7:03:43
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/4/2022 19:12:10
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/5/2022 7:16:05
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/5/2022 19:22:45
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/6/2022 7:14:08
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/6/2022 19:14:41
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/7/2022 7:23:18
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/7/2022 19:22:14
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/8/2022 7:19:09

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/8/2022 19:32:08
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/9/2022 7:16:45
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/9/2022 19:17:41
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/10/2022 7:15:46
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/11/2022 7:10:46
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	12/11/2022 19:20:18
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/12/2022 7:20:08
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.44	12/12/2022 19:16:30
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	12/13/2022 7:22:53
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	12/13/2022 19:25:03
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/14/2022 7:22:53
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	12/14/2022 19:23:35
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	12/15/2022 7:20:13
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/15/2022 19:23:45
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/16/2022 7:18:01
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/16/2022 19:16:50
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/17/2022 7:14:17
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	12/17/2022 19:21:15
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/18/2022 7:18:05
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/18/2022 19:17:15
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/19/2022 7:14:44
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/19/2022 19:11:55
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/20/2022 7:07:12

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/20/2022 19:17:20
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/21/2022 7:08:41
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/21/2022 19:21:14
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	12/22/2022 7:11:44
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	12/22/2022 19:22:38
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	12/23/2022 7:20:47
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/23/2022 19:13:40
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	12/24/2022 7:15:44
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/24/2022 19:17:31
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-1.99	12/25/2022 7:15:25
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/25/2022 19:16:22
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/26/2022 7:13:06
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	12/26/2022 19:12:02
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/27/2022 7:09:44
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	12/27/2022 19:19:02
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/28/2022 7:16:11
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/28/2022 19:14:45
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-1.99	12/29/2022 7:19:02
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.01	12/29/2022 19:19:25
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/30/2022 7:27:47
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/30/2022 19:19:37
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/31/2022 7:17:05
HVAC: 200 area glovebox exhaust header delta P (PDI-814-1 or PDI-814-2) (sta # 1)		-1.5	-2.00	12/31/2022 19:12:48

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/1/2022 7:13:16
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	7/1/2022 19:15:06
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	7/2/2022 7:17:11
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/2/2022 19:17:51
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	7/3/2022 7:16:32
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/3/2022 19:20:49
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/4/2022 7:17:31
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/4/2022 19:07:02
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	7/5/2022 7:17:00
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	7/5/2022 19:15:23
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	7/6/2022 7:23:41
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/6/2022 19:17:21
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	7/7/2022 7:16:19
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	7/7/2022 19:23:54
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/8/2022 7:19:48
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/8/2022 19:12:56
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	7/9/2022 7:16:50
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/9/2022 19:18:51
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/10/2022 7:23:12
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	7/10/2022 19:11:00
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/11/2022 7:45:17
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/11/2022 19:21:26
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/12/2022 7:20:52

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	7/12/2022 19:28:07
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	7/13/2022 7:22:12
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/13/2022 19:08:00
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/14/2022 7:20:55
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/14/2022 19:12:45
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	7/15/2022 7:28:50
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/15/2022 19:09:37
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	7/16/2022 7:31:13
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/16/2022 19:16:00
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/17/2022 7:11:31
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	7/17/2022 19:31:49
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/18/2022 7:15:25
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/18/2022 19:11:55
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	7/19/2022 7:19:43
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	7/19/2022 19:23:52
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/20/2022 7:06:50
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/20/2022 19:32:22
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/21/2022 7:23:10
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	7/21/2022 19:28:19
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	7/22/2022 7:22:23
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	7/22/2022 19:15:01
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/23/2022 7:16:33
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/23/2022 19:07:04

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/24/2022 7:13:21
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	7/24/2022 19:23:31
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/25/2022 7:17:54
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/25/2022 19:16:55
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	7/26/2022 7:20:59
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/26/2022 19:17:01
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/27/2022 7:20:58
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	7/27/2022 19:13:25
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	7/28/2022 7:22:55
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	7/28/2022 19:16:11
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	7/29/2022 7:32:58
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	7/29/2022 19:20:49
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	7/30/2022 7:27:20
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	7/31/2022 7:23:26
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	7/31/2022 19:24:36
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/1/2022 7:14:28
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	8/1/2022 19:16:20
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/2/2022 7:16:13
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/2/2022 19:11:43
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/3/2022 7:24:34
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/3/2022 19:17:49
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/4/2022 7:32:03
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/4/2022 19:38:30

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/5/2022 7:11:51
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	8/5/2022 19:25:14
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/6/2022 7:14:28
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/6/2022 19:17:20
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/7/2022 7:12:01
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/7/2022 19:15:02
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/8/2022 7:23:48
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/8/2022 19:25:39
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/9/2022 7:28:38
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/9/2022 19:25:50
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/10/2022 7:13:18
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/10/2022 19:13:20
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	8/11/2022 7:16:23
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/11/2022 19:18:11
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	8/12/2022 7:27:42
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/12/2022 19:26:15
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/13/2022 7:23:10
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/13/2022 19:26:32
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/14/2022 7:19:35
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	8/14/2022 19:24:50
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/15/2022 7:13:38
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/15/2022 19:16:12
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/16/2022 7:15:49

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/16/2022 19:20:17
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/17/2022 7:24:50
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/17/2022 19:21:53
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/18/2022 7:25:51
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/18/2022 19:23:35
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/19/2022 7:15:01
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/19/2022 19:18:09
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/20/2022 7:29:51
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/20/2022 19:17:15
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/21/2022 7:12:46
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/21/2022 19:18:04
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/22/2022 7:15:13
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/22/2022 19:18:06
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/23/2022 7:17:04
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/23/2022 19:21:08
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/24/2022 7:17:35
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	8/24/2022 19:23:24
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/25/2022 7:18:00
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/25/2022 19:16:29
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/26/2022 7:21:42
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/26/2022 19:28:05
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/27/2022 7:18:02
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/27/2022 19:25:09

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/28/2022 7:08:27
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	8/28/2022 19:05:23
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/29/2022 7:12:12
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.93	8/29/2022 19:07:52
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/30/2022 6:57:02
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/30/2022 19:15:15
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/31/2022 7:18:55
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	8/31/2022 19:31:41
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	9/1/2022 7:14:25
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	9/1/2022 19:32:54
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	9/2/2022 7:00:38
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	9/2/2022 19:31:29
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	9/3/2022 7:12:57
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	9/3/2022 19:22:58
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	9/4/2022 7:01:09
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	9/4/2022 19:15:41
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	9/5/2022 7:23:31
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	9/5/2022 19:29:46
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	9/6/2022 7:12:47
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	9/6/2022 19:21:19
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	9/7/2022 7:22:15
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	9/7/2022 19:16:10
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	9/8/2022 7:23:00

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	9/8/2022 19:28:52
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	9/9/2022 7:24:50
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	9/9/2022 19:16:46
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	9/10/2022 7:14:06
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	9/10/2022 19:23:24
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	9/11/2022 7:13:05
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	9/11/2022 19:20:55
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	9/12/2022 7:27:43
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	9/12/2022 19:15:19
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	9/13/2022 7:19:46
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	9/13/2022 19:19:39
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	9/14/2022 7:19:55
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	9/14/2022 19:23:34
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	9/15/2022 7:20:03
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	9/15/2022 19:24:06
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	9/16/2022 7:22:48
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	9/16/2022 19:17:52
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	9/17/2022 7:24:50
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	9/17/2022 19:18:54
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	9/18/2022 7:18:07
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	9/18/2022 19:14:17
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.89	9/19/2022 7:27:57
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.88	9/19/2022 19:36:19

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.86	9/20/2022 7:38:05
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.86	9/20/2022 19:12:15
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.87	9/21/2022 7:23:23
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.86	9/21/2022 19:15:41
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.87	9/22/2022 7:21:33
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.88	9/22/2022 19:30:07
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.89	9/23/2022 7:26:58
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.88	9/23/2022 19:19:51
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.89	9/24/2022 7:21:39
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.88	9/24/2022 19:18:24
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.89	9/25/2022 7:21:36
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.89	9/25/2022 19:12:02
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	9/26/2022 7:21:01
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	9/26/2022 19:23:31
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	9/27/2022 7:15:38
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	9/27/2022 19:17:58
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	9/28/2022 7:21:22
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	9/28/2022 19:12:01
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	9/29/2022 7:20:48
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	9/29/2022 19:32:50
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	9/30/2022 7:14:04
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	9/30/2022 19:12:54
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/1/2022 7:13:21

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/1/2022 19:23:56
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/2/2022 7:16:53
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/2/2022 19:19:26
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/3/2022 7:25:32
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/3/2022 19:10:38
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	10/4/2022 7:28:17
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	10/4/2022 19:15:22
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/5/2022 7:19:02
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/5/2022 19:23:41
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/6/2022 7:19:42
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/6/2022 19:05:50
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/7/2022 7:17:41
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	10/7/2022 19:11:28
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/8/2022 7:24:01
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/8/2022 19:23:20
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/9/2022 7:21:54
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/9/2022 19:20:50
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/10/2022 7:20:39
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/10/2022 19:21:09
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/11/2022 7:15:00
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/11/2022 19:22:37
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/12/2022 7:13:09
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/12/2022 19:05:58

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.87	10/13/2022 7:31:11
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	10/13/2022 19:24:49
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	10/14/2022 7:15:57
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	10/14/2022 19:16:24
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	10/15/2022 7:13:45
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	10/15/2022 19:21:20
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	10/16/2022 7:33:37
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	10/16/2022 19:23:11
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	10/17/2022 7:22:24
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	10/17/2022 19:23:07
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	10/18/2022 7:15:12
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/18/2022 19:16:52
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/19/2022 7:13:36
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/19/2022 19:23:14
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/20/2022 7:19:31
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	10/20/2022 19:24:43
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/21/2022 7:22:59
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/21/2022 19:20:54
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/22/2022 7:21:37
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/22/2022 19:21:34
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/23/2022 7:26:38
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/23/2022 19:20:18
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/24/2022 7:17:22

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/24/2022 19:16:28
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/25/2022 7:16:00
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/25/2022 19:19:00
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/26/2022 7:18:05
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/26/2022 19:23:15
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.86	10/27/2022 7:06:25
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.87	10/27/2022 19:15:52
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/28/2022 7:14:17
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/28/2022 19:15:21
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/29/2022 7:23:13
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/29/2022 19:12:38
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	10/30/2022 7:10:28
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.86	10/30/2022 19:02:54
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.85	10/31/2022 7:30:47
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.86	10/31/2022 19:17:12
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.86	11/1/2022 7:27:39
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.89	11/1/2022 19:11:37
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	11/2/2022 7:20:15
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	11/2/2022 17:05:17
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	11/3/2022 7:14:41
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	11/3/2022 19:10:18
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.89	11/4/2022 7:35:59
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	11/4/2022 19:20:34

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	11/5/2022 7:28:27
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	11/5/2022 19:20:02
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	11/6/2022 7:18:02
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	11/6/2022 19:24:03
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	11/7/2022 7:19:32
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	11/7/2022 19:15:04
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	11/8/2022 7:17:45
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	11/8/2022 19:11:39
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	11/9/2022 7:19:00
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	11/9/2022 19:25:03
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	11/10/2022 7:19:17
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	11/10/2022 19:17:45
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	11/11/2022 7:13:51
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	11/11/2022 19:08:31
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	11/12/2022 7:16:44
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	11/12/2022 19:10:10
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	11/13/2022 7:19:18
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	11/13/2022 19:15:23
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	11/14/2022 7:22:25
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	11/14/2022 19:13:28
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	11/15/2022 7:06:04
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	11/15/2022 19:19:25
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	11/16/2022 7:21:55

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	11/16/2022 19:25:26
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	11/17/2022 7:15:10
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	11/17/2022 19:15:08
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	11/18/2022 7:25:51
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	11/18/2022 19:16:55
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	11/19/2022 7:21:54
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	11/19/2022 19:09:36
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	11/20/2022 7:17:55
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	11/20/2022 19:17:45
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	11/21/2022 7:27:23
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	11/21/2022 19:13:56
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	11/22/2022 7:18:32
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	11/22/2022 19:10:52
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	11/23/2022 7:14:31
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	11/23/2022 19:16:45
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	11/24/2022 7:15:09
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	11/24/2022 19:10:54
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	11/25/2022 7:16:18
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	11/25/2022 19:16:41
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	11/26/2022 7:16:22
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	11/26/2022 19:17:47
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	11/27/2022 7:12:28
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	11/27/2022 19:23:09

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	11/28/2022 7:30:07
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	11/28/2022 19:21:03
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	11/29/2022 7:17:43
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	11/29/2022 19:27:09
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	11/30/2022 7:12:09
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	11/30/2022 19:19:55
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/1/2022 7:14:36
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/1/2022 19:20:44
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/2/2022 7:25:34
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/2/2022 19:26:40
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/3/2022 7:17:00
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/3/2022 19:14:47
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	12/4/2022 7:03:47
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/4/2022 19:12:14
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/5/2022 7:16:12
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	12/5/2022 19:22:58
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/6/2022 7:14:14
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/6/2022 19:14:49
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/7/2022 7:23:23
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/7/2022 19:22:20
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/8/2022 7:19:12
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/8/2022 19:32:14
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/9/2022 7:17:12

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/9/2022 19:17:46
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/10/2022 7:15:52
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/11/2022 7:10:50
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/11/2022 19:20:40
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/12/2022 7:20:15
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.82	12/12/2022 19:16:35
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	12/13/2022 7:23:03
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	12/13/2022 19:25:12
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	12/14/2022 7:22:56
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	12/14/2022 19:23:41
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/15/2022 7:20:17
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/15/2022 19:23:48
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/16/2022 7:18:06
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	12/16/2022 19:16:55
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	12/17/2022 7:14:24
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	12/17/2022 19:21:20
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	12/18/2022 7:18:11
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	12/18/2022 19:17:20
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	12/19/2022 7:14:52
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	12/19/2022 19:12:01
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	12/20/2022 7:07:18
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	12/20/2022 19:17:26
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/21/2022 7:08:50

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	12/21/2022 19:21:20
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	12/22/2022 7:11:58
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	12/22/2022 19:22:44
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	12/23/2022 7:20:55
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	12/23/2022 19:13:47
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	12/24/2022 7:16:02
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	12/24/2022 19:17:36
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/25/2022 7:15:33
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/25/2022 19:16:27
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/26/2022 7:13:15
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/26/2022 19:12:06
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/27/2022 7:09:49
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/27/2022 19:19:05
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/28/2022 7:16:18
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/28/2022 19:14:52
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.91	12/29/2022 7:19:08
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/29/2022 19:19:29
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/30/2022 7:27:52
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/30/2022 19:19:43
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.92	12/31/2022 7:17:18
HVAC: 100 area glovebox exhaust header delta P (PDI-820-1 or PDI-820-2) (sta # 2)		-1.5	-1.90	12/31/2022 19:12:52
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/1/2022 7:13:21
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/1/2022 19:15:11

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	7/2/2022 7:17:15
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/2/2022 19:17:56
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/3/2022 7:16:38
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/3/2022 19:20:54
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/4/2022 7:17:35
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	7/4/2022 19:07:08
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/5/2022 7:17:04
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/5/2022 19:15:27
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/6/2022 7:23:46
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/6/2022 19:17:27
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/7/2022 7:16:21
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/7/2022 19:23:58
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	7/8/2022 7:19:51
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/8/2022 19:13:02
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	7/9/2022 7:17:02
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/9/2022 19:19:00
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	7/10/2022 7:23:23
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/10/2022 19:11:05
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/11/2022 7:45:41
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	7/11/2022 19:21:31
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/12/2022 7:20:56
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/12/2022 19:28:12
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/13/2022 7:22:16

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	7/13/2022 19:08:07
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/14/2022 7:21:01
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	7/14/2022 19:12:50
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	7/15/2022 7:28:55
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/15/2022 19:09:41
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	7/16/2022 7:31:18
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	7/16/2022 19:16:05
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/17/2022 7:11:36
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/17/2022 19:31:53
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	7/18/2022 7:15:33
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/18/2022 19:12:02
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/19/2022 7:19:47
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/19/2022 19:23:58
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/20/2022 7:06:53
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/20/2022 19:32:28
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/21/2022 7:23:16
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/21/2022 19:28:23
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	7/22/2022 7:22:28
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/22/2022 19:15:06
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/23/2022 7:16:42
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/23/2022 19:07:10
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	7/24/2022 7:13:25
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	7/24/2022 19:23:39

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/25/2022 7:18:03
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/25/2022 19:16:59
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/26/2022 7:21:03
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/26/2022 19:17:06
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	7/27/2022 7:21:05
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	7/27/2022 19:13:29
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	7/28/2022 7:23:01
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	7/28/2022 19:16:17
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/29/2022 7:33:03
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	7/29/2022 19:20:53
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/30/2022 7:27:24
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/31/2022 7:23:29
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	7/31/2022 19:24:42
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/1/2022 7:14:33
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/1/2022 19:16:24
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/2/2022 7:16:20
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/2/2022 19:12:00
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/3/2022 7:24:41
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/3/2022 19:17:56
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/4/2022 7:32:13
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/4/2022 19:38:38
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/5/2022 7:11:58
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/5/2022 19:25:23

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/6/2022 7:14:35
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/6/2022 19:17:30
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/7/2022 7:12:06
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	8/7/2022 19:15:10
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	8/8/2022 7:23:54
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/8/2022 19:25:53
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/9/2022 7:28:47
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/9/2022 19:25:57
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/10/2022 7:13:23
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/10/2022 19:13:30
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/11/2022 7:16:29
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/11/2022 19:18:20
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/12/2022 7:27:48
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/12/2022 19:26:22
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/13/2022 7:23:17
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	8/13/2022 19:26:37
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/14/2022 7:19:40
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/14/2022 19:24:59
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/15/2022 7:13:47
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/15/2022 19:16:24
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/16/2022 7:15:54
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/16/2022 19:20:21
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/17/2022 7:24:58

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/17/2022 19:22:01
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/18/2022 7:25:58
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	8/18/2022 19:23:40
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/19/2022 7:15:04
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/19/2022 19:18:21
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/20/2022 7:29:58
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/20/2022 19:17:22
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/21/2022 7:12:53
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/21/2022 19:18:13
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/22/2022 7:15:20
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	8/22/2022 19:18:12
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/23/2022 7:17:11
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/23/2022 19:21:13
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/24/2022 7:17:37
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/24/2022 19:23:31
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/25/2022 7:18:04
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/25/2022 19:16:34
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/26/2022 7:21:49
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/26/2022 19:28:09
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	8/27/2022 7:18:08
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/27/2022 19:25:14
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/28/2022 7:08:33
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	8/28/2022 19:05:28

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/29/2022 7:12:18
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/29/2022 19:07:56
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/30/2022 6:57:12
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/30/2022 19:15:18
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/31/2022 7:18:58
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	8/31/2022 19:31:45
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/1/2022 7:14:34
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	9/1/2022 19:33:02
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/2/2022 7:00:45
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/2/2022 19:31:36
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/3/2022 7:13:04
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/3/2022 19:23:06
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/4/2022 7:01:21
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/4/2022 19:15:46
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/5/2022 7:23:39
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/5/2022 19:29:52
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.97	9/6/2022 7:12:53
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	9/6/2022 19:21:31
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/7/2022 7:22:23
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/7/2022 19:16:13
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/8/2022 7:23:05
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/8/2022 19:28:59
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/9/2022 7:24:55

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/9/2022 19:16:51
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/10/2022 7:14:12
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/10/2022 19:23:31
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/11/2022 7:13:09
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/11/2022 19:21:01
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/12/2022 7:27:57
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/12/2022 19:15:23
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/13/2022 7:19:51
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/13/2022 19:19:51
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/14/2022 7:20:01
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/14/2022 19:23:39
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/15/2022 7:20:10
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/15/2022 19:24:11
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/16/2022 7:22:54
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/16/2022 19:18:04
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/17/2022 7:24:55
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/17/2022 19:18:57
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/18/2022 7:18:11
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/18/2022 19:14:20
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/19/2022 7:28:03
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/19/2022 19:36:23
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/20/2022 7:38:13
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/20/2022 19:12:21

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/21/2022 7:25:25
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/21/2022 19:15:45
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/22/2022 7:21:41
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/22/2022 19:30:13
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/23/2022 7:27:04
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/23/2022 19:20:00
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/24/2022 7:21:45
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/24/2022 19:18:31
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	9/25/2022 7:21:43
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/25/2022 19:12:08
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/26/2022 7:21:19
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	9/26/2022 19:23:35
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/27/2022 7:15:42
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/27/2022 19:18:04
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/28/2022 7:21:27
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/28/2022 19:12:10
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/29/2022 7:20:53
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/29/2022 19:32:56
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/30/2022 7:14:07
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	9/30/2022 19:12:58
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	10/1/2022 7:13:28
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	10/1/2022 19:24:04
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/2/2022 7:16:55

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/2/2022 19:19:41
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	10/3/2022 7:25:37
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	10/3/2022 19:10:44
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/4/2022 7:28:23
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/4/2022 19:15:28
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/5/2022 7:19:08
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/5/2022 19:23:45
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/6/2022 7:19:45
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/6/2022 19:05:54
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/7/2022 7:17:49
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/7/2022 19:11:34
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	10/8/2022 7:24:09
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/8/2022 19:23:30
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	10/9/2022 7:22:00
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	10/9/2022 19:20:54
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	10/10/2022 7:20:43
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/10/2022 19:21:13
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/11/2022 7:15:02
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/11/2022 19:22:45
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/12/2022 7:13:15
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/12/2022 19:06:05
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	10/13/2022 7:31:17
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/13/2022 19:24:54

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/14/2022 7:16:00
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/14/2022 19:16:30
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/15/2022 7:13:49
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/15/2022 19:21:24
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/16/2022 7:14:21
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/16/2022 19:23:14
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/17/2022 7:22:30
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/17/2022 19:23:12
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/18/2022 7:15:19
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	10/18/2022 19:16:58
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/19/2022 7:13:38
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/19/2022 19:23:17
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.98	10/20/2022 7:19:40
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/20/2022 19:24:48
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/21/2022 7:23:07
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	10/21/2022 19:20:58
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/22/2022 7:21:43
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	10/22/2022 19:21:39
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/23/2022 7:26:43
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.94	10/23/2022 19:20:28
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	10/24/2022 7:17:25
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/24/2022 19:16:43
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	10/25/2022 7:16:03

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	10/25/2022 19:19:06
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/26/2022 7:18:11
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/26/2022 19:23:22
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	10/27/2022 7:06:30
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	10/27/2022 19:15:57
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	10/28/2022 7:14:23
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	10/28/2022 19:15:27
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	10/29/2022 7:23:25
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/29/2022 19:12:40
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/30/2022 7:10:34
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	10/30/2022 19:02:57
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	10/31/2022 7:30:55
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	10/31/2022 19:17:22
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	11/1/2022 7:27:45
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/1/2022 19:11:48
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	11/2/2022 7:20:22
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	11/2/2022 17:05:23
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/3/2022 7:14:43
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	11/3/2022 19:10:21
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	11/4/2022 7:36:05
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	11/4/2022 19:20:40
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/5/2022 7:28:32
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	11/5/2022 19:20:08

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	11/6/2022 7:18:10
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	11/6/2022 19:24:09
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	11/7/2022 7:19:37
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/7/2022 19:15:08
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	11/8/2022 7:17:51
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	11/8/2022 19:11:45
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/9/2022 7:19:07
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/9/2022 19:25:07
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/10/2022 7:19:24
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/10/2022 19:17:51
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	11/11/2022 7:13:58
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	11/11/2022 19:08:37
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/12/2022 7:17:08
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	11/12/2022 19:10:13
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	11/13/2022 7:19:32
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	11/13/2022 19:15:26
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/14/2022 7:22:37
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/14/2022 19:13:42
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/15/2022 7:06:11
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/15/2022 19:19:32
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	11/16/2022 7:21:57
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	11/16/2022 19:25:33
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	11/17/2022 7:15:17

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	11/17/2022 19:15:13
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/18/2022 7:25:57
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/18/2022 19:17:00
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/19/2022 7:21:58
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/19/2022 19:09:44
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	11/20/2022 7:18:02
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/20/2022 19:17:52
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	11/21/2022 7:27:31
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/21/2022 19:14:01
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	11/22/2022 7:18:35
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/22/2022 19:11:00
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	11/23/2022 7:14:37
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/23/2022 19:16:52
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/24/2022 7:15:14
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/24/2022 19:11:01
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/25/2022 7:16:24
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	11/25/2022 19:16:50
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/26/2022 7:16:29
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/26/2022 19:18:01
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/27/2022 7:12:36
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/27/2022 19:23:14
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/28/2022 7:30:13
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/28/2022 19:21:08

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	11/29/2022 7:17:53
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	11/29/2022 19:27:18
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	11/30/2022 7:12:14
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	11/30/2022 19:20:02
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	12/1/2022 7:14:38
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/1/2022 19:20:51
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	12/2/2022 7:25:41
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/2/2022 19:26:45
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	12/3/2022 7:17:05
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/3/2022 19:14:51
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/4/2022 7:03:52
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/4/2022 19:12:18
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	12/5/2022 7:16:22
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/5/2022 19:23:07
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/6/2022 7:14:20
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	12/6/2022 19:14:56
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	12/7/2022 7:23:29
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/7/2022 19:22:26
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	12/8/2022 7:19:18
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/8/2022 19:32:21
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	12/9/2022 7:17:16
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	12/9/2022 19:17:53
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	12/10/2022 7:15:57

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/11/2022 7:10:55
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	12/11/2022 19:20:49
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	12/12/2022 7:20:23
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/12/2022 19:16:39
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/13/2022 7:23:11
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/13/2022 19:25:18
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/14/2022 7:22:59
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	12/14/2022 19:23:48
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/15/2022 7:20:21
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	12/15/2022 19:23:51
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/16/2022 7:18:12
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/16/2022 19:17:02
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/17/2022 7:14:31
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/17/2022 19:21:26
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	12/18/2022 7:18:17
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	12/18/2022 19:17:26
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	12/19/2022 7:14:59
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	12/19/2022 19:12:10
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/20/2022 7:07:28
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/20/2022 19:17:31
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/21/2022 7:09:04
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	12/21/2022 19:21:25
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	12/22/2022 7:12:04

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/22/2022 19:22:49
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	12/23/2022 7:21:02
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	12/23/2022 19:13:54
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/24/2022 7:16:17
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/24/2022 19:17:45
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/25/2022 7:15:40
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	12/25/2022 19:16:33
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	12/26/2022 7:13:25
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	12/26/2022 19:12:10
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/27/2022 7:09:57
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	12/27/2022 19:19:11
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/28/2022 7:16:25
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/28/2022 19:14:58
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.97	12/29/2022 7:19:15
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/29/2022 19:19:35
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	12/30/2022 7:27:59
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.96	12/30/2022 19:19:51
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/31/2022 7:17:26
HVAC: 300 area glovebox exhaust header delta P (PDI-870-1 or PDI-870-2) (sta # 3)		-1.5	-1.95	12/31/2022 19:12:57
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/1/2022 7:13:30
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/1/2022 19:15:16
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/2/2022 7:17:20
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/2/2022 19:18:01

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/3/2022 7:16:42
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	7/3/2022 19:20:59
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/4/2022 7:17:40
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/4/2022 19:07:13
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/5/2022 7:17:10
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/5/2022 19:15:32
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/6/2022 7:23:51
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/6/2022 19:17:32
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/7/2022 7:16:25
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/7/2022 19:25:49
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/8/2022 7:19:56
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/8/2022 19:13:06
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/9/2022 7:17:15
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/9/2022 19:19:08
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/10/2022 7:23:33
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/10/2022 19:11:12
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/11/2022 7:45:37
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/11/2022 19:21:36
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/12/2022 7:21:01
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	7/12/2022 19:28:18
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/13/2022 7:22:21
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/13/2022 19:08:15
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/14/2022 7:21:05

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	7/14/2022 19:13:01
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/15/2022 7:28:59
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/15/2022 19:09:46
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/16/2022 7:31:26
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/16/2022 19:16:10
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/17/2022 7:11:41
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/17/2022 19:31:56
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/18/2022 7:15:42
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	7/18/2022 19:12:27
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/19/2022 7:19:55
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/19/2022 19:24:09
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/20/2022 7:06:58
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/20/2022 19:32:33
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/21/2022 7:23:20
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/21/2022 19:28:29
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/22/2022 7:22:32
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	7/22/2022 19:15:11
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/23/2022 7:16:53
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/23/2022 19:07:15
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/24/2022 7:13:32
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	7/24/2022 19:23:46
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/25/2022 7:18:11
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	7/25/2022 19:17:08

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/26/2022 7:21:08
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/26/2022 19:17:12
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	7/27/2022 7:21:12
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	7/27/2022 19:13:40
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/28/2022 7:23:32
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/28/2022 19:16:26
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/29/2022 7:33:07
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/29/2022 19:21:09
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/30/2022 7:27:26
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	7/31/2022 7:23:33
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	7/31/2022 19:24:48
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	8/1/2022 7:14:38
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	8/1/2022 19:16:28
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	8/2/2022 7:16:27
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/2/2022 19:12:13
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/3/2022 7:24:45
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/3/2022 19:18:06
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	8/4/2022 7:32:16
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/4/2022 19:38:46
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	8/5/2022 7:12:07
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/5/2022 19:25:35
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	8/6/2022 7:14:41
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/6/2022 19:17:39

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	8/7/2022 7:12:12
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/7/2022 19:15:14
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/8/2022 7:23:58
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/8/2022 19:26:05
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/9/2022 7:28:54
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	8/9/2022 19:26:12
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/10/2022 7:13:30
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/10/2022 19:13:38
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	8/11/2022 7:16:39
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/11/2022 19:18:29
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/12/2022 7:27:54
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/12/2022 19:26:31
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.95	8/13/2022 7:23:24
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/13/2022 19:26:41
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/14/2022 7:19:44
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	8/14/2022 19:25:09
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/15/2022 7:13:50
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/15/2022 19:16:32
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/16/2022 7:15:58
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/16/2022 19:20:25
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/17/2022 7:25:12
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/17/2022 19:22:08
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/18/2022 7:26:06

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/18/2022 19:23:46
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/19/2022 7:15:12
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/19/2022 19:18:30
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/20/2022 7:30:03
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/20/2022 19:17:32
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/21/2022 7:13:07
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/21/2022 19:18:54
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/22/2022 7:15:25
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/22/2022 19:18:17
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	8/23/2022 7:17:20
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/23/2022 19:21:18
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	8/24/2022 7:17:43
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/24/2022 19:23:34
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	8/25/2022 7:18:09
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.93	8/25/2022 19:16:38
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/26/2022 7:21:56
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/26/2022 19:28:13
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/27/2022 7:18:18
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/27/2022 19:25:19
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/28/2022 7:08:37
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/28/2022 19:05:35
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/29/2022 7:12:23
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/29/2022 19:08:01

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/30/2022 6:57:22
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/30/2022 19:15:25
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	8/31/2022 7:19:07
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	8/31/2022 19:31:51
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/1/2022 7:14:41
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/1/2022 19:33:09
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/2/2022 7:00:53
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/2/2022 19:31:41
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/3/2022 7:13:12
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/3/2022 19:23:11
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/4/2022 7:01:40
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/4/2022 19:15:52
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/5/2022 7:23:48
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/5/2022 19:29:57
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/6/2022 7:13:04
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/6/2022 19:21:38
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/7/2022 7:22:29
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	9/7/2022 19:16:19
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/8/2022 7:23:09
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/8/2022 19:29:05
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/9/2022 7:25:02
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/9/2022 19:16:56
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/10/2022 7:14:19

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/10/2022 19:23:38
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/11/2022 7:13:14
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/11/2022 19:21:08
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/12/2022 7:28:11
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.96	9/12/2022 19:15:33
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/13/2022 7:19:56
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/13/2022 19:20:00
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/14/2022 7:20:08
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/14/2022 19:23:44
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/15/2022 7:20:18
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/15/2022 19:24:23
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/16/2022 7:22:59
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/16/2022 19:18:11
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/17/2022 7:24:59
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/17/2022 19:19:01
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/18/2022 7:18:15
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/18/2022 19:14:28
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/19/2022 7:28:08
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/19/2022 19:36:28
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/20/2022 7:38:19
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/20/2022 19:12:27
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/21/2022 7:25:30
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/21/2022 19:15:49

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/22/2022 7:21:50
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.96	9/22/2022 19:30:18
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/23/2022 7:27:11
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/23/2022 19:20:06
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/24/2022 7:21:49
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/24/2022 19:18:39
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/25/2022 7:21:50
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/25/2022 19:12:16
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	9/26/2022 7:21:24
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/26/2022 19:23:38
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	9/27/2022 7:15:46
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.96	9/27/2022 19:18:10
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/28/2022 7:21:33
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/28/2022 19:12:16
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/29/2022 7:20:59
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/29/2022 19:33:04
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/30/2022 7:14:13
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	9/30/2022 19:13:02
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	10/1/2022 7:13:34
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/1/2022 19:24:11
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/2/2022 7:17:00
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/2/2022 19:19:47
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/3/2022 7:25:43

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	10/3/2022 19:10:51
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/4/2022 7:28:28
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/4/2022 19:15:35
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/5/2022 7:19:13
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	10/5/2022 19:23:50
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/6/2022 7:19:49
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/6/2022 19:05:58
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/7/2022 7:17:54
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/7/2022 19:11:39
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/8/2022 7:24:14
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/8/2022 19:23:37
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/9/2022 7:22:06
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/9/2022 19:21:01
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/10/2022 7:20:48
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	10/10/2022 19:21:17
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/11/2022 7:15:07
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	10/11/2022 19:22:59
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/12/2022 7:13:21
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/12/2022 19:06:12
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/13/2022 7:31:22
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/13/2022 19:24:57
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	10/14/2022 7:16:04
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/14/2022 19:16:38

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/15/2022 7:13:55
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/15/2022 19:21:27
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/16/2022 7:14:31
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/16/2022 19:23:17
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/17/2022 7:22:43
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/17/2022 19:23:17
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/18/2022 7:15:27
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	10/18/2022 19:17:05
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/19/2022 7:13:44
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/19/2022 19:23:21
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/20/2022 7:19:47
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/20/2022 19:24:56
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/21/2022 7:23:13
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/21/2022 19:21:12
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/22/2022 7:21:52
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/22/2022 19:21:45
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/23/2022 7:26:49
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	10/23/2022 19:20:35
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	10/24/2022 7:17:29
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	10/24/2022 19:16:55
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/25/2022 7:16:07
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	10/25/2022 19:19:15
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/26/2022 7:18:17

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	10/26/2022 19:23:32
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/27/2022 7:06:38
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/27/2022 19:16:04
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/28/2022 7:14:29
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/28/2022 19:15:34
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/29/2022 7:23:32
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/29/2022 19:12:45
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/30/2022 7:10:39
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/30/2022 19:03:02
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	10/31/2022 7:31:03
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	10/31/2022 19:17:28
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/1/2022 7:27:52
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	11/1/2022 19:11:56
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/2/2022 7:20:28
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/2/2022 17:05:27
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/3/2022 7:14:46
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	11/3/2022 19:10:26
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	11/4/2022 7:36:09
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/4/2022 19:20:50
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	11/5/2022 7:28:40
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/5/2022 19:20:16
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/6/2022 7:18:15
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/6/2022 19:24:15

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	11/7/2022 7:19:41
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/7/2022 19:15:14
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/8/2022 7:17:58
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/8/2022 19:11:52
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/9/2022 7:19:11
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/9/2022 19:25:13
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/10/2022 7:19:31
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/10/2022 19:17:56
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/11/2022 7:14:03
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/11/2022 19:08:43
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/12/2022 7:17:27
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/12/2022 19:10:23
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/13/2022 7:19:44
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/13/2022 19:15:31
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/14/2022 7:22:53
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/14/2022 19:13:50
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/15/2022 7:06:14
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.96	11/15/2022 19:19:38
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	11/16/2022 7:22:01
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/16/2022 19:25:38
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/17/2022 7:15:29
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/17/2022 19:15:16
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/18/2022 7:26:06

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/18/2022 19:17:10
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/19/2022 7:22:05
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	11/19/2022 19:09:48
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/20/2022 7:18:09
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/20/2022 19:17:59
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/21/2022 7:27:35
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/21/2022 19:14:09
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/22/2022 7:18:38
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/22/2022 19:11:10
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/23/2022 7:14:43
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/23/2022 19:16:58
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/24/2022 7:15:22
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/24/2022 19:11:07
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/25/2022 7:16:28
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/25/2022 19:17:10
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/26/2022 7:16:38
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/26/2022 19:18:13
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/27/2022 7:12:48
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	11/27/2022 19:23:22
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/28/2022 7:30:17
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/28/2022 19:21:16
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/29/2022 7:17:57
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/29/2022 19:27:27

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	11/30/2022 7:12:17
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	11/30/2022 19:20:09
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	12/1/2022 7:14:43
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	12/1/2022 19:20:57
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/2/2022 7:25:47
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/2/2022 19:26:50
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/3/2022 7:17:09
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/3/2022 19:15:23
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/4/2022 7:04:06
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/4/2022 19:12:22
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	12/5/2022 7:16:29
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	12/5/2022 19:23:18
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	12/6/2022 7:14:25
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/6/2022 19:15:05
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/7/2022 7:23:51
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/7/2022 19:22:33
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/8/2022 7:19:21
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	12/8/2022 19:32:29
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	12/9/2022 7:17:22
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	12/9/2022 19:18:01
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/10/2022 7:16:01
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/11/2022 7:11:02
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/11/2022 19:20:54

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/12/2022 7:20:29
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/12/2022 19:16:45
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/13/2022 7:23:20
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/13/2022 19:25:23
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/14/2022 7:23:12
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	12/14/2022 19:23:52
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/15/2022 7:20:27
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/15/2022 19:23:54
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	12/16/2022 7:18:21
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/16/2022 19:17:08
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	12/17/2022 7:14:37
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/17/2022 19:21:32
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/18/2022 7:18:27
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/18/2022 19:17:33
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/19/2022 7:15:17
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/19/2022 19:12:19
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/20/2022 7:07:37
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/20/2022 19:17:38
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/21/2022 7:09:12
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/21/2022 19:21:30
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	12/22/2022 7:12:10
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/22/2022 19:22:54
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/23/2022 7:21:12

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/23/2022 19:14:00
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/24/2022 7:16:37
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/24/2022 19:17:52
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	12/25/2022 7:15:46
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/25/2022 19:16:38
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/26/2022 7:13:32
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	12/26/2022 19:12:13
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/27/2022 7:10:07
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/27/2022 19:19:15
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/28/2022 7:16:33
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	12/28/2022 19:15:05
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/29/2022 7:19:22
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/29/2022 19:19:38
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.99	12/30/2022 7:28:05
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/30/2022 19:19:56
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/31/2022 7:17:34
HVAC: 400 area glovebox exhaust header delta P (PDI-864-1 or PDI-864-2) (sta # 4)		-1.5	-1.98	12/31/2022 19:13:01
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/1/2022 7:13:39
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.17	7/1/2022 19:15:20
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/2/2022 7:17:24
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	7/2/2022 19:18:05
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/3/2022 7:16:50
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/3/2022 19:21:03

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	7/4/2022 7:17:44
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	7/4/2022 19:07:23
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/5/2022 7:17:16
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.19	7/5/2022 19:15:37
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/6/2022 7:23:56
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	7/6/2022 19:17:36
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/7/2022 7:16:30
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/7/2022 19:24:22
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/8/2022 7:20:02
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	7/8/2022 19:13:10
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/9/2022 7:17:24
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/9/2022 19:19:13
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/10/2022 7:23:39
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	7/10/2022 19:11:25
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/11/2022 7:45:55
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.19	7/11/2022 19:21:40
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/12/2022 7:21:05
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	7/12/2022 19:28:22
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/13/2022 7:22:25
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/13/2022 19:08:21
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/14/2022 7:21:09
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	7/14/2022 19:13:09
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/15/2022 7:29:03

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.19	7/15/2022 19:09:50
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/16/2022 7:31:30
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	7/16/2022 19:16:15
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/17/2022 7:11:47
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/17/2022 19:32:01
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/18/2022 7:15:49
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/18/2022 19:12:44
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	7/19/2022 7:19:59
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/19/2022 19:24:16
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/20/2022 7:07:03
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/20/2022 19:32:38
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/21/2022 7:23:27
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/21/2022 19:28:34
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	7/22/2022 7:22:36
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.19	7/22/2022 19:15:16
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/23/2022 7:17:08
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	7/23/2022 19:07:20
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/24/2022 7:13:35
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/24/2022 19:23:51
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/25/2022 7:18:37
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/25/2022 19:17:13
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/26/2022 7:21:13
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/26/2022 19:17:21

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/27/2022 7:21:21
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	7/27/2022 19:13:44
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/28/2022 7:23:40
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/28/2022 19:16:32
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	7/29/2022 7:33:12
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/29/2022 19:21:13
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/30/2022 7:27:29
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/31/2022 7:23:36
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	7/31/2022 19:24:56
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.19	8/1/2022 7:14:43
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/1/2022 19:16:33
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/2/2022 7:16:35
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/2/2022 19:12:30
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.19	8/3/2022 7:24:50
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/3/2022 19:18:10
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	8/4/2022 7:32:22
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/4/2022 19:39:24
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/5/2022 7:12:12
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/5/2022 19:25:42
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/6/2022 7:14:56
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.20	8/6/2022 19:17:49
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/7/2022 7:12:23
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/7/2022 19:15:28

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	8/8/2022 7:24:07
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/8/2022 19:26:30
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.17	8/9/2022 7:29:05
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/9/2022 19:26:21
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/10/2022 7:13:35
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/10/2022 19:13:50
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/11/2022 7:16:43
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	8/11/2022 19:18:37
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/12/2022 7:27:59
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/12/2022 19:26:41
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/13/2022 19:28:48
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/13/2022 19:27:42
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	8/14/2022 7:19:49
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/14/2022 19:25:18
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/15/2022 7:13:57
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/15/2022 19:18:10
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/16/2022 7:16:02
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/16/2022 19:20:28
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	8/17/2022 7:25:22
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/17/2022 19:22:15
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	8/18/2022 7:26:17
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/18/2022 19:23:52
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/19/2022 7:15:14

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	8/19/2022 19:18:41
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	8/20/2022 7:30:11
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	8/20/2022 19:17:50
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	8/21/2022 7:13:09
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/21/2022 19:19:03
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/22/2022 7:15:30
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	8/22/2022 19:18:22
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/23/2022 7:17:29
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.19	8/23/2022 19:21:22
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/24/2022 7:17:47
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.19	8/24/2022 19:23:39
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	8/25/2022 7:18:13
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/25/2022 19:16:43
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/26/2022 7:22:04
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/26/2022 19:28:17
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/27/2022 7:18:27
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/27/2022 19:25:23
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/28/2022 7:08:43
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	8/28/2022 19:05:41
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/29/2022 7:12:31
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	8/29/2022 19:08:08
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/30/2022 6:57:32
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	8/30/2022 19:15:29

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.25	8/31/2022 7:19:14
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	8/31/2022 19:31:56
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/1/2022 7:14:49
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/1/2022 19:33:18
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/2/2022 7:01:02
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	9/2/2022 19:31:47
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	9/3/2022 7:13:18
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	9/3/2022 19:23:15
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/4/2022 7:01:47
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	9/4/2022 19:15:57
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/5/2022 7:23:56
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/5/2022 19:30:05
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	9/6/2022 7:13:11
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.17	9/6/2022 19:21:46
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	9/7/2022 7:22:35
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/7/2022 19:16:50
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/8/2022 7:23:13
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	9/8/2022 19:29:10
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/9/2022 7:25:08
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.17	9/9/2022 19:17:02
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/10/2022 7:14:25
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/10/2022 19:23:45
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/11/2022 7:13:16

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/11/2022 19:21:14
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	9/12/2022 7:28:48
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/12/2022 19:15:37
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/13/2022 7:20:00
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/13/2022 19:20:07
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/14/2022 7:20:15
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	9/14/2022 19:23:53
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/15/2022 7:20:25
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	9/15/2022 19:24:34
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	9/16/2022 7:23:08
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/16/2022 19:18:14
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/17/2022 7:25:02
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/17/2022 19:19:06
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/18/2022 7:18:19
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/18/2022 19:14:32
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/19/2022 7:28:16
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/19/2022 19:36:32
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/20/2022 7:38:26
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/20/2022 19:12:32
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/21/2022 7:25:35
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/21/2022 19:16:02
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/22/2022 7:21:59
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/22/2022 19:30:23

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/23/2022 7:27:18
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/23/2022 19:20:13
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	9/24/2022 7:21:55
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	9/24/2022 19:18:49
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/25/2022 7:21:58
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	9/25/2022 19:12:26
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	9/26/2022 7:21:47
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/26/2022 19:23:45
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/27/2022 7:15:49
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/27/2022 19:18:19
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	9/28/2022 7:21:38
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/28/2022 19:12:25
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/29/2022 7:21:04
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.17	9/29/2022 19:33:11
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/30/2022 7:14:17
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	9/30/2022 19:13:07
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/1/2022 7:13:38
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/1/2022 19:24:17
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	10/2/2022 7:17:03
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	10/2/2022 19:19:53
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	10/3/2022 7:25:48
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	10/3/2022 19:10:58
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	10/4/2022 7:28:33

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/4/2022 19:15:42
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/5/2022 7:19:17
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/5/2022 19:23:55
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/6/2022 7:19:52
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/6/2022 19:06:02
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	10/7/2022 7:17:57
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/7/2022 19:11:44
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/8/2022 7:24:19
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/8/2022 19:23:43
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/9/2022 7:22:13
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/9/2022 19:21:06
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	10/10/2022 7:20:52
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	10/10/2022 19:21:21
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	10/11/2022 7:15:09
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	10/11/2022 19:23:08
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/12/2022 7:13:26
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	10/12/2022 19:06:17
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/13/2022 7:31:26
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/13/2022 19:25:02
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/14/2022 7:16:16
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/14/2022 19:16:44
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/15/2022 7:13:58
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/15/2022 19:21:31

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/16/2022 7:14:38
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/16/2022 19:23:20
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/17/2022 7:22:51
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.19	10/17/2022 19:23:23
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/18/2022 7:15:36
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/18/2022 19:17:12
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/19/2022 7:13:47
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/19/2022 19:23:24
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/20/2022 7:19:53
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	10/20/2022 19:25:00
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/21/2022 7:23:19
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/21/2022 19:21:17
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/22/2022 7:21:59
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/22/2022 19:21:51
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/23/2022 7:26:59
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.21	10/23/2022 19:20:53
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/24/2022 7:17:32
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	10/24/2022 19:17:06
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/25/2022 7:16:10
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/25/2022 19:19:18
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/26/2022 7:18:23
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/26/2022 19:23:38
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/27/2022 7:06:48

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.19	10/27/2022 19:16:12
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.19	10/28/2022 7:14:43
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/28/2022 19:15:41
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/29/2022 7:24:06
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/29/2022 19:12:47
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/30/2022 7:10:42
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/30/2022 19:03:05
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.17	10/31/2022 7:31:10
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	10/31/2022 19:17:37
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/1/2022 7:27:58
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	11/1/2022 19:12:06
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/2/2022 7:20:39
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	11/2/2022 17:05:32
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	11/3/2022 7:14:50
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/3/2022 19:10:29
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/4/2022 7:36:14
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	11/4/2022 19:20:56
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/5/2022 7:28:46
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/5/2022 19:20:22
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/6/2022 7:18:21
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/6/2022 19:24:20
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/7/2022 7:19:46
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/7/2022 19:15:18

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/8/2022 7:18:14
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/8/2022 19:12:04
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/9/2022 7:19:25
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/9/2022 19:25:19
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/10/2022 7:19:38
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.19	11/10/2022 19:18:01
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	11/11/2022 7:14:12
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	11/11/2022 19:08:48
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/12/2022 7:17:37
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	11/12/2022 19:10:26
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/13/2022 7:20:00
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/13/2022 19:15:33
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/14/2022 7:23:04
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/14/2022 19:14:00
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	11/15/2022 7:06:23
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/15/2022 19:19:45
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	11/16/2022 7:22:04
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/16/2022 19:25:45
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/17/2022 7:15:33
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	11/17/2022 19:15:22
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	11/18/2022 7:26:12
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/18/2022 19:17:17
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/19/2022 7:22:19

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	11/19/2022 19:09:56
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/20/2022 7:18:16
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/20/2022 19:18:05
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/21/2022 7:27:40
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	11/21/2022 19:14:16
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/22/2022 7:18:41
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.17	11/22/2022 19:11:19
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/23/2022 7:14:49
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/23/2022 19:17:03
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/24/2022 7:15:26
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	11/24/2022 19:11:12
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/25/2022 7:16:35
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/25/2022 19:17:18
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/26/2022 7:16:43
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.17	11/26/2022 19:19:14
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/27/2022 7:13:08
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	11/27/2022 19:23:28
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.17	11/28/2022 7:30:23
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	11/28/2022 19:21:23
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	11/29/2022 7:18:03
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	11/29/2022 19:27:34
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	11/30/2022 7:12:21
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	11/30/2022 19:20:15

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	12/1/2022 7:14:47
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/1/2022 19:21:07
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	12/2/2022 7:25:55
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/2/2022 19:26:56
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.19	12/3/2022 7:17:15
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/3/2022 19:15:29
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.19	12/4/2022 7:04:10
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/4/2022 19:12:26
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/5/2022 7:17:01
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/5/2022 19:23:36
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	12/6/2022 7:14:30
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.16	12/6/2022 19:15:12
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	12/7/2022 7:23:57
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/7/2022 19:22:39
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	12/8/2022 7:19:27
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	12/8/2022 19:32:39
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/9/2022 7:17:32
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/9/2022 19:18:08
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/10/2022 7:16:10
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/11/2022 7:11:06
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/11/2022 19:21:03
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/12/2022 7:20:35
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	12/12/2022 19:16:49

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	12/13/2022 7:23:31
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/13/2022 19:25:29
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	12/14/2022 7:23:15
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	12/14/2022 19:23:59
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	12/15/2022 7:20:30
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.20	12/15/2022 19:23:59
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/16/2022 7:18:26
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	12/16/2022 19:17:14
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/17/2022 7:14:48
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/17/2022 19:21:37
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/18/2022 7:18:34
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/18/2022 19:17:39
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/19/2022 7:15:24
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/19/2022 19:12:25
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	12/20/2022 7:07:42
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/20/2022 19:17:44
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	12/21/2022 7:09:20
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/21/2022 19:21:38
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.20	12/22/2022 7:12:20
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/22/2022 19:23:00
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/23/2022 7:21:27
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/23/2022 19:14:05
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/24/2022 7:16:51

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/24/2022 19:17:57
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/25/2022 7:15:54
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.18	12/25/2022 19:16:44
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/26/2022 7:13:41
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/26/2022 19:12:17
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/27/2022 7:10:13
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-.19	12/27/2022 19:19:20
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	12/28/2022 7:16:42
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.19	12/28/2022 19:15:11
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/29/2022 7:19:28
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/29/2022 19:19:42
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/30/2022 7:28:11
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/30/2022 19:20:05
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/31/2022 7:17:43
HVAC: 200 area laboratory header delta P (PDI-803-1 or PDI-803-2) (sta # 5)		-0.05	-0.18	12/31/2022 19:13:05
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	7/1/2022 7:13:45
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.19	7/1/2022 19:15:26
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	7/2/2022 7:17:33
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.20	7/2/2022 19:18:09
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	7/3/2022 7:17:01
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	7/3/2022 19:21:07
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	7/4/2022 7:17:47
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.19	7/4/2022 19:07:28

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	7/5/2022 7:17:20
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.20	7/5/2022 19:15:42
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	7/6/2022 7:24:00
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.20	7/6/2022 19:17:42
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	7/7/2022 7:16:35
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	7/7/2022 19:24:27
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	7/8/2022 7:20:20
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.20	7/8/2022 19:13:14
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	7/9/2022 7:17:33
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	7/9/2022 19:19:18
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	7/10/2022 7:23:47
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	7/10/2022 19:11:27
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	7/11/2022 7:46:01
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.20	7/11/2022 19:21:45
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	7/12/2022 7:21:11
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.20	7/12/2022 19:28:26
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	7/13/2022 7:22:33
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	7/13/2022 19:08:26
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	7/14/2022 7:21:13
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	7/14/2022 19:13:16
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	7/15/2022 7:29:09
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.20	7/15/2022 19:09:54
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	7/16/2022 7:31:34

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.19	7/16/2022 19:16:18
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	7/17/2022 7:11:51
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	7/17/2022 19:32:05
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	7/18/2022 7:15:57
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	7/18/2022 19:12:51
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	7/19/2022 7:20:04
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	7/19/2022 19:24:25
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	7/20/2022 7:07:08
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	7/20/2022 19:32:45
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	7/21/2022 7:23:31
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	7/21/2022 19:28:42
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	7/22/2022 7:22:40
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.21	7/22/2022 19:15:22
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	7/23/2022 7:17:21
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.21	7/23/2022 19:07:25
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	7/24/2022 7:13:39
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	7/24/2022 19:24:00
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	7/25/2022 7:18:44
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	7/25/2022 19:17:18
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	7/26/2022 7:21:16
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	7/26/2022 19:17:31
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	7/27/2022 7:21:28
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.20	7/27/2022 19:13:48

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	7/28/2022 7:24:08
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	7/28/2022 19:16:40
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.20	7/29/2022 7:33:15
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	7/29/2022 19:21:19
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	7/30/2022 7:27:31
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	7/31/2022 7:23:39
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	7/31/2022 19:25:00
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.22	8/1/2022 7:14:47
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	8/1/2022 19:16:37
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	8/2/2022 7:16:40
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	8/2/2022 19:12:38
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.21	8/3/2022 7:24:57
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	8/3/2022 19:18:15
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	8/4/2022 7:32:25
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	8/4/2022 19:39:37
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	8/5/2022 7:12:21
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	8/5/2022 19:25:55
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	8/6/2022 7:15:01
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	8/6/2022 19:18:07
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	8/7/2022 7:12:32
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	8/7/2022 19:15:28
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.21	8/8/2022 7:24:10
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	8/8/2022 19:26:45

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.23	8/9/2022 7:29:13
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	8/9/2022 19:26:35
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	8/10/2022 7:13:40
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	8/10/2022 19:14:00
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	8/11/2022 7:16:51
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	8/11/2022 19:18:44
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	8/12/2022 7:28:06
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	8/12/2022 19:26:48
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.18	8/13/2022 7:23:44
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	8/13/2022 19:27:48
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.20	8/14/2022 7:19:58
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	8/14/2022 19:25:26
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	8/15/2022 7:13:59
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	8/15/2022 19:18:18
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	8/16/2022 7:16:05
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	8/16/2022 19:20:32
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	8/17/2022 7:25:34
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	8/17/2022 19:22:22
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	8/18/2022 7:26:23
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	8/18/2022 19:23:58
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	8/19/2022 7:15:22
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	8/19/2022 19:18:53
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.21	8/20/2022 7:30:12

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.20	8/20/2022 19:18:01
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.20	8/21/2022 7:13:15
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	8/21/2022 19:19:10
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	8/22/2022 7:15:35
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.20	8/22/2022 19:18:28
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	8/23/2022 7:17:35
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.19	8/23/2022 19:21:28
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	8/24/2022 7:17:58
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.20	8/24/2022 19:23:45
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	8/25/2022 7:18:22
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	8/25/2022 19:16:49
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	8/26/2022 7:22:11
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	8/26/2022 19:28:22
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	8/27/2022 7:18:35
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	8/27/2022 19:25:32
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	8/28/2022 7:08:47
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.18	8/28/2022 19:05:46
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	8/29/2022 7:12:36
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	8/29/2022 19:08:13
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	8/30/2022 6:57:40
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	8/30/2022 19:15:40
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.27	8/31/2022 7:19:21
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	8/31/2022 19:32:02

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	9/1/2022 7:14:55
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	9/1/2022 19:33:25
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	9/2/2022 7:01:09
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.21	9/2/2022 19:31:51
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.21	9/3/2022 7:13:25
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.21	9/3/2022 19:23:19
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	9/4/2022 7:01:56
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.21	9/4/2022 19:16:01
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	9/5/2022 7:24:01
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	9/5/2022 19:30:11
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	9/6/2022 7:13:19
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	9/6/2022 19:21:52
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	9/7/2022 7:22:40
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	9/7/2022 19:17:08
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	9/8/2022 7:23:16
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.21	9/8/2022 19:29:14
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	9/9/2022 7:25:13
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.19	9/9/2022 19:17:09
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	9/10/2022 7:14:32
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	9/10/2022 19:23:52
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	9/11/2022 7:13:19
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	9/11/2022 19:21:20
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	9/12/2022 7:28:57

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	9/12/2022 19:15:45
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	9/13/2022 7:20:05
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	9/13/2022 19:20:11
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	9/14/2022 7:20:23
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.21	9/14/2022 19:23:58
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	9/15/2022 7:20:33
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	9/15/2022 19:24:38
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	9/16/2022 7:23:17
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	9/16/2022 19:18:19
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	9/17/2022 7:25:06
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	9/17/2022 19:19:11
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	9/18/2022 7:18:22
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	9/18/2022 19:14:38
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	9/19/2022 7:28:24
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	9/19/2022 19:36:36
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	9/20/2022 7:38:32
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	9/20/2022 19:12:37
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	9/21/2022 7:25:41
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	9/21/2022 19:16:08
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	9/22/2022 7:22:04
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	9/22/2022 19:30:27
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	9/23/2022 7:27:23
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	9/23/2022 19:20:18

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.21	9/24/2022 7:21:59
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.23	9/24/2022 19:18:53
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	9/25/2022 7:22:04
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	9/25/2022 19:12:32
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.21	9/26/2022 7:21:52
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	9/26/2022 19:23:49
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	9/27/2022 7:15:54
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	9/27/2022 19:18:23
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.21	9/28/2022 7:21:44
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	9/28/2022 19:12:31
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	9/29/2022 7:21:09
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	9/29/2022 19:33:19
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	9/30/2022 7:14:21
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.21	9/30/2022 19:13:10
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	10/1/2022 7:13:45
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	10/1/2022 19:24:22
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	10/2/2022 7:17:11
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	10/2/2022 19:20:01
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	10/3/2022 7:25:53
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	10/3/2022 19:11:07
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.20	10/4/2022 7:28:39
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	10/4/2022 19:15:48
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	10/5/2022 7:19:23

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	10/5/2022 19:24:13
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	10/6/2022 7:19:58
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	10/6/2022 19:06:05
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.20	10/7/2022 7:18:02
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	10/7/2022 19:11:49
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	10/8/2022 7:24:23
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	10/8/2022 19:23:47
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	10/9/2022 7:22:19
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	10/9/2022 19:21:12
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	10/10/2022 7:20:58
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	10/10/2022 19:21:26
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	10/11/2022 7:15:15
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	10/11/2022 19:23:41
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	10/12/2022 7:13:32
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	10/12/2022 19:06:24
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	10/13/2022 7:31:39
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	10/13/2022 19:25:07
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	10/14/2022 7:16:22
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	10/14/2022 19:18:10
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	10/15/2022 7:14:03
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	10/15/2022 19:21:34
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	10/16/2022 7:33:41
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	10/16/2022 19:23:22

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	10/17/2022 7:22:56
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.21	10/17/2022 19:23:27
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	10/18/2022 7:15:42
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	10/18/2022 19:17:18
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	10/19/2022 7:13:53
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	10/19/2022 19:23:26
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	10/20/2022 7:19:58
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	10/20/2022 19:25:04
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	10/21/2022 7:23:26
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	10/21/2022 19:21:24
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	10/22/2022 7:22:04
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	10/22/2022 19:21:57
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	10/23/2022 7:27:05
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	10/23/2022 19:20:58
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	10/24/2022 7:17:35
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	10/24/2022 19:17:17
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	10/25/2022 7:16:12
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	10/25/2022 19:19:22
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	10/26/2022 7:18:28
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	10/26/2022 19:23:43
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	10/27/2022 7:06:55
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.21	10/27/2022 19:16:30
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.21	10/28/2022 7:14:50

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	10/28/2022 19:15:47
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	10/29/2022 7:24:19
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	10/29/2022 19:12:50
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	10/30/2022 7:10:49
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	10/30/2022 19:03:11
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	10/31/2022 7:31:16
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	10/31/2022 19:17:42
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	11/1/2022 7:28:04
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	11/1/2022 19:12:12
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	11/2/2022 7:20:46
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.21	11/2/2022 17:05:36
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	11/3/2022 7:14:53
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	11/3/2022 19:10:34
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	11/4/2022 7:36:19
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	11/4/2022 19:21:01
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	11/5/2022 7:28:52
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	11/5/2022 19:20:29
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	11/6/2022 7:18:27
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	11/6/2022 19:24:25
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	11/7/2022 7:19:52
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	11/7/2022 19:15:21
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	11/8/2022 7:18:21
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	11/8/2022 19:12:11

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	11/9/2022 7:19:30
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	11/9/2022 19:25:26
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	11/10/2022 7:19:42
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.21	11/10/2022 19:18:07
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.21	11/11/2022 7:14:15
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.20	11/11/2022 19:08:53
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	11/12/2022 7:17:44
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	11/12/2022 19:10:31
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	11/13/2022 7:20:15
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	11/13/2022 19:15:38
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	11/14/2022 7:23:23
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	11/14/2022 19:14:05
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.20	11/15/2022 7:06:26
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	11/15/2022 19:19:50
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	11/16/2022 7:22:06
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	11/16/2022 19:25:52
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	11/17/2022 7:15:38
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	11/17/2022 19:15:27
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.23	11/18/2022 7:26:20
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	11/18/2022 19:17:24
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	11/19/2022 7:22:27
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	11/19/2022 19:10:01
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	11/20/2022 7:18:22

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	11/20/2022 19:18:11
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	11/21/2022 7:27:44
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.23	11/21/2022 19:14:22
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	11/22/2022 7:18:46
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	11/22/2022 19:11:26
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	11/23/2022 7:14:55
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	11/23/2022 19:17:08
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	11/24/2022 7:15:35
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	11/24/2022 19:11:18
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	11/25/2022 7:16:41
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	11/25/2022 19:17:30
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	11/26/2022 7:16:49
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.21	11/26/2022 19:19:21
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	11/27/2022 7:13:16
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.20	11/27/2022 19:23:35
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.20	11/28/2022 7:30:35
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	11/28/2022 19:21:28
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.20	11/29/2022 7:18:08
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	11/29/2022 19:27:41
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	11/30/2022 7:12:25
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	11/30/2022 19:20:21
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	12/1/2022 7:14:51
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	12/1/2022 19:21:13

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	12/2/2022 7:26:00
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	12/2/2022 19:27:00
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.22	12/3/2022 7:17:20
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	12/3/2022 19:15:35
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.22	12/4/2022 7:04:14
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	12/4/2022 19:12:37
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	12/5/2022 7:17:09
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	12/5/2022 19:23:43
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.21	12/6/2022 7:14:35
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.18	12/6/2022 19:15:21
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.22	12/7/2022 7:24:03
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	12/7/2022 19:22:46
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.21	12/8/2022 7:19:31
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	12/8/2022 19:32:47
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	12/9/2022 7:17:47
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	12/9/2022 19:18:21
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	12/10/2022 7:16:15
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	12/11/2022 7:11:11
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	12/11/2022 19:21:07
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	12/12/2022 7:21:07
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.21	12/12/2022 19:16:54
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	12/13/2022 7:23:37
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	12/13/2022 19:25:35

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	12/14/2022 7:23:19
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.20	12/14/2022 19:24:03
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	12/15/2022 7:20:36
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	12/15/2022 19:24:03
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	12/16/2022 7:18:32
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	12/16/2022 19:17:20
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	12/17/2022 7:14:55
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	12/17/2022 19:21:42
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	12/18/2022 7:18:41
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	12/18/2022 19:17:45
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	12/19/2022 7:15:30
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	12/19/2022 19:12:31
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	12/20/2022 7:07:51
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	12/20/2022 19:17:51
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	12/21/2022 7:09:29
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	12/21/2022 19:21:44
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.17	12/22/2022 7:12:29
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	12/22/2022 19:23:05
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	12/23/2022 7:21:33
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	12/23/2022 19:14:09
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	12/24/2022 7:17:03
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	12/24/2022 19:18:02
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	12/25/2022 7:16:00

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.21	12/25/2022 19:16:49
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	12/26/2022 7:13:49
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	12/26/2022 19:12:21
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	12/27/2022 7:10:20
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-.21	12/27/2022 19:19:24
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	12/28/2022 7:16:52
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	12/28/2022 19:15:16
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	12/29/2022 7:19:37
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	12/29/2022 19:19:45
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	12/30/2022 7:28:18
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.20	12/30/2022 19:20:10
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	12/31/2022 7:17:49
HVAC: 100 area laboratory header delta P (PDI-802-1 or PDI-802-2) (sta # 6)		-0.05	-0.21	12/31/2022 19:13:09
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/1/2022 7:13:51
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	7/1/2022 19:15:30
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/2/2022 7:17:39
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	7/2/2022 19:18:14
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/3/2022 7:17:05
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/3/2022 19:21:11
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/4/2022 7:17:51
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	7/4/2022 19:07:33
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/5/2022 7:17:24
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	7/5/2022 19:15:47

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/6/2022 7:24:04
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	7/6/2022 19:17:47
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/7/2022 7:16:40
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	7/7/2022 19:24:32
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/8/2022 7:20:28
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	7/8/2022 19:13:20
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/9/2022 7:17:39
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/9/2022 19:19:30
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/10/2022 7:23:54
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/10/2022 19:11:34
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/11/2022 7:46:07
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	7/11/2022 19:21:49
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/12/2022 7:21:15
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	7/12/2022 19:28:30
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/13/2022 7:22:37
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/13/2022 19:08:33
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.21	7/14/2022 7:21:17
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/14/2022 19:13:21
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/15/2022 7:29:15
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	7/15/2022 19:09:58
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/16/2022 7:31:38
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	7/16/2022 19:16:25
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/17/2022 7:11:58

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/17/2022 19:32:08
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/18/2022 7:16:07
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/18/2022 19:12:58
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.21	7/19/2022 7:20:07
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/19/2022 19:24:32
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/20/2022 7:07:15
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/20/2022 19:32:49
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/21/2022 7:23:35
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/21/2022 19:28:47
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/22/2022 7:22:44
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	7/22/2022 19:15:27
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/23/2022 7:17:33
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	7/23/2022 19:07:30
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/24/2022 7:13:42
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/24/2022 19:24:35
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/25/2022 7:18:51
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	7/25/2022 19:17:22
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	7/26/2022 7:21:22
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/26/2022 19:17:36
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.21	7/27/2022 7:21:36
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.21	7/27/2022 19:13:53
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/28/2022 7:24:17
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.22	7/28/2022 19:16:53

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	7/29/2022 7:33:19
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/29/2022 19:21:27
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/30/2022 7:27:34
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/31/2022 7:23:43
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	7/31/2022 19:25:07
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	8/1/2022 7:14:51
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/1/2022 19:16:41
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/2/2022 7:16:47
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	8/2/2022 19:12:46
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	8/3/2022 7:25:03
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/3/2022 19:18:19
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/4/2022 7:32:28
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/4/2022 19:39:50
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/5/2022 7:12:29
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/5/2022 19:26:19
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/6/2022 7:15:11
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.17	8/6/2022 19:18:17
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/7/2022 7:12:43
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/7/2022 19:15:29
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	8/8/2022 7:24:17
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/8/2022 19:26:58
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.21	8/9/2022 7:29:20
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/9/2022 19:26:57

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	8/10/2022 7:13:47
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/10/2022 19:14:08
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/11/2022 7:16:56
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/11/2022 19:18:55
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.21	8/12/2022 7:28:12
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/12/2022 19:26:54
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/13/2022 7:23:50
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/13/2022 19:27:53
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	8/14/2022 7:20:02
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/14/2022 19:25:51
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/15/2022 7:14:06
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/15/2022 19:18:26
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/16/2022 7:16:11
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/16/2022 19:20:36
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/17/2022 7:25:42
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/17/2022 19:22:29
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/18/2022 7:26:29
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	8/18/2022 19:24:02
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/19/2022 7:15:26
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/19/2022 19:19:01
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	8/20/2022 7:30:17
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	8/20/2022 19:18:07
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	8/21/2022 7:13:21

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/21/2022 19:19:17
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/22/2022 7:15:40
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	8/22/2022 19:18:34
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/23/2022 7:17:43
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	8/23/2022 19:21:32
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/24/2022 7:18:02
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.19	8/24/2022 19:23:49
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/25/2022 7:18:25
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/25/2022 19:16:53
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/26/2022 7:22:17
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/26/2022 19:28:26
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/27/2022 7:18:50
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/27/2022 19:25:35
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/28/2022 7:08:52
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	8/28/2022 19:05:51
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/29/2022 7:12:40
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/29/2022 19:08:18
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/30/2022 6:57:48
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/30/2022 19:15:44
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/31/2022 7:19:25
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	8/31/2022 19:32:28
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/1/2022 7:15:01
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	9/1/2022 19:33:31

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/2/2022 7:01:16
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	9/2/2022 19:31:55
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	9/3/2022 7:13:29
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	9/3/2022 19:23:24
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/4/2022 7:02:04
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	9/4/2022 19:16:05
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/5/2022 7:24:09
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/5/2022 19:30:19
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.21	9/6/2022 7:13:27
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/6/2022 19:21:58
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/7/2022 7:22:46
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/7/2022 19:17:11
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/8/2022 7:23:20
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	9/8/2022 19:29:18
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/9/2022 7:25:22
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.21	9/9/2022 19:17:14
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/10/2022 7:14:41
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/10/2022 19:23:56
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/11/2022 7:13:21
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/11/2022 19:21:26
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/12/2022 7:29:01
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/12/2022 19:15:48
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/13/2022 7:20:09

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/13/2022 19:20:22
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/14/2022 7:20:47
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	9/14/2022 19:24:20
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/15/2022 7:20:39
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/15/2022 19:24:42
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/16/2022 7:23:21
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	9/16/2022 19:18:24
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/17/2022 7:25:10
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/17/2022 19:19:15
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/18/2022 7:18:26
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/18/2022 19:14:42
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/19/2022 7:28:32
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/19/2022 19:36:41
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/20/2022 7:38:38
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	9/20/2022 19:12:43
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/21/2022 7:25:45
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/21/2022 19:16:11
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/22/2022 7:22:10
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/22/2022 19:30:32
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/23/2022 7:27:29
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/23/2022 19:20:24
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	9/24/2022 7:22:04
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/24/2022 19:19:00

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/25/2022 7:22:09
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/25/2022 19:12:39
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	9/26/2022 7:22:04
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/26/2022 19:23:53
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	9/27/2022 7:15:56
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/27/2022 19:18:28
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	9/28/2022 7:21:50
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/28/2022 19:12:38
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/29/2022 7:21:16
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.21	9/29/2022 19:33:28
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	9/30/2022 7:14:25
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	9/30/2022 19:13:17
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/1/2022 7:13:49
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/1/2022 19:24:25
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/2/2022 7:17:13
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/2/2022 19:20:08
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/3/2022 7:25:59
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/3/2022 19:11:13
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	10/4/2022 7:28:45
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/4/2022 19:15:57
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/5/2022 7:19:27
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/5/2022 19:24:16
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	10/6/2022 7:20:02

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	10/6/2022 19:06:09
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	10/7/2022 7:18:08
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	10/7/2022 19:11:55
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/8/2022 7:24:28
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/8/2022 19:23:55
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/9/2022 7:22:24
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/9/2022 19:21:16
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	10/10/2022 7:21:00
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	10/10/2022 19:21:30
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/11/2022 7:15:19
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/11/2022 19:23:55
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/12/2022 7:13:38
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/12/2022 19:06:31
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	10/13/2022 7:31:43
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/13/2022 19:25:09
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/14/2022 7:16:24
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/14/2022 19:18:15
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/15/2022 7:14:05
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/15/2022 19:21:38
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/16/2022 7:33:43
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/16/2022 19:23:24
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	10/17/2022 7:23:02
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	10/17/2022 19:23:34

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/18/2022 7:15:48
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/18/2022 19:17:24
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	10/19/2022 7:13:58
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/19/2022 19:23:28
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/20/2022 7:20:03
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/20/2022 19:25:20
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/21/2022 7:23:36
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/21/2022 19:21:28
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/22/2022 7:22:12
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	10/22/2022 19:22:04
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	10/23/2022 7:27:11
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.22	10/23/2022 19:21:05
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/24/2022 7:17:41
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	10/24/2022 19:17:37
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/25/2022 7:16:16
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/25/2022 19:19:25
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/26/2022 7:18:36
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/26/2022 19:23:47
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/27/2022 7:07:03
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	10/27/2022 19:16:37
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	10/28/2022 7:14:56
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/28/2022 23:36:33
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/29/2022 7:24:28

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/29/2022 19:12:54
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	10/30/2022 7:10:54
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/30/2022 19:03:14
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/31/2022 7:31:21
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	10/31/2022 19:17:48
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/1/2022 7:28:10
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/1/2022 19:12:19
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/2/2022 7:20:53
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.19	11/2/2022 17:05:51
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/3/2022 7:14:55
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/3/2022 19:10:36
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/4/2022 7:36:24
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	11/4/2022 19:21:07
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/5/2022 7:28:58
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/5/2022 19:20:36
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/6/2022 7:18:33
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/6/2022 19:24:32
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	11/7/2022 7:19:57
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/7/2022 19:15:27
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/8/2022 7:18:35
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/8/2022 19:12:22
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/9/2022 7:19:36
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.12	11/9/2022 19:25:44

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/10/2022 7:19:50
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	11/10/2022 19:18:13
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	11/11/2022 7:14:19
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	11/11/2022 19:08:57
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/12/2022 7:17:52
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/12/2022 19:10:33
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/13/2022 7:20:29
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/13/2022 19:15:41
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/14/2022 7:23:41
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/14/2022 19:14:11
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.19	11/15/2022 7:06:34
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/15/2022 19:19:58
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/16/2022 7:22:09
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/16/2022 19:25:58
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	11/17/2022 7:15:43
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/17/2022 19:15:30
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/18/2022 7:26:26
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/18/2022 19:17:29
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/19/2022 7:22:32
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/19/2022 19:10:06
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	11/20/2022 7:18:28
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/20/2022 19:18:17
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/21/2022 7:27:51

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/21/2022 19:14:32
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/22/2022 7:18:49
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	11/22/2022 19:11:31
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/23/2022 7:14:59
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/23/2022 19:17:13
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/24/2022 7:15:40
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/24/2022 19:11:23
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	11/25/2022 7:16:50
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/25/2022 19:17:48
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/26/2022 7:16:53
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	11/26/2022 19:20:14
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/27/2022 7:13:25
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	11/27/2022 19:23:50
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	11/28/2022 7:30:39
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/28/2022 19:21:35
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.18	11/29/2022 7:18:14
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/29/2022 19:27:47
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	11/30/2022 7:12:31
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	11/30/2022 19:20:27
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/1/2022 7:15:06
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	12/1/2022 19:21:19
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.16	12/2/2022 7:26:05
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/2/2022 19:27:13

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.19	12/3/2022 7:17:26
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/3/2022 19:15:42
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	12/4/2022 7:04:21
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/4/2022 19:12:40
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/5/2022 7:17:15
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/5/2022 19:23:52
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.18	12/6/2022 7:14:40
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/6/2022 19:15:33
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	12/7/2022 7:24:09
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	12/7/2022 19:22:53
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	12/8/2022 7:19:35
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	12/8/2022 19:32:53
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/9/2022 7:17:53
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/9/2022 19:18:38
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/10/2022 7:16:19
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/11/2022 7:11:16
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/11/2022 19:21:12
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/12/2022 7:21:17
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.18	12/12/2022 19:17:03
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/13/2022 7:23:45
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/13/2022 19:25:41
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/14/2022 7:23:23
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	12/14/2022 19:24:05

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	12/15/2022 7:20:39
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.21	12/15/2022 19:24:07
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/16/2022 7:18:40
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/16/2022 19:17:27
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/17/2022 7:15:08
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/17/2022 19:21:49
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/18/2022 7:18:48
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/18/2022 19:17:54
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/19/2022 7:15:36
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/19/2022 19:12:36
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/20/2022 7:07:58
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/20/2022 19:17:55
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/21/2022 7:09:36
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.19	12/21/2022 19:21:48
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.14	12/22/2022 7:12:39
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/22/2022 19:23:13
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/23/2022 7:21:39
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/23/2022 19:14:13
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/24/2022 7:17:15
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/24/2022 19:18:06
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/25/2022 7:16:08
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	12/25/2022 19:16:54
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/26/2022 7:13:54

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/26/2022 19:12:24
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/27/2022 7:10:28
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-.20	12/27/2022 19:19:29
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/28/2022 7:16:59
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/28/2022 19:15:30
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/29/2022 7:19:44
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/29/2022 19:19:48
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/30/2022 7:28:24
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/30/2022 19:20:18
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/31/2022 7:17:55
HVAC: 300 area laboratory header delta P (PDI-853-1 or PDI-853-2) (sta # 7)		-0.05	-0.20	12/31/2022 19:13:14
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/1/2022 7:14:00
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	7/1/2022 19:15:35
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/2/2022 7:17:41
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	7/2/2022 19:18:18
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/3/2022 7:17:09
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/3/2022 19:21:16
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/4/2022 7:17:56
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	7/4/2022 19:07:44
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/5/2022 7:17:29
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.20	7/5/2022 19:15:51
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/6/2022 7:24:12
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	7/6/2022 19:17:51

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/7/2022 7:16:45
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/7/2022 19:24:37
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/8/2022 7:20:32
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	7/8/2022 19:13:25
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/9/2022 7:17:50
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/9/2022 19:19:36
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/10/2022 7:24:15
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/10/2022 19:11:52
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/11/2022 7:46:13
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	7/11/2022 19:21:54
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/12/2022 7:21:19
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	7/12/2022 19:28:33
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/13/2022 7:23:03
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/13/2022 19:08:40
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	7/14/2022 7:21:22
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	7/14/2022 19:14:09
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/15/2022 7:29:21
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	7/15/2022 19:10:03
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/16/2022 7:31:42
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	7/16/2022 19:16:28
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/17/2022 7:12:03
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/17/2022 19:32:14
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/18/2022 7:16:17

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	7/18/2022 19:13:09
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	7/19/2022 7:20:14
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/19/2022 19:24:41
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/20/2022 7:07:19
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/20/2022 19:32:56
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	7/21/2022 7:23:44
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/21/2022 19:28:53
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	7/22/2022 7:22:55
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.20	7/22/2022 19:15:32
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/23/2022 7:17:42
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	7/23/2022 19:07:34
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/24/2022 7:13:57
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/24/2022 19:24:50
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/25/2022 7:19:01
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/25/2022 19:17:27
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/26/2022 7:21:27
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/26/2022 19:17:41
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.17	7/27/2022 7:21:43
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.20	7/27/2022 19:13:58
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/28/2022 7:24:28
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	7/28/2022 19:17:10
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	7/29/2022 7:33:23
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	7/29/2022 19:21:31

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	7/30/2022 7:27:37
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/31/2022 7:23:46
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	7/31/2022 19:25:11
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.20	8/1/2022 7:14:57
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/1/2022 19:16:46
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/2/2022 7:16:54
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/2/2022 19:13:08
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.20	8/3/2022 7:25:07
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/3/2022 19:18:22
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/4/2022 7:32:32
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/4/2022 19:39:57
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/5/2022 7:12:47
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/5/2022 19:26:30
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/6/2022 7:15:16
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	8/6/2022 19:18:29
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/7/2022 7:12:52
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	8/7/2022 19:15:34
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	8/8/2022 7:24:21
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/8/2022 19:27:41
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	8/9/2022 7:29:30
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/9/2022 19:27:09
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/10/2022 7:14:03
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/10/2022 19:14:19

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/11/2022 7:17:10
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.17	8/11/2022 19:19:08
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	8/12/2022 7:28:20
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/12/2022 19:27:13
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	8/13/2022 7:23:56
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/13/2022 19:27:58
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	8/14/2022 7:20:06
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/14/2022 19:26:01
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	8/15/2022 7:14:13
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/15/2022 19:18:34
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	8/16/2022 7:16:19
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.18	8/16/2022 19:20:42
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	8/17/2022 7:25:49
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/17/2022 19:22:57
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/18/2022 7:26:39
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/18/2022 19:24:06
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/19/2022 7:15:32
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/19/2022 19:19:12
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	8/20/2022 7:30:21
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	8/20/2022 19:18:16
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	8/21/2022 7:13:25
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/21/2022 19:19:27
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/22/2022 7:15:45

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.20	8/22/2022 19:18:39
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/23/2022 7:17:49
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	8/23/2022 19:21:36
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	8/24/2022 7:18:08
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	8/24/2022 19:23:53
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/25/2022 7:18:28
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/25/2022 19:16:57
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/26/2022 7:22:26
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/26/2022 19:28:30
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/27/2022 7:19:04
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/27/2022 19:25:39
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/28/2022 7:08:55
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	8/28/2022 19:06:00
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/29/2022 7:12:45
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/29/2022 19:08:23
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/30/2022 6:57:55
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.18	8/30/2022 19:15:56
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	8/31/2022 7:19:30
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	8/31/2022 19:32:34
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/1/2022 7:15:08
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/1/2022 19:33:39
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/2/2022 7:01:24
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	9/2/2022 19:32:00

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	9/3/2022 7:13:35
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	9/3/2022 19:23:28
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/4/2022 7:02:22
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	9/4/2022 19:16:12
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/5/2022 7:24:22
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/5/2022 19:30:25
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/6/2022 7:13:35
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	9/6/2022 19:22:03
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/7/2022 7:22:59
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/7/2022 19:17:15
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	9/8/2022 7:23:24
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	9/8/2022 19:29:23
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/9/2022 7:25:30
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/9/2022 19:17:19
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/10/2022 7:14:46
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/10/2022 19:24:04
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/11/2022 7:13:35
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/11/2022 19:21:31
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/12/2022 7:29:04
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/12/2022 19:16:08
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/13/2022 7:20:12
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/13/2022 19:20:26
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/14/2022 7:20:56

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.20	9/14/2022 19:24:24
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/15/2022 7:20:48
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/15/2022 19:24:49
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/16/2022 7:23:27
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/16/2022 19:18:30
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/17/2022 7:25:15
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/17/2022 19:19:20
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/18/2022 7:18:31
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/18/2022 19:14:50
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/19/2022 7:28:39
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/19/2022 19:36:47
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/20/2022 7:38:44
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/20/2022 19:12:50
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/21/2022 7:25:51
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	9/21/2022 19:16:25
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/22/2022 7:22:20
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/22/2022 19:30:37
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	9/23/2022 7:27:36
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/23/2022 19:20:30
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	9/24/2022 7:22:08
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	9/24/2022 19:19:07
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/25/2022 7:22:16
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/25/2022 19:12:47

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	9/26/2022 7:23:01
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/26/2022 19:23:58
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/27/2022 7:16:01
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	9/27/2022 19:18:42
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	9/28/2022 7:21:54
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	9/28/2022 19:12:47
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.17	9/29/2022 7:21:22
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	9/29/2022 19:33:37
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.18	9/30/2022 7:14:49
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	9/30/2022 19:13:24
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/1/2022 7:13:52
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/1/2022 19:24:29
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	10/2/2022 7:17:17
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/2/2022 19:20:10
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/3/2022 7:26:05
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/3/2022 19:11:20
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.20	10/4/2022 7:28:49
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	10/4/2022 19:16:05
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/5/2022 7:19:44
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/5/2022 19:24:20
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.18	10/6/2022 7:20:07
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/6/2022 19:06:23
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	10/7/2022 7:18:12

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/7/2022 19:12:00
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/8/2022 7:24:33
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/8/2022 19:24:00
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/9/2022 7:22:31
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/9/2022 19:21:23
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/10/2022 7:21:03
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/10/2022 19:21:35
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/11/2022 7:15:24
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	10/11/2022 19:24:04
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	10/12/2022 7:15:02
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/12/2022 19:06:38
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/13/2022 7:31:46
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/13/2022 19:25:12
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/14/2022 7:16:33
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/14/2022 19:19:05
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/15/2022 7:14:09
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/15/2022 19:21:41
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	10/16/2022 7:33:54
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	10/16/2022 19:23:28
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/17/2022 7:23:09
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	10/17/2022 19:24:07
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/18/2022 7:16:00
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/18/2022 19:17:30

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/19/2022 7:14:04
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/19/2022 19:23:33
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/20/2022 7:20:07
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/20/2022 19:25:50
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/21/2022 7:23:41
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/21/2022 19:21:32
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/22/2022 7:22:23
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/22/2022 19:22:09
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	10/23/2022 7:27:18
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.21	10/23/2022 19:21:10
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/24/2022 7:17:47
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.23	10/24/2022 19:17:46
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/25/2022 7:16:20
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	10/25/2022 19:19:31
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	10/26/2022 7:18:42
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	10/26/2022 19:23:52
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	10/27/2022 7:07:11
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.20	10/27/2022 19:16:41
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.20	10/28/2022 7:15:04
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/28/2022 19:16:00
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	10/29/2022 7:24:33
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	10/29/2022 19:13:06
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	10/30/2022 7:10:59

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	10/30/2022 19:03:18
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	10/31/2022 7:31:29
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	10/31/2022 19:17:54
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	11/1/2022 7:28:15
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/1/2022 19:12:24
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/2/2022 7:20:59
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	11/2/2022 17:06:03
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/3/2022 7:15:00
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	11/3/2022 19:10:43
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/4/2022 7:36:30
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	11/4/2022 19:21:17
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/5/2022 7:29:04
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/5/2022 19:20:41
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/6/2022 7:18:38
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/6/2022 19:24:41
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/7/2022 7:20:03
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/7/2022 19:15:31
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	11/8/2022 7:18:54
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/8/2022 19:12:32
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/9/2022 7:19:40
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.13	11/9/2022 19:25:55
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	11/10/2022 7:19:56
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.20	11/10/2022 19:18:17

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	11/11/2022 7:14:26
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	11/11/2022 19:09:02
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/12/2022 7:17:58
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/12/2022 19:10:39
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/13/2022 7:20:41
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	11/13/2022 19:15:49
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	11/14/2022 7:23:57
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	11/14/2022 19:14:22
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	11/15/2022 7:06:38
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/15/2022 19:20:05
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	11/16/2022 7:22:12
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	11/16/2022 19:26:10
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	11/17/2022 7:15:46
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	11/17/2022 19:15:34
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	11/18/2022 7:26:36
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/18/2022 19:17:35
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/19/2022 7:22:40
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/19/2022 19:10:12
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/20/2022 7:18:35
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/20/2022 19:18:24
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/21/2022 7:27:54
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/21/2022 19:14:55
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/22/2022 7:18:54

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/22/2022 19:11:37
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/23/2022 7:15:04
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/23/2022 19:17:18
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	11/24/2022 7:16:06
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	11/24/2022 19:11:31
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/25/2022 7:16:54
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/25/2022 19:17:52
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/26/2022 7:16:58
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	11/26/2022 19:20:23
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/27/2022 7:13:30
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	11/27/2022 19:23:55
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/28/2022 7:30:43
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	11/28/2022 19:21:45
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.18	11/29/2022 7:18:17
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	11/29/2022 19:27:55
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	11/30/2022 7:12:35
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	11/30/2022 19:20:39
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	12/1/2022 7:15:11
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	12/1/2022 19:21:27
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/2/2022 7:26:13
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/2/2022 19:27:29
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.18	12/3/2022 7:17:30
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	12/3/2022 19:15:46

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	12/4/2022 7:04:25
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	12/4/2022 19:12:46
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	12/5/2022 7:17:29
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/5/2022 19:23:59
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.18	12/6/2022 7:14:43
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/6/2022 19:15:43
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/7/2022 7:24:15
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/7/2022 19:22:59
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.20	12/8/2022 7:19:39
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/8/2022 19:33:02
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/9/2022 7:17:57
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/9/2022 19:18:44
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/10/2022 7:16:24
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/11/2022 7:11:20
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/11/2022 19:21:18
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/12/2022 7:21:23
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.18	12/12/2022 19:17:08
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/13/2022 7:23:56
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	12/13/2022 19:25:49
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/14/2022 7:23:30
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	12/14/2022 19:24:19
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/15/2022 7:20:48
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	12/15/2022 19:24:14

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/16/2022 7:18:46
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/16/2022 19:17:33
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	12/17/2022 7:15:40
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	12/17/2022 19:21:57
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/18/2022 7:18:55
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/18/2022 19:17:59
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/19/2022 7:15:54
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	12/19/2022 19:12:42
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/20/2022 7:08:07
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	12/20/2022 19:17:59
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/21/2022 7:09:42
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/21/2022 19:21:52
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.23	12/22/2022 7:12:49
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/22/2022 19:23:18
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	12/23/2022 7:21:47
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/23/2022 19:14:17
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/24/2022 7:17:35
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/24/2022 19:18:10
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/25/2022 7:16:16
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	12/25/2022 19:17:00
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/26/2022 7:14:01
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/26/2022 19:12:28
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	12/27/2022 7:10:44

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-.19	12/27/2022 19:19:34
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	12/28/2022 7:17:06
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/28/2022 19:15:34
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/29/2022 7:19:56
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/29/2022 19:19:51
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/30/2022 7:28:29
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/30/2022 19:20:23
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.19	12/31/2022 7:18:03
HVAC: 400 area laboratory header delta P (PDI-852-1 or PDI-852-2) (sta # 8)		-0.05	-0.20	12/31/2022 19:13:19
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/1/2022 7:14:06
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	7/1/2022 19:15:40
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/2/2022 7:17:47
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	7/2/2022 19:18:25
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/3/2022 7:17:14
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/3/2022 19:21:20
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/4/2022 7:18:00
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	7/4/2022 19:07:48
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/5/2022 7:17:41
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	7/5/2022 19:15:55
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/6/2022 7:24:16
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	7/6/2022 19:17:58
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/7/2022 7:16:50
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/7/2022 19:24:42

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.16	7/8/2022 7:20:38
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	7/8/2022 19:13:29
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/9/2022 7:18:15
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.14	7/9/2022 19:19:44
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.16	7/10/2022 7:24:51
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/10/2022 19:12:02
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/11/2022 7:46:20
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	7/11/2022 19:22:01
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/12/2022 7:21:25
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	7/12/2022 19:28:38
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/13/2022 7:23:29
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/13/2022 19:08:46
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/14/2022 7:21:27
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/14/2022 19:14:30
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/15/2022 7:29:25
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	7/15/2022 19:10:09
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/16/2022 7:31:48
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	7/16/2022 19:16:34
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.14	7/17/2022 7:12:09
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/17/2022 19:32:20
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/18/2022 7:21:45
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/18/2022 19:13:23
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/19/2022 7:20:19

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/19/2022 19:24:47
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/20/2022 7:07:23
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/20/2022 19:33:00
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/21/2022 7:23:48
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/21/2022 19:29:01
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/22/2022 7:23:02
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	7/22/2022 19:15:36
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/23/2022 7:17:49
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	7/23/2022 19:07:38
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/24/2022 7:14:04
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/24/2022 19:25:10
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/25/2022 7:19:15
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/25/2022 19:17:35
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/26/2022 7:21:31
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/26/2022 19:17:47
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/27/2022 7:21:50
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	7/27/2022 19:14:02
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/28/2022 7:24:34
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/28/2022 19:17:15
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	7/29/2022 7:33:28
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/29/2022 19:21:37
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/30/2022 7:27:39
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/31/2022 7:23:50

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	7/31/2022 19:25:16
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	8/1/2022 7:15:01
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/1/2022 19:16:50
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/2/2022 7:17:00
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.16	8/2/2022 19:13:23
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	8/3/2022 7:25:16
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/3/2022 19:18:27
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/4/2022 7:32:37
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/4/2022 19:40:32
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/5/2022 7:12:54
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/5/2022 19:26:39
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/6/2022 7:15:24
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.16	8/6/2022 19:18:37
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/7/2022 7:12:57
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/7/2022 19:15:38
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	8/8/2022 7:24:28
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/8/2022 19:27:55
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/9/2022 7:29:45
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/9/2022 19:27:26
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/10/2022 7:14:11
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/10/2022 19:14:37
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/11/2022 7:17:24
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/11/2022 19:19:36

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/12/2022 7:28:26
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/12/2022 19:27:19
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.19	8/13/2022 7:24:03
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/13/2022 19:28:16
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.14	8/14/2022 7:20:12
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/14/2022 19:26:12
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.14	8/15/2022 7:14:33
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/15/2022 19:18:44
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/16/2022 7:16:24
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/16/2022 19:20:50
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/17/2022 7:25:57
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/17/2022 19:23:07
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/18/2022 7:26:47
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/18/2022 19:24:11
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/19/2022 7:15:37
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/19/2022 19:19:21
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	8/20/2022 7:30:25
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	8/20/2022 19:18:30
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	8/21/2022 7:13:30
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/21/2022 19:19:40
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.13	8/22/2022 7:15:50
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.14	8/22/2022 19:18:44
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/23/2022 7:18:00

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	8/23/2022 19:21:40
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/24/2022 7:18:12
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	8/24/2022 19:23:57
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/25/2022 7:18:31
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/25/2022 19:17:01
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/26/2022 7:22:35
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/26/2022 19:28:35
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/27/2022 7:19:14
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/27/2022 19:25:44
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/28/2022 7:09:00
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.17	8/28/2022 19:06:01
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/29/2022 7:12:50
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/29/2022 19:08:28
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/30/2022 6:58:06
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/30/2022 19:16:01
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	8/31/2022 7:19:41
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.16	8/31/2022 19:32:40
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/1/2022 7:15:16
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/1/2022 19:33:47
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/2/2022 7:01:31
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	9/2/2022 19:32:04
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	9/3/2022 7:13:43
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	9/3/2022 19:23:33

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/4/2022 7:02:44
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	9/4/2022 19:16:16
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/5/2022 7:24:29
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/5/2022 19:30:32
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/6/2022 7:13:42
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/6/2022 19:22:14
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/7/2022 7:23:06
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/7/2022 19:17:19
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/8/2022 7:23:55
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.16	9/8/2022 19:29:32
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/9/2022 7:25:38
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/9/2022 19:17:23
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.14	9/10/2022 7:15:01
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/10/2022 19:24:10
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/11/2022 7:13:33
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/11/2022 19:21:37
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/12/2022 7:29:11
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/12/2022 19:16:19
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/13/2022 7:20:15
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/13/2022 19:20:29
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.16	9/14/2022 7:21:05
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	9/14/2022 19:24:29
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/15/2022 7:20:55

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/15/2022 19:24:53
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/16/2022 7:23:32
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/16/2022 19:18:34
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.14	9/17/2022 7:25:19
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/17/2022 19:19:23
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/18/2022 7:18:34
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/18/2022 19:14:54
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/19/2022 7:28:44
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/19/2022 19:36:52
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/20/2022 7:38:50
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/20/2022 19:12:58
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/21/2022 7:25:55
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/21/2022 19:16:29
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/22/2022 7:22:23
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.14	9/22/2022 19:30:42
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/23/2022 7:27:43
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/23/2022 19:20:37
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	9/24/2022 7:22:13
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/24/2022 19:19:16
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/25/2022 7:22:23
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/25/2022 19:12:54
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	9/26/2022 7:23:07
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/26/2022 19:24:02

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/27/2022 7:16:05
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/27/2022 19:18:54
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	9/28/2022 7:21:58
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/28/2022 19:12:54
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/29/2022 7:21:30
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/29/2022 19:33:44
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/30/2022 7:14:58
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	9/30/2022 19:13:30
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/1/2022 7:14:00
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/1/2022 19:24:33
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/2/2022 7:17:23
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/2/2022 19:20:14
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/3/2022 7:26:11
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/3/2022 19:11:30
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	10/4/2022 7:28:56
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/4/2022 19:16:11
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/5/2022 7:19:49
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/5/2022 19:24:27
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/6/2022 7:20:16
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/6/2022 19:06:28
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	10/7/2022 7:18:17
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/7/2022 19:12:06
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.16	10/8/2022 7:24:58

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/8/2022 19:24:06
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/9/2022 7:22:38
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/9/2022 19:21:29
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/10/2022 7:21:07
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.14	10/10/2022 19:21:40
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.14	10/11/2022 7:15:30
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/11/2022 19:24:59
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/12/2022 7:15:09
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/12/2022 19:06:46
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/13/2022 7:31:51
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/13/2022 19:25:15
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/14/2022 7:16:35
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/14/2022 19:19:20
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/15/2022 7:14:15
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/15/2022 19:21:45
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/16/2022 7:15:10
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/16/2022 19:23:31
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/17/2022 7:23:18
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	10/17/2022 19:24:20
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/18/2022 7:16:06
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/18/2022 19:17:36
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/19/2022 7:14:09
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/19/2022 19:23:36

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/20/2022 7:20:13
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/20/2022 19:25:54
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/21/2022 7:23:49
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/21/2022 19:21:38
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/22/2022 7:22:29
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.14	10/22/2022 19:22:17
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/23/2022 7:27:25
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.16	10/23/2022 19:21:16
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/24/2022 7:17:51
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.13	10/24/2022 19:18:01
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/25/2022 7:16:22
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/25/2022 19:19:35
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/26/2022 7:18:49
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/26/2022 19:23:56
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/27/2022 7:07:21
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	10/27/2022 19:16:50
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	10/28/2022 7:15:09
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/28/2022 19:16:06
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/29/2022 7:24:46
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/29/2022 19:13:11
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/30/2022 7:11:06
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/30/2022 19:03:22
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/31/2022 7:31:36

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	10/31/2022 19:18:01
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/1/2022 7:28:22
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/1/2022 19:12:31
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/2/2022 7:21:39
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	11/2/2022 17:06:09
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/3/2022 7:15:02
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/3/2022 19:10:46
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/4/2022 7:36:35
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.16	11/4/2022 19:21:25
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.16	11/5/2022 7:29:09
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/5/2022 19:20:47
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/6/2022 7:18:44
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/6/2022 19:24:47
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/7/2022 7:20:10
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/7/2022 19:15:36
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/8/2022 7:20:17
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/8/2022 19:12:45
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/9/2022 7:19:45
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.14	11/9/2022 19:26:06
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/10/2022 7:20:36
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	11/10/2022 19:18:22
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	11/11/2022 7:15:05
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	11/11/2022 19:09:07

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/12/2022 7:18:30
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/12/2022 19:10:41
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/13/2022 7:20:58
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/13/2022 19:15:55
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/14/2022 7:24:11
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/14/2022 19:14:36
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	11/15/2022 7:06:43
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/15/2022 19:20:19
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/16/2022 7:22:14
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/16/2022 19:26:17
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/17/2022 7:15:53
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/17/2022 19:15:38
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/18/2022 7:26:43
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/18/2022 19:17:44
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/19/2022 7:22:45
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/19/2022 19:10:19
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/20/2022 7:18:42
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/20/2022 19:18:30
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/21/2022 7:28:01
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/21/2022 19:15:16
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/22/2022 7:18:57
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/22/2022 19:11:42
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/23/2022 7:15:12

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/23/2022 19:17:24
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/24/2022 7:16:11
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.16	11/24/2022 19:11:36
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/25/2022 7:17:02
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/25/2022 19:18:00
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/26/2022 7:17:03
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	11/26/2022 19:20:29
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/27/2022 7:13:37
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	11/27/2022 19:23:58
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/28/2022 7:30:48
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/28/2022 19:21:49
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	11/29/2022 7:18:22
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/29/2022 19:28:09
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/30/2022 7:12:38
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	11/30/2022 19:20:44
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/1/2022 7:15:20
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.14	12/1/2022 19:21:35
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/2/2022 7:26:17
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/2/2022 19:27:33
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	12/3/2022 7:17:35
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/3/2022 19:15:51
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	12/4/2022 7:04:31
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/4/2022 19:12:49

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/5/2022 7:17:39
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/5/2022 19:24:21
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	12/6/2022 7:14:47
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.11	12/6/2022 19:15:50
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/7/2022 7:24:20
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/7/2022 19:23:08
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	12/8/2022 7:19:43
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/8/2022 19:33:07
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/9/2022 7:18:12
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/9/2022 19:18:50
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/10/2022 7:16:31
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/11/2022 7:11:25
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/11/2022 19:21:27
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/12/2022 7:21:27
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.14	12/12/2022 19:17:12
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/13/2022 7:24:04
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/13/2022 19:25:56
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/14/2022 7:23:33
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	12/14/2022 19:24:21
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/15/2022 7:20:51
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/15/2022 19:24:17
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/16/2022 7:18:51
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/16/2022 19:18:04

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/17/2022 7:16:09
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/17/2022 19:22:05
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/18/2022 7:19:07
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.14	12/18/2022 19:18:05
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/19/2022 7:15:59
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/19/2022 19:12:49
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/20/2022 7:08:16
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/20/2022 19:18:05
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/21/2022 7:09:49
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/21/2022 19:21:58
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.17	12/22/2022 7:12:58
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/22/2022 19:23:23
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/23/2022 7:21:54
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/23/2022 19:14:22
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/24/2022 7:17:58
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/24/2022 19:18:15
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.16	12/25/2022 7:16:25
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	12/25/2022 19:17:05
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/26/2022 7:14:08
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/26/2022 19:12:35
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/27/2022 7:10:52
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-.15	12/27/2022 19:19:39
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/28/2022 7:17:13

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/28/2022 19:15:42
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/29/2022 7:20:04
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/29/2022 19:19:54
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/30/2022 7:28:34
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/30/2022 19:20:32
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/31/2022 7:18:09
HVAC: IFIT Facility delta P (PDI-865-4 or PDI-865-5) (sta # 9)		-0.05	-0.15	12/31/2022 19:13:27
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/1/2022 7:14:11
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	7/1/2022 19:15:44
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/2/2022 7:17:51
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	7/2/2022 19:18:29
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/3/2022 7:17:18
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/3/2022 19:21:24
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/4/2022 7:18:08
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	7/4/2022 19:09:13
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/5/2022 7:17:44
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	7/5/2022 19:15:59
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/6/2022 7:24:23
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	7/6/2022 19:18:05
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/7/2022 7:16:55
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.10	7/7/2022 19:24:47
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/8/2022 7:20:43
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	7/8/2022 19:13:33

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/9/2022 7:18:20
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/9/2022 19:19:49
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/10/2022 7:25:20
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/10/2022 19:12:11
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/11/2022 7:46:30
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	7/11/2022 19:22:05
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/12/2022 7:21:29
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	7/12/2022 19:28:43
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/13/2022 7:23:34
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/13/2022 19:08:51
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/14/2022 7:21:30
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/14/2022 19:14:36
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/15/2022 7:29:28
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	7/15/2022 19:10:14
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/16/2022 7:31:53
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	7/16/2022 19:16:38
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/17/2022 7:12:13
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/17/2022 19:32:24
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/18/2022 7:16:23
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/18/2022 19:13:32
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/19/2022 7:20:22
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/19/2022 19:24:58
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/20/2022 7:07:28

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/20/2022 19:33:05
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/21/2022 7:23:52
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/21/2022 19:29:06
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/22/2022 7:23:06
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	7/22/2022 19:15:40
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/23/2022 7:18:00
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	7/23/2022 19:07:43
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/24/2022 7:14:07
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/24/2022 19:25:22
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/25/2022 7:19:25
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/25/2022 19:17:42
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/26/2022 7:21:34
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/26/2022 19:17:51
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/27/2022 7:22:06
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	7/27/2022 19:14:07
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/28/2022 7:24:43
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/28/2022 19:17:21
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	7/29/2022 7:33:33
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/29/2022 19:21:42
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/30/2022 7:27:42
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/31/2022 7:23:54
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	7/31/2022 19:25:21
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	8/1/2022 7:15:06

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/1/2022 19:16:58
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/2/2022 7:17:07
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/2/2022 19:13:32
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	8/3/2022 7:25:20
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	8/3/2022 19:18:31
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/4/2022 7:32:40
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/4/2022 19:40:46
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/5/2022 7:13:06
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/5/2022 19:26:54
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/6/2022 7:15:31
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.08	8/6/2022 19:18:44
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/7/2022 7:13:04
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/7/2022 19:15:43
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	8/8/2022 7:24:34
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/8/2022 19:28:05
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.08	8/9/2022 7:29:53
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/9/2022 19:27:34
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/10/2022 7:14:15
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/10/2022 19:14:46
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/11/2022 7:17:29
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/11/2022 19:19:52
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/12/2022 7:28:32
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/12/2022 19:27:29

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/13/2022 7:24:10
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/13/2022 19:28:19
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	8/14/2022 7:20:18
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/14/2022 19:26:23
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/15/2022 7:14:37
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/15/2022 19:18:51
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/16/2022 7:16:26
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/16/2022 19:20:54
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/17/2022 7:26:07
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/17/2022 19:23:15
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/18/2022 7:26:54
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/18/2022 19:24:15
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/19/2022 7:15:42
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/19/2022 19:19:31
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	8/20/2022 7:30:34
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	8/20/2022 19:18:38
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	8/21/2022 7:13:35
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/21/2022 19:19:51
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/22/2022 7:15:56
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	8/22/2022 19:18:53
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/23/2022 7:18:13
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	8/23/2022 19:21:44
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/24/2022 7:18:16

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	8/24/2022 19:24:02
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/25/2022 7:18:35
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/25/2022 19:17:06
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/26/2022 7:22:40
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/26/2022 19:28:38
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/27/2022 7:19:20
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/27/2022 19:25:48
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/28/2022 7:09:03
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	8/28/2022 19:06:06
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/29/2022 7:12:54
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/29/2022 19:08:31
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/30/2022 6:58:15
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/30/2022 19:16:04
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/31/2022 7:19:46
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	8/31/2022 19:32:48
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/1/2022 7:15:22
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/1/2022 19:33:54
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/2/2022 7:01:44
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	9/2/2022 19:32:09
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	9/3/2022 7:13:52
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	9/3/2022 19:23:38
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/4/2022 7:02:52
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	9/4/2022 19:16:20

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/5/2022 7:24:35
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/5/2022 19:30:42
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/6/2022 7:13:48
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/6/2022 19:22:29
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/7/2022 7:23:14
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/7/2022 19:17:24
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/8/2022 7:24:02
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	9/8/2022 19:29:37
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/9/2022 7:26:08
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/9/2022 19:17:28
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/10/2022 7:15:08
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/10/2022 19:24:16
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/11/2022 7:13:42
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/11/2022 19:21:43
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/12/2022 7:29:19
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/12/2022 19:16:31
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/13/2022 7:20:19
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/13/2022 19:20:41
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/14/2022 7:21:11
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	9/14/2022 19:24:36
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/15/2022 7:21:00
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/15/2022 19:25:03
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/16/2022 7:23:36

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/16/2022 19:18:37
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/17/2022 7:25:23
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/17/2022 19:19:27
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/18/2022 7:18:40
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/18/2022 19:14:58
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/19/2022 7:28:55
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/19/2022 19:36:57
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/20/2022 7:38:58
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/20/2022 19:13:07
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/21/2022 7:26:01
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/21/2022 19:16:36
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/22/2022 7:22:35
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/22/2022 19:30:48
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/23/2022 7:27:49
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/23/2022 19:20:42
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	9/24/2022 7:22:19
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/24/2022 19:19:22
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/25/2022 7:22:28
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/25/2022 19:13:02
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	9/26/2022 7:23:11
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/26/2022 19:24:06
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/27/2022 7:16:08
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/27/2022 19:19:00

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	9/28/2022 7:22:04
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/28/2022 19:13:01
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/29/2022 7:21:35
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.10	9/29/2022 19:33:49
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/30/2022 7:15:02
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	9/30/2022 19:13:41
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/1/2022 7:14:03
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/1/2022 19:24:36
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/2/2022 7:17:26
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/2/2022 19:20:20
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/3/2022 7:26:17
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/3/2022 19:11:35
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	10/4/2022 7:29:07
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/4/2022 19:16:17
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/5/2022 7:19:56
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/5/2022 19:24:31
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/6/2022 7:20:18
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/6/2022 19:06:34
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	10/7/2022 7:18:23
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/7/2022 19:12:10
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/8/2022 7:24:48
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/8/2022 19:24:11
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/9/2022 7:22:45

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/9/2022 19:21:34
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/10/2022 7:21:10
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/10/2022 19:21:44
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/11/2022 7:15:35
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/11/2022 19:24:51
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/12/2022 7:16:21
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/12/2022 19:06:51
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/13/2022 7:31:58
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/13/2022 19:25:18
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/14/2022 7:16:40
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/14/2022 19:19:31
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/15/2022 7:14:20
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/15/2022 19:21:50
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/16/2022 7:15:44
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/16/2022 19:23:33
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/17/2022 7:23:23
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	10/17/2022 19:24:26
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/18/2022 7:16:13
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/18/2022 19:17:44
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/19/2022 7:14:11
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/19/2022 19:23:38
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/20/2022 7:20:19
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/20/2022 19:25:57

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/21/2022 7:23:55
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/21/2022 19:21:43
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/22/2022 7:22:36
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/22/2022 19:22:28
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/23/2022 7:27:31
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.08	10/23/2022 19:21:24
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/24/2022 7:17:53
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.10	10/24/2022 19:18:11
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/25/2022 7:16:25
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/25/2022 19:19:38
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/26/2022 7:18:56
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/26/2022 19:24:02
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/27/2022 7:07:27
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	10/27/2022 19:17:14
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	10/28/2022 7:15:14
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/28/2022 19:16:14
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/29/2022 7:24:54
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/29/2022 19:13:13
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/30/2022 7:11:10
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/30/2022 19:03:27
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/31/2022 7:31:41
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	10/31/2022 19:18:07
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/1/2022 7:28:28

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/1/2022 19:12:37
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/2/2022 7:21:45
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.10	11/2/2022 17:06:12
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/3/2022 7:15:04
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/3/2022 19:10:49
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/4/2022 7:36:41
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/4/2022 19:22:09
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/5/2022 7:29:16
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/5/2022 19:20:52
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/6/2022 7:18:48
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/6/2022 19:24:53
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/7/2022 7:20:16
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/7/2022 19:15:39
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/8/2022 7:20:23
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/8/2022 19:12:51
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/9/2022 7:19:48
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/9/2022 19:26:11
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/10/2022 7:20:07
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	11/10/2022 19:18:28
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	11/11/2022 7:15:12
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	11/11/2022 19:09:12
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/12/2022 7:18:37
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/12/2022 19:10:45

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/13/2022 7:21:14
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/13/2022 19:15:59
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/14/2022 7:24:21
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/14/2022 19:14:49
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	11/15/2022 7:06:48
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/15/2022 19:20:24
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/16/2022 7:22:17
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/16/2022 19:26:23
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/17/2022 7:15:56
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/17/2022 19:15:40
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/18/2022 7:26:50
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/18/2022 19:17:50
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/19/2022 7:22:49
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.10	11/19/2022 19:10:25
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/20/2022 7:18:51
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/20/2022 19:18:37
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/21/2022 7:28:05
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/21/2022 19:15:31
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/22/2022 7:19:00
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/22/2022 19:11:47
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/23/2022 7:15:17
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/23/2022 19:17:28
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/24/2022 7:16:16

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/24/2022 19:11:42
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/25/2022 7:17:18
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/25/2022 19:18:09
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/26/2022 7:17:07
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	11/26/2022 19:20:55
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	11/27/2022 7:13:45
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	11/27/2022 19:24:02
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/28/2022 7:30:56
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/28/2022 19:21:54
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.10	11/29/2022 7:18:27
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/29/2022 19:28:15
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/30/2022 7:12:41
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	11/30/2022 19:20:54
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/1/2022 7:15:26
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/1/2022 19:21:41
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.11	12/2/2022 7:26:23
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/2/2022 19:27:39
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.08	12/3/2022 7:17:40
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.10	12/3/2022 19:15:57
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	12/4/2022 7:04:36
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/4/2022 19:12:53
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/5/2022 7:17:46
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/5/2022 19:24:34

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	12/6/2022 7:14:52
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.12	12/6/2022 19:16:05
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/7/2022 7:24:30
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/7/2022 19:23:13
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	12/8/2022 7:19:48
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/8/2022 19:33:14
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/9/2022 7:18:16
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/9/2022 19:19:03
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/10/2022 7:16:37
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/11/2022 7:11:29
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/11/2022 19:21:32
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/12/2022 7:21:32
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.08	12/12/2022 19:17:17
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/13/2022 7:24:09
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/13/2022 19:26:01
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/14/2022 7:23:36
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	12/14/2022 19:24:38
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/15/2022 7:20:55
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.10	12/15/2022 19:24:23
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/16/2022 7:18:59
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/16/2022 19:17:48
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/17/2022 7:16:15
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/17/2022 19:22:10

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/18/2022 7:19:12
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/18/2022 19:18:10
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/19/2022 7:16:05
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/19/2022 19:12:54
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/20/2022 7:08:22
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/20/2022 19:18:10
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/21/2022 7:09:55
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/21/2022 19:22:09
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/22/2022 7:13:04
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/22/2022 19:23:28
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/23/2022 7:22:00
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/23/2022 19:14:27
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/24/2022 7:18:07
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/24/2022 19:18:20
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/25/2022 7:16:33
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	12/25/2022 19:17:10
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/26/2022 7:14:13
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/26/2022 19:12:37
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/27/2022 7:11:00
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-.09	12/27/2022 19:19:44
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/28/2022 7:17:24
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/28/2022 19:15:49
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.10	12/29/2022 7:20:10

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/29/2022 19:19:56
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/30/2022 7:28:39
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/30/2022 19:20:38
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/31/2022 7:18:15
HVAC: North Basement delta P (PDI-804-1 or PDI-804-2) (sta # 10)		0.00	-0.09	12/31/2022 19:13:32
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/1/2022 7:14:18
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	7/1/2022 19:15:49
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/2/2022 7:17:55
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	7/2/2022 19:18:33
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/3/2022 7:17:22
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/3/2022 19:21:28
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/4/2022 7:18:11
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	7/4/2022 19:07:53
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/5/2022 7:17:48
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	7/5/2022 19:16:03
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/6/2022 7:24:27
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	7/6/2022 19:18:11
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/7/2022 7:17:00
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.10	7/7/2022 19:24:51
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/8/2022 7:20:55
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	7/8/2022 19:13:37
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/9/2022 7:18:31
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/9/2022 19:19:56

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/10/2022 7:24:43
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/10/2022 19:12:17
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/11/2022 7:46:36
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	7/11/2022 19:22:10
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/12/2022 7:21:34
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	7/12/2022 19:28:47
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/13/2022 7:23:38
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/13/2022 19:08:56
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/14/2022 7:21:47
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/14/2022 19:14:41
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/15/2022 7:29:34
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	7/15/2022 19:10:20
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/16/2022 7:32:15
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	7/16/2022 19:16:49
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/17/2022 7:12:17
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/17/2022 19:32:27
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/18/2022 7:16:31
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/18/2022 19:13:37
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/19/2022 7:20:26
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/19/2022 19:25:03
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/20/2022 7:07:34
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/20/2022 19:33:09
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/21/2022 7:23:55

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/21/2022 19:29:10
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/22/2022 7:23:10
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	7/22/2022 19:15:46
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/23/2022 7:18:06
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	7/23/2022 19:07:47
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/24/2022 7:14:26
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/24/2022 19:25:28
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/25/2022 7:19:33
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/25/2022 19:18:00
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/26/2022 7:21:38
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/26/2022 19:17:56
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/27/2022 7:22:13
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	7/27/2022 19:14:11
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/28/2022 7:24:51
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/28/2022 19:17:26
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	7/29/2022 7:33:36
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/29/2022 19:21:52
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/30/2022 7:27:45
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/31/2022 7:24:00
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	7/31/2022 19:25:25
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	8/1/2022 7:15:14
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/1/2022 19:17:03
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/2/2022 7:17:13

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/2/2022 19:13:45
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	8/3/2022 7:25:30
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/3/2022 19:18:35
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/4/2022 7:32:42
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/4/2022 19:40:53
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/5/2022 7:13:13
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/5/2022 19:27:03
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/6/2022 7:15:37
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.08	8/6/2022 19:18:51
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/7/2022 7:13:11
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/7/2022 19:15:47
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	8/8/2022 7:24:38
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/8/2022 19:28:21
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/9/2022 7:30:05
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/9/2022 19:27:46
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/10/2022 7:14:25
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/10/2022 19:15:01
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/11/2022 7:17:35
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/11/2022 19:20:00
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/12/2022 7:28:38
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/12/2022 19:27:48
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/13/2022 7:24:17
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/13/2022 19:28:24

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	8/14/2022 7:20:25
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/14/2022 19:26:31
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/15/2022 7:14:42
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/15/2022 19:18:58
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/16/2022 7:16:29
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/16/2022 19:20:58
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/17/2022 7:26:18
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/17/2022 19:23:40
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/18/2022 7:26:58
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/18/2022 19:24:20
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/19/2022 7:16:03
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/19/2022 19:19:42
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	8/20/2022 7:30:38
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	8/20/2022 19:18:44
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	8/21/2022 7:13:39
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/21/2022 19:19:59
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/22/2022 7:15:59
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	8/22/2022 19:18:57
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/23/2022 7:18:33
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	8/23/2022 19:21:48
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/24/2022 7:18:18
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	8/24/2022 19:24:07
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/25/2022 7:18:39

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/25/2022 19:17:10
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/26/2022 7:22:45
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/26/2022 19:28:45
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/27/2022 7:19:35
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/27/2022 19:25:53
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/28/2022 7:09:06
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	8/28/2022 19:06:12
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/29/2022 7:12:58
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/29/2022 19:08:41
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/30/2022 6:58:23
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/30/2022 19:16:09
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/31/2022 7:19:51
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	8/31/2022 19:32:54
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/1/2022 7:15:28
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/1/2022 19:34:01
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/2/2022 7:02:01
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	9/2/2022 19:32:14
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	9/3/2022 7:13:57
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	9/3/2022 19:23:41
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/4/2022 7:02:59
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	9/4/2022 19:16:25
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/5/2022 7:24:43
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/5/2022 19:30:52

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/6/2022 7:14:18
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/6/2022 19:22:35
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/7/2022 7:23:24
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/7/2022 19:17:28
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/8/2022 7:24:06
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	9/8/2022 19:29:41
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/9/2022 7:26:13
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/9/2022 19:17:32
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/10/2022 7:15:55
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/10/2022 19:24:25
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/11/2022 7:13:45
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/11/2022 19:21:48
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/12/2022 7:29:21
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/12/2022 19:16:35
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/13/2022 7:20:22
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/13/2022 19:20:46
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/14/2022 7:21:44
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	9/14/2022 19:24:40
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/15/2022 7:21:07
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/15/2022 19:25:08
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/16/2022 7:23:39
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/16/2022 19:18:42
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/17/2022 7:25:30

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/17/2022 19:19:38
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/18/2022 7:18:44
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/18/2022 19:15:08
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/19/2022 7:28:59
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/19/2022 19:37:04
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/20/2022 7:39:04
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/20/2022 19:13:12
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/21/2022 7:26:24
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/21/2022 19:16:39
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/22/2022 7:22:56
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/22/2022 19:30:52
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/23/2022 7:27:54
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/23/2022 19:20:50
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	9/24/2022 7:22:23
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/24/2022 19:19:30
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/25/2022 7:22:33
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/25/2022 19:13:14
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	9/26/2022 7:23:16
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/26/2022 19:24:09
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/27/2022 7:16:12
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/27/2022 19:19:06
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	9/28/2022 7:22:09
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/28/2022 19:13:39

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/29/2022 7:21:40
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.10	9/29/2022 19:33:56
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/30/2022 7:15:05
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	9/30/2022 19:13:44
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/1/2022 7:14:12
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/1/2022 19:24:40
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/2/2022 7:17:32
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/2/2022 19:20:23
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/3/2022 7:26:24
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/3/2022 19:12:49
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	10/4/2022 7:29:10
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/4/2022 19:16:22
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/5/2022 7:20:13
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/5/2022 19:24:35
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/6/2022 7:20:22
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/6/2022 19:06:37
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	10/7/2022 7:18:27
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/7/2022 19:12:16
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/8/2022 7:25:02
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/8/2022 19:24:16
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/9/2022 7:22:51
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/9/2022 19:21:38
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/10/2022 7:21:16

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/10/2022 19:21:48
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/11/2022 7:15:38
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/11/2022 19:25:39
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/12/2022 7:16:28
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/12/2022 19:06:59
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/13/2022 7:32:03
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/13/2022 19:25:33
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/14/2022 7:16:43
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/14/2022 19:19:37
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/15/2022 7:14:29
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/15/2022 19:21:54
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/16/2022 7:15:52
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/16/2022 19:23:42
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/17/2022 7:23:43
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	10/17/2022 19:24:30
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/18/2022 7:16:22
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/18/2022 19:17:51
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/19/2022 7:14:14
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/19/2022 19:23:41
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/20/2022 7:20:22
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/20/2022 19:26:04
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/21/2022 7:24:01
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/21/2022 19:21:47

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/22/2022 7:22:42
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/22/2022 19:22:38
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/23/2022 7:27:51
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/23/2022 19:21:32
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/24/2022 7:18:04
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.10	10/24/2022 19:18:25
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/25/2022 7:16:40
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/25/2022 19:19:42
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/26/2022 7:19:02
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/26/2022 19:24:06
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/27/2022 7:07:36
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.10	10/27/2022 19:17:21
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	10/28/2022 7:15:20
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/28/2022 19:16:18
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/29/2022 7:24:58
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/29/2022 19:13:18
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/30/2022 7:11:14
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/30/2022 19:03:34
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/31/2022 7:31:49
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	10/31/2022 19:18:11
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/1/2022 7:29:14
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/1/2022 19:12:42
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/2/2022 7:21:51

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	11/2/2022 17:06:16
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/3/2022 7:15:21
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.08	11/3/2022 19:10:59
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/4/2022 7:36:46
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/4/2022 19:22:17
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/5/2022 7:29:21
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/5/2022 19:20:58
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/6/2022 7:18:52
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/6/2022 19:25:03
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/7/2022 7:20:39
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/7/2022 19:16:14
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/8/2022 7:20:27
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/8/2022 19:12:55
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/9/2022 7:19:56
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/9/2022 19:26:18
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/10/2022 7:20:45
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	11/10/2022 19:18:33
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	11/11/2022 7:15:17
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	11/11/2022 19:09:16
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/12/2022 7:18:45
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/12/2022 19:10:47
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/13/2022 7:21:21
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/13/2022 19:16:01

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/14/2022 7:24:32
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/14/2022 19:14:56
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	11/15/2022 7:06:52
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/15/2022 19:20:28
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/16/2022 7:22:34
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/16/2022 19:26:27
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/17/2022 7:16:00
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/17/2022 19:15:50
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/18/2022 7:26:58
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/18/2022 19:17:57
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/19/2022 7:22:53
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/19/2022 19:10:33
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/20/2022 7:18:57
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/20/2022 19:19:25
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/21/2022 7:28:09
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/21/2022 19:15:36
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/22/2022 7:19:07
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/22/2022 19:11:55
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/23/2022 7:15:22
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/23/2022 19:17:35
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/24/2022 7:16:29
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/24/2022 19:11:47
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/25/2022 7:17:22

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/25/2022 19:18:14
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/26/2022 7:17:12
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	11/26/2022 19:21:00
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/27/2022 7:13:55
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	11/27/2022 19:24:06
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/28/2022 7:30:59
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/28/2022 19:22:00
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.10	11/29/2022 7:18:32
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/29/2022 19:28:23
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/30/2022 7:12:51
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	11/30/2022 19:21:02
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/1/2022 7:15:33
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/1/2022 19:21:50
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.10	12/2/2022 7:26:29
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/2/2022 19:27:43
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	12/3/2022 7:17:45
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/3/2022 19:16:02
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	12/4/2022 7:04:41
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/4/2022 19:12:56
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/5/2022 7:17:50
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/5/2022 19:24:42
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	12/6/2022 7:14:55
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.12	12/6/2022 19:16:12

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/7/2022 7:24:36
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/7/2022 19:23:20
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	12/8/2022 7:19:52
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/8/2022 19:33:49
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/9/2022 7:18:22
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/9/2022 19:19:10
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/10/2022 7:16:40
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/11/2022 7:11:33
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/11/2022 19:21:37
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/12/2022 7:21:36
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.08	12/12/2022 19:17:23
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/13/2022 7:24:17
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/13/2022 19:26:06
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/14/2022 7:23:41
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	12/14/2022 19:24:43
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/15/2022 7:21:04
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.10	12/15/2022 19:24:25
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/16/2022 7:19:25
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/16/2022 19:18:10
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/17/2022 7:16:22
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/17/2022 19:22:18
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/18/2022 7:19:48
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/18/2022 19:18:15

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/19/2022 7:16:14
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/19/2022 19:12:59
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/20/2022 7:08:59
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/20/2022 19:18:15
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/21/2022 7:10:29
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/21/2022 19:22:14
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.08	12/22/2022 7:13:17
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/22/2022 19:23:32
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/23/2022 7:22:08
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/23/2022 19:14:34
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/24/2022 7:18:20
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/24/2022 19:18:25
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/25/2022 7:16:43
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	12/25/2022 19:17:16
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/26/2022 7:14:56
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/26/2022 19:12:50
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/27/2022 7:11:40
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-.09	12/27/2022 19:19:48
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/28/2022 7:17:47
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/28/2022 19:16:02
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.10	12/29/2022 7:20:17
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/29/2022 19:20:08
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/30/2022 7:28:43

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/30/2022 19:20:42
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/31/2022 7:18:58
HVAC: South Basement delta P (PDI-854-1 or PDI-854-2) (sta # 21)		0.00	-0.09	12/31/2022 19:13:42
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.094	7/1/2022 7:14:30
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.100	7/1/2022 19:16:01
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	7/2/2022 7:18:10
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.093	7/2/2022 19:18:44
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.101	7/3/2022 7:17:40
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.094	7/3/2022 19:21:48
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.110	7/4/2022 7:18:24
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.094	7/4/2022 19:08:16
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.096	7/5/2022 7:18:14
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.096	7/5/2022 19:16:17
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.095	7/6/2022 7:24:42
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.107	7/6/2022 19:18:51
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.110	7/7/2022 7:17:15
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.090	7/7/2022 19:25:13
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.104	7/8/2022 7:20:59
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.107	7/8/2022 19:13:52
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.095	7/9/2022 7:19:02
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.096	7/9/2022 19:20:22
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.093	7/10/2022 7:25:48
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.109	7/10/2022 19:12:42

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.107	7/11/2022 7:46:51
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.106	7/11/2022 19:22:20
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	7/12/2022 7:21:50
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.107	7/12/2022 19:29:00
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.110	7/13/2022 7:23:56
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.099	7/13/2022 19:09:20
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.096	7/14/2022 7:21:52
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.099	7/14/2022 19:15:16
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.098	7/15/2022 7:29:48
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.105	7/15/2022 19:10:30
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	7/16/2022 7:32:34
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.109	7/16/2022 19:17:01
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.099	7/17/2022 7:14:20
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.099	7/18/2022 0:11:27
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.098	7/18/2022 7:16:48
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.117	7/18/2022 19:14:02
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.099	7/19/2022 7:20:40
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.111	7/19/2022 19:25:23
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.105	7/20/2022 7:07:49
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.100	7/20/2022 19:33:27
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	7/21/2022 7:24:08
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.099	7/21/2022 19:29:26
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.111	7/22/2022 7:23:32

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.113	7/22/2022 19:15:58
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.112	7/23/2022 7:18:30
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.110	7/23/2022 19:07:54
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.095	7/24/2022 7:14:31
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.112	7/24/2022 19:25:48
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.099	7/25/2022 7:20:13
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	7/25/2022 19:18:23
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.108	7/26/2022 7:21:55
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.113	7/26/2022 19:18:21
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.110	7/27/2022 7:22:32
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.113	7/27/2022 19:14:19
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.097	7/28/2022 7:25:15
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.092	7/28/2022 19:17:41
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.105	7/29/2022 7:33:44
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.113	7/29/2022 19:22:27
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.095	7/30/2022 7:28:05
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.100	7/31/2022 7:24:16
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.099	7/31/2022 19:25:59
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.106	8/1/2022 7:15:36
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.099	8/1/2022 19:17:18
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.103	8/2/2022 7:17:29
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	8/2/2022 19:14:12
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.096	8/3/2022 7:25:39

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.114	8/3/2022 19:18:48
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.113	8/4/2022 7:32:52
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	8/4/2022 19:42:36
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	8/5/2022 7:13:30
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.098	8/5/2022 19:27:29
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.113	8/6/2022 7:15:56
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.092	8/6/2022 19:19:13
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	8/7/2022 7:13:29
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	8/7/2022 19:16:02
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.111	8/8/2022 7:25:00
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.099	8/8/2022 19:33:56
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.095	8/9/2022 7:30:41
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.098	8/9/2022 19:28:05
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.096	8/10/2022 7:14:42
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.095	8/10/2022 19:16:13
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.110	8/11/2022 7:18:00
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.108	8/11/2022 19:20:28
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	8/12/2022 7:29:07
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	8/12/2022 19:27:56
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.096	8/13/2022 7:24:37
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.096	8/13/2022 19:28:54
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.097	8/14/2022 7:20:38
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.112	8/14/2022 19:27:12

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.099	8/15/2022 7:15:17
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.095	8/15/2022 19:19:12
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.104	8/16/2022 7:16:53
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.110	8/16/2022 19:21:15
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.110	8/17/2022 7:27:00
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.101	8/17/2022 19:24:29
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.113	8/18/2022 7:27:43
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.095	8/18/2022 19:24:34
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.110	8/19/2022 7:16:24
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.102	8/19/2022 19:20:02
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.094	8/20/2022 7:30:50
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.095	8/20/2022 19:19:03
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.096	8/21/2022 7:13:56
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	8/21/2022 19:21:27
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.094	8/22/2022 7:16:14
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.114	8/22/2022 19:19:10
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.093	8/23/2022 7:18:43
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.095	8/23/2022 19:22:04
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.099	8/24/2022 7:18:34
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.098	8/24/2022 19:24:18
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	8/25/2022 7:18:56
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.103	8/25/2022 19:17:26
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.106	8/26/2022 7:22:57

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.104	8/26/2022 19:29:21
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.109	8/27/2022 7:20:57
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.096	8/27/2022 19:26:06
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	8/28/2022 7:09:23
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.107	8/28/2022 19:06:21
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.094	8/29/2022 7:13:17
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.109	8/29/2022 19:08:58
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.101	8/30/2022 6:58:44
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.095	8/30/2022 19:17:11
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	8/31/2022 7:19:56
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.112	8/31/2022 19:33:07
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.096	9/1/2022 7:16:16
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.104	9/1/2022 19:34:26
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.099	9/2/2022 7:02:35
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.097	9/2/2022 19:32:21
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.094	9/3/2022 7:14:15
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.103	9/3/2022 19:23:51
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	9/4/2022 7:03:22
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.094	9/4/2022 19:17:04
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.098	9/5/2022 7:25:42
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.096	9/5/2022 19:31:16
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.098	9/6/2022 7:14:27
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.098	9/6/2022 19:22:52

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	9/7/2022 7:23:42
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.100	9/7/2022 19:18:02
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	9/8/2022 7:24:21
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.100	9/8/2022 19:29:50
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.098	9/9/2022 7:26:41
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	9/9/2022 19:17:45
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.098	9/10/2022 7:16:02
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.099	9/10/2022 19:25:06
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.108	9/11/2022 7:13:55
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.091	9/11/2022 19:22:30
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	9/12/2022 7:29:34
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	9/12/2022 19:16:58
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.113	9/13/2022 7:20:39
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.098	9/13/2022 19:21:16
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	9/14/2022 7:21:56
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.094	9/14/2022 19:24:48
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.095	9/15/2022 7:21:46
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.093	9/15/2022 19:25:26
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.094	9/16/2022 7:24:00
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.105	9/16/2022 19:19:31
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.099	9/17/2022 7:25:46
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.099	9/17/2022 19:20:42
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	9/18/2022 7:18:58

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.098	9/18/2022 19:17:00
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	9/19/2022 7:29:21
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.098	9/19/2022 19:37:14
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.098	9/20/2022 7:39:21
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.099	9/20/2022 19:13:30
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.100	9/21/2022 7:26:58
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.110	9/21/2022 19:16:58
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.096	9/22/2022 7:23:17
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.087	9/22/2022 19:31:06
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.108	9/23/2022 7:28:15
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	9/23/2022 19:21:38
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.097	9/24/2022 7:22:32
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.108	9/24/2022 19:20:22
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	9/25/2022 7:22:50
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	9/25/2022 19:13:28
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.097	9/26/2022 7:23:30
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.098	9/26/2022 19:24:27
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	9/27/2022 7:16:29
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.095	9/27/2022 19:19:33
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.095	9/28/2022 7:22:28
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	9/28/2022 19:13:59
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	9/29/2022 7:21:55
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	9/29/2022 19:35:30

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.096	9/30/2022 7:15:25
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	9/30/2022 19:14:05
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	10/1/2022 7:15:43
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.101	10/1/2022 19:25:04
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.096	10/2/2022 7:18:34
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	10/2/2022 19:20:39
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.098	10/3/2022 7:26:41
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.102	10/3/2022 19:12:57
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.096	10/4/2022 7:29:21
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.096	10/4/2022 19:18:27
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	10/5/2022 7:20:33
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.113	10/5/2022 19:24:46
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	10/6/2022 7:21:30
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.098	10/6/2022 19:07:05
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.107	10/7/2022 7:18:42
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	10/7/2022 19:12:45
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.096	10/8/2022 7:25:08
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.093	10/8/2022 19:24:32
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.094	10/9/2022 7:23:07
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.111	10/9/2022 19:21:58
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.110	10/10/2022 7:22:16
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.099	10/10/2022 19:22:06
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	10/11/2022 7:17:35

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.092	10/11/2022 19:26:27
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.092	10/12/2022 7:17:41
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.106	10/12/2022 19:07:51
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	10/13/2022 7:32:08
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.095	10/13/2022 19:25:37
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.095	10/14/2022 7:17:43
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.095	10/14/2022 19:20:02
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.095	10/15/2022 7:15:40
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	10/15/2022 19:22:08
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.091	10/16/2022 7:16:08
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.101	10/16/2022 19:23:49
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.108	10/17/2022 7:23:53
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.095	10/17/2022 19:24:57
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.106	10/18/2022 7:17:13
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.100	10/18/2022 19:18:10
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.094	10/19/2022 7:14:30
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.096	10/19/2022 19:24:03
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.087	10/20/2022 7:20:39
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.108	10/20/2022 19:26:35
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	10/21/2022 7:24:36
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.104	10/21/2022 19:22:03
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.111	10/22/2022 7:23:28
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.098	10/22/2022 19:23:16

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.102	10/23/2022 7:28:23
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.095	10/23/2022 19:21:50
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.098	10/24/2022 7:18:10
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.114	10/24/2022 19:18:42
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	10/25/2022 7:16:43
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.096	10/25/2022 19:20:32
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	10/26/2022 7:19:35
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.096	10/26/2022 19:24:30
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.102	10/27/2022 7:08:53
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.090	10/27/2022 19:17:36
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.096	10/28/2022 7:15:32
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	10/28/2022 19:16:33
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	10/29/2022 7:25:26
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	10/29/2022 19:14:32
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.096	10/30/2022 7:11:39
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.098	10/30/2022 19:04:04
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.106	10/31/2022 7:32:31
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.101	10/31/2022 19:18:28
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.111	11/1/2022 7:29:22
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.093	11/1/2022 19:12:56
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.096	11/2/2022 7:22:08
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.103	11/2/2022 17:06:32
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.107	11/3/2022 7:15:36

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.096	11/3/2022 19:12:49
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.095	11/4/2022 7:37:07
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.111	11/4/2022 19:22:29
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.094	11/5/2022 7:29:38
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.095	11/5/2022 19:21:22
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.108	11/6/2022 7:19:11
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.095	11/6/2022 19:25:21
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.102	11/7/2022 7:25:53
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.107	11/7/2022 19:17:30
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.106	11/8/2022 7:20:44
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	11/8/2022 19:13:17
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.108	11/9/2022 7:20:12
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.098	11/9/2022 19:26:43
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.113	11/10/2022 7:21:02
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.101	11/10/2022 19:18:49
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.111	11/11/2022 7:15:38
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.110	11/11/2022 19:09:24
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.111	11/12/2022 7:19:02
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.099	11/12/2022 19:11:14
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.114	11/13/2022 7:22:05
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.105	11/13/2022 19:16:46
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.099	11/14/2022 7:28:35
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.110	11/14/2022 19:15:45

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.098	11/15/2022 7:07:05
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.112	11/15/2022 19:21:49
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.105	11/16/2022 7:22:47
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.104	11/16/2022 19:26:45
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.107	11/17/2022 7:16:11
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.095	11/17/2022 19:17:17
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.093	11/18/2022 7:27:55
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.106	11/18/2022 19:18:36
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.095	11/19/2022 7:23:08
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	11/19/2022 19:10:50
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.106	11/20/2022 7:19:22
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.080	11/20/2022 19:19:46
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.101	11/21/2022 7:28:26
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.110	11/21/2022 19:16:05
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.099	11/22/2022 7:19:56
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.111	11/22/2022 19:12:07
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.110	11/23/2022 7:15:53
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.099	11/23/2022 19:17:50
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.098	11/24/2022 7:16:43
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.093	11/24/2022 19:12:00
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.105	11/25/2022 7:17:39
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.108	11/25/2022 19:18:26
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.105	11/26/2022 7:17:26

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.097	11/26/2022 19:21:14
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.095	11/27/2022 7:14:23
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.097	11/27/2022 19:24:17
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.108	11/28/2022 7:31:19
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.107	11/28/2022 19:22:13
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.095	11/29/2022 7:18:41
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.105	11/29/2022 19:29:07
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.106	11/30/2022 7:13:58
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.098	11/30/2022 19:21:18
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.094	12/1/2022 7:16:02
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	12/1/2022 19:22:03
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.099	12/2/2022 7:28:00
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.105	12/2/2022 19:27:59
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.105	12/3/2022 7:18:15
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.096	12/3/2022 19:16:19
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.108	12/4/2022 7:04:51
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.096	12/4/2022 19:13:09
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.096	12/5/2022 7:18:10
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.098	12/5/2022 19:24:59
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.109	12/6/2022 7:15:01
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.135	12/6/2022 19:16:32
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.109	12/7/2022 7:24:59
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.106	12/7/2022 19:23:56

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.107	12/8/2022 7:19:58
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.108	12/8/2022 19:33:56
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.105	12/9/2022 7:19:02
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.104	12/9/2022 19:19:28
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.108	12/10/2022 7:16:59
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.103	12/11/2022 7:11:48
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.108	12/11/2022 19:21:48
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.108	12/12/2022 7:22:10
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.134	12/12/2022 19:17:35
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.098	12/13/2022 7:24:45
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	12/13/2022 19:26:23
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.110	12/14/2022 7:24:33
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.107	12/14/2022 19:24:56
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.106	12/15/2022 7:22:00
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.106	12/15/2022 19:25:06
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.095	12/16/2022 7:19:19
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.093	12/16/2022 19:18:26
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.107	12/17/2022 7:17:26
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.095	12/17/2022 19:22:33
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.109	12/18/2022 7:19:55
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.096	12/18/2022 19:18:38
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.102	12/19/2022 7:16:37
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.095	12/19/2022 19:13:25

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.106	12/20/2022 7:09:06
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.105	12/20/2022 19:18:32
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.106	12/21/2022 7:10:38
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.104	12/21/2022 19:22:31
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.116	12/22/2022 7:13:55
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.103	12/22/2022 19:23:54
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.103	12/23/2022 7:22:41
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.095	12/23/2022 19:15:02
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.108	12/24/2022 7:19:22
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.109	12/24/2022 19:18:43
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.096	12/25/2022 7:17:06
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.109	12/25/2022 19:17:26
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.097	12/26/2022 7:15:08
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.094	12/26/2022 19:13:37
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.096	12/27/2022 7:11:50
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.098	12/27/2022 19:20:10
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.095	12/28/2022 7:17:53
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.101	12/28/2022 19:16:21
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.101	12/29/2022 7:20:33
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-.110	12/29/2022 19:20:22
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.105	12/30/2022 7:29:13
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.103	12/30/2022 19:20:57
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.095	12/31/2022 7:19:07

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: IRT Tunnel delta P (PDT-901 or PDI-901) (sta # 11)		0.00	-0.108	12/31/2022 19:14:00
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/1/2022 7:14:34
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/1/2022 19:16:05
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/2/2022 7:18:13
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/2/2022 19:18:47
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/3/2022 7:17:43
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/3/2022 19:21:50
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/4/2022 7:18:32
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/4/2022 19:08:19
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/5/2022 7:18:16
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/5/2022 19:16:18
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/6/2022 7:24:49
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/6/2022 19:18:55
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/7/2022 7:17:18
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/7/2022 19:25:15
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/8/2022 7:21:02
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/8/2022 19:13:56
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/9/2022 7:19:40
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/9/2022 19:20:26
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/10/2022 7:26:51
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/10/2022 19:12:55
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/11/2022 7:47:06
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/11/2022 19:22:25

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/12/2022 7:21:51
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/12/2022 19:29:03
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/13/2022 7:23:59
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/13/2022 19:09:26
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/14/2022 7:21:54
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/14/2022 19:17:37
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/15/2022 7:29:51
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/15/2022 19:10:32
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/16/2022 7:32:36
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/16/2022 19:17:03
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/17/2022 7:14:25
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/17/2022 19:32:45
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/18/2022 7:17:51
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/18/2022 19:14:27
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/19/2022 7:20:50
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/19/2022 19:25:34
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/20/2022 7:07:55
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/20/2022 19:33:30
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/21/2022 7:24:11
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/21/2022 19:29:28
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/22/2022 7:23:35
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/22/2022 19:16:00
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/23/2022 7:19:33

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/23/2022 19:07:56
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/24/2022 7:14:33
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/24/2022 19:25:51
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/25/2022 7:20:18
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/25/2022 19:18:25
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/26/2022 7:21:58
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/26/2022 19:18:26
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/27/2022 7:22:39
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/27/2022 19:14:21
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/28/2022 7:25:17
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/28/2022 19:17:48
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/29/2022 7:33:48
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/29/2022 19:22:30
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/30/2022 7:28:09
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/31/2022 7:24:22
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	7/31/2022 19:26:01
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/1/2022 7:15:38
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/1/2022 19:17:21
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/2/2022 7:17:38
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/2/2022 19:15:25
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/3/2022 7:25:44
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/3/2022 19:18:57
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/4/2022 7:33:04

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/4/2022 19:43:19
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/5/2022 7:13:34
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/5/2022 19:27:43
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/6/2022 7:16:01
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/6/2022 19:20:18
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/7/2022 7:14:03
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/7/2022 19:16:05
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/8/2022 7:25:05
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/8/2022 19:30:02
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/9/2022 7:31:06
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/9/2022 19:29:00
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/10/2022 7:14:54
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/10/2022 19:16:27
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/11/2022 7:18:18
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/11/2022 19:21:35
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/12/2022 7:29:39
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/12/2022 19:28:28
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/13/2022 7:25:06
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/13/2022 19:28:56
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/14/2022 7:20:40
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/14/2022 19:27:51
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/15/2022 7:15:42
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/15/2022 19:19:21

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/16/2022 7:16:56
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/16/2022 19:21:18
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/17/2022 7:27:07
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/17/2022 19:24:30
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/18/2022 7:27:46
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/18/2022 19:24:37
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/19/2022 7:16:29
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/19/2022 19:20:10
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/20/2022 7:30:52
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/20/2022 19:19:06
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/21/2022 7:13:59
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/21/2022 19:21:37
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/22/2022 7:16:26
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/22/2022 19:19:17
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/23/2022 7:20:33
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/23/2022 19:22:06
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/24/2022 7:18:47
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/24/2022 19:24:24
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/25/2022 7:18:59
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/25/2022 19:17:27
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/26/2022 7:22:59
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/26/2022 19:29:22
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/27/2022 7:20:58

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/27/2022 19:26:10
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/28/2022 7:09:25
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/28/2022 19:06:25
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/29/2022 7:13:20
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/29/2022 19:09:05
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/30/2022 6:59:55
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/30/2022 19:17:14
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/31/2022 7:20:09
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	8/31/2022 19:33:09
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/1/2022 7:17:32
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/1/2022 19:34:31
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/2/2022 7:02:40
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/2/2022 19:32:23
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/3/2022 7:14:19
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/3/2022 19:23:53
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/4/2022 7:03:36
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/4/2022 19:17:08
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/5/2022 7:25:45
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/5/2022 19:31:20
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/6/2022 7:14:30
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/6/2022 19:23:06
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/7/2022 7:23:45
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/7/2022 19:18:12

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/8/2022 7:24:28
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/8/2022 19:29:54
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/9/2022 7:26:44
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/9/2022 19:17:53
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/10/2022 7:16:06
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/10/2022 19:25:19
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/11/2022 7:13:58
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/11/2022 19:22:34
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/12/2022 7:29:39
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/12/2022 19:17:08
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/13/2022 7:20:43
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/13/2022 19:21:19
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/14/2022 7:21:59
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/14/2022 19:24:59
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/15/2022 7:21:49
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/15/2022 19:25:28
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/16/2022 7:24:12
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/16/2022 19:19:34
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/17/2022 7:25:49
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/17/2022 19:19:40
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/18/2022 7:19:01
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/18/2022 19:15:11
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/19/2022 7:29:30

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/19/2022 19:37:16
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/20/2022 7:39:38
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/20/2022 19:13:34
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/21/2022 7:27:11
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/21/2022 19:17:03
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/22/2022 7:23:22
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/22/2022 19:31:10
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/23/2022 7:28:25
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/23/2022 19:21:41
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/24/2022 7:22:36
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/24/2022 19:20:25
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/25/2022 7:22:56
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/25/2022 19:13:32
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/26/2022 7:23:33
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/26/2022 19:24:29
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/27/2022 7:16:33
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/27/2022 19:19:38
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/28/2022 7:22:30
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/28/2022 19:14:02
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/29/2022 7:22:00
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/29/2022 19:35:32
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/30/2022 7:15:28
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	9/30/2022 19:14:10

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/1/2022 7:15:02
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/1/2022 19:25:07
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/2/2022 7:18:19
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/2/2022 19:20:45
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/3/2022 7:26:50
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/3/2022 19:13:00
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/4/2022 7:29:32
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/4/2022 19:18:29
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/5/2022 7:20:36
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/5/2022 19:24:48
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/6/2022 7:20:27
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/6/2022 19:07:07
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/7/2022 7:18:44
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/7/2022 19:12:48
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/8/2022 7:25:14
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/8/2022 19:24:35
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/9/2022 7:23:15
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/9/2022 19:22:02
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/10/2022 7:21:44
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/10/2022 19:22:12
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/11/2022 7:16:06
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/11/2022 19:26:33
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/12/2022 7:17:45

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/12/2022 19:07:53
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/13/2022 7:32:12
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/13/2022 19:25:43
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/14/2022 7:16:46
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/14/2022 19:20:07
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/15/2022 7:15:18
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/15/2022 19:22:12
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/16/2022 7:17:14
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/16/2022 19:23:53
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/17/2022 7:24:19
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/17/2022 19:25:02
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/18/2022 7:17:15
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/18/2022 19:18:15
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/19/2022 7:14:43
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/19/2022 19:24:06
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/20/2022 7:20:44
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/20/2022 19:26:40
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/21/2022 7:24:38
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/21/2022 19:22:09
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/22/2022 7:23:30
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/22/2022 19:23:20
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/23/2022 7:28:25
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/23/2022 19:21:54

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/24/2022 7:18:13
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/24/2022 19:19:14
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/25/2022 7:16:45
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/25/2022 19:19:48
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/26/2022 7:19:37
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/26/2022 19:24:35
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/27/2022 7:08:55
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/27/2022 19:17:47
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/28/2022 7:15:43
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/28/2022 19:16:53
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/29/2022 7:25:45
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/29/2022 19:13:27
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/30/2022 7:11:43
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/30/2022 19:03:58
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/31/2022 7:32:34
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	10/31/2022 19:18:33
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/1/2022 7:29:24
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/1/2022 19:13:00
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/2/2022 7:22:13
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/2/2022 17:06:35
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/3/2022 7:15:38
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/3/2022 19:11:15
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/4/2022 7:37:09

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/4/2022 19:22:31
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/5/2022 7:29:39
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/5/2022 19:21:26
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/6/2022 7:19:13
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/6/2022 19:25:24
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/7/2022 7:21:20
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/7/2022 19:17:00
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/8/2022 7:21:19
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/8/2022 19:14:29
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/9/2022 7:20:13
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/9/2022 19:28:52
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/10/2022 7:21:09
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/10/2022 19:18:55
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/11/2022 7:15:46
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/11/2022 19:09:26
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/12/2022 7:19:12
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/12/2022 19:11:27
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/13/2022 7:25:16
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/13/2022 19:16:52
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/14/2022 7:25:20
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/14/2022 19:15:46
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/15/2022 7:07:06
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/15/2022 19:21:51

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/16/2022 7:22:49
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/16/2022 19:26:53
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/17/2022 7:16:14
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/17/2022 19:17:09
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/18/2022 7:27:36
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/18/2022 19:18:38
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/19/2022 7:23:20
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/19/2022 19:10:56
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/20/2022 7:19:37
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/20/2022 19:19:47
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/21/2022 7:28:36
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/21/2022 19:16:14
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/22/2022 7:19:42
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/22/2022 19:12:10
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/23/2022 7:15:57
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/23/2022 19:17:53
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/24/2022 7:16:49
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/24/2022 19:12:03
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/25/2022 7:17:47
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/25/2022 19:18:28
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/26/2022 7:17:31
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/26/2022 19:21:20
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/27/2022 7:14:49

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/27/2022 19:24:19
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/28/2022 7:31:25
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/28/2022 19:22:15
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/29/2022 7:18:46
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/29/2022 19:29:09
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/30/2022 7:13:52
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	11/30/2022 19:21:28
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/1/2022 7:16:12
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/1/2022 19:22:11
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/2/2022 7:27:08
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/2/2022 19:28:03
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/3/2022 7:18:19
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/3/2022 19:16:21
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/4/2022 7:04:55
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/4/2022 19:13:13
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/5/2022 7:18:20
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/5/2022 19:49:51
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/6/2022 7:15:03
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		UNSAT	12/6/2022 20:01:40
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/7/2022 7:25:11
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/7/2022 19:23:58
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/8/2022 7:20:01
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/8/2022 19:33:57

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/9/2022 7:19:05
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/9/2022 19:19:53
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/10/2022 7:17:06
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/11/2022 7:12:34
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/11/2022 19:22:01
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/12/2022 7:22:12
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/12/2022 19:17:41
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/13/2022 7:24:48
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/13/2022 19:26:33
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/14/2022 7:23:44
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/14/2022 19:25:10
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/15/2022 7:21:37
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/15/2022 19:25:11
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/16/2022 7:19:29
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/16/2022 19:18:36
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/17/2022 7:17:28
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/17/2022 19:22:50
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/18/2022 7:19:57
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/18/2022 19:18:41
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/19/2022 7:16:54
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/19/2022 19:13:31
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/20/2022 7:09:07
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/20/2022 19:18:34

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/21/2022 7:10:40
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/21/2022 19:22:40
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/22/2022 7:13:57
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/22/2022 19:23:57
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/23/2022 7:22:47
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/23/2022 19:15:07
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/24/2022 7:19:45
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/24/2022 19:18:47
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/25/2022 7:17:12
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/25/2022 19:17:28
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/26/2022 7:15:10
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/26/2022 19:13:16
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/27/2022 7:11:51
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/27/2022 19:20:39
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/28/2022 7:18:05
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/28/2022 19:16:25
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/29/2022 7:20:38
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/29/2022 19:20:27
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/30/2022 7:29:16
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/30/2022 19:21:07
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/31/2022 7:19:08
HVAC: 200 area re-circulation fan/plenum (PDT-831 or PDT-832) (sta # 12)	.050		SAT	12/31/2022 19:14:22
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/1/2022 7:14:37

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/1/2022 19:16:06
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/2/2022 7:18:15
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/2/2022 19:18:49
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/3/2022 7:17:45
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/3/2022 19:21:53
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/4/2022 7:18:34
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/4/2022 19:08:21
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/5/2022 7:18:18
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/5/2022 19:16:20
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/6/2022 7:24:50
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/6/2022 19:18:57
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/7/2022 7:17:20
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/7/2022 19:25:17
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/8/2022 7:21:03
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/8/2022 19:13:56
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/9/2022 7:20:21
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/9/2022 19:20:29
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/10/2022 7:26:58
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/10/2022 19:13:00
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/11/2022 7:47:03
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/11/2022 19:22:27
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/12/2022 7:21:52
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/12/2022 19:29:05

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/13/2022 7:24:01
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/13/2022 19:09:28
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/14/2022 7:21:55
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/14/2022 19:18:18
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/15/2022 7:29:53
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/15/2022 19:10:35
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/16/2022 7:32:39
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/16/2022 19:17:04
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/17/2022 7:14:27
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/17/2022 19:32:47
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/18/2022 7:17:58
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/18/2022 19:14:31
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/19/2022 7:20:52
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/19/2022 19:25:40
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/20/2022 7:07:57
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/20/2022 19:33:31
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/21/2022 7:24:13
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/21/2022 19:29:29
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/22/2022 7:23:36
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/22/2022 19:16:02
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/23/2022 7:19:45
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/23/2022 19:07:57
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/24/2022 7:14:34

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/24/2022 19:25:55
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/25/2022 7:20:22
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/25/2022 19:18:27
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/26/2022 7:21:59
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/26/2022 19:18:28
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/27/2022 7:22:55
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/27/2022 19:14:22
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/28/2022 7:25:21
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/28/2022 19:18:38
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/29/2022 7:33:50
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/29/2022 19:22:32
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/30/2022 7:28:13
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/31/2022 7:24:24
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	7/31/2022 19:26:04
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/1/2022 7:15:40
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/1/2022 19:17:22
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/2/2022 7:17:44
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/2/2022 19:15:31
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/3/2022 7:25:46
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/3/2022 19:18:59
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/4/2022 7:33:07
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/4/2022 19:44:40
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/5/2022 7:13:37

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/5/2022 19:27:52
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/6/2022 7:16:03
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/6/2022 19:20:29
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/7/2022 7:14:05
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/7/2022 19:16:07
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/8/2022 7:25:09
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/8/2022 19:30:16
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/9/2022 7:31:14
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/9/2022 19:29:05
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/10/2022 7:14:57
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/10/2022 19:16:34
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/11/2022 7:18:23
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/11/2022 19:21:42
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/12/2022 7:29:43
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/12/2022 19:28:30
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/13/2022 7:25:09
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/13/2022 19:28:59
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/14/2022 7:20:42
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/14/2022 19:27:54
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/15/2022 7:15:44
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/15/2022 19:19:30
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/16/2022 7:16:59
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/16/2022 19:21:21

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/17/2022 7:27:11
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/17/2022 19:24:34
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/18/2022 7:27:48
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/18/2022 19:24:40
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/19/2022 7:16:33
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/19/2022 19:20:15
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/20/2022 7:30:54
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/20/2022 19:19:10
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/21/2022 7:14:02
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/21/2022 19:21:54
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/22/2022 7:16:31
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/22/2022 19:19:19
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/23/2022 7:19:14
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/23/2022 19:22:08
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/24/2022 7:18:50
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/24/2022 19:24:25
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/25/2022 7:19:01
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/25/2022 19:17:29
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/26/2022 7:23:01
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/26/2022 19:29:25
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/27/2022 7:21:01
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/27/2022 19:26:12
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/28/2022 7:09:28

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/28/2022 19:06:27
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/29/2022 7:13:21
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/29/2022 19:09:15
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/30/2022 7:00:00
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/30/2022 19:17:18
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/31/2022 7:20:12
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	8/31/2022 19:33:13
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/1/2022 7:17:27
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/1/2022 19:34:35
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/2/2022 7:02:49
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/2/2022 19:32:25
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/3/2022 7:14:23
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/3/2022 19:23:55
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/4/2022 7:03:46
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/4/2022 19:17:10
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/5/2022 7:25:48
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/5/2022 19:31:23
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/6/2022 7:14:36
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/6/2022 19:23:10
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/7/2022 7:23:47
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/7/2022 19:18:18
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/8/2022 7:24:30
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/8/2022 19:29:57

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/9/2022 7:26:48
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/9/2022 19:17:56
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/10/2022 7:16:10
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/10/2022 19:25:21
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/11/2022 7:14:01
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/11/2022 19:22:37
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/12/2022 7:29:42
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/12/2022 19:17:12
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/13/2022 7:20:46
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/13/2022 19:21:24
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/14/2022 7:22:03
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/14/2022 19:25:03
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/15/2022 7:21:52
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/15/2022 19:25:30
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/16/2022 7:24:15
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/16/2022 19:19:37
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/17/2022 7:25:51
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/17/2022 19:19:46
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/18/2022 7:19:03
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/18/2022 19:15:24
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/19/2022 7:29:34
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/19/2022 19:37:19
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/20/2022 7:39:41

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/20/2022 19:13:37
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/21/2022 7:27:14
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/21/2022 19:17:06
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/22/2022 7:23:25
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/22/2022 19:31:13
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/23/2022 7:28:28
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/23/2022 19:21:45
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/24/2022 7:22:41
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/24/2022 19:20:28
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/25/2022 7:22:58
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/25/2022 19:13:34
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/26/2022 7:23:35
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/26/2022 19:24:31
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/27/2022 7:16:41
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/27/2022 19:19:41
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/28/2022 7:22:32
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/28/2022 19:14:05
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/29/2022 7:22:04
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/29/2022 19:35:45
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/30/2022 7:16:14
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	9/30/2022 19:14:13
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/1/2022 7:14:57
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/1/2022 19:25:08

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/2/2022 7:18:00
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/2/2022 19:20:49
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/3/2022 7:26:52
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/3/2022 19:13:03
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/4/2022 7:29:34
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/4/2022 19:18:32
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/5/2022 7:20:37
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/5/2022 19:24:49
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/6/2022 7:20:53
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/6/2022 19:07:08
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/7/2022 7:18:46
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/7/2022 19:12:51
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/8/2022 7:25:18
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/8/2022 19:24:38
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/9/2022 7:23:18
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/9/2022 19:22:04
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/10/2022 7:21:38
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/10/2022 19:22:13
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/11/2022 7:16:11
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/11/2022 19:26:39
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/12/2022 7:17:49
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/12/2022 19:07:57
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/13/2022 7:32:15

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/13/2022 19:25:45
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/14/2022 7:16:52
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/14/2022 19:20:10
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/15/2022 7:15:13
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/15/2022 19:22:17
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/16/2022 7:17:17
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/16/2022 19:23:56
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/17/2022 7:24:22
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/17/2022 19:25:05
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/18/2022 7:17:18
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/18/2022 19:18:19
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/19/2022 7:14:46
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/19/2022 19:24:08
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/20/2022 7:20:48
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/20/2022 19:26:43
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/21/2022 7:24:41
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/21/2022 19:22:12
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/22/2022 7:23:34
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/22/2022 19:23:22
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/23/2022 7:28:27
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/23/2022 19:21:57
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/24/2022 7:18:15
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/24/2022 19:19:18

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/25/2022 7:16:47
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/25/2022 19:20:15
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/26/2022 7:19:40
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/26/2022 19:24:38
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/27/2022 7:08:57
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/27/2022 19:17:49
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/28/2022 7:15:47
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/28/2022 19:16:57
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/29/2022 7:25:53
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/29/2022 19:14:12
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/30/2022 7:11:46
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/30/2022 19:03:56
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/31/2022 7:32:36
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	10/31/2022 19:18:37
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/1/2022 7:29:29
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/1/2022 19:13:04
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/2/2022 7:22:23
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/2/2022 17:06:37
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/3/2022 7:15:40
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/3/2022 19:12:37
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/4/2022 7:37:11
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/4/2022 19:22:34
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/5/2022 7:29:42

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/5/2022 19:21:28
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/6/2022 7:19:16
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/6/2022 19:25:26
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/7/2022 7:21:24
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/7/2022 19:16:39
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/8/2022 7:21:21
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/8/2022 19:14:31
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/9/2022 7:20:16
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/9/2022 19:28:56
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/10/2022 7:21:11
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/10/2022 19:18:56
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/11/2022 7:15:48
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/11/2022 19:09:28
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/12/2022 7:19:20
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/12/2022 19:11:40
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/13/2022 7:25:10
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/13/2022 19:17:46
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/14/2022 7:25:25
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/14/2022 19:15:49
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/15/2022 7:07:09
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/15/2022 19:21:53
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/16/2022 7:22:51
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/16/2022 19:26:55

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/17/2022 7:16:17
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/17/2022 19:16:36
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/18/2022 7:27:59
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/18/2022 19:18:40
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/19/2022 7:23:22
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/19/2022 19:11:00
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/20/2022 7:19:40
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/20/2022 19:19:50
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/21/2022 7:28:38
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/21/2022 19:16:18
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/22/2022 7:19:32
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/22/2022 19:12:12
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/23/2022 7:15:59
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/23/2022 19:17:55
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/24/2022 7:16:53
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/24/2022 19:12:07
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/25/2022 7:17:50
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/25/2022 19:18:30
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/26/2022 7:17:49
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/26/2022 19:21:24
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/27/2022 7:14:56
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/27/2022 19:24:21
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/28/2022 7:31:27

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/28/2022 19:22:17
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/29/2022 7:18:48
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/29/2022 19:29:11
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/30/2022 7:13:25
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	11/30/2022 19:21:34
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/1/2022 7:16:26
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/1/2022 19:22:14
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/2/2022 7:27:14
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/2/2022 19:28:07
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/3/2022 7:18:20
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/3/2022 19:16:23
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/4/2022 7:04:57
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/4/2022 19:13:15
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/5/2022 7:18:22
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/5/2022 19:49:53
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/6/2022 7:15:05
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		UNSAT	12/6/2022 20:02:10
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/7/2022 7:25:14
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/7/2022 19:24:02
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/8/2022 7:20:03
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/8/2022 19:34:00
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/9/2022 7:20:32
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/9/2022 19:19:56

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/10/2022 7:17:09
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/11/2022 7:12:36
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/11/2022 19:22:04
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/12/2022 7:22:15
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/12/2022 19:17:43
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/13/2022 7:24:51
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/13/2022 19:26:35
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/14/2022 7:23:46
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/14/2022 19:25:12
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/15/2022 7:21:28
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/15/2022 19:25:13
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/16/2022 7:19:33
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/16/2022 19:18:38
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/17/2022 7:17:31
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/17/2022 19:22:51
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/18/2022 7:20:00
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/18/2022 19:18:44
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/19/2022 7:16:57
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/19/2022 19:13:36
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/20/2022 7:09:10
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/20/2022 19:18:39
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/21/2022 7:10:44
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/21/2022 19:22:43

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/22/2022 7:14:03
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/22/2022 19:23:58
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/23/2022 7:22:53
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/23/2022 19:15:10
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/24/2022 7:19:53
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/24/2022 19:18:50
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/25/2022 7:17:15
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/25/2022 19:17:30
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/26/2022 7:15:12
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/26/2022 19:13:14
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/27/2022 7:11:54
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/27/2022 19:20:41
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/28/2022 7:18:07
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/28/2022 19:16:28
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/29/2022 7:20:41
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/29/2022 19:20:29
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/30/2022 7:29:20
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/30/2022 19:21:10
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/31/2022 7:19:11
HVAC: 100 area re-circulation fan/plenum (PDT-833 or PDT-835) (sta # 13)	.050		SAT	12/31/2022 19:14:26
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/1/2022 7:14:43
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/1/2022 19:16:09
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/2/2022 7:18:18

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/2/2022 19:18:50
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/3/2022 7:17:46
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/3/2022 19:23:37
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/4/2022 7:18:35
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/6/2022 12:32:02
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/5/2022 7:18:41
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/5/2022 19:16:23
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/6/2022 7:24:52
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/6/2022 19:18:58
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/7/2022 7:17:23
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/7/2022 19:25:19
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/8/2022 7:21:04
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/8/2022 19:13:57
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/9/2022 7:20:28
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/9/2022 19:20:31
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/10/2022 7:27:05
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/10/2022 19:13:01
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/11/2022 7:47:10
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/11/2022 19:22:29
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/12/2022 7:21:54
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/12/2022 19:29:07
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/13/2022 7:24:03
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/13/2022 19:09:30

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/14/2022 7:21:57
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/14/2022 19:18:31
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/15/2022 7:29:57
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/15/2022 19:10:37
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/16/2022 7:32:43
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/16/2022 19:17:06
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/17/2022 7:14:30
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/17/2022 19:32:49
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/18/2022 7:18:25
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/18/2022 19:14:34
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/19/2022 7:20:52
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/19/2022 19:25:42
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/20/2022 7:07:59
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/20/2022 19:33:34
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/21/2022 7:24:16
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/21/2022 19:29:32
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/22/2022 7:23:37
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/22/2022 19:16:03
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/23/2022 7:19:52
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/23/2022 19:08:01
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/24/2022 7:14:35
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/24/2022 19:25:57
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/25/2022 7:20:30

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/25/2022 19:18:29
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/26/2022 7:22:00
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/26/2022 19:18:29
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/27/2022 7:22:59
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/27/2022 19:14:24
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/28/2022 7:25:24
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/28/2022 19:18:18
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/29/2022 7:33:52
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/29/2022 19:22:34
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/30/2022 7:28:15
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/31/2022 7:24:26
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	7/31/2022 19:26:07
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/1/2022 7:15:42
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/1/2022 19:17:24
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/2/2022 7:17:50
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/2/2022 19:15:52
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/3/2022 7:25:48
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/3/2022 19:19:02
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/4/2022 7:33:09
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/4/2022 19:45:06
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/5/2022 7:13:45
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/5/2022 19:28:32
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/6/2022 7:16:05

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/6/2022 19:20:34
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/7/2022 7:14:15
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/7/2022 19:16:09
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/8/2022 7:25:14
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/8/2022 19:30:36
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/9/2022 7:31:17
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/9/2022 19:29:30
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/10/2022 7:14:58
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/10/2022 19:16:45
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/11/2022 7:18:26
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/11/2022 19:21:54
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/12/2022 7:29:46
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/12/2022 19:30:53
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/13/2022 7:25:11
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/13/2022 19:29:01
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/14/2022 7:20:44
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/14/2022 19:28:13
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/15/2022 7:15:51
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/15/2022 19:19:40
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/16/2022 7:17:03
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/16/2022 19:21:26
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/17/2022 7:27:14
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/17/2022 19:24:38

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/18/2022 7:27:51
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/18/2022 19:24:42
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/19/2022 7:16:37
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/19/2022 19:20:19
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/20/2022 7:30:56
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/20/2022 19:19:13
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/21/2022 7:14:05
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/21/2022 19:22:00
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/22/2022 7:16:33
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/22/2022 19:19:21
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/23/2022 7:19:17
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/23/2022 19:22:10
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/24/2022 7:18:53
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/24/2022 19:24:28
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/25/2022 7:19:04
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/25/2022 19:17:30
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/26/2022 7:23:03
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/26/2022 19:29:27
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/27/2022 7:21:03
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/27/2022 19:26:14
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/28/2022 7:09:31
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/28/2022 19:06:29
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/29/2022 7:13:23

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/29/2022 19:09:18
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/30/2022 7:00:06
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/30/2022 19:17:22
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/31/2022 7:20:15
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	8/31/2022 19:33:15
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/1/2022 7:16:17
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/1/2022 19:34:41
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/2/2022 7:02:58
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/2/2022 19:32:27
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/3/2022 7:14:26
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/3/2022 19:23:56
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/4/2022 7:03:58
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/4/2022 19:17:11
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/5/2022 7:25:52
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/5/2022 19:31:26
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/6/2022 7:14:40
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/6/2022 19:23:14
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/7/2022 7:23:50
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/7/2022 19:18:21
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/8/2022 7:24:32
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/8/2022 19:29:59
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/9/2022 7:26:50
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/9/2022 19:17:58

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/10/2022 7:16:13
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/10/2022 19:25:24
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/11/2022 7:14:03
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/11/2022 19:22:41
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/12/2022 7:29:45
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/12/2022 19:17:15
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/13/2022 7:20:50
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/13/2022 19:21:28
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/14/2022 7:22:06
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/14/2022 19:25:06
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/15/2022 7:21:57
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/15/2022 19:25:32
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/16/2022 7:24:18
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/16/2022 19:19:41
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/17/2022 7:25:53
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/17/2022 19:19:52
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/18/2022 7:19:04
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/18/2022 19:15:16
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/19/2022 7:29:37
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/19/2022 19:37:21
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/20/2022 7:39:44
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/20/2022 19:13:39
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/21/2022 7:27:16

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/21/2022 19:17:09
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/22/2022 7:23:28
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/22/2022 19:31:16
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/23/2022 7:28:32
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/23/2022 19:21:48
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/24/2022 7:22:43
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/24/2022 19:20:31
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/25/2022 7:23:01
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/25/2022 19:13:35
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/26/2022 7:23:37
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/26/2022 19:24:32
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/27/2022 7:16:43
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/27/2022 19:19:44
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/28/2022 7:22:35
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/28/2022 19:14:08
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/29/2022 7:22:07
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/29/2022 19:35:47
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/30/2022 7:15:49
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	9/30/2022 19:14:16
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/1/2022 7:14:54
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/1/2022 19:25:10
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/2/2022 7:17:57
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/2/2022 19:20:51

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/3/2022 7:26:56
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/3/2022 19:13:06
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/4/2022 7:29:36
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/4/2022 19:18:34
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/5/2022 7:20:40
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/5/2022 19:24:51
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/6/2022 7:20:47
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/6/2022 19:07:10
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/7/2022 7:18:48
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/7/2022 19:12:55
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/8/2022 7:25:21
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/8/2022 19:24:41
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/9/2022 7:23:20
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/9/2022 19:22:07
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/10/2022 7:21:35
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/10/2022 19:22:15
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/11/2022 7:16:17
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/11/2022 19:27:13
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/12/2022 7:17:53
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/12/2022 19:08:00
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/13/2022 7:32:19
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/13/2022 19:25:46
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/14/2022 7:17:02

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/14/2022 19:20:13
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/15/2022 7:15:06
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/15/2022 19:22:18
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/16/2022 7:17:21
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/16/2022 19:23:58
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/17/2022 7:24:25
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/17/2022 19:25:07
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/18/2022 7:17:21
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/18/2022 19:18:23
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/19/2022 7:14:48
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/19/2022 19:24:12
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/20/2022 7:20:50
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/20/2022 19:26:46
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/21/2022 7:24:44
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/21/2022 19:22:14
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/22/2022 7:23:37
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/22/2022 19:23:25
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/23/2022 7:28:30
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/23/2022 19:22:00
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/24/2022 7:18:17
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/24/2022 19:19:19
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/25/2022 7:16:49
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/25/2022 19:20:10

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/26/2022 7:19:42
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/26/2022 19:24:40
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/27/2022 7:09:00
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/27/2022 19:17:50
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/28/2022 7:15:50
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/28/2022 19:17:01
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/29/2022 7:25:55
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/29/2022 19:13:48
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/30/2022 7:11:48
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/30/2022 19:03:53
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/31/2022 7:32:39
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	10/31/2022 19:18:42
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/1/2022 7:29:32
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/1/2022 19:13:08
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/2/2022 7:22:27
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/2/2022 17:06:39
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/3/2022 7:15:42
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/3/2022 19:12:15
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/4/2022 7:37:14
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/4/2022 19:22:36
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/5/2022 7:29:44
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/5/2022 19:21:31
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/6/2022 7:19:19

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/6/2022 19:25:28
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/7/2022 7:21:27
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/7/2022 19:16:37
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/8/2022 7:21:24
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/8/2022 19:14:34
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/9/2022 7:20:19
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		UNSAT	11/9/2022 19:28:00
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/10/2022 7:21:14
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/10/2022 19:18:59
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/11/2022 7:16:00
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/11/2022 19:09:29
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/12/2022 7:19:23
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/12/2022 19:12:17
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/13/2022 7:25:29
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/13/2022 19:17:19
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/14/2022 7:25:30
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/14/2022 19:15:52
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/15/2022 7:07:10
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/15/2022 19:21:55
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/16/2022 7:22:53
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/16/2022 19:26:57
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/17/2022 7:16:19
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/17/2022 19:16:27

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/18/2022 7:28:01
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/18/2022 19:18:43
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/19/2022 7:23:23
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/19/2022 19:11:03
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/20/2022 7:19:43
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/20/2022 19:19:53
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/21/2022 7:28:41
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/21/2022 19:16:21
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/22/2022 7:19:29
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/22/2022 19:12:14
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/23/2022 7:16:01
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/23/2022 19:17:57
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/24/2022 7:16:58
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/24/2022 19:12:09
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/25/2022 7:17:51
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/25/2022 19:18:33
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/26/2022 7:17:52
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/26/2022 19:21:28
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/27/2022 7:15:03
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/27/2022 19:24:24
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/28/2022 7:31:29
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/28/2022 19:22:21
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/29/2022 7:18:49

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/29/2022 19:29:14
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/30/2022 7:13:22
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	11/30/2022 19:21:39
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/1/2022 7:16:51
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/1/2022 19:22:16
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/2/2022 7:27:15
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/2/2022 19:28:09
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/3/2022 7:18:44
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/3/2022 19:16:25
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/4/2022 7:04:59
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/4/2022 19:13:17
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/5/2022 7:18:23
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/5/2022 19:49:54
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/6/2022 7:15:07
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/6/2022 19:17:17
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/7/2022 7:25:17
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/7/2022 19:24:04
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/8/2022 7:20:05
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/8/2022 19:34:04
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/9/2022 7:20:35
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/9/2022 19:19:58
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/10/2022 7:17:10
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/11/2022 7:12:39

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/11/2022 19:22:08
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/12/2022 7:22:18
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/12/2022 19:17:44
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/13/2022 7:24:53
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/13/2022 19:26:37
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/14/2022 7:23:49
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/14/2022 19:25:15
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/15/2022 7:21:26
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/15/2022 19:25:19
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/16/2022 7:19:35
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/16/2022 19:18:41
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/17/2022 7:17:34
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/17/2022 19:22:51
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/18/2022 7:20:04
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/18/2022 19:18:46
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/19/2022 7:17:00
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/19/2022 19:13:41
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/20/2022 7:09:13
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/20/2022 19:18:42
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/21/2022 7:10:48
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/21/2022 19:22:44
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/22/2022 7:14:06
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/22/2022 19:24:00

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/23/2022 7:22:57
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/23/2022 19:15:13
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/24/2022 7:20:00
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/24/2022 19:18:53
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/25/2022 7:17:19
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/25/2022 19:17:33
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/26/2022 7:15:15
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/26/2022 19:13:12
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/27/2022 7:11:57
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/27/2022 19:20:42
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/28/2022 7:18:09
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/28/2022 19:16:32
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/29/2022 7:20:44
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/29/2022 19:20:31
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/30/2022 7:29:22
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/30/2022 19:21:14
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/31/2022 7:19:13
HVAC: 300 area re-circulation fan/plenum (PDT-836 or PDT-837) (sta # 19)	.050		SAT	12/31/2022 19:14:28
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/1/2022 7:14:39
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/1/2022 19:16:10
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/2/2022 7:18:22
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/2/2022 19:18:52
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/3/2022 7:17:48

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/3/2022 19:23:39
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/4/2022 7:18:37
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/4/2022 19:08:23
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/5/2022 7:18:43
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/5/2022 19:16:24
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/6/2022 7:24:53
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/6/2022 19:18:59
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/7/2022 7:17:27
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/7/2022 19:25:21
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/8/2022 7:21:06
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/8/2022 19:13:59
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/9/2022 7:20:40
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/9/2022 19:20:36
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/10/2022 7:27:14
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/10/2022 19:13:04
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/11/2022 7:47:13
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/11/2022 19:22:30
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/12/2022 7:21:56
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/12/2022 19:29:08
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/13/2022 7:24:05
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/13/2022 19:09:32
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/14/2022 7:21:58
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/14/2022 19:18:35

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/15/2022 7:30:01
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/15/2022 19:10:39
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/16/2022 7:32:45
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/16/2022 19:17:07
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/17/2022 7:14:31
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/17/2022 19:32:51
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/18/2022 7:18:29
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/18/2022 19:14:36
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/19/2022 7:20:52
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/19/2022 19:25:44
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/20/2022 7:08:02
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/20/2022 19:33:37
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/21/2022 7:24:18
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/21/2022 19:29:34
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/22/2022 7:23:39
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/22/2022 19:16:04
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/23/2022 7:20:01
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/23/2022 19:08:03
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/24/2022 7:14:37
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/24/2022 19:26:00
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/25/2022 7:20:34
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/25/2022 19:18:31
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/26/2022 7:22:02

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/26/2022 19:18:31
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/27/2022 7:23:02
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/27/2022 19:14:26
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/28/2022 7:25:27
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/28/2022 19:17:59
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/29/2022 7:33:53
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/29/2022 19:22:37
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/30/2022 7:28:17
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/31/2022 7:24:28
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	7/31/2022 19:26:09
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/1/2022 7:15:44
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/1/2022 19:17:26
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/2/2022 7:17:54
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/2/2022 19:16:15
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/3/2022 7:25:50
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/3/2022 19:19:05
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/4/2022 7:33:12
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/4/2022 19:45:12
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/5/2022 7:13:57
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/5/2022 19:28:51
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/6/2022 7:16:06
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/6/2022 19:20:45
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/7/2022 7:14:27

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/7/2022 19:16:10
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/8/2022 7:25:17
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/8/2022 19:30:38
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/9/2022 7:31:33
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/9/2022 19:29:32
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/10/2022 7:15:05
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/10/2022 19:16:53
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/11/2022 7:18:30
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/11/2022 19:22:02
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/12/2022 7:30:00
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/12/2022 19:28:51
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/13/2022 7:25:14
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/13/2022 19:29:04
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/14/2022 7:20:47
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/14/2022 19:28:16
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/15/2022 7:15:53
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/15/2022 19:19:47
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/16/2022 7:17:06
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/16/2022 19:21:41
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/17/2022 7:27:23
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/17/2022 19:24:43
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/18/2022 7:27:53
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/18/2022 19:24:46

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/19/2022 7:16:39
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/19/2022 19:20:22
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/20/2022 7:30:59
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/20/2022 19:19:16
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/21/2022 7:14:09
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/21/2022 19:22:23
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/22/2022 7:16:36
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/22/2022 19:19:23
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/23/2022 7:19:19
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/23/2022 19:22:12
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/24/2022 7:19:00
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/24/2022 19:24:30
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/25/2022 7:19:07
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/25/2022 19:17:31
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/26/2022 7:23:06
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/26/2022 19:29:29
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/27/2022 7:21:06
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/27/2022 19:26:16
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/28/2022 7:09:33
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/28/2022 19:06:31
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/29/2022 7:13:25
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/29/2022 19:09:22
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/30/2022 7:00:13

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/30/2022 19:17:30
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/31/2022 7:20:20
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	8/31/2022 19:33:17
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/1/2022 7:16:21
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/1/2022 19:34:46
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/2/2022 7:03:12
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/2/2022 19:32:29
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/3/2022 7:14:29
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/3/2022 19:23:58
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/4/2022 7:04:09
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/4/2022 19:17:13
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/5/2022 7:25:56
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/5/2022 19:31:29
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/6/2022 7:15:00
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/6/2022 19:23:17
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/7/2022 7:24:09
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/7/2022 19:18:32
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/8/2022 7:24:34
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/8/2022 19:30:01
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/9/2022 7:26:53
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/9/2022 19:18:00
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/10/2022 7:16:16
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/10/2022 19:25:26

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/11/2022 7:14:04
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/11/2022 19:22:45
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/12/2022 7:29:48
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/12/2022 19:17:19
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/13/2022 7:20:53
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/13/2022 19:21:35
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/14/2022 7:22:10
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/14/2022 19:25:08
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/15/2022 7:22:01
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/15/2022 19:25:34
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/16/2022 7:24:21
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/16/2022 19:19:44
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/17/2022 7:25:55
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/17/2022 19:19:58
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/18/2022 7:19:06
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/18/2022 19:15:55
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/19/2022 7:29:40
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/19/2022 19:37:25
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/20/2022 7:39:48
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/20/2022 19:13:41
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/21/2022 7:27:19
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/21/2022 19:17:11
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/22/2022 7:23:32

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/22/2022 19:31:21
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/23/2022 7:28:35
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/23/2022 19:21:51
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/24/2022 7:22:44
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/24/2022 19:20:35
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/25/2022 7:23:05
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/25/2022 19:13:39
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/26/2022 7:23:40
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/26/2022 19:24:33
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/27/2022 7:16:45
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/27/2022 19:19:47
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/28/2022 7:22:36
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/28/2022 19:14:12
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/29/2022 7:22:11
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/29/2022 19:35:50
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/30/2022 7:15:32
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	9/30/2022 19:14:19
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/1/2022 7:14:50
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/1/2022 19:25:11
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/2/2022 7:17:49
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/2/2022 19:20:54
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/3/2022 7:26:59
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/3/2022 19:13:09

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/4/2022 7:29:37
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/4/2022 19:18:37
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/5/2022 7:20:44
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/5/2022 19:24:52
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/6/2022 7:20:44
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/6/2022 19:07:11
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/7/2022 7:18:50
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/7/2022 19:12:57
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/8/2022 7:25:25
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/8/2022 19:24:43
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/9/2022 7:23:22
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/9/2022 19:22:10
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/10/2022 7:21:32
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/10/2022 19:22:16
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/11/2022 7:16:20
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/11/2022 19:27:18
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/12/2022 7:17:57
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/12/2022 19:08:04
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/13/2022 7:32:22
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/13/2022 19:25:47
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/14/2022 7:16:52
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/14/2022 19:20:15
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/15/2022 7:15:04

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/15/2022 19:22:19
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/16/2022 7:17:24
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/16/2022 19:24:00
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/17/2022 7:24:27
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/17/2022 19:25:09
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/18/2022 7:17:24
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/18/2022 19:18:27
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/19/2022 7:14:51
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/19/2022 19:24:14
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/20/2022 7:20:55
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/20/2022 19:26:49
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/21/2022 7:24:47
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/21/2022 19:22:16
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/22/2022 7:23:40
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/22/2022 19:23:27
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/23/2022 7:28:33
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/23/2022 19:22:03
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/24/2022 7:18:19
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/24/2022 19:19:22
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/25/2022 7:16:52
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/25/2022 19:20:07
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/26/2022 7:19:45
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/26/2022 19:24:43

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/27/2022 7:09:02
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/27/2022 19:17:56
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/28/2022 7:15:52
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/28/2022 19:17:03
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/29/2022 7:25:58
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/29/2022 19:13:46
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/30/2022 7:11:51
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/30/2022 19:03:51
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/31/2022 7:32:41
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	10/31/2022 19:18:45
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/1/2022 7:29:37
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/1/2022 19:13:12
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/2/2022 7:22:30
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/2/2022 17:06:41
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/3/2022 7:15:43
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/3/2022 19:12:13
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/4/2022 7:37:16
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/4/2022 19:22:38
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/5/2022 7:29:46
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/5/2022 19:21:34
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/6/2022 7:19:21
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/6/2022 19:25:30
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/7/2022 7:21:30

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/7/2022 19:16:35
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/8/2022 7:21:26
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/8/2022 19:14:35
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/9/2022 7:20:21
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		UNSAT	11/9/2022 19:29:25
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/10/2022 7:21:17
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/10/2022 19:19:01
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/11/2022 7:16:03
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/11/2022 19:09:31
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/12/2022 7:19:25
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/12/2022 19:12:05
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/13/2022 7:25:34
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/13/2022 19:17:11
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/14/2022 7:25:34
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/14/2022 19:15:54
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/15/2022 7:07:12
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/15/2022 19:21:58
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/16/2022 7:22:56
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/16/2022 19:26:59
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/17/2022 7:16:42
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/17/2022 19:16:16
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/18/2022 7:28:03
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/18/2022 19:18:46

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/19/2022 7:23:25
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/19/2022 19:11:05
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/20/2022 7:19:45
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/20/2022 19:19:58
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/21/2022 7:28:43
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/21/2022 19:16:24
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/22/2022 7:19:25
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/22/2022 19:12:16
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/23/2022 7:16:04
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/23/2022 19:18:00
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/24/2022 7:17:02
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/24/2022 19:12:12
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/25/2022 7:17:53
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/25/2022 19:18:36
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/26/2022 7:17:54
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/26/2022 19:21:32
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/27/2022 7:15:06
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/27/2022 19:24:30
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/28/2022 7:31:30
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/28/2022 19:22:23
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/29/2022 7:18:51
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/29/2022 19:29:17
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/30/2022 7:13:16

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	11/30/2022 19:21:43
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/1/2022 7:16:49
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/1/2022 19:22:19
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/2/2022 7:27:18
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/2/2022 19:28:12
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/3/2022 7:18:47
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/3/2022 19:16:29
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/4/2022 7:05:00
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/4/2022 19:13:19
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/5/2022 7:18:26
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/5/2022 19:49:55
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/6/2022 7:15:11
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/6/2022 19:17:20
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/7/2022 7:25:19
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/7/2022 19:24:07
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/8/2022 7:20:07
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/8/2022 19:34:07
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/9/2022 7:20:41
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/9/2022 19:56:26
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/10/2022 7:17:12
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/11/2022 7:12:40
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/11/2022 19:22:11
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/12/2022 7:22:21

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/12/2022 19:17:46
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/13/2022 7:24:56
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/13/2022 19:26:40
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/14/2022 7:23:51
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/14/2022 19:25:17
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/15/2022 7:21:23
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/15/2022 19:25:21
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/16/2022 7:19:40
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/16/2022 19:18:45
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/17/2022 7:17:38
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/17/2022 19:22:53
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/18/2022 7:20:06
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/18/2022 19:18:50
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/19/2022 7:17:03
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/19/2022 19:13:44
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/20/2022 7:09:16
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/20/2022 19:18:45
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/21/2022 7:10:51
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/21/2022 19:22:46
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/22/2022 7:14:08
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/22/2022 19:24:02
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/23/2022 7:23:03
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/23/2022 19:15:16

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/24/2022 7:20:08
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/24/2022 19:19:00
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/25/2022 7:17:22
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/25/2022 19:17:35
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/26/2022 7:15:18
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/26/2022 19:13:07
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/27/2022 7:11:59
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/27/2022 19:20:44
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/28/2022 7:18:11
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/28/2022 19:16:36
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/29/2022 7:20:46
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/29/2022 19:20:33
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/30/2022 7:29:25
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/30/2022 19:21:17
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/31/2022 7:19:16
HVAC: 400 area re-circulation fan/plenum (PDT-838 or PDT-839) (sta # 14)	.050		SAT	12/31/2022 19:14:30
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/1/2022 7:14:46
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/1/2022 19:16:11
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/2/2022 7:18:20
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/2/2022 19:18:54
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/3/2022 7:17:50
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/3/2022 19:23:42
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/4/2022 7:18:51

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/4/2022 19:08:24
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/5/2022 7:18:45
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/5/2022 19:16:26
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/6/2022 7:24:55
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/6/2022 19:19:02
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/7/2022 7:17:29
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/7/2022 19:25:24
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/8/2022 7:21:07
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/8/2022 19:14:00
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/9/2022 7:20:59
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/9/2022 19:20:40
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/10/2022 7:28:08
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/10/2022 19:13:12
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/11/2022 7:47:15
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/11/2022 19:22:32
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/12/2022 7:21:58
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/12/2022 19:29:09
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/13/2022 7:24:07
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/13/2022 19:09:58
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/14/2022 7:21:59
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/14/2022 19:19:06
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/15/2022 7:30:03
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/15/2022 19:10:40

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/16/2022 7:32:48
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/16/2022 19:17:08
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/17/2022 7:14:32
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/17/2022 19:32:54
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/18/2022 7:18:36
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/18/2022 19:14:44
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/19/2022 7:20:52
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/19/2022 19:25:55
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/20/2022 7:08:03
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/20/2022 19:33:39
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/21/2022 7:24:21
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/21/2022 19:29:36
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/22/2022 7:23:40
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/22/2022 19:16:06
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/23/2022 7:20:10
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/23/2022 19:08:04
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/24/2022 7:14:38
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/24/2022 19:26:04
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/25/2022 7:20:41
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/25/2022 19:18:34
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/26/2022 7:22:04
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/26/2022 19:18:35
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/27/2022 7:23:06

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/27/2022 19:14:27
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/28/2022 7:25:30
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/28/2022 19:17:57
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/29/2022 7:33:55
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/29/2022 19:22:41
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/30/2022 7:28:20
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/31/2022 7:24:32
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	7/31/2022 19:26:12
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/1/2022 7:15:45
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/1/2022 19:17:28
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/2/2022 7:17:59
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/2/2022 19:16:30
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/3/2022 7:25:52
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/3/2022 19:19:09
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/4/2022 7:33:13
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/4/2022 19:45:40
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/5/2022 7:13:58
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/5/2022 19:29:02
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/6/2022 7:16:08
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/6/2022 19:20:52
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/7/2022 7:14:17
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/7/2022 19:16:12
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/8/2022 7:25:19

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/8/2022 19:31:05
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/9/2022 7:31:40
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/9/2022 19:30:10
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/10/2022 7:15:10
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/10/2022 19:17:10
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/11/2022 7:18:32
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/11/2022 19:22:17
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/12/2022 7:30:08
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/12/2022 19:28:57
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/13/2022 7:25:16
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/13/2022 19:29:10
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/14/2022 7:20:50
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/14/2022 19:28:47
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/15/2022 7:15:57
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/15/2022 19:19:58
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/16/2022 7:17:11
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/16/2022 19:21:43
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/17/2022 7:27:29
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/17/2022 19:25:06
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/18/2022 7:27:57
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/18/2022 19:24:51
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/19/2022 7:16:41
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/19/2022 19:20:26

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/20/2022 7:31:00
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/20/2022 19:19:20
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/21/2022 7:14:11
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/21/2022 19:22:43
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/22/2022 7:16:39
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/22/2022 19:19:25
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/23/2022 7:19:24
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/23/2022 19:22:14
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/24/2022 7:18:57
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/24/2022 19:24:32
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/25/2022 7:19:38
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/25/2022 19:17:33
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/26/2022 7:23:09
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/26/2022 19:29:32
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/27/2022 7:21:10
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/27/2022 19:26:18
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/28/2022 7:09:35
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/28/2022 19:06:32
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/29/2022 7:13:28
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/29/2022 19:09:25
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/30/2022 7:00:23
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/30/2022 19:17:32
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/31/2022 7:20:21

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	8/31/2022 19:33:26
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/1/2022 7:16:26
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/1/2022 19:34:52
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/2/2022 7:03:22
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/2/2022 19:32:31
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/3/2022 7:14:32
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/3/2022 19:24:00
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/4/2022 7:04:16
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/4/2022 19:17:15
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/5/2022 7:26:00
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/5/2022 19:31:32
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/6/2022 7:15:05
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/6/2022 19:23:21
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/7/2022 7:24:12
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/7/2022 19:18:35
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/8/2022 7:24:36
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/8/2022 19:30:03
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/9/2022 7:26:55
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/9/2022 19:18:03
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/10/2022 7:16:21
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/10/2022 19:25:29
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/11/2022 7:14:06
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/11/2022 19:22:49

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/12/2022 7:29:52
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/12/2022 19:17:23
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/13/2022 7:20:56
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/13/2022 19:22:38
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/14/2022 7:22:19
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/14/2022 19:25:10
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/15/2022 7:22:04
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/15/2022 19:25:37
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/16/2022 7:24:24
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/16/2022 19:19:47
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/17/2022 7:25:56
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/17/2022 19:20:08
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/18/2022 7:19:07
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/18/2022 19:15:38
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/19/2022 7:29:44
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/19/2022 19:37:27
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/20/2022 7:39:52
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/20/2022 19:13:43
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/21/2022 7:27:21
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/21/2022 19:17:14
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/22/2022 7:23:34
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/22/2022 19:31:24
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/23/2022 7:28:38

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/23/2022 19:21:53
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/24/2022 7:22:46
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/24/2022 19:20:37
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/25/2022 7:23:08
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/25/2022 19:13:41
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/26/2022 7:23:44
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/26/2022 19:24:35
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/27/2022 7:16:48
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/27/2022 19:19:49
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/28/2022 7:22:37
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/28/2022 19:14:16
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/29/2022 7:22:15
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/29/2022 19:35:52
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/30/2022 7:15:47
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	9/30/2022 19:14:23
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/1/2022 7:14:32
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/1/2022 19:25:12
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/2/2022 7:17:47
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/2/2022 19:20:58
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/3/2022 7:27:02
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/3/2022 19:13:12
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/4/2022 7:29:38
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/4/2022 19:18:40

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/5/2022 7:20:42
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/5/2022 19:24:54
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/6/2022 7:20:43
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/6/2022 19:07:12
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/7/2022 7:18:51
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/7/2022 19:13:00
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/8/2022 7:25:28
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/8/2022 19:24:46
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/9/2022 7:23:25
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/9/2022 19:22:12
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/10/2022 7:21:30
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/10/2022 19:22:17
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/11/2022 7:16:24
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/11/2022 19:28:06
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/12/2022 7:18:01
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/12/2022 19:08:07
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/13/2022 7:32:25
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/13/2022 19:25:49
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/14/2022 7:17:06
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/14/2022 19:20:18
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/15/2022 7:15:00
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/15/2022 19:22:21
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/16/2022 7:17:28

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/16/2022 19:24:01
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/17/2022 7:24:30
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/17/2022 19:25:11
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/18/2022 7:17:27
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/18/2022 19:18:31
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/19/2022 7:14:55
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/19/2022 19:24:16
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/20/2022 7:20:57
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/20/2022 19:26:52
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/21/2022 7:24:50
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/21/2022 19:22:18
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/22/2022 7:23:42
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/22/2022 19:23:30
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/23/2022 7:28:37
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/23/2022 19:22:07
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/24/2022 7:18:20
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/24/2022 19:19:24
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/25/2022 7:16:55
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/25/2022 19:20:05
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/26/2022 7:19:48
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/26/2022 19:24:46
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/27/2022 7:09:05
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/27/2022 19:17:59

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/28/2022 7:15:55
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/28/2022 19:17:05
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/29/2022 7:26:00
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/29/2022 19:13:43
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/30/2022 7:11:53
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/30/2022 19:03:49
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/31/2022 7:32:44
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	10/31/2022 19:18:50
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/1/2022 7:29:40
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/1/2022 19:13:17
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/2/2022 7:22:33
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/2/2022 17:06:42
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/3/2022 7:15:45
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/3/2022 19:11:54
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/4/2022 7:37:26
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/4/2022 19:22:40
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/5/2022 7:29:49
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/5/2022 19:21:36
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/6/2022 7:19:24
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/6/2022 19:25:32
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/7/2022 7:21:37
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/7/2022 19:16:32
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/8/2022 7:21:29

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/8/2022 19:14:37
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/9/2022 7:20:24
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/9/2022 19:29:40
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/10/2022 7:21:19
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/10/2022 19:19:02
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/11/2022 7:16:06
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/11/2022 19:09:33
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/12/2022 7:19:28
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/12/2022 19:11:57
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/13/2022 7:25:42
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/13/2022 19:17:08
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/14/2022 7:25:37
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/14/2022 19:15:57
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/15/2022 7:07:13
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/15/2022 19:22:00
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/16/2022 7:22:58
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/16/2022 19:27:01
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/17/2022 7:16:45
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/17/2022 19:16:01
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/18/2022 7:28:05
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/18/2022 19:18:50
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/19/2022 7:23:26
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/19/2022 19:11:07

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/20/2022 7:19:48
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/20/2022 19:20:01
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/21/2022 7:28:46
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/21/2022 19:16:27
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/22/2022 7:19:19
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/22/2022 19:12:19
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/23/2022 7:16:06
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/23/2022 19:18:03
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/24/2022 7:17:04
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/24/2022 19:12:14
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/25/2022 7:17:56
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/25/2022 19:18:38
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/26/2022 7:17:57
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/26/2022 19:21:35
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/27/2022 7:15:10
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/27/2022 19:24:32
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/28/2022 7:31:32
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/28/2022 19:22:25
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/29/2022 7:18:53
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/29/2022 19:29:20
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/30/2022 7:13:13
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	11/30/2022 19:21:50
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/1/2022 7:16:45

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/1/2022 19:22:21
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/2/2022 7:27:20
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/2/2022 19:28:14
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/3/2022 7:18:48
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/3/2022 19:16:33
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/4/2022 7:05:02
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/4/2022 19:13:20
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/5/2022 7:18:29
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/5/2022 19:49:56
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/6/2022 7:15:11
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		UNSAT	12/6/2022 20:02:45
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/7/2022 7:25:22
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/7/2022 19:24:09
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/8/2022 7:20:08
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/8/2022 19:34:10
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/9/2022 7:20:42
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/9/2022 19:20:05
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/10/2022 7:17:14
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/11/2022 7:12:42
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/11/2022 19:22:15
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/12/2022 7:22:24
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/12/2022 19:17:48
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/13/2022 7:24:59

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/13/2022 19:26:42
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/14/2022 7:23:54
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/14/2022 19:25:20
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/15/2022 7:21:20
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/15/2022 19:25:23
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/16/2022 7:19:44
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/16/2022 19:18:47
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/17/2022 7:17:40
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/17/2022 19:22:55
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/18/2022 7:20:09
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/18/2022 19:18:54
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/19/2022 7:17:07
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/19/2022 19:13:47
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/20/2022 7:09:19
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/20/2022 19:18:49
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/21/2022 7:10:55
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/21/2022 19:22:49
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/22/2022 7:14:11
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/22/2022 19:24:04
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/23/2022 7:23:08
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/23/2022 19:15:23
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/24/2022 7:20:21
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/24/2022 19:19:03

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/25/2022 7:17:26
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/25/2022 19:17:37
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/26/2022 7:15:20
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/26/2022 19:13:05
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/27/2022 7:12:05
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/27/2022 19:20:46
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/28/2022 7:18:15
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/28/2022 19:16:39
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/29/2022 7:20:49
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/29/2022 19:20:36
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/30/2022 7:29:28
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/30/2022 19:21:20
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/31/2022 7:19:19
HVAC: Vault re-circulation fan/plenum (PDT-840 or PDT-841) (sta # 15)	.050		SAT	12/31/2022 19:14:33
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/1/2022 7:15:49
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/1/2022 19:16:14
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/2/2022 7:18:24
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/2/2022 19:18:55
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/3/2022 7:17:52
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/3/2022 19:23:44

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/4/2022 7:18:39
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/4/2022 19:08:26
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/5/2022 7:18:46
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/5/2022 19:16:27
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/6/2022 7:24:57
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/6/2022 19:19:04
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/7/2022 7:17:32
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/7/2022 19:25:26
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/8/2022 7:21:08
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/8/2022 19:14:02
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/9/2022 7:21:28
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/9/2022 19:20:43
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/10/2022 7:28:16
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/10/2022 19:13:06
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/11/2022 7:47:19
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/11/2022 19:22:33

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/12/2022 7:21:59
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/12/2022 19:29:11
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/13/2022 7:24:09
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/13/2022 19:10:03
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/14/2022 7:22:00
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/14/2022 19:19:17
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/15/2022 7:30:05
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/15/2022 19:10:42
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/16/2022 7:32:50
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/16/2022 19:17:09
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/17/2022 7:14:34
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/17/2022 19:32:56
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/18/2022 7:18:44
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/18/2022 19:14:47
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/19/2022 7:20:53
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/19/2022 19:25:58

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/20/2022 7:08:05
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/20/2022 19:33:41
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/21/2022 7:24:23
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/21/2022 19:29:39
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/22/2022 7:23:42
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/22/2022 19:16:07
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/23/2022 7:20:15
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/23/2022 19:08:06
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/24/2022 7:14:39
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/24/2022 19:26:07
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/25/2022 7:20:45
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/25/2022 19:18:36
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/26/2022 7:22:05
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/26/2022 19:18:39
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/27/2022 7:23:10
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/27/2022 19:14:28

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/28/2022 7:25:32
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/28/2022 19:17:55
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/29/2022 7:33:57
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/29/2022 19:22:44
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/30/2022 7:28:22
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/31/2022 7:24:34
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	7/31/2022 19:26:15
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/1/2022 7:15:47
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/1/2022 19:17:29
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/2/2022 7:18:02
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/2/2022 19:16:38
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/3/2022 7:25:54
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/3/2022 19:19:12
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/4/2022 7:33:17
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/4/2022 19:46:48
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/5/2022 7:14:01

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/5/2022 19:29:09
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/6/2022 7:16:09
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/6/2022 19:21:00
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/7/2022 7:14:34
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/7/2022 19:16:13
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/8/2022 7:25:22
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/8/2022 19:31:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/9/2022 7:31:46
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/9/2022 19:30:46
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/10/2022 7:15:19
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/10/2022 19:17:17
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/11/2022 7:18:34
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/11/2022 19:22:21
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/12/2022 7:30:15
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/12/2022 19:29:19
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/13/2022 7:25:19

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/13/2022 19:29:12
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/14/2022 7:20:57
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/14/2022 19:29:15
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/15/2022 7:16:07
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/15/2022 19:20:06
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/16/2022 7:17:13
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/16/2022 19:21:46
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/17/2022 7:27:34
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/17/2022 19:25:41
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/18/2022 7:28:00
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/18/2022 19:24:55
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/19/2022 7:16:44
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/19/2022 19:20:30
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/20/2022 7:31:02
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/20/2022 19:19:27
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/21/2022 7:14:13

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/21/2022 19:22:49
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/22/2022 7:16:41
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/22/2022 19:19:28
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/23/2022 7:20:06
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/23/2022 19:22:15
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/24/2022 7:19:02
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/24/2022 19:24:34
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/25/2022 7:19:12
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/25/2022 19:17:34
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/26/2022 7:23:11
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/26/2022 19:29:33
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/27/2022 7:21:15
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/27/2022 19:26:22
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/28/2022 7:09:37
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/28/2022 19:06:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/29/2022 7:13:29

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/29/2022 19:09:28
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/30/2022 7:00:33
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/30/2022 19:17:34
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/31/2022 7:20:23
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	8/31/2022 19:33:28
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/1/2022 7:16:28
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/1/2022 19:34:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/2/2022 7:03:32
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/2/2022 19:32:32
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/3/2022 7:14:37
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/3/2022 19:24:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/4/2022 7:04:22
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/4/2022 19:17:17
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/5/2022 7:26:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/5/2022 19:31:36
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/6/2022 7:15:35

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/6/2022 19:23:24
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/7/2022 7:24:15
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/7/2022 19:18:57
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/8/2022 7:24:37
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/8/2022 19:30:05
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/9/2022 7:26:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/9/2022 19:18:05
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/10/2022 7:16:23
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/10/2022 19:25:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/11/2022 7:14:08
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/11/2022 19:22:54
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/12/2022 7:29:55
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/12/2022 19:17:27
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/13/2022 7:20:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/13/2022 19:22:00
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/14/2022 7:22:50

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/14/2022 19:25:11
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/15/2022 7:22:49
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/15/2022 19:25:41
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/16/2022 7:24:26
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/16/2022 19:19:50
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/17/2022 7:25:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/17/2022 19:20:23
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/18/2022 7:19:09
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/18/2022 19:15:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/19/2022 7:29:47
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/19/2022 19:37:30
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/20/2022 7:39:56
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/20/2022 19:13:45
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/21/2022 7:27:24
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/21/2022 19:17:17
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/22/2022 7:23:37

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/22/2022 19:31:28
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/23/2022 7:28:42
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/23/2022 19:21:56
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/24/2022 7:22:48
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/24/2022 19:20:40
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/25/2022 7:23:11
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/25/2022 19:13:43
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/26/2022 7:23:45
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/26/2022 19:24:36
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/27/2022 7:16:56
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/27/2022 19:19:52
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/28/2022 7:22:39
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/28/2022 19:14:20
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/29/2022 7:22:19
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/29/2022 19:35:56
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/30/2022 7:15:41

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	9/30/2022 19:14:26
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/1/2022 7:14:29
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/1/2022 19:25:14
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/2/2022 7:17:45
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/2/2022 19:21:00
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/3/2022 7:27:05
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/3/2022 19:13:16
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/4/2022 7:29:40
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/4/2022 19:18:42
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/5/2022 7:20:47
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/5/2022 19:24:56
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/6/2022 7:20:39
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/6/2022 19:07:14
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/7/2022 7:18:54
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/7/2022 19:13:02
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/8/2022 7:25:32

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/8/2022 19:24:50
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/9/2022 7:23:27
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/9/2022 19:22:14
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/10/2022 7:21:29
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/10/2022 19:22:18
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/11/2022 7:16:24
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/11/2022 19:28:15
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/12/2022 7:18:06
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/12/2022 19:08:10
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/13/2022 7:32:29
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/13/2022 19:25:50
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/14/2022 7:17:03
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/14/2022 19:20:21
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/15/2022 7:14:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/15/2022 19:22:22
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/16/2022 7:17:35

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/16/2022 19:24:03
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/17/2022 7:24:33
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/17/2022 19:25:13
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/18/2022 7:17:30
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/18/2022 19:18:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/19/2022 7:14:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/19/2022 19:24:17
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/20/2022 7:21:00
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/20/2022 19:26:55
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/21/2022 7:24:54
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/21/2022 19:22:21
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/22/2022 7:23:45
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/22/2022 19:23:33
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/23/2022 7:28:40
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/23/2022 19:22:09
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/24/2022 7:18:23

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/24/2022 19:19:27
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/25/2022 7:16:57
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/25/2022 19:20:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/26/2022 7:19:52
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/26/2022 19:24:49
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/27/2022 7:09:07
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/27/2022 19:18:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/28/2022 7:15:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/28/2022 19:17:06
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/29/2022 7:26:02
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/29/2022 19:13:41
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/30/2022 7:11:56
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/30/2022 19:03:46
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/31/2022 7:32:46
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	10/31/2022 19:18:54
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/1/2022 7:29:44

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/1/2022 19:13:20
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/2/2022 7:22:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/2/2022 17:06:44
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/3/2022 7:15:47
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/3/2022 19:11:34
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/4/2022 7:37:29
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/4/2022 19:22:42
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/5/2022 7:29:51
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/5/2022 19:21:39
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/6/2022 7:19:26
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/6/2022 19:25:34
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/7/2022 7:21:41
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/7/2022 19:16:30
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/8/2022 7:21:31
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/8/2022 19:14:40
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/9/2022 7:20:29

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/9/2022 19:29:47
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/10/2022 7:21:21
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/10/2022 19:19:04
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/11/2022 7:16:08
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/11/2022 19:09:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/12/2022 7:19:30
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/12/2022 19:11:51
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/13/2022 7:25:55
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/13/2022 19:17:06
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/14/2022 7:25:44
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/14/2022 19:16:00
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/15/2022 7:07:15
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/15/2022 19:22:05
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/16/2022 7:23:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/16/2022 19:27:03
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/17/2022 7:16:49

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/17/2022 19:15:59
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/18/2022 7:28:07
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/18/2022 19:18:53
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/19/2022 7:23:28
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/19/2022 19:11:10
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/20/2022 7:19:50
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/20/2022 19:20:04
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/21/2022 7:28:48
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/21/2022 19:16:30
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/22/2022 7:19:16
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/22/2022 19:12:21
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/23/2022 7:16:09
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/23/2022 19:18:05
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/24/2022 7:17:05
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/24/2022 19:12:16
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/25/2022 7:17:58

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/25/2022 19:18:41
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/26/2022 7:17:59
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/26/2022 19:21:39
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/27/2022 7:15:13
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/27/2022 19:24:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/28/2022 7:31:34
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/28/2022 19:22:28
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/29/2022 7:18:54
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/29/2022 19:29:23
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/30/2022 7:13:02
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	11/30/2022 19:21:55
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/1/2022 7:16:42
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/1/2022 19:22:24
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/2/2022 7:27:22
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/2/2022 19:28:16
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/3/2022 7:18:50

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/3/2022 19:16:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/4/2022 7:05:04
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/4/2022 19:13:22
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/5/2022 7:18:31
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/5/2022 19:49:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/6/2022 7:15:12
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/6/2022 19:17:27
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/7/2022 7:25:24
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/7/2022 19:24:13
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/8/2022 7:20:10
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/8/2022 19:34:12
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/9/2022 7:20:45
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/9/2022 19:20:07
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/10/2022 7:17:16
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/11/2022 7:12:45
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/11/2022 19:22:21

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/12/2022 7:22:26
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/12/2022 19:17:50
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/13/2022 7:25:02
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/13/2022 19:26:45
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/14/2022 7:24:12
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/14/2022 19:25:44
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/15/2022 7:21:15
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/15/2022 19:25:25
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/16/2022 7:19:46
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/16/2022 19:18:50
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/17/2022 7:17:44
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/17/2022 19:22:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/18/2022 7:20:12
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/18/2022 19:18:56
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/19/2022 7:17:09
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/19/2022 19:13:49

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/20/2022 7:09:21
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/20/2022 19:18:55
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/21/2022 7:10:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/21/2022 19:22:51
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/22/2022 7:14:14
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/22/2022 19:24:06
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/23/2022 7:23:13
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/23/2022 19:15:27
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/24/2022 7:21:11
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/24/2022 19:19:07
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/25/2022 7:17:30
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/25/2022 19:17:40
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/26/2022 7:15:23
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/26/2022 19:13:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/27/2022 7:12:08
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/27/2022 19:20:47

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/28/2022 7:18:17
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/28/2022 19:16:42
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/29/2022 7:20:52
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/29/2022 19:20:38
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/30/2022 7:29:31
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/30/2022 19:21:24
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/31/2022 7:19:21
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 200 area (sta # 16)			SAT	12/31/2022 19:14:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/1/2022 7:14:50
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/1/2022 19:16:15
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/2/2022 7:18:26
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/2/2022 19:18:57
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/3/2022 7:17:53
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/3/2022 19:23:46
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/4/2022 7:18:40
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/4/2022 19:08:28

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/5/2022 7:18:49
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/5/2022 19:16:30
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/6/2022 7:24:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/6/2022 19:19:05
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/7/2022 7:17:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/7/2022 19:25:29
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/8/2022 7:21:09
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/8/2022 19:14:04
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/9/2022 7:21:47
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/9/2022 19:20:44
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/10/2022 7:28:20
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/10/2022 19:13:14
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/11/2022 7:47:22
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/11/2022 19:22:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/12/2022 7:22:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/12/2022 19:29:12

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/13/2022 7:24:10
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/13/2022 19:10:14
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/14/2022 7:22:03
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/14/2022 19:19:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/15/2022 7:30:10
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/15/2022 19:10:43
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/16/2022 7:32:53
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/16/2022 19:17:11
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/17/2022 7:14:37
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/17/2022 19:32:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/18/2022 7:18:51
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/18/2022 19:14:51
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/19/2022 7:20:54
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/19/2022 19:26:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/20/2022 7:08:06
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/20/2022 19:33:45

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/21/2022 7:24:26
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/21/2022 19:29:41
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/22/2022 7:23:44
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/22/2022 19:16:09
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/23/2022 7:20:27
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/23/2022 19:08:10
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/24/2022 7:14:40
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/24/2022 19:26:07
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/25/2022 7:20:50
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/25/2022 19:18:38
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/26/2022 7:22:06
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/26/2022 19:18:40
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/27/2022 7:23:13
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/27/2022 19:14:30
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/28/2022 7:25:36
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/28/2022 19:17:55

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/29/2022 7:33:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/29/2022 19:22:46
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/30/2022 7:28:28
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/31/2022 7:24:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	7/31/2022 19:26:18
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/1/2022 7:15:49
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/1/2022 19:17:30
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/2/2022 7:18:09
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/2/2022 19:16:51
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/3/2022 7:25:56
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/3/2022 19:19:15
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/4/2022 7:33:20
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/4/2022 19:47:37
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/5/2022 7:14:04
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/5/2022 19:29:15
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/6/2022 7:16:11

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/6/2022 19:21:07
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/7/2022 7:14:38
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/7/2022 19:16:15
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/8/2022 7:25:24
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/8/2022 19:32:26
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/9/2022 7:31:55
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/9/2022 19:31:07
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/10/2022 7:15:22
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/10/2022 19:17:32
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/11/2022 7:18:39
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/11/2022 19:22:28
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/12/2022 7:30:19
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/12/2022 19:30:09
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/13/2022 7:25:21
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/13/2022 19:29:15
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/14/2022 7:20:58

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/14/2022 19:29:19
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/15/2022 7:15:59
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/15/2022 19:20:14
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/16/2022 7:17:16
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/16/2022 19:21:47
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/17/2022 7:27:36
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/17/2022 19:25:45
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/18/2022 7:28:02
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/18/2022 19:25:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/19/2022 7:16:46
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/19/2022 19:20:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/20/2022 7:31:04
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/20/2022 19:19:31
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/21/2022 7:14:16
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/21/2022 19:22:57
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/22/2022 7:16:43

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/22/2022 19:19:29
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/23/2022 7:20:09
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/23/2022 19:22:16
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/24/2022 7:19:04
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/24/2022 19:24:37
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/25/2022 7:19:09
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/25/2022 19:17:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/26/2022 7:23:14
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/26/2022 19:29:37
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/27/2022 7:21:21
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/27/2022 19:26:23
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/28/2022 7:09:40
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/28/2022 19:06:37
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/29/2022 7:13:30
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/29/2022 19:09:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/30/2022 7:00:38

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/30/2022 19:17:37
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/31/2022 7:20:27
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	8/31/2022 19:33:30
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/1/2022 7:16:31
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/1/2022 19:35:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/2/2022 7:03:40
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/2/2022 19:32:34
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/3/2022 7:14:40
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/3/2022 19:24:03
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/4/2022 7:04:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/4/2022 19:17:21
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/5/2022 7:26:38
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/5/2022 19:31:39
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/6/2022 7:15:37
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/6/2022 19:23:27
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/7/2022 7:24:18

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/7/2022 19:19:02
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/8/2022 7:24:39
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/8/2022 19:30:08
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/9/2022 7:27:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/9/2022 19:18:08
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/10/2022 7:16:26
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/10/2022 19:25:38
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/11/2022 7:14:09
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/11/2022 19:22:59
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/12/2022 7:29:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/12/2022 19:17:29
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/13/2022 7:21:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/13/2022 19:21:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/14/2022 7:22:53
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/14/2022 19:25:13
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/15/2022 7:22:30

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/15/2022 19:25:44
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/16/2022 7:24:29
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/16/2022 19:19:57
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/17/2022 7:25:59
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/17/2022 19:20:16
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/18/2022 7:19:10
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/18/2022 19:15:33
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/19/2022 7:29:50
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/19/2022 19:37:32
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/20/2022 7:40:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/20/2022 19:13:47
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/21/2022 7:27:26
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/21/2022 19:17:21
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/22/2022 7:23:40
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/22/2022 19:31:31
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/23/2022 7:28:45

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/23/2022 19:21:59
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/24/2022 7:22:50
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/24/2022 19:20:42
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/25/2022 7:23:14
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/25/2022 19:13:45
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/26/2022 7:23:47
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/26/2022 19:24:38
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/27/2022 7:17:18
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/27/2022 19:19:55
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/28/2022 7:22:40
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/28/2022 19:14:22
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/29/2022 7:22:23
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/29/2022 19:35:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/30/2022 7:15:40
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	9/30/2022 19:14:28
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/1/2022 7:14:24

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/1/2022 19:25:15
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/2/2022 7:17:42
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/2/2022 19:21:03
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/3/2022 7:27:07
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/3/2022 19:13:19
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/4/2022 7:29:42
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/4/2022 19:18:45
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/5/2022 7:20:49
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/5/2022 19:24:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/6/2022 7:20:36
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/6/2022 19:07:16
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/7/2022 7:18:55
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/7/2022 19:13:05
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/8/2022 7:25:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/8/2022 19:24:52
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/9/2022 7:23:30

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/9/2022 19:22:18
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/10/2022 7:21:25
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/10/2022 19:22:19
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/11/2022 7:16:30
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/11/2022 19:28:23
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/12/2022 7:18:09
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/12/2022 19:08:13
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/13/2022 7:32:33
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/13/2022 19:25:51
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/14/2022 7:17:20
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/14/2022 19:20:23
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/15/2022 7:14:41
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/15/2022 19:22:25
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/16/2022 7:17:38
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/16/2022 19:24:05
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/17/2022 7:24:37

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/17/2022 19:25:15
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/18/2022 7:17:33
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/18/2022 19:18:39
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/19/2022 7:15:02
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/19/2022 19:24:19
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/20/2022 7:21:05
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/20/2022 19:26:57
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/21/2022 7:24:57
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/21/2022 19:22:22
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/22/2022 7:23:48
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/22/2022 19:23:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/23/2022 7:28:45
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/23/2022 19:22:13
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/24/2022 7:18:25
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/24/2022 19:19:29
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/25/2022 7:16:59

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/25/2022 19:19:57
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/26/2022 7:19:55
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/26/2022 19:24:51
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/27/2022 7:09:10
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/27/2022 19:18:03
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/28/2022 7:16:00
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/28/2022 19:17:09
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/29/2022 7:26:05
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/29/2022 19:13:36
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/30/2022 7:11:59
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/30/2022 19:03:44
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/31/2022 7:32:49
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	10/31/2022 19:18:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/1/2022 7:29:47
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/1/2022 19:13:25
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/2/2022 7:22:38

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/2/2022 17:06:46
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/3/2022 7:15:53
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/3/2022 19:11:22
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/4/2022 7:37:31
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/4/2022 19:22:45
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/5/2022 7:29:53
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/5/2022 19:21:41
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/6/2022 7:19:29
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/6/2022 19:25:36
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/7/2022 7:21:44
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/7/2022 19:16:24
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/8/2022 7:21:34
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/8/2022 19:14:42
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/9/2022 7:20:38
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/9/2022 19:29:51
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/10/2022 7:21:24

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/10/2022 19:19:06
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/11/2022 7:16:11
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/11/2022 19:09:36
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/12/2022 7:19:33
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/12/2022 19:11:48
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/13/2022 7:26:12
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/13/2022 19:17:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/14/2022 7:25:49
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/14/2022 19:16:03
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/15/2022 7:07:16
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/15/2022 19:22:08
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/16/2022 7:23:02
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/16/2022 19:27:05
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/17/2022 7:16:51
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/17/2022 19:15:57
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/18/2022 7:28:10

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/18/2022 19:18:56
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/19/2022 7:23:30
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/19/2022 19:11:12
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/20/2022 7:19:53
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/20/2022 19:20:06
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/21/2022 7:28:50
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/21/2022 19:16:32
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/22/2022 7:19:14
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/22/2022 19:12:25
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/23/2022 7:16:11
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/23/2022 19:18:08
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/24/2022 7:17:07
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/24/2022 19:12:20
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/25/2022 7:18:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/25/2022 19:18:43
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/26/2022 7:18:02

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/26/2022 19:21:42
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/27/2022 7:15:19
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/27/2022 19:24:37
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/28/2022 7:31:36
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/28/2022 19:22:30
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/29/2022 7:18:55
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/29/2022 19:29:27
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/30/2022 7:12:59
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	11/30/2022 19:21:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/1/2022 7:16:37
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/1/2022 19:22:27
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/2/2022 7:27:23
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/2/2022 19:28:19
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/3/2022 7:18:51
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/3/2022 19:16:38
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/4/2022 7:05:06

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/4/2022 19:13:24
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/5/2022 7:18:32
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/5/2022 19:49:59
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/6/2022 7:15:12
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/6/2022 19:17:31
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/7/2022 7:25:27
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/7/2022 19:24:15
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/8/2022 7:20:11
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/8/2022 19:34:15
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/9/2022 7:20:48
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/9/2022 19:20:40
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/10/2022 7:17:17
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/11/2022 7:12:47
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/11/2022 19:22:24
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/12/2022 7:22:28
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/12/2022 19:17:51

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/13/2022 7:25:06
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/13/2022 19:26:48
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/14/2022 7:24:05
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/14/2022 19:25:47
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/15/2022 7:21:12
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/15/2022 19:25:27
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/16/2022 7:19:48
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/16/2022 19:18:52
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/17/2022 7:17:47
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/17/2022 19:22:59
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/18/2022 7:20:15
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/18/2022 19:18:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/19/2022 7:17:13
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/19/2022 19:13:53
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/20/2022 7:09:24
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/20/2022 19:18:58

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/21/2022 7:11:00
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/21/2022 19:22:53
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/22/2022 7:14:16
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/22/2022 19:24:09
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/23/2022 7:23:19
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/23/2022 19:15:32
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/24/2022 7:21:17
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/24/2022 19:19:10
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/25/2022 7:17:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/25/2022 19:17:43
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/26/2022 7:15:26
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/26/2022 19:12:59
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/27/2022 7:12:10
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/27/2022 19:20:49
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/28/2022 7:18:20
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/28/2022 19:16:45

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/29/2022 7:20:55
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/29/2022 19:20:40
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/30/2022 7:29:34
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/30/2022 19:21:29
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/31/2022 7:19:26
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 100 area (sta # 17)			SAT	12/31/2022 19:14:36
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/1/2022 7:14:48
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/1/2022 19:16:17
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/2/2022 7:18:28
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/2/2022 19:18:59
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/3/2022 7:17:55
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/3/2022 19:23:49
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/4/2022 7:18:42
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/4/2022 19:08:33
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/5/2022 7:18:50
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/5/2022 19:16:35

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/6/2022 7:25:00
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/6/2022 19:19:07
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/7/2022 7:17:38
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/7/2022 19:25:32
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/8/2022 7:21:11
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/8/2022 19:14:07
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/9/2022 7:21:53
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/9/2022 19:20:50
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/10/2022 7:28:24
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/10/2022 19:13:15
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/11/2022 7:47:24
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/11/2022 19:22:36
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/12/2022 7:22:03
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/12/2022 19:29:14
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/13/2022 7:24:12
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/13/2022 19:10:15

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/14/2022 7:22:04
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/14/2022 19:19:54
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/15/2022 7:30:14
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/15/2022 19:10:45
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/16/2022 7:32:56
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/16/2022 19:17:12
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/17/2022 7:14:39
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/17/2022 19:33:02
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/18/2022 7:18:55
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/18/2022 19:14:57
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/19/2022 7:20:56
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/19/2022 19:26:04
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/20/2022 7:08:08
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/20/2022 19:33:48
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/21/2022 7:24:29
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/21/2022 19:29:44

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/22/2022 7:23:45
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/22/2022 19:16:12
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/23/2022 7:20:37
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/23/2022 19:08:13
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/24/2022 7:14:42
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/24/2022 19:26:08
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/25/2022 7:20:54
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/25/2022 19:18:42
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/26/2022 7:22:07
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/26/2022 19:18:43
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/27/2022 7:23:16
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/27/2022 19:14:33
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/28/2022 7:25:40
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/28/2022 19:17:51
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/29/2022 7:34:00
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/29/2022 19:22:50

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/30/2022 7:28:31
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/31/2022 7:24:37
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	7/31/2022 19:26:21
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/1/2022 7:15:51
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/1/2022 19:17:33
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/2/2022 7:18:13
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/2/2022 19:17:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/3/2022 7:25:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/3/2022 19:19:17
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/4/2022 7:33:22
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/4/2022 19:48:07
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/5/2022 7:14:06
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/5/2022 19:29:21
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/6/2022 7:16:13
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/6/2022 19:21:15
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/7/2022 7:14:39

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/7/2022 19:16:19
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/8/2022 7:25:28
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/8/2022 19:32:50
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/9/2022 7:32:05
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/9/2022 19:31:41
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/10/2022 7:15:24
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/10/2022 19:17:38
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/11/2022 7:18:43
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/11/2022 19:22:34
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/12/2022 7:30:25
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/12/2022 19:30:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/13/2022 7:25:23
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/13/2022 19:29:18
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/14/2022 7:20:59
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/14/2022 19:29:45
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/15/2022 7:16:10

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/15/2022 19:20:23
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/16/2022 7:17:18
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/16/2022 19:21:49
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/17/2022 7:27:38
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/17/2022 19:26:13
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/18/2022 7:28:05
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/18/2022 19:25:04
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/19/2022 7:16:52
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/19/2022 19:21:42
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/20/2022 7:31:06
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/20/2022 19:19:38
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/21/2022 7:14:18
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/21/2022 19:23:03
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/22/2022 7:16:46
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/22/2022 19:19:31
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/23/2022 7:20:12

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/23/2022 19:22:18
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/24/2022 7:19:06
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/24/2022 19:24:38
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/25/2022 7:19:22
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/25/2022 19:17:37
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/26/2022 7:23:16
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/26/2022 19:29:39
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/27/2022 7:21:24
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/27/2022 19:26:25
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/28/2022 7:09:44
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/28/2022 19:06:38
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/29/2022 7:13:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/29/2022 19:09:42
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/30/2022 7:00:45
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/30/2022 19:17:39
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/31/2022 7:20:29

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	8/31/2022 19:33:33
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/1/2022 7:17:17
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/1/2022 19:35:05
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/2/2022 7:03:47
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/2/2022 19:32:37
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/3/2022 7:14:43
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/3/2022 19:24:05
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/4/2022 7:04:40
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/4/2022 19:17:29
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/5/2022 7:26:41
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/5/2022 19:31:42
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/6/2022 7:15:41
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/6/2022 19:23:32
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/7/2022 7:24:20
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/7/2022 19:19:04
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/8/2022 7:24:41

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/8/2022 19:30:10
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/9/2022 7:27:05
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/9/2022 19:18:10
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/10/2022 7:16:29
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/10/2022 19:25:41
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/11/2022 7:14:12
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/11/2022 19:23:02
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/12/2022 7:30:02
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/12/2022 19:17:33
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/13/2022 7:21:04
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/13/2022 19:21:55
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/14/2022 7:22:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/14/2022 19:25:14
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/15/2022 7:22:36
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/15/2022 19:25:46
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/16/2022 7:24:31

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/16/2022 19:20:00
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/17/2022 7:26:00
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/17/2022 19:20:13
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/18/2022 7:19:12
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/18/2022 19:15:32
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/19/2022 7:29:53
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/19/2022 19:37:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/20/2022 7:40:05
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/20/2022 19:13:49
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/21/2022 7:27:28
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/21/2022 19:17:25
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/22/2022 7:23:43
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/22/2022 19:31:34
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/23/2022 7:28:48
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/23/2022 19:22:02
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/24/2022 7:22:52

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/24/2022 19:20:46
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/25/2022 7:23:18
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/25/2022 19:13:48
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/26/2022 7:23:50
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/26/2022 19:24:41
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/27/2022 7:17:02
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/27/2022 19:19:57
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/28/2022 7:22:42
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/28/2022 19:14:25
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/29/2022 7:22:27
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/29/2022 19:36:03
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/30/2022 7:15:39
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	9/30/2022 19:14:31
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/1/2022 7:14:22
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/1/2022 19:25:16
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/2/2022 7:17:40

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/2/2022 19:21:05
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/3/2022 7:27:09
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/3/2022 19:13:23
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/4/2022 7:29:44
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/4/2022 19:18:48
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/5/2022 7:20:52
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/5/2022 19:24:59
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/6/2022 7:20:34
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/6/2022 19:07:17
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/7/2022 7:18:57
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/7/2022 19:13:08
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/8/2022 7:25:39
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/8/2022 19:24:55
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/9/2022 7:23:32
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/9/2022 19:22:26
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/10/2022 7:21:23

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/10/2022 19:22:20
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/11/2022 7:16:32
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/11/2022 19:28:31
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/12/2022 7:18:14
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/12/2022 19:08:15
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/13/2022 7:32:36
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/13/2022 19:25:53
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/14/2022 7:17:12
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/14/2022 19:20:26
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/15/2022 7:14:39
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/15/2022 19:22:27
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/16/2022 7:17:40
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/16/2022 19:24:06
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/17/2022 7:24:43
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/17/2022 19:25:17
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/18/2022 7:17:38

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/18/2022 19:18:43
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/19/2022 7:15:06
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/19/2022 19:24:24
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/20/2022 7:21:09
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/20/2022 19:27:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/21/2022 7:24:59
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/21/2022 19:22:26
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/22/2022 7:23:51
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/22/2022 19:23:37
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/23/2022 7:28:48
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/23/2022 19:22:16
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/24/2022 7:18:27
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/24/2022 19:19:31
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/25/2022 7:17:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/25/2022 19:19:53
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/26/2022 7:19:58

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/26/2022 19:24:53
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/27/2022 7:09:13
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/27/2022 19:18:05
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/28/2022 7:16:03
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/28/2022 19:17:10
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/29/2022 7:26:10
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/29/2022 19:13:34
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/30/2022 7:12:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/30/2022 19:03:41
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/31/2022 7:32:51
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	10/31/2022 19:19:02
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/1/2022 7:29:49
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/1/2022 19:13:31
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/2/2022 7:22:40
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/2/2022 17:06:48
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/3/2022 7:15:55

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/3/2022 19:11:20
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/4/2022 7:37:33
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/4/2022 19:22:47
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/5/2022 7:29:55
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/5/2022 19:21:44
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/6/2022 7:19:31
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/6/2022 19:25:38
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/7/2022 7:21:46
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/7/2022 19:16:21
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/8/2022 7:21:36
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/8/2022 19:14:44
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/9/2022 7:20:40
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/9/2022 19:30:05
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/10/2022 7:21:27
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/10/2022 19:19:07
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/11/2022 7:16:13

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/11/2022 19:09:39
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/12/2022 7:19:36
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/12/2022 19:11:45
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/13/2022 7:26:36
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/13/2022 19:16:59
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/14/2022 7:25:54
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/14/2022 19:16:06
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/15/2022 7:07:18
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/15/2022 19:22:10
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/16/2022 7:23:05
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/16/2022 19:27:07
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/17/2022 7:17:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/17/2022 19:15:54
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/18/2022 7:28:12
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/18/2022 19:18:59
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/19/2022 7:23:31

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/19/2022 19:11:15
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/20/2022 7:19:56
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/20/2022 19:20:09
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/21/2022 7:28:51
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/21/2022 19:16:36
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/22/2022 7:19:13
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/22/2022 19:12:28
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/23/2022 7:16:12
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/23/2022 19:18:10
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/24/2022 7:17:08
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/24/2022 19:12:22
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/25/2022 7:18:02
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/25/2022 19:18:46
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/26/2022 7:18:04
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/26/2022 19:21:45
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/27/2022 7:15:24

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/27/2022 19:24:40
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/28/2022 7:31:37
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/28/2022 19:22:33
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/29/2022 7:18:57
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/29/2022 19:29:30
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/30/2022 7:12:57
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	11/30/2022 19:22:02
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/1/2022 7:16:32
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/1/2022 19:22:29
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/2/2022 7:27:25
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/2/2022 19:28:23
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/3/2022 7:18:53
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/3/2022 19:16:40
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/4/2022 7:05:08
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/4/2022 19:13:27
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/5/2022 7:18:34

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/5/2022 19:50:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/6/2022 7:15:14
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/6/2022 19:17:33
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/7/2022 7:25:29
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/7/2022 19:24:20
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/8/2022 7:20:13
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/8/2022 19:34:18
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/9/2022 7:20:49
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/9/2022 19:20:45
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/10/2022 7:17:20
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/11/2022 7:12:51
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/11/2022 19:22:27
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/12/2022 7:22:31
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/12/2022 19:17:53
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/13/2022 7:25:10
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/13/2022 19:26:50

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/14/2022 7:24:02
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/14/2022 19:25:51
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/15/2022 7:21:10
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/15/2022 19:25:28
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/16/2022 7:19:51
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/16/2022 19:18:54
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/17/2022 7:17:52
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/17/2022 19:23:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/18/2022 7:20:17
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/18/2022 19:19:00
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/19/2022 7:17:17
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/19/2022 19:13:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/20/2022 7:09:28
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/20/2022 19:19:04
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/21/2022 7:11:03
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/21/2022 19:22:54

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/22/2022 7:14:19
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/22/2022 19:24:11
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/23/2022 7:23:24
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/23/2022 19:15:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/24/2022 7:21:23
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/24/2022 19:19:13
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/25/2022 7:17:39
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/25/2022 19:17:45
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/26/2022 7:15:29
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/26/2022 19:12:55
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/27/2022 7:12:14
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/27/2022 19:20:51
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/28/2022 7:18:22
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/28/2022 19:16:48
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/29/2022 7:20:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/29/2022 19:20:42

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/30/2022 7:29:36
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/30/2022 19:21:33
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/31/2022 7:19:29
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 300 area (sta # 18)			SAT	12/31/2022 19:14:38
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/1/2022 7:15:32
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/1/2022 19:16:26
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/2/2022 7:18:31
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/2/2022 19:19:07
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/3/2022 7:18:05
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/3/2022 19:23:53
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/4/2022 7:18:44
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/4/2022 19:08:37
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/5/2022 7:19:04
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/5/2022 19:16:37
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/6/2022 7:25:03
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/6/2022 19:19:17

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/7/2022 7:17:42
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/7/2022 19:25:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/8/2022 7:21:22
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/8/2022 19:14:09
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/9/2022 7:22:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/9/2022 19:21:10
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/10/2022 7:28:33
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/10/2022 19:13:47
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/11/2022 7:47:43
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/11/2022 19:22:45
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/12/2022 7:22:04
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/12/2022 19:29:23
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/13/2022 7:24:33
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/13/2022 19:10:19
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/14/2022 7:22:41
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/14/2022 19:20:46

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/15/2022 7:30:16
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/15/2022 19:10:50
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/16/2022 7:33:00
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/16/2022 19:17:17
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/17/2022 7:14:44
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/17/2022 19:33:11
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/18/2022 7:19:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/18/2022 19:15:22
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/19/2022 7:21:10
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/19/2022 19:26:31
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/20/2022 7:08:09
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/20/2022 19:33:51
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/21/2022 7:24:32
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/21/2022 19:29:48
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/22/2022 7:23:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/22/2022 19:16:14

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/23/2022 7:20:46
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/23/2022 19:08:16
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/24/2022 7:14:59
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/24/2022 19:26:28
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/25/2022 7:20:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/25/2022 19:18:44
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/26/2022 7:22:21
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/26/2022 19:18:47
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/27/2022 7:23:19
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/27/2022 19:14:37
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/28/2022 7:25:45
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/28/2022 19:17:49
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/29/2022 7:34:03
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/29/2022 19:22:53
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/30/2022 7:28:34
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/31/2022 7:24:43

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	7/31/2022 19:26:24
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/1/2022 7:15:55
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/1/2022 19:17:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/2/2022 7:18:17
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/2/2022 19:17:12
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/3/2022 7:26:07
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/3/2022 19:19:20
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/4/2022 7:33:24
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/4/2022 19:48:26
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/5/2022 7:14:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/5/2022 19:29:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/6/2022 7:16:19
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/6/2022 19:21:21
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/7/2022 7:15:23
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/7/2022 19:16:44
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/8/2022 7:25:40

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/8/2022 19:33:13
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/9/2022 7:32:07
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/9/2022 19:32:18
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/10/2022 7:16:17
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/10/2022 19:17:48
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/11/2022 7:18:41
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/11/2022 19:22:46
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/12/2022 7:30:39
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/12/2022 19:30:11
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/13/2022 7:25:34
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/13/2022 19:29:20
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/14/2022 7:21:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/14/2022 19:29:50
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/15/2022 7:17:11
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/15/2022 19:20:34
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/16/2022 7:17:59

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/16/2022 19:22:52
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/17/2022 7:28:13
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/17/2022 19:26:19
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/18/2022 7:28:45
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/18/2022 19:25:07
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/19/2022 7:17:19
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/19/2022 19:21:45
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/20/2022 7:31:11
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/20/2022 19:19:46
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/21/2022 7:14:23
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/21/2022 19:23:12
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/22/2022 7:17:00
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/22/2022 19:19:32
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/23/2022 7:20:16
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/23/2022 19:22:32
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/24/2022 7:19:35

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/24/2022 19:24:40
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/25/2022 7:19:15
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/25/2022 19:17:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/26/2022 7:23:18
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/26/2022 19:29:41
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/27/2022 7:21:27
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/27/2022 19:26:29
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/28/2022 7:09:47
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/28/2022 19:06:49
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/29/2022 7:14:04
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/29/2022 19:10:02
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/30/2022 7:00:51
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/30/2022 19:18:45
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/31/2022 7:20:34
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	8/31/2022 19:33:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/1/2022 7:17:19

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/1/2022 19:35:13
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/2/2022 7:04:21
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/2/2022 19:33:07
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/3/2022 7:14:46
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/3/2022 19:24:32
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/4/2022 7:05:07
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/4/2022 19:17:55
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/5/2022 7:26:44
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/5/2022 19:32:11
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/6/2022 7:15:44
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/6/2022 19:24:11
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/7/2022 7:25:05
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/7/2022 19:19:22
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/8/2022 7:24:42
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/8/2022 19:30:31
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/9/2022 7:27:07

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/9/2022 19:18:13
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/10/2022 7:16:31
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/10/2022 19:26:10
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/11/2022 7:14:16
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/11/2022 19:23:06
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/12/2022 7:30:04
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/12/2022 19:18:03
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/13/2022 7:21:41
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/13/2022 19:21:39
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/14/2022 7:23:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/14/2022 19:25:26
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/15/2022 7:22:40
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/15/2022 19:25:48
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/16/2022 7:24:36
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/16/2022 19:20:33
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/17/2022 7:27:01

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/17/2022 19:20:10
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/18/2022 7:19:33
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/18/2022 19:15:31
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/19/2022 7:30:19
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/19/2022 19:37:41
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/20/2022 7:40:47
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/20/2022 19:13:51
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/21/2022 7:27:32
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/21/2022 19:17:59
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/22/2022 7:23:53
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/22/2022 19:31:38
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/23/2022 7:29:18
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/23/2022 19:22:04
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/24/2022 7:23:04
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/24/2022 19:20:49
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/25/2022 7:23:51

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/25/2022 19:13:51
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/26/2022 7:23:56
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/26/2022 19:25:00
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/27/2022 7:16:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/27/2022 19:20:00
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/28/2022 7:23:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/28/2022 19:14:29
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/29/2022 7:22:31
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/29/2022 19:36:06
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/30/2022 7:15:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	9/30/2022 19:14:40
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/1/2022 7:14:15
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/1/2022 19:25:36
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/2/2022 7:17:36
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/2/2022 19:21:10
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/3/2022 7:27:44

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/3/2022 19:13:27
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/4/2022 7:29:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/4/2022 19:18:52
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/5/2022 7:21:18
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/5/2022 19:25:21
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/6/2022 7:20:29
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/6/2022 19:07:40
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/7/2022 7:19:05
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/7/2022 19:13:11
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/8/2022 7:25:52
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/8/2022 19:24:57
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/9/2022 7:24:00
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/9/2022 19:22:29
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/10/2022 7:21:19
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/10/2022 19:22:42
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/11/2022 7:16:43

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/11/2022 19:29:44
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/12/2022 7:18:19
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/12/2022 19:08:18
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/13/2022 7:32:41
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/13/2022 19:26:26
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/14/2022 7:17:08
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/14/2022 19:20:31
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/15/2022 7:14:33
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/15/2022 19:22:29
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/16/2022 7:17:41
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/16/2022 19:24:11
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/17/2022 7:24:46
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/17/2022 19:25:20
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/18/2022 7:17:41
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/18/2022 19:19:10
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/19/2022 7:15:03

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/19/2022 19:24:52
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/20/2022 7:21:12
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/20/2022 19:28:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/21/2022 7:25:02
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/21/2022 19:22:30
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/22/2022 7:23:54
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/22/2022 19:24:06
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/23/2022 7:28:51
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/23/2022 19:22:55
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/24/2022 7:18:50
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/24/2022 19:19:33
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/25/2022 7:17:24
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/25/2022 19:19:52
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/26/2022 7:20:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/26/2022 19:25:21
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/27/2022 7:09:16

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/27/2022 19:18:17
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/28/2022 7:16:08
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/28/2022 19:17:13
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/29/2022 7:26:17
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/29/2022 19:13:29
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/30/2022 7:12:17
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/30/2022 19:03:38
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/31/2022 7:32:55
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	10/31/2022 19:19:11
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/1/2022 7:29:52
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/1/2022 19:13:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/2/2022 7:22:52
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/2/2022 17:07:16
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/3/2022 7:16:20
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/3/2022 19:11:17
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/4/2022 7:37:36

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/4/2022 19:23:16
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/5/2022 7:29:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/5/2022 19:22:09
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/6/2022 7:19:34
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/6/2022 19:26:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/7/2022 7:22:04
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/7/2022 19:16:18
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/8/2022 7:21:42
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/8/2022 19:14:47
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/9/2022 7:20:43
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/9/2022 19:30:29
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/10/2022 7:21:30
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/10/2022 19:19:09
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/11/2022 7:17:25
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/11/2022 19:10:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/12/2022 7:19:40

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/12/2022 19:11:43
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/13/2022 7:26:43
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/13/2022 19:16:56
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/14/2022 7:26:03
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/14/2022 19:16:10
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/15/2022 7:07:25
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/15/2022 19:22:13
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/16/2022 7:23:25
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/16/2022 19:27:09
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/17/2022 7:17:24
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/17/2022 19:15:53
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/18/2022 7:28:56
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/18/2022 19:19:02
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/19/2022 7:23:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/19/2022 19:11:17
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/20/2022 7:19:58

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/20/2022 19:20:11
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/21/2022 7:28:54
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/21/2022 19:16:46
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/22/2022 7:19:09
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/22/2022 19:12:31
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/23/2022 7:16:37
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/23/2022 19:18:13
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/24/2022 7:17:17
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/24/2022 19:12:25
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/25/2022 7:18:06
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/25/2022 19:18:50
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/26/2022 7:18:13
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/26/2022 19:21:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/27/2022 7:15:28
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/27/2022 19:24:58
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/28/2022 7:31:53

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/28/2022 19:22:35
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/29/2022 7:19:04
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/29/2022 19:29:32
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/30/2022 7:12:53
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	11/30/2022 19:22:07
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/1/2022 7:15:56
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/1/2022 19:22:31
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/2/2022 7:27:27
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/2/2022 19:28:26
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/3/2022 7:19:00
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/3/2022 19:16:43
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/4/2022 7:05:12
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/4/2022 19:13:30
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/5/2022 7:18:39
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/5/2022 19:50:14
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/6/2022 7:15:17

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/6/2022 19:17:36
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/7/2022 7:26:00
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/7/2022 19:24:26
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/8/2022 7:20:18
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/8/2022 19:34:23
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/9/2022 7:21:07
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/9/2022 19:20:49
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/10/2022 7:17:23
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/11/2022 7:12:55
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/11/2022 19:22:31
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/12/2022 7:22:33
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/12/2022 19:18:04
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/13/2022 7:25:14
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/13/2022 19:27:16
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/14/2022 7:23:59
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/14/2022 19:26:02

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/15/2022 7:21:07
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/15/2022 19:25:32
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/16/2022 7:19:54
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/16/2022 19:19:29
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/17/2022 7:17:55
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/17/2022 19:23:27
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/18/2022 7:20:20
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/18/2022 19:19:32
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/19/2022 7:17:25
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/19/2022 19:14:01
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/20/2022 7:09:31
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/20/2022 19:19:08
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/21/2022 7:11:06
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/21/2022 19:22:59
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/22/2022 7:14:21
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/22/2022 19:24:28

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/23/2022 7:23:46
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/23/2022 19:15:39
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/24/2022 7:21:52
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/24/2022 19:19:16
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/25/2022 7:18:00
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/25/2022 19:17:50
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/26/2022 7:15:33
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/26/2022 19:12:53
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/27/2022 7:12:16
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/27/2022 19:21:03
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/28/2022 7:18:30
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/28/2022 19:16:51
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/29/2022 7:21:15
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/29/2022 19:20:47
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/30/2022 7:29:40
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/30/2022 19:21:36

Tour: Shiftly Rounds

Readings from 7/1/2022 to 12/31/2022

Description	Minimum	Maximum	Reading	Time of Reading
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/31/2022 7:19:31
HVAC: Glovebox exhaust header delta Ps < laboratory delta Ps < basement delta Ps for 400 area (sta # 20)			SAT	12/31/2022 19:14:42

ATTACHMENT A806.A.

External Combustion

20.2.61 NMAC Opacity

Use of pipeline quality natural gas at LANL meets the requirement at Condition A806.A and constitutes compliance with 20.2.61 NMAC. Opacity did not exceed 20% over a 10-minute period and no visible emissions occurred during steady state operation.

ATTACHMENT A806.C.

External Combustion

20.2.61 NMAC Opacity – Units RLUOB-BHWs Fuel-Oil Fired

No fuel oil was used in the RLUOB Boilers during this reporting period and no opacity measurements were required.

ATTACHMENT A807.A.

External Combustion

Natural Gas Usage and Rolling 12-Month Total

2022 Small Boilers Data Entry / Gas Use

	Metered Boilers Gas Use			Non-Metered Gas Use	All Small Boilers[a] Non-Metered + Metered		
	TA-55-6 Boilers[b]		CMRR-RLUOB		Total Gas Use		12-Month Rolling Total[c]
	BHW-1B (EQPT-29)	BHW-2B (EQPT-30)	All 3 Boilers (EQPT-90, 104, & 105)				
Month	(Mscf)	(Mscf)	(Mscf)	(MMscf)	(Mscf)	(MMscf)	(MMscf)
January	2182	29	372	59.12	61,704	61.70	400.21
February	2053	162	474	55.40	58,084	58.08	403.72
March	2160	21	385	48.61	51,171	51.17	408.64
April	1263	357	214	27.28	29,112	29.11	405.01
May	2	1406	158	8.25	9,812	9.81	396.08
June	144	996	118	4.70	5,953	5.95	396.43
July	72	1214	104	5.97	7,364	7.36	398.24
August	1	1627	122	1.78	3,529	3.53	394.83
September	1	1651	133	4.44	6,229	6.23	392.99
October	6	1632	205	49.48	51,326	51.33	415.70
November	1980	131	376	43.45	45,938	45.94	417.30
December	820	1681	450	49.17	52,124	52.12	382.35
TOTAL	10684	10907	3111	358	382346	382	
12 Month Limit (MMscf) =							870

Reviewed by: Katelyn Mahoney 1/11/2023

2022 Non Metered Boiler Pool Capacity:	282.4 MMBtu/hr[d]
Estimated Gas-Use per MMBtu rating Jan-June:	0.72 MMscf/MMBtu/hr
Estimated Gas-Use per MMBtu rating July-Dec:	0.55 MMscf/MMBtu/hr
Estimated Gas-Use per MMBtu - Annual	1.27 MMscf/MMBtu/hr
Estimated Gas-Use per MMBtu - Fiscal Year	1.30 MMscf/MMBtu/hr

Gas Use Non-Metered[e] (MMSCF)				
NMED ID:	EQPT-11	EQPT-12	EQPT-53&134	Insignificant Units[f]
Location:	TA-53-365	TA-53-365	TA-16-1484	Lab Wide
Equipment ID:	BHW-1	BHW-2	Plant 5	Various
Database ID:	B-0042	B-0043	B-0093/0092	
Design Rate[g] (MMBTU/hr)	7.115	7.115	12.700	255
Calculated Gas Use-Jan-June	5.123	5.123	9.145	183.950
Calculated Gas Use-July-Dec	3.887	3.887	6.939	139.590
Calculated Gas Use-Annual	9.010	9.010	16.084	323.540

ATTACHMENT A807.B.

External Combustion

RLUOB Boilers Natural Gas and Fuel Oil Usage

Boilers at the RLUOB did not use fuel oil during this reporting period. Please see Attachment A807.A. for natural gas use by the RLUOB boilers.

ATTACHMENT A807.C. & D.

External Combustion

Fuel Oil Sulfur Content

LANL purchases only fuel oil with ultra-low sulfur content; fuel oil was not used in the TA-55-6 Boilers or RLUOB Boilers during this reporting period.

ATTACHMENT A807.E.

External Combustion

Initial Compliance Testing (Unit RLUOB-BHW-4)

Unit RLUOB-BHW-4 has not been installed.

ATTACHMENT A807.F.a.

External Combustion

Operational Inspection for Sources listed in Table 800.A.

Facility: F10 Unit: 550440 Proj:
Task Title: 550440: HW BOILER FS/WS (A) PM
W/O Type: PM W/O Group: RLUOB PM Task Priority: 4
Planner: 116672 MADRID
W/O Title: 550440: HW BOILER (A) FS/WS PM
Written To: 550440 HOT WATER BOILERS
Task Dspln: FTTR Due Date: 09/30/2022
Job Type: PM D-B Determination: N/A
Hazard Level: MODERATE IWD Requirement: STANDING
Material Required?:

0073001701

Los Alamos NATIONAL LABORATORY EST 1943

Work Order Task
00730017 01
MASTER

Date: 8/22/22

Work Order Task Written To

Facility: F10
Unit: 550440 Op Sys: HW
Room:
Area: Sys/Cls: HW
Equipment:
Component:
550440 HOT WATER BOILERS
Equipment Tag:
Alternate Tag:
Work item: CUB BOILERS
Tech Surv Reqmt Rel: N
PEG Equip Group Type:
PEG Equip Group ID:
Crit Safety Control:
Property Group:
Maintenance Programs: 1: 2: 3: 4: 5:

Authorization

Start Permission	[signature]	C/S	C/B	Start Date	8.23.22 1439
Complete Notice				Complete Date	10/03/22 1627

NOTE:

*** Refer to attached Form 2101 - Non-Tenant Activity Form - or Form 2102 - Tenant Activity Form - for a description of site specific training or escort and access requirements.**

Work Order Task Instructions

PERFORM ANNUAL BOILER PM IN ACCORDANCE WITH O&M CRITERION 403
AND PMI 403-A, BOILER INSPECTION TESTING AND MAINTENANCE.

.

COMPLETE APPLICABLE PORTIONS OF CHECKLISTS 403-A.006
AND 403-A.002 (WATER TREATMENT).

.

REFER TO IWD PART 2 FORM 2101 FOR ENTRY AND COORDINATION REQTS. AND FOR AREA
AND CO-LOCATED HAZARDS AND CONTROLS (SEE 2101 FOR POC AND MC's CONTACT INFO).

.

DOCUMENT WORK PERFORMED AND ANY / ALL OTHER OR ADDITIONAL ITEMS NEEDING
REPAIR OR REPLACEMENT ON THE ATTACHED WORK DOCUMENTAION FORM OR CHECKLIST.

Rework Reason/Cause

Y/N

Work Order 00730017 **Task** 01

Rework Reason/Cause

		Y/N
CDSG	CUSTOMER DESIGN	N
IMCW	IMPROPER CONSTRUCTION/WORKMANSHIP	N
IMDN	IMPROPER DESIGN	N
PDMS	PARTS/MATERIAL DID NOT MEET SPECIFICATIONS	N
WR	WARRANTY REWORK/REPAIR	N

Date: Hours: Crew: Shift:

Comments: Keene

Rework/Approval

Deficiency Tag No: Location: Tag Removed:

Rework Job: N Comments:

Trouble Found/Work Performed

Completion Comments Required: N

Fitters were Pre-jobbed Fitters completed Fire Side waterside Per PMI Checklist No issues encountered Boilers Restored to Normal Condition

Continue on additional sheets?

Calibrated Tools

Calibrated Tool Used? Y Y/N

File ID	Date Used	File ID	Date Used
100843	9-26-22		
100843	9-27-22		

Work Delay Reason

A	ACCESS	N Y/N
EQPT	EQUIPMENT	N Y/N
ESC	ESCORT AVAILABILITY	N Y/N
IWD	IWD WORKABILITY	N Y/N
LOTO	LOCK OUT/TAG OUT	N Y/N
MAT	MATERIAL	N Y/N
OPS	OPERATIONS	N Y/N

Work Order 00730017 Task 01

Work Delay Reason

RCT	RCT AVAILABILTY	n	Y/N
SP	SAFETY PAUSE	n	Y/N
TEL	TOOLS/EQUIP/LIFTS	n	Y/N
W	WEATHER	n	Y/N

Work Date: | Hours: | Crew: | Shift:

Comments: N/A

Major Failure/Action Taken

Major Failure:	None	
Major Action Taken:	None	
Deficiency Tag Removed:	None	Y/N
Deficiency Tag Location:	N/A	
Deficiency Tag ID:	N/A	
Limited Condition of Operation:	None	Y/N

Work Completion Signatures

Name	Function/Department	Date
Isaac Gallegos	Logs-CS Boiler Crew	9-27-22
[illegible]	Jay. Supv	9-27-22
[illegible]	MSS-MC	10/03/22

Comments: None
(Rework?) None

Equipment List Exceptions

Equipment List	Revision	Equipment List Description
CUB-BOILER	000	550440: CUB BOILERS

Seq	Fac	Unit	Op Sys	Division	Area	System	Class
	F10	550440	HW	U209		HW	ML4
	Equipment:		BOILER	BHW-01			

Name: BOILER 1
Location: U209
Exception Reason:
Comments:
Equipment Tag: BHW-01

Seq	Fac	Unit	Op Sys	Division	Area	System	Class
	F10	550440	HW	U209		HW	ML4
	Equipment:		BOILER	BHW-02			

Name: BOILER 2
Location: U209
Exception Reason:
Comments:
Equipment Tag: BHW-02

Work Order 00730017 **Task** 01

Equipment List Exceptions

Equipment List	Revision	Equipment List Description
CUB-BOILER	000	550440: CUB BOILERS

Seq	Fac	Unit	Op Sys	Division	Area	System	Class
	F10	550440	HW	U209		HW	ML4
	Equipment:		BOILER	BHW-03			

Name: BOILER 3
Location: U209
Exception Reason:
Comments:
Equipment Tag: BHW-03

Accounting

Percentage	Cost Center	Activity	Account No	Sub Account No
100.00	7D170C	640CL000	KGRB00	1G550440

* * * **End of Report** * * *

Los Alamos	Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)		
Revision #:			Activity/Task Title: 550440 Annual Hot Water Boiler FS/WS PM
Work Document #: (WO # / Task) 730017 - 01			Planner/Preparer (Name/Z#/Date) Wanda J. Madrid 116672 08/20/2021
TA: 55	Building: 0440	Room:	Additional Location Description:

1. Scope of Work

1.1 **PERFORM** – Annual HW Boiler FS/WS Inspection Testing and Maintenance PM in accordance with MSS PMI Procedure 403-A.002 and 403-A.006.

Hazard Analysis (HA) Team: Date

2. Precautions and Limitations

2.1 **IF** steps cannot be completed as described, or **IF** unforeseen situations occur, Then **PAUSE WORK** and **STABILIZE** the situation, **CONTACT** your supervisor, and **AWAIT** further instructions before proceeding.

2.2 Follow all postings when moving throughout the facility, wear appropriate PPE as listed. If postings are not understood, then **PAUSE WORK** and verify with RLUOB Operations before proceeding.

2.3 Signatures, Initials, and Place-Keeping blocks at the end of each step signifies the completion of the specific step or series of steps as an error prevention tool. Steps SHALL be signed and/or marked as required upon completion

2.4 Verify the activity is on the Plan of the Day or has received same day approval.

2.5 Perform Non-hazardous voltage checks in the vicinity where electrical work is to be performed and anytime the electrical configuration of a system is changed, including changes to LOTO configuration. Re-emphasize the need for daily Non-hazardous voltage checks.

2.6 **ENTRY CONDITIONS:**

- Ensure Facility status is compatible with work activity.
- When required, place barricades or other access control measures to exclude non-qualified workers and by standers from entering work area.
- Check in with Operations Center prior to starting any work.

3. Prerequisites/Initial Conditions

3.1 **CHECK-IN REQUIREMENTS:**

- All personnel must check in at the RLUOB Operations Center to release work and ensure work is on Plan-of-Day or receive late addition approval.

Los Alamos	Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)	
Revision #:		Activity/Task Title: 550440 Annual Hot Water Boiler FS/WS PM
Work Document #-(WO # / Task) 730017-01		Planner/Preparer (Name/Z#/Date) Wanda J. Madrid 116672 08/20/2021
TA: 55	Building: 0440	Room:	Additional Location Description:

3.2 **WORK AREA TRAINING REQUIREMENTS:**

- Residents must complete RLUOB Site Specific Training (TP #161) and read the Building Emergency Plan or be escorted.

3.3 **OTHER BOUNDING CONDITIONS**

- Look for postings when moving through the facility such as PPE requirements. If you have any questions, ask.
- Follow announcements, alarms, alerts, and all directions from Facility Ops due to changing conditions, outages, testing activities, evacuation orders, etc.
- Conduct a Pre-job Briefing and include the following discussion:
- Determine the appropriate level of personal protective equipment (PPE) during maintenance and LOTO activities.

3.4 **REFERENCED DOCUMENTS**

- LOTO Form 2244
- SDS – Gas
- SDS – Garrett-Callahan Formula 1015L

4. SPECIAL TRAINING/MEDICAL REQUIREMENTS

4.1 The following training is required for the General Hazards Section:

- LANL Maintenance Craft Worker **Curriculum ID # 10968**

4.2 The following training is required for performing work at RLUOB:

- RLUOB Site Specific **Curriculum ID # 161**
- RLUOB 1st Floor Access Unescorted **Curriculum ID # 1768**

4.3 The following training is required for working on Boilers –Pipefitters performing work:

- General Pipefitter Requirements **Curriculum ID # 647**
- Water Treatment **Curriculum ID # 2296**
- Chemical Hazards Communication **Curriculum ID # 25418**

4.4 The following training is required for Electricians performing work:

- General Electrician Requirements **Curriculum ID # 642**
- Electrician and Facility Engineers **Curriculum ID # 2559**
  or Non-Electrician Craft **Curriculum ID # 2908**

Los Alamos NATIONAL LABORATORY	Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)		
Revision #:			Activity/Task Title: 550440 Annual Hot Water Boiler FS/WS PM
Work Document #: (WO # / Task) 730017-01			Planner/Preparer (Name/Z#/Date) Wanda J. Madrid 116672 08/20/2021
TA: 55	Building: 0440	Room:	Additional Location Description:

Note: Q/L clearance is required for access to the Limited Area portion of facility or be escorted.

5. SPECIAL TOOLS/EQUIPMENT

5.1 **N/A** Seals

6. WORK INSTRUCTIONS

⚠WARNING

Hazard: Noise Exposure when working in Equipment rooms
Control: Follow postings and wear hearing protection
Training: Hearing Conservation – Curriculum # 2307

6.1 **PERFORM Pre-Maintenance**

6.1.1 **Perform** Pre-Maintenance in accordance with 403-A.006, Hot Water Boiler Yearly Fireside/Waterside Inspection and Maintenance Checklist. ☑

BHW-01 ☑

BHW-02 ☐

BHW-03 ☑

6.2 **PERFORM Electrical LOTO of Boiler #1 per Ops Sequence (AS/WHEN NEEDED)**

NOTE:

- OP's to define the sequence of turning Boilers 1, 2, and 3 **OFF/ON.**
- BHW-01 has controller for all 3 Boilers. If BHW-01 is Locked Out, then Boilers 2 or 3 have to be turned ON/OFF Manually.

⚠WARNING

Hazardous Energy/Electrical Shock/Arc Flash Hazard – Potential contact with energized systems.

6.2.1 **Record** the current AS FOUND position of Boiler Switch for each Boiler.

BHW-01 Off ☑ **BHW-02** OFF ☑ **BHW-03** OFF ☑

Los Alamos NATIONAL LABORATORY	Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)	
Revision #:		**Activity/Task Title:** 550440 Annual Hot Water Boiler FS/WS PM
Work Document #: (WO # / Task #) 730017 - 01		**Planner/Preparer (Name/Z#/Date)** Wanda J. Madrid 116672 08/20/2021
TA: 55	**Building:** 0440	**Room:**	**Additional Location Description:**

BHW-01 fed from: MCC-B Ckt # 3B, Rm U209 (480V/3Ø) Class 1.3b)	
Incident Energy (cal/cm²)	0.17
Arc Flash Boundary (in)	5
Working Distance (in)	18
Limited Approach Boundary (in)	42

HW-P-01 fed from: MCC-B Ckt # 2B, Rm U209 (480V/3Ø) Class 1.3b)	
Incident Energy (cal/cm²)	0.14
Arc Flash Boundary (in)	5
Working Distance (in)	18
Limited Approach Boundary (in)	42

6.2.2 **Perform** LOTO of **Boiler BHW-01** at MCC-B Ckt 3B and LOTO **HW Pump HW-P-01** at MCC-B Ckt # 2B located in Rm U209. ☑
- LOTO Form 2244

Breaker Manipulation PPE:
- Electrical Worker Standard Required Daily Wear Work Clothing

6.2.3 **Place** switch inside UPS in the OPEN(OFF) position. UPS is located beneath BHW-01 control Panel and apply LOTO. ☑

6.2.4 **Place** Boiler 2 or 3 in Manual position and verify accompanying pump is also in Manual positon prior to start of work on Boiler 1. ☑

6.2.5 **Notify** Operations Center that Boiler 2 or 3 have been placed in Manual position. ☑

6.2.6 **Verify** Non-Hazardous Voltage at BHW-01 Controller and at Pump local disconnect switch using NRTL, Cat. III min volt meter. ☑

Non-Hazardous Voltage Verification PPE:
- Electrical Worker Standard Required Daily Wear Work Clothing
- Di-Electric Gloves with Leather Protectors

Los Alamos NATIONAL LABORATORY	Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)	
Revision #:		Activity/Task Title: 550440 Annual Hot Water Boiler FS/WS PM
Work Document #: (WO # / Task) 230017-01		Planner/Preparer (Name/Z#/Date) Wanda J. Madrid 116672 08/20/2021
TA: 55	Building: 0440	Room:	Additional Location Description:

- Safety Glasses
- Hearing Protection (Ear Canal Inserts)
- Two-Person Rule

HOLD POINT

Non-Hazardous Voltage Verified for **BHW-01 and HW-P-01**

Verifier [signature] Z# 351014 Date 9-26-22

6.3 **PERFORM Mechanical LOTO of Boiler # 1 Gas / Fuel Oil/ Water Valves**

⚠WARNING

Hazard: Gas

PPE Requirements: Wear safety glasses with side shields, work gloves, long sleeves, long pants, use explosion proof equipment and non-sparking tools. Ensure work is occurring in well ventilated area.

6.3.1 **Close** and **Perform** LOTO to the following valves: ☑

- Natural Gas Valves **NG-V-6009D** and **NG-V-6004A**
- INLET Water Valve to **BHW-01** and **HW-V-101A**
- OUTLET Water Valve from **BHW-01** and **HW-V-101B**

NOTE:
If Required, Relieve Boiler Pressure by opening pressure relief valve and allow to drain.

- LOTO Form 2244

6.3.2 **Verify** Non-Hazardous Energy on BHW-01 Natural Gas Valves by firing boiler until boiler flame fails, this will suck out all gas within the gas line. Verify "0" psig on gas line gauge. ☑?

HOLD POINT

Non-Hazardous Energy Verified for **BHW-01 Natural Gas Valves**

Verifier Isaac Ortega Z# 358331 Date 9-26-22

Los Alamos	Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)	
Revision #:		Activity/Task Title: 550440 Annual Hot Water Boiler FS/WS PM
Work Document #: (WO # / Task) 730017-01		Planner/Preparer (Name/Z#/Date) Wanda J. Madrid 116672 08 20/2021
TA: 55	Building: 0440	Room:	Additional Location Description:

HOLD POINT

Non-Hazardous Energy Verified for **BHW-01 Inlet/ Outlet Water Valves**

Verifier Isaac Ortega Z# 358331 Date 9-26-22

6.3.3 **Proceed** to perform **TASK 6.8** in accordance with IWD and as per PMI Checklists 403-A.002 and 403-A.006. ☑

6.4 **PERFORM Electrical LOTO of Boiler # 2 per Ops Sequence (AS/WHEN NEEDED)**

⚠WARNING

Hazardous Energy/Electrical Shock/Arc Flash Hazard – Potential contact with energized systems.

BHW-02 fed from: MCC-B Ckt # 3D, Rm U209 (480V/3Ø) Class 1.3b)	
Incident Energy (cal/cm²)	0.17
Arc Flash Boundary (in)	5
Working Distance (in)	18
Limited Approach Boundary (in)	42

HW-P-02 fed from: MCC-B Ckt # 2C, Rm U209 (480V/3Ø) Class 1.3b)	
Incident Energy (cal/cm²)	0.14
Arc Flash Boundary (in)	5
Working Distance (in)	18
Limited Approach Boundary (in)	42

6.4.1 **Perform** LOTO of **Boiler BHW-02** at MCC-B Ckt 3D and LOTO **HW Pump HW-P-02** at MCC-B Ckt # 2C located in Rm U209. ☑

- LOTO Form 2244

Breaker Manipulation PPE:

- Electrical Worker Standard Required Daily Wear Work Clothing

Los Alamos NATIONAL LABORATORY	Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)	
Revision #:		**Activity/Task Title:** 550440 Annual Hot Water Boiler FS/WS PM
Work Document #-(WO # / Task) 730017 - 01		**Planner/Preparer (Name/Z#/Date)** Wanda J. Madrid 116672 08/20/2021
TA: 55	**Building:** 0440	**Room:**
Additional Location Description:		

6.4.2 **Verify** Non-Hazardous Voltage at BHW-02 Controller and at Pump local disconnect switch using NRTL, Cat. III min volt meter. ☑

Non-Hazardous Voltage Verification PPE:

- Electrical Worker Standard Required Daily Wear Work Clothing
- Di-Electric Gloves with Leather Protectors
- Safety Glasses
- Hearing Protection (Ear Canal Inserts)
- Two-Person Rule

HOLD POINT

Non-Hazardous Voltage Verified for **BHW-02 and HW-P-02**

Verifier _____ Z# 351014 Date 9-27-22

6.5 **PERFORM Mechanical LOTO of Boiler # 2 Gas / Fuel Oil/ Water Valves**

⚠WARNING

Hazard: Gas

PPE Requirements: Wear safety glasses with side shields, work gloves, long sleeves, long pants, use explosion proof equipment and non-sparking tools. Ensure work is occurring in well ventilated area.

6.5.1 **Close** and **Perform** LOTO to the following valves: ☑

- Natural Gas Valves **NG-V-6010D** and **NG-V-6014A**
- INLET Water Valve to **BHW-02** and **HW-V-201A**
- OUTLET Water Valve from **BHW-02** and **HW-V-201B**

NOTE:
If Required, Relieve Boiler Pressure by opening pressure relief valve and allow to drain.

- LOTO Form 2244

6.5.2 **Verify** Non-Hazardous Energy on BHW-02 Natural Gas Valves by firing boiler until boiler flame fails, this will suck out all gas within the gas line. Verify "0" psig on gas line gauge. ☑

Los Alamos	Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)	
Revision #:		**Activity/Task Title:** 550440 Annual Hot Water Boiler FS/WS PM
Work Document #: (WO # / Task) 730017-01		**Planner/Preparer (Name/Z#/Date)** Wanda J. Madrid 116672 08/20/2021
TA: 55	**Building:** 0440	**Room:** / **Additional Location Description:**

HOLD POINT

Non-Hazardous Energy Verified for **BHW-02 Natural Gas Valves**

Verifier Isaac Ortega Z# 359331 Date 9.27.22

HOLD POINT

Non-Hazardous Energy Verified for **BHW-02 Inlet/ Outlet Water Valves**

Verifier Isaac Ortega Z# 359331 Date 9-27-22

6.5.3 **Proceed** to perform **TASK 6.8** in accordance with IWD and as per PMI Checklists 403-A.002 and 403-A.006. ☑

6.6 **PERFORM Electrical LOTO of Boiler # 3 per Ops Sequence (AS/WHEN NEEDED)**

⚠WARNING

Hazardous Energy/Electrical Shock/Arc Flash Hazard – Potential contact with energized systems.

BHW-03 fed from: MCC-B Ckt # 3F, Rm U209 (480V/3Ø) Class 1.3b)	
Incident Energy (cal/cm²)	**0.17**
Arc Flash Boundary (in)	**5**
Working Distance (in)	**18**
Limited Approach Boundary (in)	**42**

HW-P-03 fed from: MCC-B Ckt # 2D, Rm U209 (480V/3Ø) Class 1.3b)	
Incident Energy (cal/cm²)	**0.14**
Arc Flash Boundary (in)	**5**
Working Distance (in)	**18**
Limited Approach Boundary (in)	**42**

6.6.1 **Perform** LOTO of **Boiler BHW-03** at MCC-B Ckt 3F and LOTO **HW Pump HW-P-03** at MCC-B Ckt # 2D located in Rm U209. ☑

- LOTO Form 2244

Los Alamos NATIONAL LABORATORY	Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)	
Revision #:		**Activity/Task Title:** 550440 Annual Hot Water Boiler FS/WS PM
Work Document #: (WO # / Task #) 730017-01		**Planner/Preparer (Name/Z#/Date)** Wanda J. Madrid 116672 08/20/2021
TA: 55	**Building:** 0440	**Room:** / **Additional Location Description:**

Breaker Manipulation PPE:

- Electrical Worker Standard Required Daily Wear Work Clothing

6.2.7 **Verify** Non-Hazardous Voltage at BHW-03 Controller and at Pump local disconnect switch using NRTL, Cat. III min volt meter. ☑

Non-Hazardous Voltage Verification PPE:

- Electrical Worker Standard Required Daily Wear Work Clothing
- Di-Electric Gloves with Leather Protectors
- Safety Glasses
- Hearing Protection (Ear Canal Inserts)
- Two-Person Rule

HOLD POINT

Non-Hazardous Voltage Verified for **BHW-03 and HW-P-03**

Verifier _____ Z# 351014 Date 9-27-22

6.7 **PERFORM Mechanical LOTO of Boiler # 3 Gas / Fuel Oil/ Water Valves**

⚠WARNING

Hazard: Gas

PPE Requirements: Wear safety glasses with side shields, work gloves, long sleeves, long pants, use explosion proof equipment and non-sparking tools. Ensure work is occurring in well ventilated area.

6.7.1 **Close** and **Perform** LOTO to the following valves: ☑

- Natural Gas Valves **NG-V-6020D** and **NG-V-6024A**
- INLET Water Valve to **BHW-03** and **HW-V-301A**
- OUTLET Water Valve from **BHW-03** and **HW-V-301B**

NOTE:

If Required, Relieve Boiler Pressure by opening pressure relief valve and allow to drain.

- LOTO Form 2244

Los Alamos NATIONAL LABORATORY	Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)	
Revision #:		**Activity/Task Title:** 550440 Annual Hot Water Boiler FS/WS PM
Work Document #: (WO # / Task) 730017 - 01		**Planner/Preparer (Name/Z#/Date)** Wanda J. Madrid 116672 08/20/2021
TA: 55	**Building:** 0440	**Room:** **Additional Location Description:**

6.7.2 **Verify** Non-Hazardous Energy on BHW-03 Natural Gas Valves by firing boiler until boiler flame fails, this will suck out all gas within the gas line. Verify "0" psig on gas line gauge. ☑

HOLD POINT

Non-Hazardous Energy Verified for **BHW-03 Natural Gas Valves**

Verifier Isaac ortega Z# 358331 Date 9-27-22

HOLD POINT

Non-Hazardous Energy Verified for **BHW-03 Inlet/ Outlet Water Valves**

Verifier Isaac ortega Z# 358331 Date 9-27-22

6.7.3 **Proceed** to perform **TASK 6.8** in accordance with IWD and as per PMI Checklists 403-A.002 and 403-A.006. ☑

6.8 **PERFORM PMI Work Steps**

6.8.1 **Perform** applicable steps of PMI procedure while unit is under LOTO and document results on attached checklists for each boiler. Mark unit below as work is completed. ☑

BHW-01 ☑

BHW-02 ☑

BHW-03 ☑

6.9 **REMOVE LOTO**

6.9.1 **REMOVE** Electrical LOTO and Re-Energize Boilers on **BHW-01** as they are returned to service. (Refer to **Task 6.2** for applicable LOTO points) ☑

6.9.2 **REMOVE** Electrical LOTO and Re-Energize Boilers on **BHW-02** as they are returned to service. (Refer to **Task 6.4** for applicable LOTO points) ☑

Los Alamos NATIONAL LABORATORY	Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)		
Revision #:			**Activity/Task Title:** 550440 Annual Hot Water Boiler FS/WS PM
Work Document #: (WO # / Task) 730017-01			**Planner/Preparer (Name/Z#/Date)** Wanda J. Madrid 116672 08/20/2021
TA: 55	**Building:** 0440	**Room:**	**Additional Location Description:**

6.9.3 **REMOVE** Electrical LOTO and Re-Energize Boilers on **BHW-03** as they are returned to service. (Refer to **Task 6.6** for applicable LOTO points) ☑

6.9.4 **REMOVE** Mechanical LOTO and Open Valves to Boiler **BHW-01** as it is returned to service. (Refer to **Task 6.3** for applicable LOTO points) **Proceed** to **Task 7.1** for PMT. ☑

6.9.5 **REMOVE** Mechanical LOTO and Open Valves to Boiler **BHW-02** as it is returned to service. (Refer to **Task 6.5** for applicable LOTO points) **Proceed** to **Task 7.1** for PMT. ☑

6.9.6 **REMOVE** Mechanical LOTO and Open Valves to Boiler **BHW-03** as it is returned to service. (Refer to **Task 6.7** for applicable LOTO points) **Proceed** to **Task 7.1** for PMT. ☑

6.10 **PERFORM Hot Water Boiler Water Treatment**

⚠ CAUTION

Water Pressure on System 45-50 PSI
Water Temperature 160° - 170° F
Do not leave area with system open

6.10.1 **Perform** Hot Water Boiler water treatment in accordance with PMI 403-A.002 and record results. ☑

6.10.2 **IF** required, add Garrett-Callahan Formula 1015L or equivalent to Pot Feeder located in Rm U200, and follow work steps listed below: N/A

(1) **Close** Valve HW-V-01C
(2) **Close** Valve HW-V-01D
(3) **Slowly** Open Pot Feeder Drain Valve HW-V01E and relieve pressure slowly
(4) **Slowly** remove lid to Pot Feeder
(5) **Close** Drain Valve HW-V01E prior to adding chemical

(6) **DON PPE** for adding Chemical:
- Use with good ventilation
- Face Shield and Chemical Goggles for splash hazard
- Chemical Resistant Apron
- Long sleeves and long pants

Los Alamos	Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)	
Revision #:		**Activity/Task Title:** 550440 Annual Hot Water Boiler FS/WS PM
Work Document #: (WO # / Task) 730017 - 01		**Planner/Preparer (Name/Z#/Date)** Wanda J. Madrid 116672 08/20/2021
TA: 55	**Building:** 0440	**Room:** **Additional Location Description:**

- Nitrile Gloves
- Eyewash or Portable Eyewash available in immediate vicinity

(7) **Connect** a hose to Tepid Water supply line hose bib adjacent to Potable Hot Water Tank for immediate use and contemporary rinse station.
(8) **Slowly Add** Garrett-Callahan Formula 1015L (Clean up Spills)
(9) **Inspect** lid and seal, wipe threads, clean seal area
(10) **Close** Pot Feeder lid to snug tight
(11) **Slowly** Open Valve HW-V-01D
(12) **Slowly** Open Valve HW-V-01C
(13) **Ensure** no leaks occur from Pot Feeder, Inlet/Outlet valves, and piping.

6.10.3 **Wait** a minimum of 72 hours and RE-Test Hot Water Boiler Water Treatment per PMI 403-A.002. ☒

6.10.4 **Re-Perform** steps as needed to obtain acceptable water treatment results. ☒

7. Post Work Activities ☑

7.1 **Perform** Post Maintenance Testing for all 3 Boilers in accordance with PMI 403-A.006.

BHW-01 ☑

BHW-02 ☑

BHW-03 ☑

8. Closeout

8.1 **DISPOSE** of all waste (if any) per the direction of the Waste Management Coordinator (WMC) or designee ☑

8.2 **CLOSE** out package ☑
- Document any additional information and work performed on Work Doc Form
- Document any lessons learned in the Work Doc Form if applicable.

8.3 **CONTACT** the MC and inform them of the work completed. Fill out the required Work Order documentation and return to the MC or Work Control Office. ☑

Los Alamos	Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)		
Revision #:			**Activity/Task Title:** 550440 Annual Hot Water Boiler FS/WS PM
Work Document #: TWO # / Task #) 730017-01			**Planner/Preparer (Name/Z#/Date)** Wanda J. Madrid 116672 08/20/2021
TA: 55	**Building:** 0440	**Room:**	**Additional Location Description:**

Insert Rows above for additional Tasks Steps or attach pages to clearly communicate ESH&Q/S&S hazards and associated controls.	The RLM, and FOD or FOD Representative approval indicates IWM has been applied appropriately, work is authorized, workers are qualified, work will be performed in accordance with ESH&Q/S&S requirements and the IWD. and facility safety basis, aggregate hazards, and collocated hazards were appropriately included in the hazard analysis and acknowledges completion of a peer review.	**RLM** (Signature/Z#/Date) **Required** [signature] 239177 9/1/2021 **FOD or Representative** (Signature/Z#/Date) See attached Coversheet **ESO Review** (Signature/Z#/Date) **If Required** CHARLES GRAY (Affiliate) **Safety Review** (Signature/Z#/Date) **Required** See attached coversheet
IWD Type ☒ Moderate-Hazard ☐ High-Hazard/Complex ☐ Standing IWD	Date when RLM re-approval is required 10/31/2022 Other Conditions for Re-Approval Changes in Scope/Hazards or IWD (Print) Name of Primary PIC Z. Garcia Z# 177709 Name of Alternate PIC D. Valdez Z# 135042 Name of Alternate PIC M. Fernandez-Mesz Z# 330075	Any required classification review completed, N/A per 9/1/2021 Signature/Date

FOD 10 IWD Validation

LOS ALAMOS NATIONAL LABS
INTEGRATED WORK DOCUMENT (IWD) COVER SHEET

WORK ORDER NO: 730017 - 09 REV: _____

TITLE: (A) 550440 Hot Water Boiler Fireside/Waterside PM

Planner: Wanda J Madrid / Wanda J. Madrid Digitally signed by Wanda J. Madrid Date: 2020.09.09 14:46:18 -06'00' / _____
Name / Signature / Date

Peer Review: Lauro Lucero Jr / Digitally signed by Lauro Lucero Jr Date: 2020.09.09 14:29:04 -06'00' / _____
Name / Signature / Date

WORKABILITY

Based on a validation walk down this IWD and work package can be worked as written.

Superintendent: Ezequiel Gaur / [signature] / 9-1-21
Name / Signature / Date

Craft/Tech: N/A / N/A / _____
Name / Signature / Date

Craft/Tech: N/A / N/A / _____
Name / Signature / Date

Ops/SOM: N/A / N/A / _____
Name / Signature / Date

CONCURRENCE:

Based on my personal review, I agree that the work described in this package meets technical requirements under my cognizance, and contains the controls to perform the work safely.

RP-1: N/A / N/A / _____
Name / Signature / Date

ESO: Eugene A Wagner, III / Digitally signed by Eugene A Wagner, III Date: 2020.09.09 12:49:41 -06'00' / _____
Name / Signature / Date

IH&S: Tammy A. Lopez / Digitally signed by Tammy A. Lopez Date: 2020.08.31 11:30:25 -06'00' / _____
Name / Signature / Date

SE: Jacob Natzic, 338870 / Jacob Natzic Digitally signed by Jacob Natzic Date: 2020.08.25 08:03:16 -06'00' / _____
Name / Signature / Date

Ops/SOM: Stephen McNeel / [signature] / 09/01/2021
Name / Signature / Date

MC (if required by RLM):

N/A / _____ / _____
Name / Signature / Date

Los Alamos NATIONAL LABORATORY

730017-01

AP-WORK-004: Attachment 1
Maintenance & Site Services
Worker Engagement Questions

Worker engagement questions are intended to focus attention on the task and ensure uncertainties are addressed. Basic worker engagement questions are provided below. Additional worker engagement questions should be tailored to the situation.

Each of the questions listed below will be discussed at each Pre-Job Brief with all affected personnel.

Topic	Completed (X)
What permits, permissions, or support are required to safely start this work?	X
What is the most likely thing that could go wrong (not the worst thing) and what, specifically, will prevent it?	X
What can cause us to go beyond the scope of the work?	X
What hazards in the work area may not have been considered during planning of this job?	X

Los Alamos NATIONAL LABORATORY

Form 2103

Integrated Work Document (IWD) Part 3, Validation and Work Release

IWD No: 730017-01 Revision No.:

By signing below, I verify that this activity is appropriate to be conducted in the facility and is within the scope of the facility safety basis; area/facility hazards have been identified and addressed; work meets applicable Laboratory environmental, safety, and security requirements, DOE Orders, and other applicable regulatory requirements; and that the appropriate Subject Matter Expert (SME) reviews have been completed.

FOD or FOD designee (e.g., Operations Manager)

Signature/Z-Number/Date **(If required by FOD)**: 241620 09/26/2022

By signing below, I have verified the following:

- I have verified authorization by ensuring approval signatures of the RLM and FOD.
- I have jointly conducted a validation walkdown with workers to review tasks and steps for workability and to ensure that the hazards and controls are described correctly and have not changed.
- The assigned workers are authorized and competent to perform the work in a safe, secure, and environmentally responsible manner.
- I have conducted the pre-job briefing, and all workers (including support workers) have been briefed.
- I have ensured coordination with any required FOD work-area representatives (e.g., area work coordinators).

PIC (Signature/Z Number/Date) **Required**: 185042 9/26/22

Alternate PIC signature **acknowledges** PIC authority is assumed for the first time. *(Note: Alternate PICs are required to sign only once, but formal handoff includes conferring with previous PIC to obtain all required information associated with the handoff and informing workers that they have a new PIC.)*

Alternate PIC (Signature/Z Number/Date) **Required**: _____

Alternate PIC (Signature/Z Number/Date) **Required**: _____

Pre-Job Brief Content

- Prerequisites, where applicable – things that must be staged, in place, or completed before the work starts
- Worker pause/stop work authority and obligation per P101-18, Procedure for Pause/Stop Work
- Scope of work and work activities including IWD/WCDs, procedures, work package documents, and drawings, as applicable
- Hazards and associated controls, including personal protective equipment, and the resolution of any related questions
- Critical steps* including where they are covered in the IWD/WCD and which HPI technique will be used for each critical step
- Permit and plan requirements and limitations (e.g., penetrations, spark flame) and how permit requirements will be met
- Applicable regulatory requirements [e.g., Technical Safety Requirements (TSR), Code of Federal Regulations (CFR)] including how these requirements can be inadvertently violated if the IWD/WCD is not followed
- Roles and responsibilities including person(s) responsible for making critical decisions (e.g., PIC)
- Handoffs and coordination requirements among workers and multiple PICs, if applicable
- Work site conditions including location of phone and emergency equipment (e.g., fire alarms, fire extinguisher, AED) and how to respond to alarms and emergencies
- Hold points and other notifications/signoffs (e.g., inspections, Industrial Hygiene, radiation protection)
- Applicable Lessons Learned (LL), especially from previous performance of the activity
- Any other information needed to perform this activity in a safe, secure, and environmentally responsible manner

Ask: Does everyone agree with the work tasks/steps and controls, and commit to follow them?

*Critical steps are when "a procedure step, series of steps, or action that, if performed improperly, will cause irreversible harm to equipment, people, or the environment" (DOE-HDBK-1028-2009, Volume 1).

IWD No:	Revision No.:

Pre-Job Brief Attendance Roster

By signing below **as required**, I agree to the following:

- I agree to follow the work steps and implement the controls as written, as applicable to my work assignments.
- I agree to pause/stop work when conditions or hazards change or when I encounter unexpected conditions during the execution of work, or when work cannot be performed as written, or instructions become unclear during execution.
- I confirm that I am authorized, qualified, and fit to perform the work.

Worker (Signature/Z Number/Date) 300580 9-26-22	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date) 328629 9-26-22	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date) 358331 9 26 22	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date) 368069 9.26.22	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date)

Work Order/Task: 730017-01

Start Date: ~~9-27-22~~ 9.26.22	Completion Date: 9-27-22

SUMMARIZE THE WORK PERFORMED

Date 9.27.22	Fitters were Prejobbed Fitters Performed PM per PMT Checklist No issues encountered all Chemical water treatment is good for Boilers Returned to normal operating condition

FOR CORRECTIVE WORK – WHAT FAILED AND WHAT WAS FIXED

	Failure Mode Root Cause Code (Circle Root Causes that Apply)	
Failure Mode None	Circuit Breaker Tasks	System Restoration Issues
	Digital Component Tasks	Pump Related Tasks
	Doors/Hatches	Procedure Use
	Electrical Determinations	Rigging/Lifting Tasks
	Failed Surveillance	Electrical Switches
	Fastener Tasks	Troubleshooting Issues
	FME Tasks	Valve Related Tasks
	I&C Calibration/Setpoints	Welding
	Mechanical Connections	Work Instruction Issues
	Other (Specify Root Cause)	
Failure Mode Comments	(Add Details) n/a	
	Rework Mode (Circle Rework Causes that Apply)	
Rework None	Cause Indeterminate	Life Cycle Management
	Design Deficiency	PM Deficiency
	Intentionally Abbreviated Maintenance	Rule Base Human Performance Deficiency
	Instructional Deficiency	Skill Base Human Performance Deficiency
	Knowledge Based Human Performance Error	Tools/Equipment/Lifts
	Deficiency	Vendor Deficiency
	Operational Deficiency	Work Management Deficiency
		Weather
	Other (Specify Rework Mode)	
Comments	n/a	

730017-01

FOR PMs – SUMMARIZE AS FOUND AND AS LEFT CONDITIONS BELOW		
	As Found Conditions (Circle Conditions that Apply)	
As found	Unanticipated Failure	Within Tolerance
	Failure Not Normal Wear	~~Satisfactory~~
	Failure Normal Wear	Superior, Like New
	Outside of Tolerance	Not Applicable
	Reliability Degraded	
	Other (Specify As Found Condition)	
Comments	none	
As left	As Found	
Parts/Repairs	none	
Read/meas.	BHW-001 20 PSI 185°F BHW-002 20 PSI 180°F BHW-003 20 PSI 180°F	
Post test info.	20PSI 185°F 20PSI 180°F 20PSI 180°F	
Problems Encountered (delays, safety, etc.):		
	Delay Codes (Circle Codes that Apply)	
Delay	Access	Operations
None	Equipment	RCT Availability
	IWD Workability	Safety Pause
	Material	Weather
		# of Hours_____ Date(s)_____
	Other (Specify Reason for Delay)	
Comments	N/A	
Lessons Learned/Recommendations:		
	None	
Name: Ismael Ortega	**Z#** 358331	**Signature:**	**Date:** 9/7/22

730017-01

PIC/SUPT

☑ PM has been completed in its entirety and ready for closure.

IF A PM COULD NOT BE COMPLETED:

☑ Percentage complete is 100 %

☐ Sections that did not work and need to be rescheduled

Reasons why:

MAINTENANCE COORIDATOR/AREA WORK COORDINATOR

Work Package is Complete and may be closed out: YES ☑ NO ☐

IF no: State Reason

Additional Work Needed? ☐ YES ☑ NO

Document UP/WO/FSR Number: _____

ENGINEERING (FOR MD and CD Work Orders)

IF a configuration baseline has been changed, THEN indicate the changes are to be incorporated into the following documents and/or configuration baseline:

☐ Drawings ☐ FDD/SDD

☐ Procedures ☐ Master Equipment List

☐ Permits ☐ Checklists

SE Name: Signature: Date:

WORK CONTROL

Moderate/High Hazard – WMC/Planner reviewed for Lessons Learned/Feedback

☐ YES ☐ NO N/A ☐

☐ Review of the completed work package is complete per AP-WORK-005, and the work package is ready to be set to complete in CMMS.

Name: **Z#** **Signature:** **Date:**

Work Order/Task: 730017-01

Start Date: 9-26-27	Completion Date: 9-27-27

ADITIONAL DETAILS ON WORK PERFORMED

Date	(Add details on As Found, Failure Mode, and Lessons Learned etc.)
Note:	Need to take a look at Step 6.3.2 I think it should go before Step 6.2.2

Los Alamos NATIONAL LABORATORY EST 1943	*Preventive Maintenance Instruction* Low- and High-Pressure Steam Boiler and Low-Temperature Water Heating Boiler Inspection, Testing, and Maintenance **403-A.006: Hot Water Boiler Yearly Fireside/Waterside Inspection and Maintenance**
Work Order No.: 730017-01	Equipment ID No.: BHW-001

Instructions: Enter the requested information. All items marked **S** or **Y** are satisfactory. Document all items marked **U**, **N**, or **N/A** in the Remarks section below, noting the step number and reason. Notify the foreman or supervisor of problems involving imminent danger.

TA: 55 Building: 40 Room: U209	
Date Inspected: 9/26/22	Inspectors: JU IO

1.0 PRE-MAINTENANCE ACTIVITIES

NOTE Preoperational and pre-maintenance activities shall be conducted per the work order package, e.g., lockout/tagout, permits, special instructions, etc.

! WARNING If purging of gas lines will be required during this maintenance, ensure that the purging activity is addressed in the Integrated Work Document (IWD). The following must be addressed (see Master Specification 23 1123):

1. Purged fuel gases shall be directly vented to a safe location outdoors, away from personnel and ignition sources. This may be accomplished through permanent piping or temporary piping or hosing.
2. If it is not possible to vent purged gases outdoors, the following conditions must be met:
   a. Purging activity must be approved by the LANL Fire Marshal based on a documented justification detailing why outdoor venting is not possible and IWD.
   b. Gas concentration in the space to which the purge is vented shall be maintained at no more than 25% of the Lower Explosive Limit (LEL). For natural gas, the LEL is a concentration of 5% in air or 50,000 ppm. Therefore a maximum concentration of 12,500 ppm is allowed for natural gas. The concentration may be controlled by providing adequate ventilation or by limiting the amount of purge gas.
   c. Combustible gas detectors shall be used during the purging operation to monitor the gas concentration.
   d. Nonessential personnel shall be evacuated from the vicinity (including adjacent spaces) during the purging operation.
   e. Ignition sources in the purging space shall be controlled or eliminated.

NOTE All repair work, adjustments, or the replacement of parts shall be done in accordance with the manufacturer's procedures, specifications, recommendations, and instructions.

Remarks: none

Work Order No.: 730017-01 Equipment ID No.: BHW-601

1.1	Notify maintenance coordinator (MC) that work will be in progress on the boiler system.		Initials: IO

2.0 MAINTENANCE

NOTE These selected hot water boilers are mainly boilers with power burners that have refractory in front and rear flue doors or have heat extractors in the fire-tubes as are found in most one-pass boilers (Sellers). Hot water heating boilers with atmospheric burners generally require minimal fireside preventative maintenance. Contact the MSS-MP Boiler subject matter expert (SME) at 7-8550 with questions or concerns.

2.1	Lock and tag out electrical and all associated valves on boiler and shut off gas supply.		Initials: IO
2.2	Cool boiler, open air cock, and drain the boiler.		Initials: IO
2.3	Perform an internal and external inspection after thorough cleaning.	S ☑ U ☐ N/A ☐	Initials: IO
2.3.1	Check the fireside furnace and fire-tubes for any evidence of soot formation or corrosion.	S ☑ U ☐ N/A ☐	Initials: IO
2.3.2	Brush and vacuum furnace and fire-tubes if such conditions exist.		Initials: IO
2.3.3	Perform hydrostatic test based on the boiler's Maximum Allowable Working Pressure and/or facility potable water pressure as long as the potable water pressure is at least 30 psi over boiler operating pressure.	S ☑ U ☐ N/A ☐	Initials: IO
2.3.4	Note if any boiler tubes and/or fittings are leaking, and repair as required. For any major repairs (determined by the SME), request a work order for the repairs from the MC.		Initials: IO

Remarks: none

2.3.5 On one-pass boilers (Sellers), check condition of all heat extractors.	S ☐ U ☐ N/A ☑	Initials: JO
2.3.6 Check refractory materials.	S ☑ U ☐ N/A ☐	Initials: JO
2.3.7 Replace if needed.		Initials: JO
2.4 Perform maintenance on low-water cutoff float chamber and water feeder. Disassemble to ensure freedom from obstruction and proper functioning of the working parts.		Initials: JO
2.5 Perform routine burner maintenance.		Initials: JO
2.5.1 Observe temperature and operating pressure and general conditions.	S ☑ U ☐ N/A ☐	Initials: JO
2.5.2 Fire and cycle the burner.		Initials: JO
2.6 Perform routine maintenance of circulating pump and expansion pump equipment.		Initials: JO
2.6.1 Observe condition of expansion tank.	S ☑ U ☐ N/A ☐	Initials: JO
2.6.2 Drain expansion tank if it is of a non-bladder type and refill to reestablish an air cushion.	S ☐ U ☐ N/A ☑	Initials: JO
2.6.3 Check the air pressure on the bladder-type expansion tanks.	S ☑ U ☐ N/A ☐	Initials: JO

Remarks: ~~N/A~~ 2.3.5 Not a Sellers Boiler

2.6.4	Observe operation of circulating pumps.	S ☑ U ☐ N/A ☐	Initials: IO
2.6.5	Lubricate pump motors.		Initials: IO
2.7	Perform routine maintenance of entire combustion control equipment.		Initials: IO
2.7.1	Check gas/air linkages and moving parts (on power burners that modulate) for positioning, tightness, and binding.	S ☑ U ☐ N/A ☐	Initials: IO
2.7.2	Adjust air/fuel mixture as needed.		Initials: IO
2.7.3	Test flame detection devices on boilers with flame scanners.	S ☑ U ☐ N/A ☐	Initials: IO
2.7.4	Remove the flame scanner with the burner firing.		Initials: IO
NOTE	The burner should shut off as a flame failure condition.		
2.7.5	Clean the flame scanner, reinstall and test programmer.		Initials: IO
2.7.6	Check for proper operation as boiler goes through a firing cycle and light-off.	S ☑ U ☐ N/A ☐	Initials: IO
2.7.7	Check all electrical control and circuitry.	S ☑ U ☐ N/A ☐	Initials: IO

Remarks: none

2.7.8 Inspect for cracked mercury tubes, separation of mercury, cracked insulators (probe type), jumper tube conditions, loose connections, poor or deteriorated wiring, improperly used bypass switches, cutoff switches wired in parallel, shut-offs installed at improper levels, wedges behind mercury tubes.	S ☑ U ☐ N/A ☐	Initials: TO
2.7.9 Observe operation of forced draft fan motors on boilers with power burners and induced draft fan motors on horizontal breeching where applicable.	S ☑ U ☐ N/A ☐	Initials: TO
2.7.10 Lubricate fan motors where necessary.		Initials: TO
2.8 Perform combustion and draft tests.		Initials: TO
2.8.1 Visually inspect combustion.	S ☑ U ☐ N/A ☐	Initials: TO
NOTE Changes in flame shape, color, and sound are among early indicators of potential combustion-related problems. Changes may be due to changes in fuel pressure or gas/air linkage movement.		
2.9 Perform safety relief valve(s) pop test.	S ☑ U ☐ N/A ☐	Initials: TO
2.9.1 Check pressure-reducing valve.	S ☑ U ☐ N/A ☐	Initials: TO
2.9.2 Replace the strainer in the valve if needed.		Initials: TO
2.10 Perform slow drain test of low-water cutoff.	S ☑ U ☐ N/A ☐	Initials: TO

Remarks: none

2.11 Inspect gas piping for proper support and tightness.	S ☑ U ☐ N/A ☐	Initials: ~~[illegible]~~
2.11.1 Inspect fuel supply system and gas controls.	S ☑ U ☐ N/A ☐	Initials: ~~[illegible]~~
2.11.2 Leak check gas controls and associated gas piping with a gas detector or soap suds.	S ☑ U ☐ N/A ☐	Initials: ~~[illegible]~~
2.12 Inspect boiler room ventilation louvers and intake.	S ☑ U ☐ N/A ☐	Initials: ~~[illegible]~~
2.12.1 Listen for any unusual noises or conditions and correct as necessary.	S ☑ U ☐ N/A ☐	Initials: ~~[illegible]~~
2.12.2 Report any needed corrections to the MC for corrective maintenance.		Initials: ~~[illegible]~~
2.12.3 Check combustion air supply openings to ensure that they are not closed or stopped up.	S ☑ U ☐ N/A ☐	Initials: ~~[illegible]~~
2.12.4 Inspect conditions of stacks and rain caps.	S ☑ U ☐ N/A ☐	Initials: ~~[illegible]~~
2.12.5 Inspect flue door gaskets to ensure they are in good condition, and properly secured.	S ☑ U ☐ N/A ☐	Initials: ~~[illegible]~~
2.12.6 Replace if necessary.		Initials: ~~[illegible]~~

Remarks: none

Work Order No.: 730017-01 Equipment ID No.: BHW-005

3.0 POST-MAINTENANCE ACTIVITIES

NOTE Post-maintenance activities shall be conducted in accordance with the work order package instructions (e.g., lockout/tagout, special instructions, etc.).

3.1	Close and secure front and rear flue doors.		Initials: TO
3.2	Hook up all associated piping.		Initials: TO
3.3	IF water makeup feeds boiler directly, THEN open by-pass valve to refill boiler, AND close by-pass valve when boiler reaches operating pressure. -or- IF water makeup does NOT feed boiler directly, THEN open supply and return valves to refill boiler.	By-pass ☐ -or- Supply/ Return ☑	Initials: TO
3.4	Fire up boiler and check for air, gas, and water leaks.	S ☑ U ☐ N/A ☐	Initials: TO
3.5	Check gas/air linkages and moving parts (on power burners that modulate) for positioning, tightness, and binding.	S ☑ U ☐ N/A ☐	Initials: TO
3.6	Check pilot burners and ignition equipment for proper condition and adjustment.	S ☑ U ☐ N/A ☐	Initials: TO
3.7	Visually check burner for proper combustion.	S ☑ U ☐ N/A ☐	Initials: TO
3.8	Record all mechanical maintenance data, testing data, and other notable items.		Initials: TO

NOTE Combustion analysis is verifiable only with a flue gas analyzer and is performed mainly on boilers with power burners.

Remarks: None

Work Order No.: 730017-01 Equipment ID No.: BHW-001

3.9	Test water for proper chemical levels. Test and treat water as defined on Datasheet 403-A.002.	S ☑ U ☐ N/A ☐	Initials: JB
3.10	Record all mechanical maintenance data, testing data, and other notable items.		Initials: JB
3.11	Notify MC that work on the boiler system is complete.		Initials: JB

Name of Craft Worker: Isaac Vallejos Z Number: 355331

Signature: [signature] Date: 9/26/22

Name of Craft Worker: Joseph Vranger Z Number: 368069

Signature: [signature] Date: 9/26/22

Foreman Verification: N/A Z Number: N/A

Signature: N/A Date: N/A

Remarks: None

Los Alamos NATIONAL LABORATORY EST 1943	*Preventive Maintenance Instruction* Low- and High-Pressure Steam Boiler and Low-Temperature Water Heating Boiler Inspection, Testing, and Maintenance **403-A.002: Hot Water Boiler Water Treatment**
Work Order No.: 730017-01	Equipment ID No.: BHW-001

Instructions: Enter the requested information. All items marked **S** or **Y** are satisfactory. Document all items marked **U**, **N**, or **N/A** in the Remarks section below, noting the step number and reason. Notify the foreman or supervisor of problems involving imminent danger.

TA: 55 Building: 4410 Room: U209	
Date Inspected: ~~9-27-22~~ 9-28-22	Inspectors: JB JU

1.0 PRE-MAINTENANCE ACTIVITIES

NOTE Preoperational and pre-maintenance activities shall be conducted per the work order package, e.g., lockout/tagout, permits, special instructions, etc.

1.1	Notify maintenance coordinator (MC) that work will be in progress on the boiler system.	Initials: JO

2.0 MAINTENANCE

2.1	Obtain a water sample from the boiler drain or an accessible point on the hot water loop system.		Initials: JO
2.2	Check sample water for boiler water treatment chemical concentration and pH. Use orthophosphate (O-PO_4) field test kit. Boiler water treatment chemical concentration should be 8 to 10 ppm. PO_4: 9 pH: 8 PO_4: N/A pH: N/A	**S** ☑ **U** ☐ **N/A** ☐	Initials: JO
2.3	If required, add Garrett-Callahan Formula 1015L or equivalent to the pot feeder.		Initials: JO

NOTE Not all boiler systems have pot feeders.

2.4	If the boiler does not have a pot feeder, isolate and drain the boiler and add boiler water treatment chemical directly into the boiler using the vent or other accessible fitting.	Initials: JO

Remarks: ~~JB~~ None

2.5	After addition of boiler water treatment chemical, circulate the system for a minimum of 72 hours. Boilers without pot feeders must be refilled before recirculation. Obtain a sample of the boiler water and use the orthophosphate (O PO_4) kit to test the sample for PO_4 and pH. Boiler water treatment chemical concentration should be 8 to 10 ppm. PO_4 N/A pH: N/A PO_4: N/A pH: N/A	S ☐ U ☐ N/A ☑	Initials: TO
2.6	Send a copy of the water treatment report to LANL Commissioned Inspector Supervisor's office, MS P291.		Initials: TO

3.0 POST-MAINTENANCE ACTIVITIES

NOTE Post-maintenance activities shall be conducted in accordance with the work order package instructions (e.g., lockout/tagout, special instructions, etc.).

3.1	Notify MC that work on the boiler system is complete.	Initials: TO

Name of Craft Worker: Isaac Ortega Z Number: 358331

Signature: [signature] Date: 9 / 27 / 22

Name of Craft Worker: Jesse Urbina Z Number: 306179

Signature: [signature] Date: 9 / 27 / 22

Foreman Verification: N/A Z Number: N/A

Signature: _____ Date: _____ /

Remarks: None

Los Alamos NATIONAL LABORATORY EST 1943	*Preventive Maintenance Instruction* Low- and High-Pressure Steam Boiler and Low-Temperature Water Heating Boiler Inspection, Testing, and Maintenance **403-A.006: Hot Water Boiler Yearly Fireside/Waterside Inspection and Maintenance**
Work Order No.: 730017-01	Equipment ID No.: BHW-GGZ

Instructions: Enter the requested information. All items marked **S** or **Y** are satisfactory. Document all items marked **U**, **N**, or **N/A** in the Remarks section below, noting the step number and reason. Notify the foreman or supervisor of problems involving imminent danger.

TA: 55 Building: 410 Room: U269	
Date Inspected: 9/27/22	Inspectors: Jo JU

1.0 PRE-MAINTENANCE ACTIVITIES

NOTE Preoperational and pre-maintenance activities shall be conducted per the work order package, e.g., lockout/tagout, permits, special instructions, etc.

! WARNING If purging of gas lines will be required during this maintenance, ensure that the purging activity is addressed in the Integrated Work Document (IWD). The following must be addressed (see Master Specification 23 1123):

1. Purged fuel gases shall be directly vented to a safe location outdoors, away from personnel and ignition sources. This may be accomplished through permanent piping or temporary piping or hosing.
2. If it is not possible to vent purged gases outdoors, the following conditions must be met:
   a. Purging activity must be approved by the LANL Fire Marshal based on a documented justification detailing why outdoor venting is not possible and IWD.
   b. Gas concentration in the space to which the purge is vented shall be maintained at no more than 25% of the Lower Explosive Limit (LEL). For natural gas, the LEL is a concentration of 5% in air or 50,000 ppm. Therefore a maximum concentration of 12,500 ppm is allowed for natural gas. The concentration may be controlled by providing adequate ventilation or by limiting the amount of purge gas.
   c. Combustible gas detectors shall be used during the purging operation to monitor the gas concentration.
   d. Nonessential personnel shall be evacuated from the vicinity (including adjacent spaces) during the purging operation.
   e. Ignition sources in the purging space shall be controlled or eliminated.

NOTE All repair work, adjustments, or the replacement of parts shall be done in accordance with the manufacturer's procedures, specifications, recommendations, and instructions.

Remarks: None

Work Order No.: 730017-01 Equipment ID No.: BHW-002

1.1	Notify maintenance coordinator (MC) that work will be in progress on the boiler system.	Initials: JO

2.0 MAINTENANCE

NOTE These selected hot water boilers are mainly boilers with power burners that have refractory in front and rear flue doors or have heat extractors in the fire-tubes as are found in most one-pass boilers (Sellers). Hot water heating boilers with atmospheric burners generally require minimal fireside preventative maintenance. Contact the MSS-MP Boiler subject matter expert (SME) at 7-8550 with questions or concerns.

2.1	Lock and tag out electrical and all associated valves on boiler and shut off gas supply.		Initials: JO
2.2	Cool boiler, open air cock, and drain the boiler.		Initials: JO
2.3	Perform an internal and external inspection after thorough cleaning.	S ☑ U ☐ N/A ☐	Initials: JO
2.3.1	Check the fireside furnace and fire-tubes for any evidence of soot formation or corrosion.	S ☑ U ☐ N/A ☐	Initials: JO
2.3.2	Brush and vacuum furnace and fire-tubes if such conditions exist.		Initials: JO
2.3.3	Perform hydrostatic test based on the boiler's Maximum Allowable Working Pressure and/or facility potable water pressure as long as the potable water pressure is at least 30 psi over boiler operating pressure.	S ☑ U ☐ N/A ☐	Initials: JO
2.3.4	Note if any boiler tubes and/or fittings are leaking, and repair as required. For any major repairs (determined by the SME), request a work order for the repairs from the MC.		Initials: JO

Remarks: none

2.3.5	On one-pass boilers (Sellers), check condition of all heat extractors.	S ☐ U ☐ N/A ☑	Initials: IO
2.3.6	Check refractory materials.	S ☑ U ☐ N/A ☐	Initials: IO
2.3.7	Replace if needed.		Initials: IO
2.4	Perform maintenance on low-water cutoff float chamber and water feeder. Disassemble to ensure freedom from obstruction and proper functioning of the working parts.		Initials: IO
2.5	Perform routine burner maintenance.		Initials: IO
2.5.1	Observe temperature and operating pressure and general conditions.	S ☑ U ☐ N/A ☐	Initials: IO
2.5.2	Fire and cycle the burner.		Initials: IO
2.6	Perform routine maintenance of circulating pump and expansion pump equipment.		Initials: IO
2.6.1	Observe condition of expansion tank.	S ☑ U ☐ N/A ☐	Initials: IO
2.6.2	Drain expansion tank if it is of a non-bladder type and refill to reestablish an air cushion.	S ☐ U ☐ N/A ☑	Initials: IO
2.6.3	Check the air pressure on the bladder-type expansion tanks.	S ☑ U ☐ N/A ☐	Initials: IO

Remarks: 2.3.5 Not as sellers
2.6.2 Not a non Bladder type

Work Order No.: 730017-01 Equipment ID No.: BHW-602

2.6.4 Observe operation of circulating pumps.	S ☑ U ☐ N/A ☐	Initials: JO
2.6.5 Lubricate pump motors.		Initials: JO
2.7 Perform routine maintenance of entire combustion control equipment.		Initials: JO
2.7.1 Check gas/air linkages and moving parts (on power burners that modulate) for positioning, tightness, and binding.	S ☑ U ☐ N/A ☐	Initials: JO
2.7.2 Adjust air/fuel mixture as needed.		Initials: JO
2.7.3 Test flame detection devices on boilers with flame scanners.	S ☑ U ☐ N/A ☐	Initials: JO
2.7.4 Remove the flame scanner with the burner firing.		Initials: JO
NOTE The burner should shut off as a flame failure condition.		
2.7.5 Clean the flame scanner, reinstall and test programmer.		Initials: JO
2.7.6 Check for proper operation as boiler goes through a firing cycle and light-off.	S ☑ U ☐ N/A ☐	Initials: JO
2.7.7 Check all electrical control and circuitry.	S ☑ U ☐ N/A ☐	Initials: JO

Remarks: done

2.7.8 Inspect for cracked mercury tubes, separation of mercury, cracked insulators (probe type), jumper tube conditions, loose connections, poor or deteriorated wiring, improperly used bypass switches, cutoff switches wired in parallel, shut-offs installed at improper levels, wedges behind mercury tubes.	S ☑ U ☐ N/A ☐	Initials: TD
2.7.9 Observe operation of forced draft fan motors on boilers with power burners and induced draft fan motors on horizontal breeching where applicable.	S ☑ U ☐ N/A ☐	Initials: JG
2.7.10 Lubricate fan motors where necessary.		Initials: JG
2.8 Perform combustion and draft tests.		Initials: JG
2.8.1 Visually inspect combustion.	S ☑ U ☐ N/A ☐	Initials: JG
NOTE Changes in flame shape, color, and sound are among early indicators of potential combustion-related problems. Changes may be due to changes in fuel pressure or gas/air linkage movement.		
2.9 Perform safety relief valve(s) pop test.	S ☑ U ☐ N/A ☐	Initials: TG
2.9.1 Check pressure-reducing valve.	S ☑ U ☐ N/A ☐	Initials: TG
2.9.2 Replace the strainer in the valve if needed.		Initials: TG
2.10 Perform slow drain test of low-water cutoff.	S ☑ U ☐ N/A ☐	Initials: TD

Remarks: None

Work Order No.: 730017-01 Equipment ID No.: BHW002

2.11 Inspect gas piping for proper support and tightness.	S ☑ U ☐ N/A ☐	Initials: Io
2.11.1 Inspect fuel supply system and gas controls.	S ☑ U ☐ N/A ☐	Initials: Io
2.11.2 Leak check gas controls and associated gas piping with a gas detector or soap suds.	S ☑ U ☐ N/A ☐	Initials: Io
2.12 Inspect boiler room ventilation louvers and intake.	S ☑ U ☐ N/A ☐	Initials: Io
2.12.1 Listen for any unusual noises or conditions and correct as necessary.	S ☑ U ☐ N/A ☐	Initials: Io
2.12.2 Report any needed corrections to the MC for corrective maintenance.		Initials: Io
2.12.3 Check combustion air supply openings to ensure that they are not closed or stopped up.	S ☑ U ☐ N/A ☐	Initials: Io
2.12.4 Inspect conditions of stacks and rain caps.	S ☑ U ☐ N/A ☐	Initials: Io
2.12.5 Inspect flue door gaskets to ensure they are in good condition, and properly secured.	S ☑ U ☐ N/A ☐	Initials: Io
2.12.6 Replace if necessary.		Initials: Io

Remarks: None

Work Order No.: 730017-01 Equipment ID No.: BHW-002

3.0 POST-MAINTENANCE ACTIVITIES

NOTE Post-maintenance activities shall be conducted in accordance with the work order package instructions (e.g., lockout/tagout, special instructions, etc.).

3.1	Close and secure front and rear flue doors.		Initials: TO
3.2	Hook up all associated piping.		Initials: TO
3.3	IF water makeup feeds boiler directly, THEN open by-pass valve to refill boiler, AND close by-pass valve when boiler reaches operating pressure. -or- IF water makeup does NOT feed boiler directly, THEN open supply and return valves to refill boiler.	By-pass ☐ -or- Supply/Return ☑	Initials: TO
3.4	Fire up boiler and check for air, gas, and water leaks.	S ☑ U ☐ N/A ☐	Initials: TO
3.5	Check gas/air linkages and moving parts (on power burners that modulate) for positioning, tightness, and binding.	S ☑ U ☐ N/A ☐	Initials: TO
3.6	Check pilot burners and ignition equipment for proper condition and adjustment.	S ☑ U ☐ N/A ☐	Initials: TO
3.7	Visually check burner for proper combustion.	S ☑ U ☐ N/A ☐	Initials: TO
3.8	Record all mechanical maintenance data, testing data, and other notable items.		Initials: TO

NOTE Combustion analysis is verifiable only with a flue gas analyzer and is performed mainly on boilers with power burners.

Remarks: None

Work Order No.: 750017-01 Equipment ID No.: BHW002

3.9	Test water for proper chemical levels. Test and treat water as defined on Datasheet 403-A.002.	S ☑ U ☐ N/A ☐	Initials: JO
3.10	Record all mechanical maintenance data, testing data, and other notable items.		Initials: JO
3.11	Notify MC that work on the boiler system is complete.		Initials: JO

Name of Craft Worker: Jesse Urbina Z Number: 306179

Signature: [signature] Date: 9/27/22

Name of Craft Worker: Isaac Bitsoy Z Number: 358331

Signature: [signature] Date: 9/27/22

Foreman Verification: N/A Z Number: N/A

Signature: Date:

Remarks: None

Los Alamos NATIONAL LABORATORY EST 1943	*Preventive Maintenance Instruction* Low- and High-Pressure Steam Boiler and Low-Temperature Water Heating Boiler Inspection, Testing, and Maintenance **403-A.002: Hot Water Boiler Water Treatment**
Work Order No.: 730017-01	Equipment ID No.: BHW-002

Instructions: Enter the requested information. All items marked **S** or **Y** are satisfactory. Document all items marked **U**, **N**, or **N/A** in the Remarks section below, noting the step number and reason. Notify the foreman or supervisor of problems involving imminent danger.

TA: 55 Building: 410 Room: U269	
Date Inspected: 9/27/22	Inspectors: IO JU

1.0 PRE-MAINTENANCE ACTIVITIES

NOTE Preoperational and pre-maintenance activities shall be conducted per the work order package, e.g., lockout/tagout, permits, special instructions, etc.

1.1	Notify maintenance coordinator (MC) that work will be in progress on the boiler system.	Initials: IO

2.0 MAINTENANCE

2.1	Obtain a water sample from the boiler drain or an accessible point on the hot water loop system.		Initials: IO
2.2	Check sample water for boiler water treatment chemical concentration and pH. Use orthophosphate (O-PO_4) field test kit. Boiler water treatment chemical concentration should be 8 to 10 ppm. PO_4: 9 pH: 8 PO_4: N/A pH: N/A	**S** ☐ **U** ☐ **N/A** ☐	Initials: IO
2.3	If required, add Garrett-Callahan Formula 1015L or equivalent to the pot feeder.		Initials: IO

NOTE Not all boiler systems have pot feeders.

2.4	If the boiler does not have a pot feeder, isolate and drain the boiler and add boiler water treatment chemical directly into the boiler using the vent or other accessible fitting.	Initials: IO

Remarks: Leak

Work Order No.: 730017-01 Equipment ID No.: _____

2.5	After addition of boiler water treatment chemical, circulate the system for a minimum of 72 hours. Boilers without pot feeders must be refilled before recirculation. Obtain a sample of the boiler water and use the orthophosphate (O PO_4) kit to test the sample for PO_4 and pH. Boiler water treatment chemical concentration should be 8 to 10 ppm. PO_4: N/A pH: N/A PO_4: N/A pH: N/A	S ☐ U ☐ N/A ☑	Initials: TO
2.6	Send a copy of the water treatment report to LANL Commissioned Inspector Supervisor's office, MS P291.		Initials: TO

3.0 POST-MAINTENANCE ACTIVITIES

NOTE Post-maintenance activities shall be conducted in accordance with the work order package instructions (e.g., lockout/tagout, special instructions, etc.).

3.1	Notify MC that work on the boiler system is complete.	Initials: TO

Name of Craft Worker: Isaac Ochoa Z Number: 355831

Signature: _____ Date: 9/27/22

Name of Craft Worker: Jesse Urbina Z Number: 306179

Signature: _____ Date: 9/27/22

Foreman Verification: N/A Z Number: N/A

Signature: _____ Date: / /

Remarks: _____

Los Alamos NATIONAL LABORATORY EST 1943	*Preventive Maintenance Instruction* Low- and High-Pressure Steam Boiler and Low-Temperature Water Heating Boiler Inspection, Testing, and Maintenance **403-A.006: Hot Water Boiler Yearly Fireside/Waterside Inspection and Maintenance**
Work Order No.: 730017-01	Equipment ID No.: BHW-003

Instructions: Enter the requested information. All items marked **S** or **Y** are satisfactory. Document all items marked **U**, **N**, or **N/A** in the Remarks section below, noting the step number and reason. Notify the foreman or supervisor of problems involving imminent danger.

TA: 55 Building: 440 Room: U209	
Date Inspected: 9/27/22	Inspectors: IG JU

1.0 PRE-MAINTENANCE ACTIVITIES

NOTE Preoperational and pre-maintenance activities shall be conducted per the work order package, e.g., lockout/tagout, permits, special instructions, etc.

! WARNING If purging of gas lines will be required during this maintenance, ensure that the purging activity is addressed in the Integrated Work Document (IWD). The following must be addressed (see Master Specification 23 1123):

1. Purged fuel gases shall be directly vented to a safe location outdoors, away from personnel and ignition sources. This may be accomplished through permanent piping or temporary piping or hosing.
2. If it is not possible to vent purged gases outdoors, the following conditions must be met:
   a. Purging activity must be approved by the LANL Fire Marshal based on a documented justification detailing why outdoor venting is not possible and IWD.
   b. Gas concentration in the space to which the purge is vented shall be maintained at no more than 25% of the Lower Explosive Limit (LEL). For natural gas, the LEL is a concentration of 5% in air or 50,000 ppm. Therefore a maximum concentration of 12,500 ppm is allowed for natural gas. The concentration may be controlled by providing adequate ventilation or by limiting the amount of purge gas.
   c. Combustible gas detectors shall be used during the purging operation to monitor the gas concentration.
   d. Nonessential personnel shall be evacuated from the vicinity (including adjacent spaces) during the purging operation.
   e. Ignition sources in the purging space shall be controlled or eliminated.

NOTE All repair work, adjustments, or the replacement of parts shall be done in accordance with the manufacturer's procedures, specifications, recommendations, and instructions.

Remarks: None

Work Order No.: 730017-01 Equipment ID No.: BHW-003

1.1	Notify maintenance coordinator (MC) that work will be in progress on the boiler system.		Initials: JO

2.0 MAINTENANCE

NOTE These selected hot water boilers are mainly boilers with power burners that have refractory in front and rear flue doors or have heat extractors in the fire-tubes as are found in most one-pass boilers (Sellers). Hot water heating boilers with atmospheric burners generally require minimal fireside preventative maintenance. Contact the MSS-MP Boiler subject matter expert (SME) at 7-8550 with questions or concerns.

2.1	Lock and tag out electrical and all associated valves on boiler and shut off gas supply.		Initials: JO
2.2	Cool boiler, open air cock, and drain the boiler.		Initials: JO
2.3	Perform an internal and external inspection after thorough cleaning.	S ☑ U ☐ N/A ☐	Initials: JO
2.3.1	Check the fireside furnace and fire-tubes for any evidence of soot formation or corrosion.	S ☑ U ☐ N/A ☐	Initials: JO
2.3.2	Brush and vacuum furnace and fire-tubes if such conditions exist.		Initials: JO
2.3.3	Perform hydrostatic test based on the boiler's Maximum Allowable Working Pressure and/or facility potable water pressure as long as the potable water pressure is at least 30 psi over boiler operating pressure.	S ☑ U ☐ N/A ☐	Initials: JO
2.3.4	Note if any boiler tubes and/or fittings are leaking, and repair as required. For any major repairs (determined by the SME), request a work order for the repairs from the MC.		Initials: JO

Remarks: None

Work Order No.: 730017-01 Equipment ID No.: BHW-003

2.3.5	On one-pass boilers (Sellers), check condition of all heat extractors.	S ☐ U ☐ N/A ☑	Initials: JO
2.3.6	Check refractory materials.	S ☑ U ☐ N/A ☐	Initials: JO
2.3.7	Replace if needed.		Initials: JO
2.4	Perform maintenance on low-water cutoff float chamber and water feeder. Disassemble to ensure freedom from obstruction and proper functioning of the working parts.		Initials: JO
2.5	Perform routine burner maintenance.		Initials: JO
2.5.1	Observe temperature and operating pressure and general conditions.	S ☑ U ☐ N/A ☐	Initials: JO
2.5.2	Fire and cycle the burner.		Initials: JO
2.6	Perform routine maintenance of circulating pump and expansion pump equipment.		Initials: JO
2.6.1	Observe condition of expansion tank.	S ☑ U ☐ N/A ☐	Initials: JO
2.6.2	Drain expansion tank if it is of a non-bladder type and refill to reestablish an air cushion.	S ☐ U ☐ N/A ☑	Initials: JO
2.6.3	Check the air pressure on the bladder-type expansion tanks.	S ☑ U ☐ N/A ☐	Initials: JO

Remarks: 2.3.5 Not a sellers Boiler
2.6.2 Not a non-Bladder type expansion tank

2.6.4 Observe operation of circulating pumps.	S ☐ U ☐ N/A ☐	Initials: TO
2.6.5 Lubricate pump motors.		Initials: TO
2.7 Perform routine maintenance of entire combustion control equipment.		Initials: TO
2.7.1 Check gas/air linkages and moving parts (on power burners that modulate) for positioning, tightness, and binding.	S ☑ U ☐ N/A ☐	Initials: TO
2.7.2 Adjust air/fuel mixture as needed.		Initials: TO
2.7.3 Test flame detection devices on boilers with flame scanners.	S ☑ U ☐ N/A ☐	Initials: TO
2.7.4 Remove the flame scanner with the burner firing.		Initials: TO
NOTE The burner should shut off as a flame failure condition.		
2.7.5 Clean the flame scanner, reinstall and test programmer.		Initials: TO
2.7.6 Check for proper operation as boiler goes through a firing cycle and light-off.	S ☑ U ☐ N/A ☐	Initials: TO
2.7.7 Check all electrical control and circuitry.	S ☑ U ☐ N/A ☐	Initials: TO

Remarks: None

2.7.8	Inspect for cracked mercury tubes, separation of mercury, cracked insulators (probe type), jumper tube conditions, loose connections, poor or deteriorated wiring, improperly used bypass switches, cutoff switches wired in parallel, shut-offs installed at improper levels, wedges behind mercury tubes.	S ☑ U ☐ N/A ☑	Initials: IO
2.7.9	Observe operation of forced draft fan motors on boilers with power burners and induced draft fan motors on horizontal breeching where applicable.	S ☑ U ☐ N/A ☐	Initials: IO
2.7.10	Lubricate fan motors where necessary.		Initials: IO
2.8	Perform combustion and draft tests.		Initials: IO
2.8.1	Visually inspect combustion.	S ☑ U ☐ N/A ☐	Initials: IO
NOTE	Changes in flame shape, color, and sound are among early indicators of potential combustion-related problems. Changes may be due to changes in fuel pressure or gas/air linkage movement.		
2.9	Perform safety relief valve(s) pop test.	S ☐ U ☐ N/A ☐	Initials: IO
2.9.1	Check pressure-reducing valve.	S ☑ U ☐ N/A ☐	Initials: IO
2.9.2	Replace the strainer in the valve if needed.		Initials: IO
2.10	Perform slow drain test of low-water cutoff.	S ☑ U ☐ N/A ☐	Initials: IO

Remarks: None

Work Order No.: 730017-01 Equipment ID No.: BHW-003

2.11 Inspect gas piping for proper support and tightness.	S ☑ U ☐ N/A ☐	Initials: JO
2.11.1 Inspect fuel supply system and gas controls.	S ☑ U ☐ N/A ☐	Initials: JO
2.11.2 Leak check gas controls and associated gas piping with a gas detector or soap suds.	S ☑ U ☐ N/A ☐	Initials: JO
2.12 Inspect boiler room ventilation louvers and intake.	S ☑ U ☐ N/A ☐	Initials: JO
2.12.1 Listen for any unusual noises or conditions and correct as necessary.	S ☑ U ☐ N/A ☐	Initials: JO
2.12.2 Report any needed corrections to the MC for corrective maintenance.		Initials: JO
2.12.3 Check combustion air supply openings to ensure that they are not closed or stopped up.	S ☑ U ☐ N/A ☐	Initials: JO
2.12.4 Inspect conditions of stacks and rain caps.	S ☑ U ☐ N/A ☐	Initials: JO
2.12.5 Inspect flue door gaskets to ensure they are in good condition, and properly secured.	S ☑ U ☐ N/A ☐	Initials: JO
2.12.6 Replace if necessary.		Initials: JO

Remarks: none

3.0 POST-MAINTENANCE ACTIVITIES

NOTE Post-maintenance activities shall be conducted in accordance with the work order package instructions (e.g., lockout/tagout, special instructions, etc.).

3.1	Close and secure front and rear flue doors.		Initials: Io
3.2	Hook up all associated piping.		Initials: Io
3.3	IF water makeup feeds boiler directly, THEN open by-pass valve to refill boiler, AND close by-pass valve when boiler reaches operating pressure. -or- IF water makeup does NOT feed boiler directly, THEN open supply and return valves to refill boiler.	By-pass ☐ -or- Supply/Return ☑	Initials: Io
3.4	Fire up boiler and check for air, gas, and water leaks.	S ☑ U ☐ N/A ☐	Initials: Io
3.5	Check gas/air linkages and moving parts (on power burners that modulate) for positioning, tightness, and binding.	S ☑ U ☐ N/A ☐	Initials: Io
3.6	Check pilot burners and ignition equipment for proper condition and adjustment.	S ☑ U ☐ N/A ☐	Initials: Io
3.7	Visually check burner for proper combustion.	S ☑ U ☐ N/A ☐	Initials: Io
3.8	Record all mechanical maintenance data, testing data, and other notable items.		Initials: Io

NOTE Combustion analysis is verifiable only with a flue gas analyzer and is performed mainly on boilers with power burners.

Remarks: None

Work Order No.: 730017-01 Equipment ID No.: BHW-003

3.9	Test water for proper chemical levels. Test and treat water as defined on Datasheet 403-A.002.	S ☑ U ☐ N/A ☐	Initials: IO
3.10	Record all mechanical maintenance data, testing data, and other notable items.		Initials: IO
3.11	Notify MC that work on the boiler system is complete.		Initials: IO

Name of Craft Worker: Isaac Ortega Z Number: 558331

Signature: [signature] Date: 9/27/22

Name of Craft Worker: Jesse Urbina Z Number: 306179

Signature: [signature] Date: 9/27/22

Foreman Verification: N/A Z Number: N/A

Signature: Date: /

Remarks: none

Los Alamos NATIONAL LABORATORY EST 1943	*Preventive Maintenance Instruction* Low- and High-Pressure Steam Boiler and Low-Temperature Water Heating Boiler Inspection, Testing, and Maintenance **403-A.002: Hot Water Boiler Water Treatment**
Work Order No.: 730017-01	Equipment ID No.: BHW-003

Instructions: Enter the requested information. All items marked **S** or **Y** are satisfactory. Document all items marked **U**, **N**, or **N/A** in the Remarks section below, noting the step number and reason. Notify the foreman or supervisor of problems involving imminent danger.

TA: 55 Building: 440 Room: U209	
Date Inspected: 9 / 27 / 22	Inspectors: Jo Ju

1.0 PRE-MAINTENANCE ACTIVITIES

NOTE Preoperational and pre-maintenance activities shall be conducted per the work order package, e.g., lockout/tagout, permits, special instructions, etc.

1.1	Notify maintenance coordinator (MC) that work will be in progress on the boiler system.	Initials: Jo

2.0 MAINTENANCE

2.1	Obtain a water sample from the boiler drain or an accessible point on the hot water loop system.		Initials: Jo
2.2	Check sample water for boiler water treatment chemical concentration and pH. Use orthophosphate (O-PO_4) field test kit. Boiler water treatment chemical concentration should be 8 to 10 ppm. PO_4 9 pH: 8 PO_4: N/A pH: N/A	**S** ☑ **U** ☐ **N/A** ☐	Initials: Jo
2.3	If required, add Garrett-Callahan Formula 1015L or equivalent to the pot feeder.		Initials: Jo

NOTE Not all boiler systems have pot feeders.

2.4	If the boiler does not have a pot feeder, isolate and drain the boiler and add boiler water treatment chemical directly into the boiler using the vent or other accessible fitting.	Initials: Jo

Remarks: None

2.5	After addition of boiler water treatment chemical, circulate the system for a minimum of 72 hours. Boilers without pot feeders must be refilled before recirculation. Obtain a sample of the boiler water and use the orthophosphate (O PO_4) kit to test the sample for PO_4 and pH. Boiler water treatment chemical concentration should be 8 to 10 ppm. PO_4 N/A pH: N/A PO_4: N/A pH: N/A	S ☐ U ☐ N/A ☑	Initials: IO
2.6	Send a copy of the water treatment report to LANL Commissioned Inspector Supervisor's office, MS P291.		Initials: IO

3.0 POST-MAINTENANCE ACTIVITIES

NOTE Post-maintenance activities shall be conducted in accordance with the work order package instructions (e.g., lockout/tagout, special instructions, etc.).

3.1	Notify MC that work on the boiler system is complete.	Initials: IO

Name of Craft Worker: Isaac Ortega Z Number: 358331

Signature: [signature] Date: 9/27/22

Name of Craft Worker: Jesse Urbina Z Number: 306179

Signature: [signature] Date: 9/27/22

Foreman Verification: N/A Z Number: N/A

Signature: N/A Date: N/A

Remarks: None

#1

No: RN101-3-01 Interim Requirements for Hazardous Energy Identification and Control
Attachment A. Lockout/Tagout Pre-job Walk-down Checklist (Page 1 of 2)

Instructions: Perform the pre-job walk-down with the necessary people per Section 3.1 of the Requirements Notice 101-3-01. Complete this checklist and take signed checklist to the lock coordinator. All Authorized Workers are required to participate in the walk-down and sign the checklist in order to check out a lock and tag. If additional workers are added to the job, they must also perform a walk-down of the system and show a signed checklist to the lock coordinator. The signed checklists are to be kept with the parent work document (IWD, work package, etc.).

Work Document Number (e.g., Package/Procedure#): 730017-01

- [x] We have walked down and discussed the work to be performed.
- [x] All energy isolation points and positions have been identified and documented.
- [x] The proper energy control procedure is being used (Simple vs Complex LO/TO).
- [x] All energy-isolating devices are labeled properly (e.g., labels aren't faded, no hand written modifications).
- [x] No discrepancies are found between record drawings, labels, panel schedules, and LO/TO procedures.
- [x] Lockout devices have been identified to support the work.

*If any of the above items are identified to be inadequate, pause work, report the issues to your RLM, and contact the appropriate SMEs to help resolve issues ***before*** performing/resuming work.

Simple Lockout/Tagout

By signing below, you acknowledge that you have completed the pre-job walk-down and there are no issues that need to be reported to your Responsible Line Manager before beginning work.

Lead Authorized Worker (print name)	Z Number	Signature/Date
Authorized Worker (print name)	Z Number	Signature/Date

Complex Lockout/Tagout

By signing below, you acknowledge that you have completed the pre-job walk-down and there are no issues that need to be reported to your Responsible Line Manager before beginning work.

MS&E Owner/Operator (print name) Stephen McVey	Z Number 265531	Signature/Date 9/26/22
Preparer or PIC (print name) [illegible]	Z Number 185092	Signature/Date 9-26-22
Lead Authorized Worker (print name) Isaac Ortega	Z Number 358331	Signature/Date 9-26-22
Authorized Worker (print name) Joseph Uran	Z Number 368069	Signature/Date 9-26-22
Authorized Worker (print name) Jacobo Romero	Z Number 351014	Signature/Date 9-26-22

Note: Print additional sheets as necessary.

NOTE: Use these buttons to print or save the form. DO NOT use the browser tool bar.

Los Alamos NATIONAL LABORATORY EST 1943

Form 2244

Lockout/Tagout (LO/TO) Orders

Section 1: General Information

Work Document Number (e.g., Package/Procedure #): 130017-01	LO/TO Remedy ID: 22-7164
Location of Equipment to be Isolated: TA: 55 Bldg: 0440 Rm/Other: U209	Description of Machinery, System & Equipment (MS&E) to be worked on: BHW-01 and HW-P-01
MS&E Owner/Operator: Stephen McNeel Z Number: Z65531 Phone: 7-1973	
Shutdown to be performed by MS&E Owner/Operator (as determined by MS&E Owner/Operator) ☒ Yes ☐ No	Re-energize/restart to be performed by MS&E Owner/Operator (as determined by MS&E Owner/Operator) ☒ Yes ☐ No
Reason for LO/TO: Perform 550440 Hot Water Boiler Fireside/ Waterside PM	
Group LO/TO (2 or more)? ☒ Yes ☐ No *If yes, a lead authorized worker must be appointed.*	Group lock box used? ☒ Yes ☐ No #18
Shift or Personnel Changes? ☐ Yes ☒ No *If yes, a description of how the continuity of LO/TO protection will be ensured must be referenced or attached to this form. (See Section 3.9.6 of P101-3 for details.)*	☐ Continuity of LO/TO protection details described in operating procedure, work instruction, or other work control document. Document Number:

Section 2: Energy Control Procedure

1. Plan the work.
2. Identify and assess hazardous energy.
3. Contact the MS&E owner/operator.
4. Obtain locks and tags from lock coordinator.
5. Notify affected workers.
6. Shutdown MS&E according to **Section 3: Shutdown Sequence**.
7. Isolate and lock out MS&E from energy source, relieve stored energy, and perform verification of isolation according to **Section 4: LO/TO Sequence**.
8. Perform the work.
9. Release MS&E from LO/TO according to **Section 5: Release MS&E from Lockout/Tagout Sequence**.

Section 3: Shutdown Sequence

☐ Perform shutdown according to operating procedure, work instruction, or other work control document (e.g., IWD, Owner's Manual, SOP).
Document Number:

☒ **N/A**; MS&E to be worked on will be isolated according to **Section 4: LO/TO Sequence** (e.g., cannot be shut down)
Detail the process to normally shut down the MS&E below, if not following other document referenced above or N/A.

Step No.	Action/Description	Step No.	Action/Description
☐ 1		☐ 6	
☐ 2		☐ 7	
☐ 3		☐ 8	
☐ 4		☐ 9	
☐ 5		☐ 10	

Section 4: LO/TO Sequence

☒ Perform LO/TO sequence according to operating procedure, work instruction, or other work control document (e.g., IWD, Owner's Manual, SOP).
Document Number:
Describe how to effectively isolate & lockout the MS&E below, if not following other document referenced above.

Isolate & Lockout (Step No.)	Equipment Descriptor (What is being locked out? e.g., machine drive motor, input power to MCC)	Energy Source (e.g., electrical, mechanical, pneumatic, hydraulic, chemical, thermal)	Energy Isolation Device (e.g., specific ID, description, circuit #, lock box #)	Location of Energy Isolation Device (e.g., room number, north wall, south wall)	Required LO/TO Position or Alignment (e.g., off, open, closed, on)	Verification Method (e.g., live/dead/live, crack open, on-off-on-off, peer checking, independent verification)	Verifier's Initials (if req'd)	See Section 5: Release (Step No.)
☐ (1)	BHW-01	Electrical	MCC-B Ckt 3B	U209	OPEN / OFF	Peer		☐
☐ (2)	HW-P-01	Electrical	MCC-B Ckt 2B	U209	OPEN/OFF	Peer		☐
☐ (3)	UPS	Electrical	UPS Switch	U209	OPEN / OFF	Peer		☐
☐ (4)	BHW-01	Mechanical	NG-V-6000D	U209	CLOSED	Peer		☐
☐ (5)	BHW-01	Mechanical	NG-V-6004A	U209	CLOSED	Peer		☐
☐ (6)	HW-P-01	Mechanical	HW-V-101A	U209	CLOSED	Peer		☐
☐ (7)	HW-P-01	Mechanical	HW-V-101B	U209	CLOSED	Peer		☐
☐ (8)								☐

Section 5: Release MS&E from Lockout/Tagout Sequence

1. Check the MS&E and immediate area for items that could result in damage or danger on start-up.
2. Check the work area to ensure that all workers have been safely positioned or removed from the work area.
3. Verify that the controls are in neutral or "off" position.
4. Notify the owner/operator and affected workers that work is complete and MS&E is ready to release from LO/TO.
5. Remove the LO/TO device, and re-energize (if appropriate according to MS&E owner/operator) according to the sequence as identified above under Release in **Section 4: LO/TO Sequence** or according to operating procedure, work instruction, or other work control document identified in **Section 4**.
6. Return lock and locking device to Lock Coordinator.

Energy Control Procedure prepared by:

Preparer (print name)	Z Number	Organization	Phone	Signature/Date
Wanda J. Madrid	116672	MSS-WC	6-0332	Wanda J Madrid 8.22.22

By signing below, you acknowledge that this energy control procedure and/or referenced documents identify the isolation devices, isolation points, and methods necessary to prevent any unexpected release of hazardous energy.

Energy Control Procedure approved by:

MS&E Owner/Operator (print name)	Z Number	Organization	Phone	Signature/Date
Stephen McNeel	Z65531	TA55-RLWOB	7-1973	9/26/2022

Section 6: All Authorized Workers (anyone applying a lock for this activity)

Fill out the following information or print and attach Authorized Workers information from the Lockout/Tagout Remedy Application.

Authorized Workers Name(s)	Z Number	Date Lock Applied	Date Lock Removed
Lead: Isaac Arteaga	358331	9-26-22	
Jacobo Romero	351014		
Joseph Urra Vega	360069	9/26/22	9/26/22

#2

No: RN101-3-01 Interim Requirements for Hazardous Energy Identification and Control
Attachment A. Lockout/Tagout Pre-job Walk-down Checklist (Page 1 of 2)

Instructions: Perform the pre-job walk-down with the necessary people per Section 3.1 of the Requirements Notice 101-3-01. Complete this checklist and take signed checklist to the lock coordinator. All Authorized Workers are required to participate in the walk-down and sign the checklist in order to check out a lock and tag. If additional workers are added to the job, they must also perform a walk-down of the system and show a signed checklist to the lock coordinator. The signed checklists are to be kept with the parent work document (IWD, work package, etc.).

Work Document Number (e.g., Package/Procedure#): 730017-01

- ☑ We have walked down and discussed the work to be performed.
- ☑ All energy isolation points and positions have been identified and documented.
- ☑ The proper energy control procedure is being used (Simple vs Complex LO/TO).
- ☑ All energy-isolating devices are labeled properly (e.g., labels aren't faded, no hand written modifications).
- ☑ No discrepancies are found between record drawings, labels, panel schedules, and LO/TO procedures.
- ☐ Lockout devices have been identified to support the work.

*If any of the above items are identified to be inadequate, pause work, report the issues to your RLM, and contact the appropriate SMEs to help resolve issues ***before*** performing/resuming work.

Simple Lockout/Tagout

By signing below, you acknowledge that you have completed the pre-job walk-down and there are no issues that need to be reported to your Responsible Line Manager before beginning work.

Lead Authorized Worker (print name)	Z Number	Signature/Date
Authorized Worker (print name)	Z Number	Signature/Date

Complex Lockout/Tagout

By signing below, you acknowledge that you have completed the pre-job walk-down and there are no issues that need to be reported to your Responsible Line Manager before beginning work.

MS&E Owner/Operator (print name)	Z Number 365531	Signature/Date Stephen Mead 09/26/2022
Preparer or PIC (print name)	Z Number 185092	Signature/Date 9-26-22
Lead Authorized Worker (print name) Isaac Ortega	Z Number 359331	Signature/Date 9-26-22
Authorized Worker (print name) Joseph Lizarraga	Z Number 368069	Signature/Date 9-26-22
Authorized Worker (print name) Jacobo Romero	Z Number 351014	Signature/Date 9-26-22

Note: Print additional sheets as necessary.

HAROLD A DEAKIN 351234 Harold A Deakin 9/27/22
LANL Jesse Urbina 306179 Jesse Urbina 9/27/22

NOTE: Use these buttons to print or save the form. DO NOT use the browser tool bar.

Form 2244

Los Alamos NATIONAL LABORATORY EST 1943

Lockout/Tagout (LO/TO) Orders

Section 1: General Information

Work Document Number (e.g., Package/Procedure #):	LO/TO Remedy ID: 22-7175
Location of Equipment to be Isolated: TA: 55 Bldg: 0440 Rm/Other: U209	Description of Machinery, System & Equipment (MS&E) to be worked on: BHW-02 and HW-P-02
MS&E Owner/Operator: Stephen McNeel Z Number: Z65531	Phone: 7-1978
Shutdown to be performed by MS&E Owner/Operator (as determined by MS&E Owner/Operator) ☒ Yes ☐ No	Re-energize/restart to be performed by MS&E Owner/Operator (as determined by MS&E Owner/Operator) ☒ Yes ☐ No
Reason for LO/TO: Perform 550440 Hot Water Boiler Fireside/ Waterside PM	
Group LO/TO (2 or more)? ☒ Yes ☐ No *If yes, a lead authorized worker must be appointed.*	Group lock box used? ☒ Yes ☐ No #18
Shift or Personnel Changes? ☐ Yes ☒ No *If yes, a description of how the continuity of LO/TO protection will be ensured must be referenced or attached to this form. (See Section 3.9.6 of P101-3 for details.)*	☒ Continuity of LO/TO protection details described in operating procedure, work instruction, or other work control document. Document Number:

Section 2: Energy Control Procedure

1. Plan the work.
2. Identify and assess hazardous energy.
3. Contact the MS&E owner/operator.
4. Obtain locks and tags from lock coordinator.
5. Notify affected workers.
6. Shutdown MS&E according to **Section 3: Shutdown Sequence**.
7. Isolate and lock out MS&E from energy source, relieve stored energy, and perform verification of isolation according to **Section 4: LO/TO Sequence**.
8. Perform the work.
9. Release MS&E from LO/TO according to **Section 5: Release MS&E from Lockout/Tagout Sequence**.

Section 3: Shutdown Sequence

☒ Perform shutdown according to operating procedure, work instruction, or other work control document (e.g., IWD, Owner's Manual, SOP).
Document Number:

☐ **N/A**; MS&E to be worked on will be isolated according to **Section 4: LO/TO Sequence** (e.g., cannot be shut down)
Detail the process to normally shut down the MS&E below, if not following other document referenced above or N/A.

Step No.	Action/Description	Step No.	Action/Description
☐ 1		☐ 6	
☐ 2		☐ 7	
☐ 3		☐ 8	
☐ 4		☐ 9	
☐ 5		☐ 10	

Section 4: LO/TO Sequence

☒ Perform LO/TO sequence according to operating procedure, work instruction, or other work control document (e.g., IWD, Owner's Manual, SOP).
Document Number:
Describe how to effectively isolate & lockout the MS&E below, if not following other document referenced above.

Isolate & Lockout (Step No.)	Equipment Descriptor (What is being locked out? e.g., machine drive motor, input power to MCC)	Energy Source (e.g., electrical, mechanical, pneumatic, hydraulic, chemical, thermal)	Energy Isolation Device (e.g., specific ID, description, circuit #, lock box #)	Location of Energy Isolation Device (e.g., room number, north wall, south wall)	Required LO/TO Position or Alignment (e.g., off, open, closed, on)	Verification Method (e.g., live/dead/live, crack open, on-off-on-off, peer checking, independent verification)	Verifier's Initials (if req'd)	See Section 5: Release (Step No.)
☐ (1)	BHW-02	Electrical	MCC-B Ckt 3D	U209	OPEN / OFF	Peer		☐
☐ (2)	HW-P-02	Electrical	MCC-B Ckt 2C	U209	OPEN/OFF	Peer		☐
☐ (3)	BHW-02	Mechanical	NG-V-6010D	U209	CLOSED	Peer		☐
☐ (4)	BHW-02	Mechanical	NG-V-6014A	U209	CLOSED	Peer		☐
☐ (5)	HW-P-02	Mechanical	HW-V-201A	U209	CLOSED	Peer		☐
☐ (6)	HW-P-02	Mechanical	HW-V-201B	U209	CLOSED	Peer		☐
☐ (7)	Lock Box	Lock Box	Lock Box 18	U209	Locked	Peer		☐
☐ (8)								☐

Section 5: Release MS&E from Lockout/Tagout Sequence

1. Check the MS&E and immediate area for items that could result in damage or danger on start-up.
2. Check the work area to ensure that **all** workers have been safely positioned or removed from the work area.
3. Verify that the controls are in neutral or "off" position.
4. Notify the owner/operator and affected workers that work is complete and MS&E is ready to release from LO/TO.
5. Remove the LO/TO device, and re-energize (if appropriate according to MS&E owner/operator) according to the sequence as identified above under Release in **Section 4: LO/TO Sequence** or according to operating procedure, work instruction, or other work control document identified in **Section 4**.
6. Return lock and locking device to Lock Coordinator.

Energy Control Procedure prepared by:

Preparer (print name)	Z Number	Organization	Phone	Signature/Date
Wanda J. Madrid	116672	MSS-WC	6.0332	Wanda J. Madrid 8/22/22

By signing below, you acknowledge that this energy control procedure and/or referenced documents identify the isolation devices, isolation points, and methods necessary to prevent any unexpected release of hazardous energy.

Energy Control Procedure approved by:

MS&E Owner/Operator (print name)	Z Number	Organization	Phone	Signature/Date
Stephen McNeel	265531	TASS-RLWOB	7-1975	09/26/22

Section 6: All Authorized Workers (anyone applying a lock for this activity)

Fill out the following information or print and attach Authorized Workers information from the Lockout/Tagout Remedy Application.

Authorized Workers Name(s)	Z Number	Date Lock Applied	Date Lock Removed
Lead: Isaac Ortega	358331	9-27-22	9-27-22
Jacob Romero	351014	9-27-22	9-27-22
HAROLD A DEAKIN	351234	9-27-22	9-27-22
Jesse Urbina	306179	9-27-22	9-27-22

#3

No: RN101-3-01 Interim Requirements for Hazardous Energy Identification and Control
Attachment A. Lockout/Tagout Pre-job Walk-down Checklist (Page 1 of 2)

Instructions: Perform the pre-job walk-down with the necessary people per Section 3.1 of the Requirements Notice 101-3-01. Complete this checklist and take signed checklist to the lock coordinator. All Authorized Workers are required to participate in the walk-down and sign the checklist in order to check out a lock and tag. If additional workers are added to the job, they must also perform a walk-down of the system and show a signed checklist to the lock coordinator. The signed checklists are to be kept with the parent work document (IWD, work package, etc.).

Work Document Number (e.g., Package/Procedure#): 730017-01

- ☑ We have walked down and discussed the work to be performed.
- ☑ All energy isolation points and positions have been identified and documented.
- ☑ The proper energy control procedure is being used (Simple vs Complex LO/TO).
- ☑ All energy-isolating devices are labeled properly (e.g., labels aren't faded, no hand written modifications).
- ☑ No discrepancies are found between record drawings, labels, panel schedules, and LO/TO procedures.
- ☑ Lockout devices have been identified to support the work.

*If any of the above items are identified to be inadequate, pause work, report the issues to your RLM, and contact the appropriate SMEs to help resolve issues ***before*** performing/resuming work.

Simple Lockout/Tagout

By signing below, you acknowledge that you have completed the pre-job walk-down and there are no issues that need to be reported to your Responsible Line Manager before beginning work.

Lead Authorized Worker (print name)	Z Number	Signature/Date
Authorized Worker (print name)	Z Number	Signature/Date

Complex Lockout/Tagout

By signing below, you acknowledge that you have completed the pre-job walk-down and there are no issues that need to be reported to your Responsible Line Manager before beginning work.

MS&E Owner/Operator (print name)	Z Number	Signature/Date
Stephen Mowell	265531	09/26/2022
Preparer or PIC (print name)	Z Number	Signature/Date
Mary Vale	195019	9/26/22
Lead Authorized Worker (print name)	Z Number	Signature/Date
Isaac Briley	354331	9-26-22
Authorized Worker (print name)	Z Number	Signature/Date
Joseph Urquhart	368069	9.26.22
Authorized Worker (print name)	Z Number	Signature/Date
Jacob Romero	351014	9-26-22

Note: Print additional sheets as necessary.

Jesse Urbina Z06179 9-27-22

NOTE: Use these buttons to print or save the form. DO NOT use the browser tool bar.

Los Alamos NATIONAL LABORATORY EST. 1943

Form 2244

Lockout/Tagout (LO/TO) Orders

Section 1: General Information

Work Document Number (e.g., Package/Procedure #): 730017-01	LO/TO Remedy ID: 22-7189
Location of Equipment to be Isolated: TA: 55 Bldg: 0440 Rm/Other: U209	Description of Machinery, System & Equipment (MS&E) to be worked on: BHW-03 and HW-P-03
MS&E Owner/Operator: Stephen McNeel Z Number: Z65531 Phone: 7-1973	
Shutdown to be performed by MS&E Owner/Operator (as determined by MS&E Owner/Operator) ☒ Yes ☐ No	Re-energize/restart to be performed by MS&E Owner/Operator (as determined by MS&E Owner/Operator) ☒ Yes ☐ No
Reason for LO/TO: Perform 550440 Hot Water Boiler Fireside/ Waterside PM	
Group LO/TO (2 or more)? ☒ Yes ☐ No *If yes, a lead authorized worker must be appointed.*	Group lock box used? ☒ Yes ☐ No #18
Shift or Personnel Changes? ☐ Yes ☒ No *If yes, a description of how the continuity of LO/TO protection will be ensured must be referenced or attached to this form. (See Section 3.9.6 of P101-3 for details.)*	☒ Continuity of LO/TO protection details described in operating procedure, work instruction, or other work control document. Document Number:

Section 2: Energy Control Procedure

1. Plan the work.
2. Identify and assess hazardous energy.
3. Contact the MS&E owner/operator.
4. Obtain locks and tags from lock coordinator.
5. Notify affected workers.
6. Shutdown MS&E according to **Section 3: Shutdown Sequence**.
7. Isolate and lock out MS&E from energy source, relieve stored energy, and perform verification of isolation according to **Section 4: LO/TO Sequence**.
8. Perform the work.
9. Release MS&E from LO/TO according to **Section 5: Release MS&E from Lockout/Tagout Sequence**.

Section 3: Shutdown Sequence

☒ Perform shutdown according to operating procedure, work instruction, or other work control document (e.g., IWD, Owner's Manual, SOP).
Document Number:

☐ **N/A**; MS&E to be worked on will be isolated according to **Section 4: LO/TO Sequence** (e.g., cannot be shut down)
Detail the process to normally shut down the MS&E below, if not following other document referenced above or N/A.

Step No.	Action/Description	Step No.	Action/Description
☐ 1		☐ 6	
☐ 2		☐ 7	
☐ 3		☐ 8	
☐ 4		☐ 9	
☐ 5		☐ 10	

Section 4: LO/TO Sequence

☒ Perform LO/TO sequence according to operating procedure, work instruction, or other work control document (e.g., IWD, Owner's Manual, SOP).
Document Number:
Describe how to effectively isolate & lockout the MS&E below, if not following other document referenced above.

Isolate & Lockout (Step No.)	Equipment Descriptor (What is being locked out? e.g., machine drive motor, input power to MCC)	Energy Source (e.g., electrical, mechanical, pneumatic, hydraulic, chemical, thermal)	Energy Isolation Device (e.g., specific ID, description, circuit #, lock box #)	Location of Energy Isolation Device (e.g., room number, north wall, south wall)	Required LO/TO Position or Alignment (e.g., off, open, closed, on)	Verification Method (e.g., live/dead/live, crack open, on-off-on-off, peer checking, independent verification)	Verifier's Initials (if req'd)	See Section 5: Release (Step No.)
☐ (1)	BHW-03	Electrical	MCC-B Ckt 3F	U209	OPEN / OFF	Peer		☐
☐ (2)	HW-P-03	Electrical	MCC-B Ckt 2D	U209	OPEN/OFF	Peer		☐
☐ (3)	BHW-03	Mechanical	NG-V-6020D	U209	CLOSED	Peer		☐
☐ (4)	BHW-03	Mechanical	NG-V-6024A	U209	CLOSED	Peer		☐
☐ (5)	HW-P-03	Mechanical	HW-V-301A	U209	CLOSED	Peer		☐
☐ (6)	HW-P-03	Mechanical	HW-V-301B	U209	CLOSED	Peer		☐
☐ (7)	Lock Box 18	Lock Box 18	Lock Box 18	U209	Locked	Peer		☐
☐ (8)								☐

Section 5: Release MS&E from Lockout/Tagout Sequence

1. Check the MS&E and immediate area for items that could result in damage or danger on start-up.
2. Check the work area to ensure that all workers have been safely positioned or removed from the work area.
3. Verify that the controls are in neutral or "off" position.
4. Notify the owner/operator and affected workers that work is complete and MS&E is ready to release from LO/TO.
5. Remove the LO/TO device, and re-energize (if appropriate according to MS&E owner/operator) according to the sequence as identified above under Release in **Section 4: LO/TO Sequence** or according to operating procedure, work instruction, or other work control document identified in **Section 4**.
6. Return lock and locking device to Lock Coordinator.

Energy Control Procedure prepared by:

Preparer (print name)	Z Number	Organization	Phone	Signature/Date
Wanda J. Madrid	116672	MSS-WC	6.0332	Wanda J Madrid 8/22/22

By signing below, you acknowledge that this energy control procedure and/or referenced documents identify the isolation devices, isolation points, and methods necessary to prevent any unexpected release of hazardous energy.

Energy Control Procedure approved by:

MS&E Owner/Operator (print name)	Z Number	Organization	Phone	Signature/Date
Stephen McNeel	765531	TASS-RLWB	7-1973	09/27/22

Section 6: All Authorized Workers (anyone applying a lock for this activity)

Fill out the following information or print and attach Authorized Workers information from the Lockout/Tagout Remedy Application.

Authorized Workers Name(s)	Z Number	Date Lock Applied	Date Lock Removed
Lead: Isaac Ortega	358331	9-22-22	9-27-22
Jacobo Romero	351014	9-27-22	9-27-22
Jesse Urbina	396179	9-27-22	9-27-22

Los Alamos NATIONAL LABORATORY

Form 2103

Integrated Work Document (IWD) Part 3, Validation and Work Release

IWD No: ~~70~~ 730017 -01 @ 09/27/2022 Revision No.:

By signing below, I verify that this activity is appropriate to be conducted in the facility and is within the scope of the facility safety basis; area/facility hazards have been identified and addressed; work meets applicable Laboratory environmental, safety, and security requirements, DOE Orders, and other applicable regulatory requirements; and that the appropriate Subject Matter Expert (SME) reviews have been completed.

FOD or FOD designee (e.g., Operations Manager)

Signature/Z-Number/Date **(If required by FOD)**: [signature] 120321 09/27/2022

By signing below, I have verified the following:

- I have verified authorization by ensuring approval signatures of the RLM and FOD.
- I have jointly conducted a validation walkdown with workers to review tasks and steps for workability and to ensure that the hazards and controls are described correctly and have not changed.
- The assigned workers are authorized and competent to perform the work in a safe, secure, and environmentally responsible manner.
- I have conducted the pre-job briefing, and all workers (including support workers) have been briefed.
- I have ensured coordination with any required FOD work-area representatives (e.g., area work coordinators).

PIC (Signature/Z Number/Date) **Required**: [signature] 185042 9/27/22

Alternate PIC signature **acknowledges** PIC authority is assumed for the first time. *(Note: Alternate PICs are required to sign only once, but formal handoff includes conferring with previous PIC to obtain all required information associated with the handoff and informing workers that they have a new PIC.)*

Alternate PIC (Signature/Z Number/Date) **Required**: _____

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Pre-Job Brief Content

- Prerequisites, where applicable – things that must be staged, in place, or completed before the work starts
- Worker pause/stop work authority and obligation per P101-18, Procedure for Pause/Stop Work
- Scope of work and work activities including IWD/WCDs, procedures, work package documents, and drawings, as applicable
- Hazards and associated controls, including personal protective equipment, and the resolution of any related questions
- Critical steps* including where they are covered in the IWD/WCD and which HPI technique will be used for each critical step
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- Applicable regulatory requirements [e.g., Technical Safety Requirements (TSR), Code of Federal Regulations (CFR)] including how these requirements can be inadvertently violated if the IWD/WCD is not followed
- Roles and responsibilities including person(s) responsible for making critical decisions (e.g., PIC)
- Handoffs and coordination requirements among workers and multiple PICs, if applicable
- Work site conditions including location of phone and emergency equipment (e.g., fire alarms, fire extinguisher, AED) and how to respond to alarms and emergencies
- Hold points and other notifications/signoffs (e.g., inspections, Industrial Hygiene, radiation protection)
- Applicable Lessons Learned (LL), especially from previous performance of the activity
- Any other information needed to perform this activity in a safe, secure, and environmentally responsible manner

Ask: Does everyone agree with the work tasks/steps and controls, and commit to follow them?

*Critical steps are when "a procedure step, series of steps, or action that, if performed improperly, will cause irreversible harm to equipment, people, or the environment" (DOE-HDBK-1028-2009, Volume 1).

IWD No:	Revision No.:

Pre-Job Brief Attendance Roster

By signing below **as required**, I agree to the following:

- I agree to follow the work steps and implement the controls as written, as applicable to my work assignments.
- I agree to pause/stop work when conditions or hazards change or when I encounter unexpected conditions during the execution of work, or when work cannot be performed as written, or instructions become unclear during execution.
- I confirm that I am authorized, qualified, and fit to perform the work.

Worker (Signature/Z Number/Date) 234645 9-27-2022	**Worker** (Signature/Z Number/Date) 351234 Harold A Deabin 9/27/22
Worker (Signature/Z Number/Date) 328629 9-27-22	**Worker** (Signature/Z Number/Date) 358331 9-27-22
Worker (Signature/Z Number/Date) 371227 9-27-22	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date) 300380 9-27-22	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date) 351014 9-27-22	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date) 294718 - 9-27-22	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date) 306179 9-27-22	**Worker** (Signature/Z Number/Date)

MSS FOD 10 PM/PdM Work Package Traveler

WO: 73001701 Title: (A) 550440 Hot Water Boiler FS/WS

Work Package Approval – Package complete & released for scheduling:

☐ YES ☑ N/A	**Special Instructions:**
☑ YES	**Work Package Final Approval:** Final review of the work package is complete to ensure forms, permits, scope, craft resources, estimates, duration, and IWD are correct. MM or WC TL Signature: *Wanda J. Madrid for Daniel Roybal per Telecom* Z# 116672 Date: 8/22/22

Work Package Closeout – Work History

☐ YES ☐ N/A	**Documents Scanned/Linked:** Work package documents are scanned in to the appropriate drive and linked to the equipment, and work history in CMMS per AP-Work-005. Work Control Member: _____ Z# _____ Date: _____

SECTION 1 – WORK PACKAGE INITIATION

- [x] Table of Contents
- [x] Master WO – CMMS Work Order
- [ ] USQ Evaluation or Routine Maintenance Exemption (Nuclear Facilities only)
- [x] Mandatory 4-Questions
- [x] IWD Part 3 – *Validation and Release* (P300 – Form 2103) (Separate copy for every pre-job)
- [x] Work Documentation Form (AP-WORK-002.11)
- [x] PMI or Checklist

SECTION 2 – WORK AUTHORIZATION

- [x] Work Package Traveler
- [ ] IWD Part 1 – *Activity Specific Information* (AP-WORK-002 Form 2100-WC)
- [x] IWD/PMI Combination (Facility Specific IWD/PMI)
- [x] IWD Part 2 – Form 2101; 2102; or Facility Notes for each work area (P300 – Form 2101)

Applicable Permits:

- [ ] Radiological Work Permit (RWP)
- [ ] Attachment A – *Simple LOTO* (P101-3.4.1); **not an attachment in work package – craft/LOTO coordinator provide**
- [x] Form 2244 – *Lockout/Tagout Orders – Complex LOTO* (P 101-3.4.2 Form 2244)
- [ ] Penetration Permit (P101-22 Form 2074); **Class I only**
- [ ] Spark- or Flame- Producing Operations Permit (P101-26 Form 1563)
- [ ] Utility Outage Form (Form 1821)
- [ ] Other: _____
- [ ] PMI Checklist: _____
- [ ] **Safety Data Sheets (SDS)**: _____
- [ ] **Facility Specific Documents:** _____

The required documentation is noted with a checked box☒. All other documentation depends on the work performed and the complexity of the task. Only check the documents included in the package (there is no need to "N/A" the blocks for documents not in the work package.

Los Alamos NATIONAL LABORATORY

Integrated Work Document (IWD) Part 2
FOD Requirements and Approval for Entry and Area Hazards and Controls
Non-Tenant

IWD No./Work Request No: _____ Revision No.: _____

The Facility Operations Director (FOD) or designee must determine the facility entry and coordination requirements and identify the area environment, safety, health (ESH)/security and safeguards (S&S) hazards and controls associated with the specific activity location.

FOD	TA	Bldg.	Room	Other Location
10	55	0440	Various	Includes areas outside building 0400 and 0440
FOD Designated Facility Point-of-Contact	Name	Phone	Pager	Email
	Stacy Howze	505.667.7333	505.664.6541	howze@lanl.gov

General Requirement/Guidance:

- Workers in areas that have building or facility-specific training (FST) shall take the FST unless they are escorted by someone who is current in the training.
- Any abnormal event or condition, whether within or beyond the bounds of the assigned work area, must be reported to supervisors or first-line managers and the FOD.

Entry and Coordination Requirements (*check one or more of the following*):

- ☐ No entry/coordination requirements
- ☒ Schedule work with the FOD
- ☒ Attend Plan of the Day/Plan of the Week (POTD/POTW)
- ☒ Security clearance or escort required
- ☒ Other security requirements (e.g., no cellphone or foreign nationals)
- ☒ Review work under Authorization Basis / Safety Basis / Unreviewed Safety Question (USQ)
- ☐ FOD-designated facility point-of-contact must sign IWD Part 3
- ☒ Facility-specific or other work area training required
- ☒ Check in daily
- ☒ Check out daily
- ☐ Quality issues
- ☐ Non-security escort required
- ☐ Other bounding conditions: _____

Additional Comments:

NOTE: Maintenance Coordinator to coordinate all work with the Ops Center. Consult with MC and Ops Center for potential changing conditions.
1) All work in the overhead requires a thorough inspection for any electrical abnormalities including any exposed wirirng or missing covers from junction boxes.
2) Use of gloves required for all work in the overhead.
3) Facility Specific PPE: No facility specific PPE or as posted otherwise.
4) Outdoor Activities: Watch for potential or on-going construction activities, heavy equipment, trenching, overhead work, et cetra, Follow all signage, postings, and access restrictions.
5) For unescorted access to RLUOB, complete: RLUOB Access Training (Curriculum #161) and be Q/L Cleared for the Limited Area of the Facility.
6) Facility Operations: (a) Follow all signage, postings, and barricades or cordoned off areas, (b) Follow announcements, alarms, alerts, and all directions from Facility Ops and/or a Site Safety Rep. due to changing conditions, outages, testing activities, evacuation orders, et cetra; (c) Do NOT enter worksites or areas unrelated to work activities, unless authorized.
7) For work scope that requires chemical storage, or non-product chemicals: The chemical types and quantities must be evaluated against RLUOB PAC-3 and IBC limits prior to purchase. Comply with the RLUOB Chemical Management Requirements: P101-14 Chemical Management, PA-DOP-01373 RLUOB Chemical Preparation and Storage, PA-RD-01007 RLUOB Chemical Management Requirements, TA55-AP-095, Hazardous Materials Management Program. Check with operations, maintenance, and/or site safety representative prior to bringing chemicals into RLUOB facilities.

Instructions: In the block below, identify work area hazards that could potentially affect the worker(s) or others. Avoid using the same Part 2, Form 2101 for multiple facilities. Ensure that work area hazards specific to the facility or work location are identified and controlled. Specify the facility controls and preventive measures that must be implemented by the worker(s) to protect against the work area hazards, including any unique or special training required because of work area conditions/hazards.

ESH/S&S WORK AREA HAZARDS AND CONTROLS

Work Area Hazards/Concerns Identify site hazards and concerns that could potentially affect the worker(s) or others.	**Work Area Hazard Present**	**Facility Controls/ Preventive Measures/ Bounding Conditions** Specify preventive measures, controls, and bounding conditions for each site hazard	**Reference Documents** List permits, operating manuals, and other procedures (if required in the field)	**Training and Qualification** (*special or unique to the area*)
☐ **No work area hazards**				
Ionizing Radiation Work in posted radiological areas, work with radioactive materials, or work on or near radiation producing devices. **Specify Hazard:**	☐ Yes ☒ No			

IWD No./Work Request No.: ____ Revision No.: ____

ESH/S&S WORK AREA HAZARDS AND CONTROLS

Work Area Hazards/Concerns Identify site hazards and concerns that could potentially affect the worker(s) or others.	**Work Area Hazard Present**	**Facility Controls/ Preventive Measures/ Bounding Conditions** Specify preventive measures, controls, and bounding conditions for each site hazard	**Reference Documents** List permits, operating manuals, and other reference procedures	**Training and Qualification** List training requirements
Worker Exposure Working near non-ionizing radiation, beryllium, noise, chemicals, biological hazards, lead, asbestos, temperature/humidity extremes, nanoparticles, cryogens, or high explosives. **Specify Hazards:**	☒ Yes ☐ No	**High noise levels possible near operationg equipment. Follow signs and postings.**	P101-13: Hearing Conservation/Noise Program	Hearing Conservation Self-Study (Curricula # 12350 or equivalent).
Energized and Operative Systems Working near energized electrical parts, pressure systems, steam lines; unprotected belts, pulleys, chains, rotating equipment; fuel-fired equipment (other than vehicles); or spark/flame-producing operations. **Specify Hazards:**	☒ Yes ☐ No	Treat all electrical, pneumatic, hydraulic, mechanical, and piping systems as energized. Stay clear of energized work performed by others.		
Confined Spaces Entry into tanks, manholes, cooling towers, sumps, or any other area with potentially low oxygen concentration or other hazards such as toxic vapors or engulfment. **Specify Hazards:**	☐ Yes ☒ No	Do NOT enter confined spaces unless with accompanying permit. Follow all signage and postings.		
Elevated Work Surface Unprotected elevated work (e.g., conventional guardrails are not provided) requiring fall protection per P101-20, *Fall Protection Program*, or a surface not designed to support worker(s) and equipment.	☐ Yes ☒ No	Watch for overhead work performed by others		

Environmental Activities conducted in areas containing potential release sites, contaminated soil, sensitive species, watercourse, wetlands, floodplains, historical/archeological sites, or other work area element that can impact, or be impacted by, the environment. **Specify Hazards:**	☐ Yes ☒ No			
Security Requirements **Specify:**	☒ Yes ☐ No	LANL Badge Holder for facility access. Q/L clearance for unescorted access to Limited Areas. PED's allowed in uncleared areas.		
Other Hazards **Specify:**	☐ Yes ☒ No			

I have verified that the items indicated above adequately identify existing and potential area hazards associated with the work location and communicate facility-required controls that will enable safe, secure, and environmentally compliant work execution.

FOD or Representative (Signature/Z Number/Date) **Approval Required**

STACY HOWZE (Affiliate) Digitally signed by STACY HOWZE (Affiliate) Date: 2022.02.24 14:37:34 -07'00'

Facility : F08 **Unit :** 161484 **Proj :**
Task Title : ST TA-16-1484 STEAM PLANT ANNUAL MAINTENANCE PM
W/O Type : PM **W/O Group :** UTIL **Task Priority :** 4
Planner : 185614 HARRIS JEANETTE S
W/O Title : ST TA-16-1484 STEAM PLANT ANNUAL MAINTENANCE PM
Written To : TA16-1484 STEAM PLANT BOILERS
Task Dspln : FTTR **Due Date :** 11/30/2022
Superintendant :

Hazard : MODERATE **IWD Reqmt :** TASK SPECIFC

Work Order Task

00724446 01

MASTER

Date: 04/22/2022

Work Order Task Written To

Facility : F08 **Unit :** 161484 **Op Sys :**
Room : **Area :** **Sys/Cls :**
Equipment : **Component :**
Location :
Job Type : PM
Tag 1 : **Tag 2 :**
Work Item : TA16-1484 STM BOILER **Ops Review Reqd :**

Authorization

Start Permission : Glenn Martinez **Start Date :** 4-22-22
Complete Notice : Glenn Martinez **Complete Date :** 11-7-22

Work Order Task Instructions

PERFORM PM PER 76-28-010 WATERSIDE/ FIRESIDE CHECKLIST. . ENGINEERING TO PROVIDE MAINTENANCE WITH SUPPORT, OVERSIGHT & TRAINING THROUGHOUT PM. . NB Inspector perform boiler inspection and complete form LANL STD-342-100, Chapter 17, Section QCSM, Attachment 2. .

QC Requirements / Comments

Facility : F08 **Unit :** 161484 **Proj :**
Task Title : ST TA-16-1484 STEAM PLANT ANNUAL MAINTENANCE PM
W/O Type : PM **W/O Group :** UTIL **Task Priority :** 4
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Superintendant :

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Work Order Task

00724446 01

MASTER

Date: 04/22/2022

<u>Work Completion Signatures</u>

Name	Function/Dept.	Date
Jason Sparks	122088 11-07-2022 12:13	

Comments

(rework?)

<u>Cost Accounting</u>

Cost Center : 7D120C **Activity :** 640CL000

Percentage : 100 **Acct No :** XU5000 **Sub Acct :** 7E2P0016

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Los Alamos NATIONAL LABORATORY

Form 2103

Integrated Work Document (IWD) Part 3, Validation and Work Release

IWD No: Revision No.:

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- I have conducted the pre-job briefing, and all workers (including support workers) have been briefed.
- I have ensured coordination with any required FOD work-area representatives (e.g., area work coordinators).

PIC (Signature/Z Number/Date) **Required**: Jason Sparks 122088 05-16-2022 09:25

Alternate PIC signature **acknowledges** PIC authority is assumed for the first time. *(Note: Alternate PICs are required to sign only once, but formal handoff includes conferring with previous PIC to obtain all required information associated with the handoff and informing workers that they have a new PIC.)*

Alternate PIC (Signature/Z Number/Date) **Required**: David Harris 324726 05-16-2022 09:25

Alternate PIC (Signature/Z Number/Date) **Required**: _____

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- Prerequisites, where applicable – things that must be staged, in place, or completed before the work starts
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Worker (Signature/Z Number/Date) Daniel Ortiz 283014 05-16-2022 09:25	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date) Robert Olivas 347468 05-16-2022 09:26	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date) Martin Romero 340775 05-16-2022 09:26	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date)
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Worker (Signature/Z Number/Date) T. Benny Lopez 144618 5-18-22	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date) [signature] 1943340 5-18-22	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date) [signature] 365424 5/18/2022	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date) [signature] 238317 5-18-2022	**Worker** (Signature/Z Number/Date) [signature] 193092 5/18/2022

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By signing below **as required**, I agree to the following:

- I agree to follow the work steps and implement the controls as written, as applicable to my work assignments.
- I agree to pause/stop work when conditions or hazards change or when I encounter unexpected conditions during the execution of work, or when work cannot be performed as written, or instructions become unclear during execution.
- I confirm that I am authorized, qualified, and fit to perform the work.

Worker (Signature/Z Number/Date) Daniel Ortiz 283014 05-16-2022 09:22	**Worker** (Signature/Z Number/Date) 283014 5-16-22
Worker (Signature/Z Number/Date) Robert Olivas 347468 05-16-2022 09:23	**Worker** (Signature/Z Number/Date) 365420 5/19/22
Worker (Signature/Z Number/Date) Martin Romero 340775 05-16-2022 09:23	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date) T. Benny Lopez 144618 5-18-22	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date) 194330 5-18-22	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date) 365424 5/18/2022	**Worker** (Signature/Z Number/Date) 310557 5/19/2022
Worker (Signature/Z Number/Date) 238317 5-18-2022	**Worker** (Signature/Z Number/Date) 193092 5/18/2022

Worker engagement questions are intended to focus attention on the task and ensure uncertainties are addressed. Basic worker engagement questions are provided below. Additional worker engagement questions should be tailored to the situation.

Each of the questions listed below will be discussed at each Pre-Job Brief with all affected personnel.

Topic	Completed (X)
What permits, permissions, or support are required to safely start this work?	X
What is the most likely thing that could go wrong (not the worst thing) and what, specifically, will prevent it?	X
What can cause us to go beyond the scope of the work?	X
What hazards in the work area may not have been considered during planning of this job?	X

BOILER INSPECTION REPORT (BIR)

NBIC NB-23, Part 2 (This report to be completed by LANL Commissioned Inspector)

SECTION I – BOILER INFORMATION

Boiler ID#:		Insp Date:	**Expiration Date:**
Boiler Area:		Ext. Inspection: ☐	Int. Inspection: ☐
National Board No.:		Serial No.:	
Boiler Mfg.:		Year Built:	
Boiler Type:	Steam ☐ Hot Water ☐ Others ☐	Firetube ☐	Watertube ☐
Safety Relief Valve (s) ID#:		Safety Valve (s) Size:	_____ , _____ , _____ ,
Set Press:	1. _____ 2. _____ 3. _____ (PSI)	Capacity:	1. _____ 2. _____ 3. _____ (lbs/hr)
Safety Valve (s):	Last Tested ☐ "VR" ☐ Replaced ☐	Date:	1. _____ 2. _____ 3. _____ ,
Pressure Gauge Range:	0 to	Heating Surface Area (sqft):	Boiler MAWP: _____ (PSI)
Pressure Allowed:	This Inspection: _____ (PSI)	Previous Inspection: _____ (PSI)	
Fuel:		Method of Firing:	
Inspection Finding:	Major ☐ Minor ☐	Permit Issued:	Yes ☐ No ☐

SECTION II – EXTERNAL/INSERVICE INSPECTION CONDITIONS

Planning, Coordination and Safety Requirements –

External Casing (cracks, leakage of fluids or combustion gases …) –

Safety Valve (s) Testing and Conditions –

Hangers and boiler supports Conditions –

Piping External Surfaces Conditions –
Controls (Firing, Flame Detector, valves, …) Functionality Test –
Low Water Cutoff Alarm Test –
Other Observations / Notes –

SECTION III – INTERNAL INSPECTION CONDITIONS			
Is the boiler prepared, drained and cleaned for internal inspection?	Yes ☐	No ☐	
Is the fuel shutoff valve locked and tagged?	Yes ☐	No ☐	
Is the boiler isolated from other boilers?	Yes ☐	No ☐	N/A ☐
Is the boiler atmosphere being monitored for safe entry (Boilers w/manway)?	Yes ☐	No ☐	N/A ☐
Is the boiler hydro tested for leaks? Yes ☐ No ☐	Pressure Test:	PSIG	

SECTION IV – FIRESIDE
Fire Box, Refractory, Burners, Flame Detectors Conditions –
Tubes External Condition (Pitting, bulging, misalignment, soot built up …) Watertube Boilers Only –
Tubesheets Condition (Bulging, leaks around the tubes connections, Cracks in the ligaments and weld joints) –

Staybolts Testing –
Other Observations / Notes –
SECTION V – WATERSIDE
Tubes External Surfaces, if possible internal surfaces –
Water Columns, Gage Glasses, Floats Chambers Internal Surfaces or Low Water Level Rods Condition –
Superheater Tubes External Surfaces (Power boilers Only) –
Steam Drum/Vessel Internal Surfaces (If electric boilers the condition of the electric resistant coils) –
Mud Drum Internal Surfaces (Power boilers) –
Deaerator Tank Internals (Power boilers) –

Deaerator Storage Tank (Power boilers) –
Any Repairs or Alteration Since Last Inspection (All repairs and Alteration requires 'R' Stamp R-1 or R-2 Form) –
water Chemistry Last Checked / Notes –
SECTION VI – DEFICIENCIES SUMMARY
SECTION VII – RECOMMENDATIONS

Person Conditions Reported To and/or FSR #, If Issued:	Z#	Phone No.:
LANL Commissioned Inspector Name and Signature:	Z#	National Board Commission No.:

Reviewed By: Initial: Z# Date:

NOTE: Use these buttons to print or save the form. DO NOT use the browser tool bar.

Los Alamos NATIONAL LABORATORY EST. 1943

Form 2244

Lockout/Tagout (LO/TO) Orders

Section 1: General Information

Work Document Number (e.g., Package/Procedure #): 724446-01	LO/TO Remedy ID: 22-4280
Location of Equipment to be Isolated: TA: 16 Bldg: 1484 Rm/Other:	Description of Machinery, System & Equipment (MS&E) to be worked on: Boiler Plant BSA,BSB,and Feed Water tank
MS&E Owner/Operator: Glenn Martinez Z Number: 190429	Phone: 231-8341
Shutdown to be performed by MS&E Owner/Operator (as determined by MS&E Owner/Operator) ☐ Yes ☐ No	Re-energize/restart to be performed by MS&E Owner/Operator (as determined by MS&E Owner/Operator) ☐ Yes ☐ No
Reason for LO/TO: Boiler Plant Annual pm	
Group LO/TO (2 or more)? ☒ Yes ☐ No *If yes, a lead authorized worker must be appointed.*	Group lock box used? ☒ Yes ☐ No
Shift or Personnel Changes? ☐ Yes ☐ No *If yes, a description of how the continuity of LO/TO protection will be ensured must be referenced or attached to this form. (See Section 3.9.6 of P101-3 for details.)*	☒ Continuity of LO/TO protection details described in operating procedure, work instruction, or other work control document. Document Number: 724446-01

Section 2: Energy Control Procedure

1. Plan the work.
2. Identify and assess hazardous energy.
3. Contact the MS&E owner/operator.
4. Obtain locks and tags from lock coordinator.
5. Notify affected workers.
6. Shutdown MS&E according to **Section 3: Shutdown Sequence**.
7. Isolate and lock out MS&E from energy source, relieve stored energy, and perform verification of isolation according to **Section 4: LO/TO Sequence**.
8. Perform the work.
9. Release MS&E from LO/TO according to **Section 5: Release MS&E from Lockout/Tagout Sequence**.

Section 3: Shutdown Sequence

☐ Perform shutdown according to operating procedure, work instruction, or other work control document (e.g., IWD, Owner's Manual, SOP).
Document Number: 724446-01

☒ **N/A**; MS&E to be worked on will be isolated according to **Section 4: LO/TO Sequence** (e.g., cannot be shut down)
Detail the process to normally shut down the MS&E below, if not following other document referenced above or N/A.

Step No.	Action/Description	Step No.	Action/Description
☐ 1	shut off power to boilerA	☐ 6	
☐ 2	shut off power to Boiler B	☐ 7	
☐ 3	shut off power to lead/lag control panel	☐ 8	
☐ 4	shutoff power to feed water tank	☐ 9	
☐ 5	shut off gas supply to boiler plant	☐ 10	

Section 4: LO/TO Sequence

☐ Perform LO/TO sequence according to operating procedure, work instruction, or other work control document (e.g., IWD, Owner's Manual, SOP).
Document Number: 724446-01
Describe how to effectively isolate & lockout the MS&E below, if not following other document referenced above.

Isolate & Lockout (Step No.)	Equipment Descriptor (What is being locked out? e.g., machine drive motor, input power to MCC)	Energy Source (e.g., electrical, mechanical, pneumatic, hydraulic, chemical, thermal)	Energy Isolation Device (e.g., specific ID, description, circuit #, lock box #)	Location of Energy Isolation Device (e.g., room number, north wall, south wall)	Required LO/TO Position or Alignment (e.g., off, open, closed, on)	Verification Method (e.g., live/dead/live, crack open, on-off-on-off, peer checking, independent verification)	Verifier's Initials (if req'd)	See Section 5: Release (Step No.)
☐ (1)	Boiler BSA	Electrical	PPA CKT4	PPA Panel inside boiler plant	off	live/dead/live.		☐
☐ (2)	Boiler BSB	Electrical	PPA CKT10	PPA Panel inside boiler plant	off	live/dead/live.		☐
☐ (3)	Lead/Lag controls	Electrical	LP1 CKT 7	LP1 Panel inside boiler plant	off	live/dead/live.		☐
☐ (4)	Feed waer tank	Electrical	PPA CKT9	PPA Panel inside boiler plant	off	live/dead/live.		☐
☐ (5)	Gas supply	gas	gas valve 1	outside reg. station	off	crack open low pressure valve		☐
☐ (6)								☐
☐ (7)								☐
☐ (8)								☐

Section 5: Release MS&E from Lockout/Tagout Sequence

1. Check the MS&E and immediate area for items that could result in damage or danger on start-up.
2. Check the work area to ensure that all workers have been safely positioned or removed from the work area.
3. Verify that the controls are in neutral or "off" position.
4. Notify the owner/operator and affected workers that work is complete and MS&E is ready to release from LO/TO.
5. Remove the LO/TO device, and re-energize (if appropriate according to MS&E owner/operator) according to the sequence as identified above under Release in **Section 4: LO/TO Sequence** or according to operating procedure, work instruction, or other work control document identified in **Section 4.**
6. Return lock and locking device to Lock Coordinator.

Energy Control Procedure prepared by:

Preparer (print name)	Z Number	Organization	Phone	Signature/Date
JASON SPARKS	122088	LOG-CS	500-6436	JASON SPARKS (Affiliate) Digitally signed by JASON SPARKS (Affiliate) Date: 2022.06.30 09:44:53 -06'00'

By signing below, you acknowledge that this energy control procedure and/or referenced documents identify the isolation devices, isolation points, and methods necessary to prevent any unexpected release of hazardous energy.

Energy Control Procedure approved by:

MS&E Owner/Operator (print name)	Z Number	Organization	Phone	Signature/Date
GLENN MARTINEZ	190429	LOG-CS	231-8341	7-1-22

Section 6: All Authorized Workers (anyone applying a lock for this activity)

Fill out the following information or print and attach Authorized Workers information from the Lockout/Tagout Remedy Application.

Authorized Workers Name(s)	Z Number	Date Lock Applied	Date Lock Removed
Lead: DAVID HARRIS	324726	7-1-2022	9.1.2022
DANIEL ORTIZ	283014	7-1-2022	9-1-2022
MARTIN ROMERO	340775	7-1-2022	9/1/22
ROBERT OLIVAS	347468	7-1-2022	9/1/22
Isaac J Garcia	238317		
Pablo S Sedillo	193092		
Richard Gonzales	310557		
Timothy B Lopez	144610		
Raymond M Martinez	294334		
Kenneth Rendon	365420		
Isaah Byer	365424		

Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)			
Revision #: 0			**Activity/Task Title:** ST 1Y STEAM PLANT FIRESIDE / WATERSIDE PM
Work Document #: (WO # / Task)			**Planner/Preparer (Name/Z#/Date)** Justin Maestas 177550 5/1/19
TA:	**Building:**	**Room:**	**Additional Location Description:** UI BOILER HOUSES

1. Scope of Work

1.1. Perform annual Waterside / Fireside PM and boiler inspections per UI Checklist / PMI. UI Engineering will provide support, oversight and training.

2. Precautions and Limitations

2.1. If steps cannot be completed as described or if unforeseen situations occur. PAUSE / STOP WORK.



STABILIZE the situation if safe to do so, CONTACT supervisor or POC and await further instructions PRIOR to proceeding

2.2. Workers shall perform Individual Hazard Analysis (IHA) for this task, which includes continual self-analysis of work scope, hazards and controls

2.3. Housekeeping shall be performed before, during and after work activities.
- 2.3.1 Control all material
- 2.3.2 Secure hoses, cords, lines, and portable equipment

2.4. Action Steps from Section 6 on **SHALL** utilize Place Keeping and be signed/marked upon completion.

3. Prerequisites/Initial Conditions

3.1. Supervisor will verify work is on the UI / FOD POD and not in conflict with other work activities

3.2. Verify all personnel have the appropriate PPE for task execution during pre-job planning
- 3.2.1. General PPE; Bump cap, safety shoes, safety glasses, hearing protection and gloves appropriate for task being performed

3.3. Barricade work area using caution tape and signs. Barricade building, room or area as discussed with PIC and other involved personnel during pre-job briefing.
- 3.2.1 Post barricades with entry/exit requirements, PPE and POC info

3.4. Verify pre-job briefing including 2101 hazards and requirements has been performed for all affected personnel

Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)			
Revision #: 0			**Activity/Task Title:** ST 1Y STEAM PLANT FIRESIDE / WATERSIDE PM
Work Document #: (WO # / Task)			**Planner/Preparer (Name/Z#/Date)** Justin Maestas 177550 5/1/19
TA:	**Building:**	**Room:**	**Additional Location Description:** UI BOILER HOUSES

4. Special Training/Medical Requirements

4.1. Curriculum ID 10968, WQ LOG Maintenance Worker
4.2. Parent Curriculum ID 647 – WQ LOG Pipefitter
  4.2.1. Endorsement Curriculum ID 718 – WQ LOG Pipefitter – Boiler Fitter
4.3. Parent Curriculum ID 642 – WQ LOG Electrician
4.4. Curriculum ID 641 – WQ LOG Carpenter
  4.4.1. Curriculum ID 726 – WQ LOG Carpenter – Scaffold Competent Person

5. Special Tools/Equipment

5.1. None

6. Work Instructions

6.1. **NOTIFY** operations of work to be performed and for permission to proceed
  6.1.1. Verify boiler is ready to be taken out of service ☐

6.2. **INSPECT** boiler
  6.2.1. Conduct initial observations and external inspections
  6.2.2. Use National Boiler Inspection Code (NBIC) standards
  6.2.3. Inspector must be certified to NBIC
  6.2.4. Wear long sleeve shirts or Ansell sleeves
  6.2.5. Use insulating blankets to protect against hot surfaces ☐

6.3. **ERECT / DISMANTLE / MOVE** scaffolding when needed to access work area
  6.3.1. Scaffold will be inspected daily by Competent Scaffold Personnel before use
  6.3.2. Only competent personnel will erect, modify or inspect scaffold
  6.3.3. Wear hardhats when working on or near scaffolding ☐

6.4. **DE-ENERGIZE** boiler
  6.4.1. Trace piping, conduits and wiring to ensure appropriate energy isolation is identified
  6.4.2. Close valves
  6.4.3. Turn Off / Open breakers or disconnects
    6.4.3.1. Wear non-melting clothing, leather gloves and remove all metallic objects when operating breakers or disconnects ☐
  6.4.4. Apply LOTO

Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)			
Revision #: 0			**Activity/Task Title:** ST 1Y STEAM PLANT FIRESIDE / WATERSIDE PM
Work Document #: (WO # / Task)			**Planner/Preparer (Name/Z#/Date)** Justin Maestas 177550 5/1/19
TA:	**Building:**	**Room:**	**Additional Location Description:** UI BOILER HOUSES



WARNING

Potential injury or death due to uncontrolled release of energy.

6.5. **VERIFY** zero energy prior to performing work
- 6.5.1. Bleed residual pressure
- 6.5.2. Verify zero energy on each assumed electrically live conductor or equipment
  - 6.5.2.1. Test meter on known live circuit before and after zero energy verification
  - 6.5.2.2. 50V to 230V; Mode 1 to achieve mode 0, Class 1.2 a / b
    - 6.5.2.2.1. Wear; long shirt and pants or coveralls with rating of 4-cal or more, hard hat, hearing protection, safety glasses, class “0” dielectric gloves and remove all metallic objects
    - 6.5.2.2.2. Approach Boundaries: Limited; 3’-6”, Restricted; Avoid Contact
  - 6.5.2.3. 230V to1000V, Mode 1 to achieve Mode 0 Class 1.3a / b
    - 6.5.2.3.1. Wear 8 Cal PPE: AR coveralls with double layer switching hood, hard hat with face shield and hearing protection, safety glasses and ear canal inserts beneath hood, Class “0” dielectric gloves, remove all metallic objects
- 6.5.3. Approach Boundaries: Limited; 3’-6” Restricted; 1’-0 ☐

6.6. **OPEN** access doors and covers
- 6.6.1. Stage / store fasteners for reuse
- 6.6.2. Wear long sleeve shirts or Ansell sleeves
- 6.6.3. Use insulating blankets to protect against hot surfaces
- 6.6.4. Be aware of body positioning and lifting techniques ☐

6.7. **DETERMINATE** wiring from pressure and control switches
- 6.7.1. Label and protect wiring for re-termination
- 6.7.2. Ensure wiring and electrical devices are electrically safe ☐

6.8. **PERFORM** annual boiler maintenance
- 6.8.1. Follow approved checklists, PMIs and procedures
- 6.8.2. Notify UI engineering to provide support when needed
- 6.8.3. Calibrate gauges
- 6.8.4. Review & follow SDS for any lubricants or chemical used
- 6.8.5. Document all maintenance performed ☐

6.9. **PERFORM** internal boiler inspections
- 6.9.1. Follow NBIC ☐

Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)			
Revision #: 0			**Activity/Task Title:** ST 1Y STEAM PLANT FIRESIDE / WATERSIDE PM
Work Document #: (WO # / Task)			**Planner/Preparer (Name/Z#/Date)** Justin Maestas 177550 5/1/19
TA:	**Building:**	**Room:**	**Additional Location Description:** UI BOILER HOUSES

6.10. **CLOSE / REINSTALL** all doors or removed covers
- 6.10.1. Replace gaskets and fasteners on doors as needed ☐

6.11. **RECONNECT** all removed wiring and terminations
- 6.11.1. Utilize peer checking to ensure wiring is terminated properly ☐

6.12. **VERIFY** boiler is ready to be placed back into service
- 6.12.1. Inspect all work performed
- 6.12.2. Remove all tools and excess materials form boilers ☐

6.13. **REMOVE** applied LOTO
- 6.13.1. Re-Energize boiler ☐

7. Post Work Activities

7.1. **VERIFY** proper operation of boiler
- 7.1.1. Document operation per approved checklists or procedures

7.2. **PERFORM** post maintenance testing as directed by System Engineer
- 7.2.1. If any deficiencies are found document and notify supervisor

7.3. **CLEAN** work area of all debris and excess materials
- 7.3.1. Segregate all waste as required by WMC
- 7.3.2. Dispose of all generated waste in appropriate containers/locations
- 7.3.3. Remove all tools, equipment and barricades

8. Closeout

8.1. **COMPLETE** work documentation and return work package

8.2. **NOTIFY** operations and supervisor of status

Los Alamos NATIONAL LABORATORY	**Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)**		
Revision #: 0			**Activity/Task Title:** ST 1Y STEAM PLANT FIRESIDE / WATERSIDE PM
Work Document #: (WO # / Task)			**Planner/Preparer (Name/Z#/Date)** Justin Maestas 177550 5/1/19
TA:	**Building:**	**Room:**	**Additional Location Description:** UI BOILER HOUSES

***Insert Rows above** for additional Tasks/Steps or attach pages to clearly communicate ESH&Q/S&S hazards and associated controls.*	The RLM, and FOD or FOD Representative (if required or recommended by RLM, e.g. high hazard) approval indicates IWM has been applied appropriately, work is authorized, workers are qualified, work will be performed in accordance with ESH&Q/S&S requirements and the IWD, and facility safety basis, aggregate hazards, and collocated hazards were appropriately included in the hazard analysis and acknowledges completion of a peer review.	**RLM** (Signature/Z#/Date) **Required** GLENN MARTINEZ (Affiliate) Digitally signed by GLENN MARTINEZ (Affiliate) Date: 2019.05.02 09:04:52 -06'00' **FOD or Representative** (Signature/Z#/Date) **If Required or Recommended by RLM** Digitally signed by PHILLIP ULIBARRI (Affiliate) Date: 2019.05.08 12:28:54 -06'00' **ESO Review** (Signature/Z#/Date) **If Required** ROBERT SIMPSON (Affiliate) Digitally signed by ROBERT SIMPSON (Affiliate) Date: 2019.05.02 10:59:00 -06'00' **Safety Review** (Signature/Z#/Date) **Required** EUGENE FRESQUEZ (Affiliate) Digitally signed by EUGENE FRESQUEZ (Affiliate) Date: 2019.05.02 12:27:56 -06'00'

IWD Type ☒ Moderate-Haz ☐ High-Haz/Complex ☐ Standing IWD	Date when RLM re-approval is required_____ Other Conditions for Re-Approval_____ (Print) Name of Primary PIC Jason Sparks Name of Alternate PIC_____ Name of Alternate PIC_____	Any required classification review completed, N/A Signature/Date

BOILER INSPECTION REPORT (BIR)

NBIC NB-23, Part 2 (This report to be completed by LANL Commissioned Inspector)

SECTION I – BOILER INFORMATION

Boiler ID#:	BS-A	Insp Date: 4/6/2022	**Expiration Date:** 4/6/2023
Boiler Area:	TA16, Bldg 1484	Ext. Inspection: ☒	Int. Inspection: ☐
National Board No.:	8334	Serial No.:	10291
Boiler Mfg.:	Sellers Engineering	Year Built:	1995
Boiler Type:	Steam ☒ Hot Water ☐ Others ☐	Firetube ☒	Watertube ☐
Safety Relief Valve (s) ID#:		Safety Valve (s) Size:	2" , 1.5" , _____ ,
Set Press:	1. 100 2. 100 3. _____ (PSI)	Capacity:	1. 4593 2. 2948 3. _____ (lbs/hr)
Safety Valve (s):	Last Tested ☒ "VR" ☐ Replaced ☒	Date:	1. 4/6/22 2. 4/6/22 3. _____ ,
Pressure Gauge Range:	0 to 160	Heating Surface Area (sqft):	636
Boiler MAWP:	150 (PSI)		
Pressure Allowed:	This Inspection: 100 (PSI)	Previous Inspection: 100 (PSI)	
Fuel:	NG	Method of Firing:	Auto
Inspection Finding:	Major ☐ Minor ☐	Permit Issued:	Yes ☒ No ☐

SECTION II – EXTERNAL/INSERVICE INSPECTION CONDITIONS

Planning, Coordination and Safety Requirements –

No Lockout/Tagout, this is an in-service inspection.

External Casing (cracks, leakage of fluids or combustion gases …) –

No adverse conditions-good

Safety Valve (s) Testing and Conditions –

MSVRC 5,088 lbs/hr per ASME Code, Section I, PG-70. Two SV's installed capacity 7,541 Lbs/hr, therefor acceptable.
Lift test of SV's at 82 psi

Hangers and boiler supports Conditions –

None-good

Piping External Surfaces Conditions –

Good-Fuel train leak test performed, entire building.

Controls (Firing, Flame Detector, valves, …) Functionality Test –

All boilers controls, pressure controls, fuel train, flame failure, SSOV test Good

Low Water Cutoff Alarm Test –

LWCO test Good

Other Observations / Notes –

None

SECTION III – INTERNAL INSPECTION CONDITIONS

Is the boiler prepared, drained and cleaned for internal inspection?	N/A	Yes ☐	No ☒	
Is the fuel shutoff valve locked and tagged?	N/A	Yes ☐	No ☒	
Is the boiler isolated from other boilers?	N/A	Yes ☐	No ☐	N/A ☒
Is the boiler atmosphere being monitored for safe entry (Boilers w/manway)?		Yes ☐	No ☐	N/A ☒

Is the boiler hydro tested for leaks? Yes ☐ No ☒	Pressure Test: PSIG

SECTION IV – FIRESIDE

Fire Box, Refractory, Burners, Flame Detectors Conditions –

N/A

Tubes External Condition (Pitting, bulging, misalignment, soot built up …) Watertube Boilers Only –

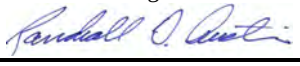
N/A

Tubesheets Condition (Bulging, leaks around the tubes connections, Cracks in the ligaments and weld joints) –

N/A

Staybolts Testing – N/A
Other Observations / Notes – N/A
SECTION V – WATERSIDE
Tubes External Surfaces, if possible internal surfaces – N/A
Water Columns, Gage Glasses, Floats Chambers Internal Surfaces or Low Water Level Rods Condition – Good
Superheater Tubes External Surfaces (Power boilers Only) – N/A
Steam Drum/Vessel Internal Surfaces (If electric boilers the condition of the electric resistant coils) – N/A
Mud Drum Internal Surfaces (Power boilers) – N/A
Deaerator Tank Internals (Power boilers) – N/A

Deaerator Storage Tank (Power boilers) – N/A
Any Repairs or Alteration Since Last Inspection (All repairs and Alteration requires 'R' Stamp R-1 or R-2 Form) – None
water Chemistry Last Checked / Notes – Unknown
SECTION VI – DEFICIENCIES SUMMARY
None
SECTION VII – RECOMMENDATIONS
None

Person Conditions Reported To and/or FSR #, If Issued: Jason Sparks	Z# 122088	Phone No.: c 500 6436, p 664 6262
LANL Commissioned Inspector Name and Signature: Randall D. Austin 	Z# 334246	National Board Commission No.: 10798, R,O (IS & AI Commission)

Reviewed By: Initial: Z# Date:

BOILER OPERATING PERMIT

PO Box 1663
Los Alamos, NM 87545

National Board Federal Inspection Agency

Inspection Due Date:	7/25/2023

Boiler ID No.:	TA-16-1484-BS-A		
Boiler Type:	Steam, Firetube, High Pressure		
National Board No.:	8334	Serial No.:	10291
Boiler Location:	TA-16-1484		
Max. Allowable Working Pressure (MAWP):	100 PSIG		

LANL COMMISSIONED INSPECTOR

Name & Z#:	Randall D. Austin
Signature:	Randall D. Austin
Commission No.:	10798, R, O

Issuing Organization:	MSS-MP
LANL Comm. Insp. Supervisor:	Randall Austin (Z# 334246) PH# 505-667-6740

Form 2101

Integrated Work Document (IWD) Part 2, FOD Requirements and Approval for Entry and Area Hazards and Controls

Non-Tenant Activity Form

IWD No./Work Request No: ____ Revision #: 0

Facility Operation Director (FOD) must determine the facility entry and coordination requirements and identify the Environment, Safety, Health (ESH)/Security and Safeguards (S&S) hazards and controls associated with the activity location.

FOD	TA	Bldg.	Room	Other Location
3	**16**	**N/A**	**N/A**	**Admin Outside Areas Excluding HE areas**
FOD Designated Facility Point-of-Contact	**Name** John Branch, WFO OM Designee Christina Archuleta-Mares, WFO OM Designee Erlinda Gonzales, WFO OM Designee Ryan Locke, WFO OM Designee	**Phone** 412-9696 231-7583 412-8133 500-6727	**Pager**	**Email** jbranch@lanl.gov xtina@lanl.gov etmedina@lanl.gov rlocke@lanl.gov

Entry and Coordination Requirements (*Check one or more of the following*)

- ☐ No Entry/Coordination Requirements
- ☒ Plan of the Day/Plan of the Week (POTD/POTW)
- ☒ Security Clearance Requirements
- ☒ Co-located Hazards/Concerns
- ☒ Check out at End of Work
- ☐ Escort Required
- ☐ Other Bounding Conditions: ____
- ☐ FOD-designated facility Point-of-Contact must sign IWD Part 3
- ☒ Check in at Start of Work
- ☒ Work must be Scheduled
- ☒ Other Security Requirements (ex.: Cellphone, No Foreign Nationals, etc.)
- ☐ Quality Issues
- ☐ Review under Authorization Basis (AB)/Safety Basis/Unreviewed Safety Question (USQ)
- ☒ Work-Area Training Required
- ☒ Check in Daily
- ☒ Check out Daily

Additional Comments

Potential Contact with HE Transport Vehicles. Be aware of Vehicle Placards.

ABNORMAL EVENTS: Any injury, accident, spill, off normal occurrence, etc. MUST be reported immediately to the WFO-FOD Duty Officer @ 664-2926 AND TA-16 Access Control Office 7-9192

Instructions: In the block below, identify work-area hazards that could potentially affect the worker(s) or others. Specify the facility controls and preventive measures that must be implemented by the worker(s) to protect against the site hazards as well as any special training required.

ESH/S&S WORK AREA HAZARDS & CONTROLS

Work Area Hazards/Concerns Identify site hazards and concerns that could potentially affect the worker(s) or others.	**Work Area Hazard Present**	**Facility Controls/ Preventive Measures/ Bounding Conditions** Specify preventive measures, controls and bounding conditions for each site hazard	**Reference Documents** List permits, operating manuals, and other reference procedures	**Training and Qualification** List training requirements (P300, Integretated Work Management, Section 6.1)
☐ **No Work Area Hazards**				
Ionizing Radiation Work in posted radiological areas, work with radioactive materials, or work on or near radiation producing devices. **Specify Hazard:**	☐ Yes ☒ No	• N/A	• N/A	• N/A
Worker Exposure Working near non-ionizing radiation, beryllium, noise, chemicals, hazardous biological materials, lead, asbestos, temperature/humidity extremes, or high explosives. **Specify Hazards:**	☐ Yes ☒ No	• N/A	• N/A	• N/A
Energized and Operative Systems Working near energized electrical parts, pressure systems, steam lines; near unprotected belts, pulleys, chains or rotating equipment; fuel fired equipment other than vehicles; or spark or flame producing operations. **Specify Hazards:**	☐ Yes ☒ No	• N/A	• N/A	• N/A
Confined Spaces Entry into tanks, manholes, cooling towers, sumps, or any other area with potentially low oxygen concentration or other hazards such as toxic vapors or engulfment. **Specify Hazards:**	☐ Yes ☒ No	• N/A	• N/A	• N/A
Elevated Work Surface Elevated work when fall protection is not provided by conventional handrail systems or required per P101-20, *Fall Protection Program*	☐ Yes ☒ No	• N/A	• N/A	• N/A
ESH/S&S WORK AREA HAZARDS & CONTROLS				
Environmental Impact Activities conducted in areas containing potential release site, contaminated soil, sensitive species, watercourse wetlands, floodplain, historical/archeological sites, or other work area condition that can be impacted by or can impact the environment. **Specify Hazards:** PRS, sensitive species – e.g. spotted owl, historical/archeological sites, and waste generation.	☒ Yes ☐ No	• PRS exists. Notify WFO Environmental Generalist, if required. • Archeological sites exist within open areas. Do not disturb any marked archeological sites. If entry into any area required	• Excavation Permit for soil disturbance activities	• Waste Generator Overview

		contact Environmental Stewardship Group. • Work during threatened and endangered species seasons will restricts outdoor activities.		
Security Requirements **Specify:** **Limited Security Area**	☒ Yes ☐ No	• Q or L clearance • Uncleared MUST be escorted	• P200-2, Physical Security • P200-1, Security Areas, Property Protection Areas, and General Access Areas	• Escort Training
Other Hazards **Specify:**	☐ Yes ☒ No	• N/A	• N/A	• N/A

I have verified that the hazards identified above adequately identify the area hazards and that the IWM process has been applied appropriately.

FOD or Representative (Signature/Z #/Date) **Approval Required** _____WFO OM/Designee Signature-on-File_____

Date Approval Expires: 9/30/2022

BOILER OPERATING PERMIT

PO Box 1663
Los Alamos, NM 87545

National Board Federal Inspection Agency

Inspection Due Date:	7/25/2023

Boiler ID No.:	TA-16-1484-BS-B		
Boiler Type:	Steam, Firetube, High Pressure		
National Board No.:	8333	Serial No.:	10290
Boiler Location:	TA-16-1484		
Max. Allowable Working Pressure (MAWP):	100	PSIG	

LANL COMMISSIONED INSPECTOR

Name & Z#:	Randall D. Austin
Signature:	Randall D. Austin
Commission No.:	10798, R, O

Issuing Organization:	MSS-MP
LANL Comm. Insp. Supervisor:	Randall Austin (Z# 334246) PH# 505-667-6740

Integrated Work Document (IWD) Part 2, FOD Requirements and Approval for Entry and Area Hazards and Controls

Non-Tenant Activity Form

IWD No./Work Request No: ____ Revision #: 0

Facility Operation Director (FOD) must determine the facility entry and coordination requirements and identify the Environment, Safety, Health (ESH)/Security and Safeguards (S&S) hazards and controls associated with the activity location.

FOD	TA	Bldg.	Room	Other Location
3	**16**	**N/A**	**N/A**	**Outside Areas**
FOD Designated Facility Point-of-Contact	**Name** John Branch, WFO OM Designee Christina Archuleta-Mares, WFO OM Designee Erlinda Gonzales, WFO OM Designee Ryan Locke, WFO OM Designee	**Phone** 412-9696 231-7583 412-8133 500-6727	**Pager**	**Email** jbranch@lanl.gov xtina@lanl.gov etmedina@lanl.gov rlocke@lanl.gov

Entry and Coordination Requirements (*Check one or more of the following*)

- ☐ No Entry/Coordination Requirements
- ☒ Plan of the Day/Plan of the Week (POTD/POTW)
- ☒ Security Clearance Requirements
- ☒ Co-located Hazards/Concerns
- ☒ Check out at End of Work
- ☐ Escort Required
- ☐ Other Bounding Conditions: ____
- ☐ FOD-designated facility Point-of-Contact must sign IWD Part 3
- ☒ Check in at Start of Work
- ☒ Work must be Scheduled
- ☒ Other Security Requirements (ex.: Cellphone, No Foreign Nationals, etc.)
- ☐ Quality Issues
- ☐ Review under Authorization Basis (AB)/Safety Basis/Unreviewed Safety Question (USQ)
- ☒ Work-Area Training Required
- ☒ Check in Daily
- ☒ Check out Daily

Additional Comments

ACCESS CONTROL: Work within the TA-16 HE Area requires check-in first with TA-16 ACO at TA-16 Building 969. The single most important requirement that all personnel must understand is that a closed gate or other barrier must never be crossed.

CAUTION: This area is a High Explosives (HE) Area. Work group shall adhere to all local ACO instructions as to where access is allowed and where it is restricted, e.g. areas around HE facilities and magazines.

CAUTION: Non-TRIAD workers (outside contractors) require a HE waiver (see P101-8) to work within intraline distance of High Explosive materials if work takes longer than 8 hours.

PIC Pre-Job Brief Instructions:

For all Low and Moderate Hazard work activities, the PIC shall perform a pre-job brief prior to work start and for any new member of the work group prior to that member beginning work. For all High Hazard activities, the PIC shall perform a pre-job brief prior to work start on EVERY Day/Shift of the activity and for any new member of the work group prior to that member beginning work.

ABNORMAL EVENTS: Any injury, accident, spill, off normal occurrence, etc. MUST be reported immediately to the WFO-FOD Duty Officer @ 664-2926 AND TA-16 Access Control Office 7-9192

Instructions: In the block below, identify work-area hazards that could potentially affect the worker(s) or others. Specify the facility controls and preventive measures that must be implemented by the worker(s) to protect against the site hazards as well as any special training required.

ESH/S&S WORK AREA HAZARDS & CONTROLS				
Work Area Hazards/Concerns Identify site hazards and concerns that could potentially affect the worker(s) or others.	**Work Area Hazard Present**	**Facility Controls/ Preventive Measures/ Bounding Conditions** Specify preventive measures, controls and bounding conditions for each site hazard	**Reference Documents** List permits, operating manuals, and other reference procedures	**Training and Qualification** List training requirements (P300, Integretated Work Management, Section 6.1)
☐ **No Work Area Hazards**				
Ionizing Radiation Work in posted radiological areas, work with radioactive materials, or work on or near radiation producing devices. **Specify Hazard:**	☐ Yes ☒ No	• N/A	• N/A	• N/A
Worker Exposure Working near non-ionizing radiation, beryllium, noise, chemicals, hazardous biological materials, lead, asbestos, temperature/humidity extremes, or high explosives. **Specify Hazards: High Explosive Area**	☒ Yes ☐ No	• Spark and Flame Permit Requirements. • All operations that are in direct contact with the structure must use the indoor 2101. These operations include but are not limited to class 2 penetrations, operations on or above roof tops of structures or other activities that impact or penetrate the surface of the building.	• P101-26, Welding, Cutting, and Other Spark- or Flame-Producing Operations	• TA-16 (11, 37) Site Specific Training for the High Explosives Area
Energized and Operative Systems Working near energized electrical parts, pressure systems, steam lines; near unprotected belts, pulleys, chains or rotating equipment; fuel fired equipment other than vehicles; or spark or flame producing operations. **Specify Hazards:**	☐ Yes ☒ No	• N/A	• N/A	• N/A
Confined Spaces Entry into tanks, manholes, cooling towers, sumps, or any other area with potentially low oxygen concentration or other hazards such as toxic vapors or engulfment.	☐ Yes ☒ No	• N/A	• N/A	• N/A

Specify Hazards:				
Elevated Work Surface Elevated work when fall protection is not provided by conventional handrail systems or required per P101-20, *Fall Protection Program*	☐ Yes ☒ No	• N/A	• N/A	• N/A
ESH/S&S WORK AREA HAZARDS & CONTROLS				
Environmental Impact Activities conducted in areas containing potential release site, contaminated soil, sensitive species, watercourse wetlands, floodplain, historical/archeological sites, or other work area condition that can be impacted by or can impact the environment. **Specify Hazards:** PRS, sensitive species – e.g. spotted owl, historical/archeological sites, and waste generation.	☒ Yes ☐ No	• PRS exists. Notify WFO Environmental Generalist, if required. • Archeological sites exist within open areas. Do not disturb any marked archeological sites. If entry into any area required contact Environmental Stewardship Group. • Work during threatened and endangered species seasons will restricts outdoor activities.	• Excavation Permit for soil disturbance activities	• Waste Generator Overview
Security Requirements **Specify:** **Limited Security Area**	☒ Yes ☐ No	• Q or L clearance • Uncleared MUST be escorted	• P200-2, Physical Security • P200-1, Security Areas, Property Protection Areas, and General Access Areas	• Escort Training
Other Hazards **Specify:**	☐ Yes ☒ No	• N/A	• N/A	• N/A

I have verified that the hazards identified above adequately identify the area hazards and that the IWM process has been applied appropriately.

FOD or Representative (Signature/Z #/Date) **Approval Required** WFO OM/Designee Signature-on-File

Date Approval Expires: 9/30/2022

LANL TA-9/16 boiler Inspections:

Summer 2022:

Overall, the boilers are still in excellent condition. There is virtually no scale on the boiler tubes, so the heat transfer is outstanding. The exposed steel is in various conditions with the majority showing dark red to dark grey surfaces. You are on your way to developing magnetite at every boiler. MANY THANKS TO JASON AND HIS CREW FOR ALL OF THE HARD WORK!

TA-9 Boilers A and B

Boiler A: There are no heat transfer issues since the tubes are all clean. The tubes are mostly covered with rust, probably from high levels of iron in the condensate or possibly flash rush when the boiler was opened and exposed to oxygen. There are no safety or operational issues.

Boiler B: The tubes looked the same as boiler A with the addition of numerous tubercules (looks like flash oxygen pitting). The pits are extremely shallow, almost non-existent. We are not sure what is causing that condition. We saw the same items last summer.

The make-up tank was had as much as 1/2'" of mud in it but there was no corrosion evident in the tank. Similar to last year.

16-1490 Boilers A and B:

Boiler A: Almost perfect! There is flat black on the tubes, top and bottom. Otherwise, there was no scale seen just shiny bare metal.

Boiler B: The tops of the tubes were virtually identical to Boiler A. As you look through the lower holes you see that the tubes have a very light gray color. It is still bare iron but the color changes a bit. Nothing to be concerned about. Both boilers looked excellent

The make-up tank had a light mud coating in the bottom. There was a small area on the East side of the tank that had some corrosion tubercules. They were not severe.

16-1491 Boilers A and B:

Boiler A: Very clean. The steel tubes were mostly black magnetite. No safety or heat transfer concerns. I could not see the back of the tubes because the head was not open, but it was obvious that the boiler is really clean. It looked excellent!

Boiler B: Again, basically clean, and similar Boiler A. The front had no mud and was magnetite black. I couldn't see the back or bottom of the tubes. Excellent!

The make-up tank was coated with dried slime and had about ½ inch of sludge before it was cleaned. There are a few tubercles evident indicating some corrosion but it appears to be minor.

16-1492 Boilers A and B:

Boiler A: The tubes are all steel with a slight red tint and no scale seen. No safety or efficiency issues just some iron returning in the condensate.

Boiler B: Almost identical to Boiler A but had slightly less of a red tint and is not turning blacker. Again, just some iron returning to the boiler in the condensate is causing the red tint.

The make-up tank had about ¼" to ½" of mud returning with the condensate.

16-1484 Boiler A and B:

Boiler A: The tubes are perfect virtually perfect. The tubes are all very red from condensate return but there is no scale anywhere. No safety or efficiency concerns.

Boiler B: The tubes look just like Boiler A, very clean with a definite red tint.

The make-up tank was clean but there are pits all over the bottom of the tank. Some appear to be relatively deep.

16-1480 Boilers A and B:

Boiler A: Still has good steel surfaces dark purple tops and black bottoms with some powder seen which would be from the water drying during the shut-down and opening. There are no safety or efficiency concerns.

Boiler B: The tubes were smooth with mostly blue and black surfaces. The bottoms of the tubes had rough, ripples of scale but still generally clean.

The make-up tank had ¼" to ½" of deposits. There is also some corrosion evident on one of the side walls. It appears to be minor but you might want to check it out.

16-1483 Boiler A:

The boiler looks the same as last year, great with mostly black magnetite. Some powder was left behind from the drying water during shut down but is not an issue. The bottoms of the tubes have now changed to mostly black. There are no safety concerns or efficiency problems.

16-1487 Boiler A: There is no scale evident, just bare steel throughout the tubes. The tubes have a red coloring to them probably due to iron returning in the condensate. No tubercles are on the tubes this year.

Boiler B: Again, the tubes are entirely exposed steel with no scale. The tubes are all black. Everything looks great!

BOILER INSPECTION REPORT (BIR)

NBIC NB-23, Part 2 (This report to be completed by LANL Commissioned Inspector)

SECTION I – BOILER INFORMATION

Boiler ID#:	16-1484-BS-B	Insp Date: 7/25/2022	**Expiration Date:** 7/25/2023
Boiler Area:	TA16, Bldg 1484	Ext. Inspection: ☐	Int. Inspection: ☒
National Board No.:	8333	Serial No.:	10290
Boiler Mfg.:	Sellers Engineering	Year Built:	1995
Boiler Type:	Steam ☒ Hot Water ☐ Others ☐	Firetube ☒	Watertube ☐
Safety Relief Valve (s) ID#:		Safety Valve (s) Size:	2" , 1.5" , _____ ,
Set Press:	1. 100 2. 100 3. _____ (PSI)	Capacity:	1. 4593 2. 2948 3. _____ (lbs/hr)
Safety Valve (s):	Last Tested ☐ "VR" ☐ Replaced ☒	Date:	1. 10/14/20 2. _____ 3. _____ ,
Pressure Gauge Range:	0 to 160	Heating Surface Area (sqft):	636
Boiler MAWP:	150 (PSI)		
Pressure Allowed:	This Inspection: 100 (PSI)	Previous Inspection: 150 (PSI)	
Fuel:	NG	Method of Firing:	Auto
Inspection Finding:	Major ☐ Minor ☐	Permit Issued:	Yes ☐ No ☒

SECTION II – EXTERNAL/INSERVICE INSPECTION CONDITIONS

Planning, Coordination and Safety Requirements –

Lockout/Tagout verified

External Casing (cracks, leakage of fluids or combustion gases …) –

No adverse conditions

Safety Valve (s) Testing and Conditions –

Good-new, MSVRC 5,088 lbs/hr per ASME Code Section I, PG-70-acceptable

Hangers and boiler supports Conditions –

None-good

Piping External Surfaces Conditions –

None, All new BEP

Controls (Firing, Flame Detector, valves, …) Functionality Test –

N/A

Low Water Cutoff Alarm Test –

Boiler shut down, N/A

Other Observations / Notes –

None

SECTION III – INTERNAL INSPECTION CONDITIONS

Is the boiler prepared, drained and cleaned for internal inspection?	N/A	Yes ☒	No ☐	
Is the fuel shutoff valve locked and tagged?	N/A	Yes ☒	No ☐	
Is the boiler isolated from other boilers?	N/A	Yes ☒	No ☐	N/A ☐
Is the boiler atmosphere being monitored for safe entry (Boilers w/manway)?		Yes ☐	No ☐	N/A ☒

Is the boiler hydro tested for leaks? Yes ☐ No ☒	Pressure Test: PSIG

SECTION IV – FIRESIDE

Fire Box, Refractory, Burners, Flame Detectors Conditions –

Good

Tubes External Condition (Pitting, bulging, misalignment, soot built up …) Watertube Boilers Only –

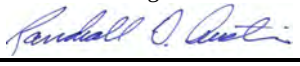
Good

Tubesheets Condition (Bulging, leaks around the tubes connections, Cracks in the ligaments and weld joints) –

Good

Staybolts Testing – Stays look good
Other Observations / Notes – N/A
SECTION V – WATERSIDE
Tubes External Surfaces, if possible internal surfaces –
Water Columns, Gage Glasses, Floats Chambers Internal Surfaces or Low Water Level Rods Condition – Good-clean
Superheater Tubes External Surfaces (Power boilers Only) – N/A
Steam Drum/Vessel Internal Surfaces (If electric boilers the condition of the electric resistant coils) – Good/ clean
Mud Drum Internal Surfaces (Power boilers) – N/A
Deaerator Tank Internals (Power boilers) – Good

Deaerator Storage Tank (Power boilers) – Good
Any Repairs or Alteration Since Last Inspection (All repairs and Alteration requires 'R' Stamp R-1 or R-2 Form) – None
water Chemistry Last Checked / Notes – Unknown
SECTION VI – DEFICIENCIES SUMMARY
None
SECTION VII – RECOMMENDATIONS
None

Person Conditions Reported To and/or FSR #, If Issued: Jason Sparks	Z# 122088	Phone No.: c 500 6436, p 664 6262
LANL Commissioned Inspector Name and Signature: Randall D. Austin 	Z# 334246	National Board Commission No.: 10798, R,O (IS & AI Commission)

Reviewed By: Initial: Z# Date:

Los Alamos NATIONAL LABORATORY **Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)**			
Revision #: 0			**Activity/Task Title:** **ST 1Y STEAM PLANT FIRESIDE / WATERSIDE PM**
Work Document #: (WO # / Task)			**Planner/Preparer (Name/Z#/Date)** Jerome D. Trujillo / 119186 / 4-28-2022
TA:	**Building:**	**Room:**	**Additional Location Description:** UI BOILER HOUSES

1. SCOPE OF WORK

1.1. Perform annual Waterside / Fireside PM and boiler inspections per UI Checklist / PMI. UI Engineering will provide support, oversight and training.

2. PRECAUTIONS AND LIMITATIONS

2.1. **IF** steps cannot be completed as described or **IF** unforeseen situations occur. **THEN PAUSE / STOP WORK** and **STABILIZE** the situation, **CONTACT** your supervisor, and **AWAIT** further instructions before proceeding.

⚠WARNING

2.2. Potential injury due to uncontrolled release of hazardous energy.

2.3. AC Electrical Hazards – Electrical shock from contact with energized AC sources or burn from arc flash.

2.4. 50 V AC to 150 V AC Approach Boundaries **(**Note: this includes circuits where the exposure does not exceed 120V).
- 2.2.1. Limited Approach – 3ft - 6in.
- 2.2.2. Restricted Approach – Avoid Contact

2.5. 151 V AC to 750 V AC Approach Boundaries
- 2.5.1. Limited Approach – 3 ft. – 6 in.
- 2.5.2. Restricted Approach – 1 ft. – 0 in.

2.6. PPE for 50 V AC to 750 V AC Mode 0 Class 1.2a,b, 1.3a & 1.3b
- 2.6.1. **WEAR** non-melting or untreated natural fiber long-sleeve shirt long pants, hard hat**,** safety glasses or goggles, gloves (appropriate for type of work).

2.7. PPE for 50 V AC to 150 V AC Mode 1 & 2 Class 1.2a,b, 1.3a
- 2.7.1. **PERFORM** Electrical Hazard field analysis.
- 2.7.2. **WEAR** AR PPE as determined by the arc flash hazard analysis for the equipment or as stated on the arc flash label for the equipment.

2.8. PPE for 151 V AC to 750 V AC Mode 1 & 2 Class 1.3a & 1.3b
- 2.8.1. **PERFORM** Electrical Hazard field analysis.
- 2.8.2. **WEAR** AR PPE as determined by the arc flash hazard analysis for the equipment or as stated on the arc flash label for the equipment.

Los Alamos NATIONAL LABORATORY **Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)**			
Revision #: 0			**Activity/Task Title:** **ST 1Y STEAM PLANT FIRESIDE / WATERSIDE PM**
Work Document #: (WO # / Task)			**Planner/Preparer (Name/Z#/Date)** Jerome D. Trujillo / 119186 / 4-28-2022
TA:	**Building:**	**Room:**	**Additional Location Description:** UI BOILER HOUSES

2.9. Operating breakers.
- 2.9.1. No PPE is required for operating circuit breakers when the equipment and the breaker meet the following equipment conditions:
  - 2.9.1.1. Has been maintained in accordance with O&M Criterion 504.
  - 2.9.1.2. Has been properly installed.
  - 2.9.1.3. Have no impending failures.
  - 2.9.1.4. When operating a circuit breaker, stand to one side of panel, use one hand to operate the handle of the circuit breaker and keep head turned away from panel.
- 2.9.2. **IF** the above doesn't apply, **WEAR** the AR PPE as determined by the arc flash hazard analysis for the equipment or as stated on the arc flash label for the equipment. Selection will be different in case-by-case bases.

2.10. Housekeeping shall be performed before, during and after work activities
- 2.5.1. Limit transient combustible materials
- 2.5.2. Control all material.
- 2.5.3. Secure hoses, cords, lines, and portable equipment.

2.11. General PPE:
- 2.6.1. Bump caps, safety glasses, safety shoes, reflective safety vests/shirt, hearing protection and gloves appropriate for task being performed.

3. PREREQUISITES/INITIAL CONDITIONS

3.1. **VERIFY** work is on the UI and FOD POD schedule and not in conflict of other work activities.

3.2. **VERIFY** a daily pre-job brief has been performed with all affected personnel and 2101 for site hazards and entry requirements has been read.

3.3. **VERIFY** all personnel have the appropriate PPE for task execution during pre-job planning.
- 3.3.1. General Boiler Plant PPE: **WEAR** bump caps, safety glasses, safety shoes, hearing protection and gloves appropriate for task being performed.
- 3.3.2. **WEAR** Long sleeve shirts or Ansel sleeves when working near hot surfaces.

3.4. **VERIFY** permits/documents are filled out and signed when needed prior to performing corrective maintenance on equipment/outlet and components to be worked on.

Los Alamos NATIONAL LABORATORY **Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)**			
Revision #: 0			**Activity/Task Title:** **ST 1Y STEAM PLANT FIRESIDE / WATERSIDE PM**
Work Document #: (WO # / Task)			**Planner/Preparer (Name/Z#/Date)** Jerome D. Trujillo / 119186 / 4-28-2022
TA:	**Building:**	**Room:**	**Additional Location Description:** UI BOILER HOUSES

3.5. **BARRICADE** the work area to protect tenants/unexpected personnel/or traffic as directed by the Supervisor or PIC.
- 3.5.1. **POST** barricades, utilizing caution tape and stanchions, with entry/exit requirements, PPE and POC info.

3.6. **PERFORM** Individual Hazard Analysis (IHA) for this task, which includes continual self-analysis of work scope, hazards and controls.
- 3.6.1. **ENSURE** safe operations is everyone's personal responsibility.
- 3.6.2. **IDENTIFY** and **EVALUATE** hazards for every task, every time.
- 3.6.3. **MAINTAIN** a healthy respect for what can go wrong.

3.7. **VERIFY** where evacuation muster, shelter-in-place areas and AED are located.

4. Special Training/Medical Requirements

4.1. Curriculum ID 10968 – Maintenance Worker
4.2. Parent Curriculum ID 647 – Pipefitter
- 4.2.1. Endorsement Curriculum ID 718 – Pipefitter – Boiler Fitter

4.3. Curriculum ID 641 – Carpenter
- 4.3.1. Curriculum ID 726 – Carpenter – Scaffold Competent Person

4.4. Parent Curriculum ID 643 – Insulator
4.5. Parent Curriculum ID 642 – Electrician

5. Special Tools/Equipment

5.1. Tools needed for work performance.

6. Work Instructions

6.1. **NOTIFY** operations of work to be performed and for permission to proceed.
- 6.1.1. **VERIFY** boiler is ready to be taken out of service.

6.2. **INSPECT** boiler.
- 6.2.1. **CONDUCT** initial observations and external inspections.
- 6.2.2. **USE** National Boiler Inspection Code (NBIC) standards.
- 6.2.3. Inspector must be certified to NBIC.
- 6.2.4. **WEAR** long sleeve shirts or Ansell sleeves.
- 6.2.5. **USE** insulating blankets to protect against hot surfaces.

Los Alamos NATIONAL LABORATORY **Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)**			
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Work Document #: (WO # / Task)			**Planner/Preparer (Name/Z#/Date)** Jerome D. Trujillo / 119186 / 4-28-2022
TA:	**Building:**	**Room:**	**Additional Location Description:** UI BOILER HOUSES

6.3. **SETUP / ERECT / DISMANTLE / MOVE** ladders, work platforms and scaffolding when needed to access work area
- 6.3.1. **INSPECT** ladders and platforms daily before use.
  - 6.3.1.1. **ENSURE** ladder is properly oriented to work location.
  - 6.3.1.2. **MAINTAIN** 3 points of contact when working on ladders.
- 6.3.2. Scaffold will be inspected daily by Competent Scaffold Personnel before use.
  - 6.3.2.1. **ONLY** competent personnel will erect, modify or inspect scaffold.
  - 6.3.2.2. **WEAR** hardhats when working on or near scaffolding.

WARNING

The following electrical activities for step 6.4. and 6.5 are Mode1

6.4. **DE-ENERGIZE Boiler.**
- 6.4.1. **TRACE** piping, conduit and wiring to **ENSURE** appropriate isolation point(s) is identified.
- 6.4.2. **CLOSE** valves.
- 6.4.3. **CLOSE** breaker.
  - 6.4.3.1. **FOLLOW** instructions on step 2.9 for breaker/disconnect manipulation.
- 6.4.4. **APPLY** LO/TO

6.5. **PERFORM** 0 energy on equipment/components.
- 6.5.1. **ENSURE** equipment will not start automatically, Attempt to start using HOA.
- 6.5.2. **CONFIRM (**Live/Dead/live) no electrical potential is present on electrical equipment to be worked with an NRTL-listed, approved Measurement & Test Equipment (M&TA).
- 6.5.3. **WEAR** PPE as determined by the arc flash hazard analysis (2193 form) or as stated on the arc flash label for the equipment to perform Mode 1.
  - 6.5.3.1. **ALL** affected workers **SHALL** witness this confirmation.

6.6. **OPEN** access doors and covers
- 6.6.1. **STAGE** / **STORE** fasteners for reuse.
- 6.6.2. **WEAR** long sleeve shirts or Ansell sleeves.
- 6.6.3. **USE** insulating blankets to protect against hot surfaces.
- 6.6.4. **BE AWARE** of body positioning and lifting techniques.

6.7. **DETERMINATE** wiring from pressure and control switches.
- 6.7.1. **LABEL** and **PROTECT** wiring for re-termination.
- 6.7.2. **ENSURE** wiring and electrical devices are electrically safe.

Los Alamos NATIONAL LABORATORY **Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)**			
Revision #: 0			**Activity/Task Title:** **ST 1Y STEAM PLANT FIRESIDE / WATERSIDE PM**
Work Document #: (WO # / Task)			**Planner/Preparer (Name/Z#/Date)** Jerome D. Trujillo / 119186 / 4-28-2022
TA:	**Building:**	**Room:**	**Additional Location Description:** UI BOILER HOUSES

6.8. **PERFORM** annual boiler maintenance.
- 6.8.1. **FOLLOW** approved checklists, PMIs and procedures.
- 6.8.2. **NOTIFY** UI engineering to provide support when needed.
- 6.8.3. **CALIBRATE** gauges.
- 6.8.4. **REVIEW** AND **FOLLOW** SDS for any lubricants or chemical used.
- 6.8.5. **DOCUMENT** all maintenance performed.

6.9. **PERFORM** internal boiler inspections.
- 6.9.1. **FOLLOW** NBIC.

6.10. **CLOSE / REINSTALL** all doors or removed covers.
- 6.10.1. **REPLACE** gaskets and fasteners on doors as needed.

6.11. **RECONNECT** all removed wiring and terminations.
- 6.11.1. **UTILIZE** peer checking to ensure wiring is terminated properly.

6.12. **VERIFY** boiler is ready to be placed back into service.
- 6.12.1. **INSPECT** all work performed.
- 6.12.2. **REMOVE** all tools and excess materials form boilers.



The following electrical activities for steps 6.15. is Mode 1

6.13. **REMOVE** LO/TO and **RE-ENERGIZE** .
- 6.13.1. **FOLLOW** instructions on step 2.9 for breaker/disconnect manipulation.

6.14. **SLOWLY OPEN** valves.

6.15. **REPAIR / REPLACE** any removed insulation.
- 6.15.1. **WEAR** cut resistant gloves when using sharp tools to cut insulation.
- 6.15.2. **FOLLOW** SDS for any adhesives or chemical used.
- 6.15.3. **REPLACE** insulation as directed by PIC / superintendent.

Los Alamos NATIONAL LABORATORY **Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)**			
Revision #: 0			**Activity/Task Title:** **ST 1Y STEAM PLANT FIRESIDE / WATERSIDE PM**
Work Document #: (WO # / Task)			**Planner/Preparer (Name/Z#/Date)** Jerome D. Trujillo / 119186 / 4-28-2022
TA:	**Building:**	**Room:**	**Additional Location Description:** UI BOILER HOUSES

7. POST WORK ACTIVITIES

7.1. **VERIFY** proper operation of boiler.

7.1.1. **DOCUMENT** operation per approved checklists or procedures.

7.2. **PERFORM** post maintenance testing as directed by System Engineer.

7.2.1. **IF** any deficiencies are found, **DOCUMENT** and **NOTIFY** supervisor.

7.3. **CLEAN** work area of all debris and excess materials.

7.3.1. **SEGREGATE** all waste as required by WMC.

7.3.2. **DISPOSE** of all generated waste in appropriate containers/locations.

7.3.3. **REMOVE** all tools, equipment and barricades.

8. CLOSEOUT

8.1. **COMPLETE** work package documentation and return work package.

8.2. **NOTIFY** operations that work is complete.

Los Alamos NATIONAL LABORATORY **Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)**			
Revision #: 0			**Activity/Task Title:** **ST 1Y STEAM PLANT FIRESIDE / WATERSIDE PM**
Work Document #: (WO # / Task)			**Planner/Preparer (Name/Z#/Date)** Jerome D. Trujillo / 119186 / 4-28-2022
TA:	**Building:**	**Room:**	**Additional Location Description:** UI BOILER HOUSES

***Insert Rows above** for additional Tasks/Steps or attach pages to clearly communicate ESH&Q/S&S hazards and associated controls.*	The RLM, and FOD or FOD Representative approval indicates IWM has been applied appropriately, work is authorized, workers are qualified, work will be performed in accordance with ESH&Q/S&S requirements and the IWD, and facility safety basis, aggregate hazards, and collocated hazards were appropriately included in the hazard analysis and acknowledges completion of a peer review.	**RLM** (Signature/Z#/Date) **Required** Glenn Martinez Digitally signed by Glenn Martinez Date: 2022.04.28 11:36:19 -06'00' **FOD or Representative** (Signature/Z#/Date) ROBERT ORTIZ (Affiliate) Digitally signed by ROBERT ORTIZ (Affiliate) Date: 2022.05.18 07:11:50 -06'00' **ESO Review** (Signature/Z#/Date) **If Required** MARTY CORDOVA (Affiliate) Digitally signed by MARTY CORDOVA (Affiliate) Date: 2022.05.02 07:48:30 -06'00' **Safety Review** (Signature/Z#/Date) **Required** Leaton Jones Digitally signed by Leaton Jones Date: 2022.05.16 12:44:44 -06'00'

IWD Type ☒ Moderate-Hazard ☐ High-Hazard/Complex ☐ Standing IWD	Date when RLM re-approval is required_____ Other Conditions for Re-Approval **Change of Scope/ Hazard** (Print) Name of Primary PIC Jason Sparks Name of Alternate PIC___ Name of Alternate PIC Issac Garcia	Any required classification review completed, Signature/Date

BOILER INSPECTION REPORT (BIR)

NBIC NB-23, Part 2 (This report to be completed by LANL Commissioned Inspector)

SECTION I – BOILER INFORMATION

Boiler ID#:	BS-B	Insp Date: 4/6/2022	**Expiration Date:** 4/6/2023
Boiler Area:	TA16, Bldg 1484	Ext. Inspection: ☒	Int. Inspection: ☐
National Board No.:	8333	Serial No.:	10290
Boiler Mfg.:	Sellers Engineering	Year Built:	1995
Boiler Type:	Steam ☒ Hot Water ☐ Others ☐	Firetube ☒	Watertube ☐
Safety Relief Valve (s) ID#:		Safety Valve (s) Size:	2" , 1.5" , _____ ,
Set Press:	1. 100 2. 100 3. _____ (PSI)	Capacity:	1. 4593 2. 2948 3. _____ (lbs/hr)
Safety Valve (s):	Last Tested ☒ "VR" ☐ Replaced ☒	Date:	1. 4/6/22 2. 4/6/22 3. _____ ,
Pressure Gauge Range:	0 to 160	Heating Surface Area (sqft):	636
Boiler MAWP:	150 (PSI)		
Pressure Allowed:	This Inspection: 100 (PSI)	Previous Inspection: 100 (PSI)	
Fuel:	NG	Method of Firing:	Auto
Inspection Finding:	Major ☐ Minor ☐	Permit Issued:	Yes ☐ No ☒

SECTION II – EXTERNAL/INSERVICE INSPECTION CONDITIONS

Planning, Coordination and Safety Requirements –

No Lockout/Tagout, this is an in-service inspection.

External Casing (cracks, leakage of fluids or combustion gases …) –

No adverse conditions

Safety Valve (s) Testing and Conditions –

5,088 lbs/hr per ASME Code, Section I, PG-70. Two SV's installed capacity 7,541 Lbs/hr, therefor acceptable.
Lift test on SV's at 82 psi

Hangers and boiler supports Conditions –

None-good

Piping External Surfaces Conditions –

Good-Fuel train leak test performed, entire building.

Controls (Firing, Flame Detector, valves, …) Functionality Test –

All boilers controls, pressure controls, fuel train, flame failure, SSOV test Good

Low Water Cutoff Alarm Test –

LWCO test Good

Other Observations / Notes –

None

SECTION III – INTERNAL INSPECTION CONDITIONS

Is the boiler prepared, drained and cleaned for internal inspection?	N/A	Yes ☐	No ☒	
Is the fuel shutoff valve locked and tagged?	N/A	Yes ☐	No ☒	
Is the boiler isolated from other boilers?	N/A	Yes ☐	No ☐	N/A ☒
Is the boiler atmosphere being monitored for safe entry (Boilers w/manway)?		Yes ☐	No ☐	N/A ☒

Is the boiler hydro tested for leaks? Yes ☐ No ☒	Pressure Test: PSIG

SECTION IV – FIRESIDE

Fire Box, Refractory, Burners, Flame Detectors Conditions –

N/A

Tubes External Condition (Pitting, bulging, misalignment, soot built up …) Watertube Boilers Only –

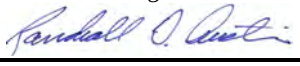
N/A

Tubesheets Condition (Bulging, leaks around the tubes connections, Cracks in the ligaments and weld joints) –

N/A

Staybolts Testing – N/A
Other Observations / Notes – N/A
SECTION V – WATERSIDE
Tubes External Surfaces, if possible internal surfaces – N/A
Water Columns, Gage Glasses, Floats Chambers Internal Surfaces or Low Water Level Rods Condition – Good
Superheater Tubes External Surfaces (Power boilers Only) – N/A
Steam Drum/Vessel Internal Surfaces (If electric boilers the condition of the electric resistant coils) – N/A
Mud Drum Internal Surfaces (Power boilers) – N/A
Deaerator Tank Internals (Power boilers) – N/A

Deaerator Storage Tank (Power boilers) – N/A
Any Repairs or Alteration Since Last Inspection (All repairs and Alteration requires 'R' Stamp R-1 or R-2 Form) – None
water Chemistry Last Checked / Notes – Unknown
SECTION VI – DEFICIENCIES SUMMARY
None
SECTION VII – RECOMMENDATIONS
None

Person Conditions Reported To and/or FSR #, If Issued: Jason Sparks	Z# 122088	Phone No.: c 500 6436, p 664 6262
LANL Commissioned Inspector Name and Signature: Randall D. Austin 	Z# 334246	National Board Commission No.: 10798, R,O (IS & AI Commission)

Reviewed By: Initial: Z# Date:

Form 2101

Integrated Work Document (IWD) Part 2, FOD Requirements and Approval for Entry and Area Hazards and Controls

Non-Tenant Activity Form

IWD No./Work Request No: _____ Revision #: _____

Facility Operation Director (FOD) must determine the facility entry and coordination requirements and identify the Environment, Safety, Health (ESH)/Security and Safeguards (S&S) hazards and controls associated with the activity location.

FOD 8	TA 9/16	Bldg. All Steam Boiler Plants (1480,1481,1483,1484, 1486,1487,1488,1490, 1491 & 1492)	Room ALL	Other Location Inside Boiler Plants
FOD Designated Facility Point-of-Contact	Name Nicholas Nelson	Phone 665-5508	Pager N/A	Email Nelson_n@lanl.gov

Entry and Coordination Requirements (*Check one or more of the following*)

- ☐ No Entry/Coordination Requirements
- ☒ Plan of the Day/Plan of the Week (POTD/POTW)
- ☒ Security Clearance Requirements
- ☐ Co-located Hazards/Concerns
- ☒ Check out at End of Work
- ☐ Escort Required
- ☐ Other Bounding Conditions: _____
- ☐ FOD-designated facility Point-of-Contact must sign IWD Part 3
- ☒ Check in at Start of Work
- ☒ Work must be Scheduled
- ☐ Other Security Requirements (ex.: Cellphone, No Foreign Nationals, etc.)
- ☐ Quality Issues
- ☐ Review under Authorization Basis (AB)/Safety Basis/Unreviewed Safety Question (USQ)
- ☒ Work-Area Training Required
- ☒ Check in Daily
- ☒ Check out Daily

Additional Comments (refer to Job Hazard Analysis [JHA] Tool Facility Notes)

All work must be approved by the Utilities FOD or UI-OPS. POD/POTW-contact Facility POC. No Smoking around Natural Gas Systems. Evaluate inside floor and housekeeping conditions to safely proceed with activities. Observe safety signs and floor markings in all buildings and areas. If activities involve potential exposure to Water Treatment Chemicals consult with UI Safety/IH representatives to identify proper PPE. Be aware of pipe or any components on floors for tripping hazards, If insect or pests are excessive contact pest control to address.

Instructions: In the block below, identify work-area hazards that could potentially affect the worker(s) or others. Specify the facility controls and preventive measures that must be implemented by the worker(s) to protect against the site hazards as well as any special training required.

ESH/S&S WORK AREA HAZARDS & CONTROLS				
Work Area Hazards/Concerns Identify site hazards and concerns that could potentially affect the worker(s) or others.	**Work Area Hazard Present**	**Facility Controls/ Preventive Measures/ Bounding Conditions** Specify preventive measures, controls and bounding conditions for each site hazard	**Reference Documents** List permits, operating manuals, and other reference procedures	**Training and Qualification** List training requirements (P300, Integretated Work Management, Section 6.1)
☐ **No Work Area Hazards**				
Ionizing Radiation	☐ Yes ☒ No			

Work in posted radiological areas, work with radioactive materials, or work on or near radiation producing devices. **Specify Hazard:**				

IWD No./Work Request No: _____ Revision #: _____

ESH/S&S WORK AREA HAZARDS & CONTROLS				
Work Area Hazards/Concerns Identify site hazards and concerns that could potentially affect the worker(s) or others.	**Work Area Hazard Present**	**Facility Controls/ Preventive Measures/ Bounding Conditions** Specify preventive measures, controls and bounding conditions for each site hazard	**Reference Documents** List permits, operating manuals, and other reference procedures	**Training and Qualification** List training requirements (P300, Integretated Work Management, Section 6.1)
Worker Exposure Working near non-ionizing radiation, beryllium, noise, chemicals, hazardous biological materials, lead, asbestos, temperature/humidity extremes, or high explosives. **Specify Hazards:** Working near chemicals, temperature/humidity extremes: High temperature boiler equipment, High temperature Water/Steam, Boiler Water Treatment Chemicals	☒ Yes ☐ No	Required PPE: Hard hat, safety shoes, safety glasses. Hearing protection (noise > 85 dba). Avoid hot surfaces and piping. Long sleeve shirt,Ansell sleeves or coveralls when working on hot surfaces. Gloves when operating valves or contacting pipe/fitting openings where there is potential for hot water/ steam release.Be aware of chemical containers and check labeling. Be aware of piping, associated systems for any leaks. If chemical leak is noticed contact operations manager, IH&S Rep during regular working hrs. Over 5 gallon chemical spill leave area, call EM&R, and control access. Follow LANL Asbestos program/rqmts if PACM identified outside containment. For after-hours contact the UI Duty Officer, 699-7452 to re-assess any abnormal situation.	•P101-6 PPE •P101-31 Hearing Conservations/ Noise Program HAZCOM (Chemical Hazard Communication) Course # 25418 Chemical MSDS's	•LANL PPE or equivalent •Hearing protection •Site specific training •Hazcom •Read Chemical MSDSs

Energized and Operative Systems Working near energized electrical parts, pressure systems, steam lines; near unprotected belts, pulleys, chains or rotating equipment; fuel fired equipment other than vehicles; or spark or flame producing operations. **Specify Hazards:**	☒ Yes ☐ No	Stay within established walking areas. Observe safety signage alarm lights and floor markings Identify explosive hazards and follow task specific IWD if working on plant equipment or components. If questions consult with UI system engineer, Operation Mgr. Designee, or Safety rep.	P101-13 Electrical Safety P101-3 LO/TO P101-34 Pressure, Vacuum, and Cryogenic System.	Electrical Safety LOTO if applicable to task. •Pressure Safety Awareness Read P315 admin lock/tag.
Confined Spaces Entry into tanks, manholes, cooling towers, sumps, or any other area with potentially low oxygen concentration or other hazards such as toxic vapors or engulfment. **Specify Hazards:**	☐ Yes ☒ No			
Elevated Work Surface Elevated work when fall protection is not provided by conventional handrail systems or required per P101-20, *Fall Protection Program*	☒ Yes ☐ No	Stay within established walking areas, stairways and paths. Observe safety signage. Follow LANL Fall Protection Requirements if task on roofs or work above 4 feet.	P101-20.0	Fall Protection
Environmental Impact Activities conducted in areas containing potential release site, contaminated soil, sensitive species, watercourse wetlands, floodplain, historical/archeological sites, or other work area condition that can be impacted by or can impact the environment. **Specify Hazards:**	☐ Yes ☒ No			
Security Requirements **Specify:**	☒ Yes ☐ No	Uncleared must have Q or L escort and must sign in/out @ 16-0969/09-0021 Access Control. Meet WFO access requirements.	P200-2 Physical Security	Escort Training LANL Course # 18366
Other Hazards **Specify:** Look-alike Equipment in the vicinity of work site may contain un-controlled hazardous energy.	☒ Yes ☐ No	Adequette barriers and controls will be stablished to prevent unauthorized personnel/workers from entering job site	IWD	Pre-job briefing emphasis. Worker confirmation of look-alike potential hazards, locations and barriers set in place to identify those potential hazards.

		and encounter uncontrolled hazards.		

I have verified that the hazards identified above adequately identify the area hazards and that the IWM process has been applied appropriately.

FOD or Representative (Signature/Z #/Date) **Approval Required** NICHOLAS NELSON (Affiliate) Digitally signed by NICHOLAS NELSON (Affiliate) Date: 2021.07.13 09:14:39 -06'00'

Date Approval Expires: 09/10/2022

BOILER INSPECTION REPORT (BIR)

NBIC NB-23, Part 2 (This report to be completed by LANL Commissioned Inspector)

SECTION I – BOILER INFORMATION

Boiler ID#:	16-1484-BS-A	Insp Date: 7/25/2022	**Expiration Date:** 7/25/2023
Boiler Area:	TA16, Bldg 1484	Ext. Inspection: ☐	Int. Inspection: ☒
National Board No.:	8334	Serial No.:	10291
Boiler Mfg.:	Sellers Engineering	Year Built:	1995
Boiler Type:	Steam ☒ Hot Water ☐ Others ☐	Firetube ☒	Watertube ☐
Safety Relief Valve (s) ID#:		Safety Valve (s) Size:	2" , 1.5" , _____ ,
Set Press:	1. 100 2. 100 3. _____ (PSI)	Capacity:	1. 4593 2. 2948 3. _____ (lbs/hr)
Safety Valve (s):	Last Tested ☒ "VR" ☐ Replaced ☒	Date:	1. 10/14/20 2. _____ 3. _____ ,
Pressure Gauge Range:	0 to 160	Heating Surface Area (sqft):	636
Boiler MAWP:	150 (PSI)		
Pressure Allowed:	This Inspection: 100 (PSI)	Previous Inspection: 150 (PSI)	
Fuel:	NG	Method of Firing:	Auto
Inspection Finding:	Major ☐ Minor ☐	Permit Issued:	Yes ☐ No ☒

SECTION II – EXTERNAL/INSERVICE INSPECTION CONDITIONS

Planning, Coordination and Safety Requirements –

Lockout/Tagout verified

External Casing (cracks, leakage of fluids or combustion gases …) –

No adverse conditions

Safety Valve (s) Testing and Conditions –

Good-new SV, MSVRC 5,088 lbs/hr per ASME Code, Section I, PG-70-Acceptable

Hangers and boiler supports Conditions –

None-good

Piping External Surfaces Conditions –

None, All new BEP

Controls (Firing, Flame Detector, valves, …) Functionality Test –

N/A, boiler not in operation for internal inspection

Low Water Cutoff Alarm Test –

Boiler shut down for internal

Other Observations / Notes –

None

SECTION III – INTERNAL INSPECTION CONDITIONS

Is the boiler prepared, drained and cleaned for internal inspection?	N/A	Yes ☒	No ☐	
Is the fuel shutoff valve locked and tagged?	N/A	Yes ☒	No ☐	
Is the boiler isolated from other boilers?	N/A	Yes ☒	No ☐	N/A ☐
Is the boiler atmosphere being monitored for safe entry (Boilers w/manway)?		Yes ☐	No ☐	N/A ☒
Is the boiler hydro tested for leaks? Yes ☐ No ☐	Pressure Test:	PSIG		

SECTION IV – FIRESIDE

Fire Box, Refractory, Burners, Flame Detectors Conditions –

Good

Tubes External Condition (Pitting, bulging, misalignment, soot built up …) Watertube Boilers Only –

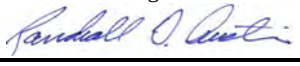
None, good

Tubesheets Condition (Bulging, leaks around the tubes connections, Cracks in the ligaments and weld joints) –

Good

Staybolts Testing – Stays good
Other Observations / Notes – N/A
SECTION V – WATERSIDE
Tubes External Surfaces, if possible internal surfaces – Good
Water Columns, Gage Glasses, Floats Chambers Internal Surfaces or Low Water Level Rods Condition – Good-clean
Superheater Tubes External Surfaces (Power boilers Only) – N/A
Steam Drum/Vessel Internal Surfaces (If electric boilers the condition of the electric resistant coils) – Good, clean
Mud Drum Internal Surfaces (Power boilers) – N/A
Deaerator Tank Internals (Power boilers) – Good

Deaerator Storage Tank (Power boilers) – Good
Any Repairs or Alteration Since Last Inspection (All repairs and Alteration requires 'R' Stamp R-1 or R-2 Form) – None
water Chemistry Last Checked / Notes – Unknown
SECTION VI – DEFICIENCIES SUMMARY
None
SECTION VII – RECOMMENDATIONS
None

Person Conditions Reported To and/or FSR #, If Issued: Jason Sparks	Z# 122088	Phone No.: c 500 6436, p 664 6262
LANL Commissioned Inspector Name and Signature: Randall D. Austin 	Z# 334246	National Board Commission No.: 10798, R,O (IS & AI Commission)

Reviewed By: Initial: Z# Date:

DAHL
DIVISION OF HAJOCA CORPORATION
WHOLESALE PLUMBING DISTRIBUTORS
1000 Siler Park Lane • Santa Fe, New Mexico 87507
(505) 471-1811 • (800) 523-6829 • Fax (505) 471-1706

CERTIFICATE OF CONFORMANCE

Date: June 16, 2022

To: LOS ALAMOS NATIONAL LABS

Customer Purchase Order: LANL PO EP60027

Manufacturer	Description	Dahl Part #
KUNKLE	6021GGT01-AAM0100 1-1/2 SAFETY RELIEF VALVE SET @100PSI TAG #60027-C	1785029
KUNKLE	6021GGT01-AAM0100 1-1/2 SAFETY RELIEF VALVE SET @100PSI TAG #60027-D	1785029

9-6-22
BSB-B s
1484

This is to certify that the above product(s) conform(s) with the line description of the above listed purchase order and applicable standards.

Thank you,

Gary Goodwin

North American Safety Valve Industries, Inc.

1600 Warren Street
North Kansas City,
Missouri 64116 U.S.A.
Telephone: (816) 421-7042
1-800-800-8882
Fax: (816) 421-0297
Email: SALES@NASVI.COM

CERTIFICATE OF SET PRESSURE

NASVI Serial Number: 1925724-1-2

Pick Ticket Number	
3692901	
Date	Page
6/8/2022 07:27:19	2 of 7
Order Number	
1925724	

LANL PO EP60027

Bill To:

DAHL SUPPLY
1000 SILER PARK LN
SANTA FE, NM 87507
505-471-1811

Ship To:

DAHL SUPPLY
1000 SILER PARK LN
SANTA FE, NM 87507

Customer ID: 102873

Order Date	*PO Number*	*Route*	*Ordered By*	*Entered By*
06/08/22	193-P004222718		: GARY GOODWIN	ISAAC

Quantities				*NASVI Part #* *Item Description* *Manufacturer Part #*	*UOM*
Ordered		*Shipped*	*Disp.*		
2		2		KUN6021GGT01 1-1/2x1-1/2 Male x Female Kunkle 6021GGT01AAM	EA

Set At : 100.0 PSI Sec 1 Steam
Flow Capacity : 2948 LB/H ***Seat Diameter :*** .8400
Spring # : 14393012 ***Code Stamp :*** V

****** We certify the above valve performed in full accordance ******
with all applicable safety valve standards and codes.

Ron Martin Quality Control Manager

DAHL
DIVISION OF HAJOCA CORPORATION
WHOLESALE PLUMBING DISTRIBUTORS
1000 Siler Park Lane • Santa Fe, New Mexico 87507
(505) 471-1811 • (800) 523-6829 • Fax (505) 471-1706

CERTIFICATE OF CONFORMANCE

Date: June 16, 2022

To: LOS ALAMOS NATIONAL LABS

Customer Purchase Order: LANL PO EP60027

Manufacturer	Description	Dahl Part #
KUNKLE	6021HHT01-AAM0100 2 SAFETY RELIEF VALVE SET @100PSI TAG #60027-A	1785026
KUNKLE	6021HHT01-AAM0100 2 SAFETY RELIEF VALVE SET @100PSI TAG #60027-B	1785026

BSB
9-6-22
1484

This is to certify that the above product(s) conform(s) with the line description of the above listed purchase order and applicable standards.

Thank you,

Gary Goodwin

North American Safety Valve Industries, Inc.

1600 Warren Street
North Kansas City,
Missouri 64116 U.S.A.
Telephone: (816) 421-7042
1-800-800-8882
Fax: (816) 421-0297
Email: SALES@NASVI.COM

CERTIFICATE OF SET PRESSURE

NASVI Serial Number: 1925724-2-1

Pick Ticket Number	
3692901	
Date	Page
6/8/2022 07:27:19	3 of 7
Order Number	
1925724	

LANL PO EP60027

Bill To:

DAHL SUPPLY
1000 SILER PARK LN
SANTA FE, NM 87507
505-471-1811

Ship To:

DAHL SUPPLY
1000 SILER PARK LN
SANTA FE, NM 87507

Customer ID: 102873

Order Date	*PO Number*	*Route*	*Ordered By*	*Entered By*
06/08/22	193-P004222718		: GARY GOODWIN	ISAAC

Quantities				*NASVI Part #* *Item Description* *Manufacturer Part #*	*UOM*
Ordered		*Shipped*	*Disp.*		
5		5		KUN6021HHT01 2x2 Male x Female Kunkle 6021HHT01AAM	EA

Set At : 100.0 PSI Sec 1 Steam
Flow Capacity : 4593 LB/H ***Seat Diameter :*** 1.0480
Spring # : 14394012 ***Code Stamp :*** V

**** We certify the above valve performed in full accordance ****
with all applicable safety valve standards and codes.

Ron Martin Quality Control Manager

DAHL
DIVISION OF HAJOCA CORPORATION
WHOLESALE PLUMBING DISTRIBUTORS
1000 Siler Park Lane • Santa Fe, New Mexico 87507
(505) 471-1811 • (800) 523-6829 • Fax (505) 471-1706

CERTIFICATE OF CONFORMANCE

Date: June 16, 2022

To: LOS ALAMOS NATIONAL LABS

Customer Purchase Order: LANL PO EP60027

Manufacturer	**Description**	**Dahl Part #**
KUNKLE	6021GGT01-AAM0100 1-1/2 SAFETY RELIEF VALVE SET @100PSI TAG #60027-C	1785029
KUNKLE	6021GGT01-AAM0100 1-1/2 SAFETY RELIEF VALVE SET @100PSI TAG #60027-D	1785029

1484
BSB-A
9-6-22
S

This is to certify that the above product(s) conform(s) with the line description of the above listed purchase order and applicable standards.

Thank you,

Gary Goodwin

North American Safety Valve Industries, Inc.

1600 Warren Street
North Kansas City,
Missouri 64116 U.S.A.
Telephone: (816) 421-7042
1-800-800-8882
Fax: (816) 421-0297
Email: SALES@NASVI.COM

CERTIFICATE OF SET PRESSURE

NASVI Serial Number: 1925724-1-1

Pick Ticket Number	
3692901	
Date	Page
6/8/2022 07:27:19	1 of 7
Order Number	
1925724	

LANL PO EP60027

Bill To:

DAHL SUPPLY
1000 SILER PARK LN
SANTA FE, NM 87507
505-471-1811

Ship To:

DAHL SUPPLY
1000 SILER PARK LN
SANTA FE, NM 87507

Customer ID: 102873

Order Date	*PO Number*	*Route*	*Ordered By*	*Entered By*
06/08/22	193-P004222718		: GARY GOODWIN	ISAAC

Quantities				*NASVI Part #* *Item Description* *Manufacturer Part #*	*UOM*
Ordered		*Shipped*	*Disp.*		
2		2		KUN6021GGT01 1-1/2x1-1/2 Male x Female Kunkle 6021GGT01AAM	EA

Set At : 100.0 PSI Sec 1 Steam
Flow Capacity : 2948 LB/H ***Seat Diameter :*** .8400
Spring # : 14393012 ***Code Stamp :*** V

****** We certify the above valve performed in full accordance ******
with all applicable safety valve standards and codes.

Ron Martin Quality Control Manager

DAHL
DIVISION OF HAJOCA CORPORATION
WHOLESALE PLUMBING DISTRIBUTORS
1000 Siler Park Lane • Santa Fe, New Mexico 87507
(505) 471-1811 • (800) 523-6829 • Fax (505) 471-1706

CERTIFICATE OF CONFORMANCE

Date: June 16, 2022

To: LOS ALAMOS NATIONAL LABS

Customer Purchase Order: LANL PO EP60028

Manufacturer	**Description**	**Dahl Part #**
KUNKLE	6021HHT01-AAM0100 2 SAFETY RELIEF VALVE SET @100PSI TAG #60028	1785026

1484
9-6-22
BSB-A

This is to certify that the above product(s) conform(s) with the line description of the above listed purchase order and applicable standards.

Thank you,

Gary Goodwin

North American Safety Valve Industries, Inc.

1600 Warren Street
North Kansas City,
Missouri 64116 U.S.A.
Telephone: (816) 421-7042
1-800-800-8882
Fax: (816) 421-0297
Email: SALES@NASVI.COM

CERTIFICATE OF SET PRESSURE

NASVI Serial Number: 1925724-2-5

Pick Ticket Number	
3692901	
Date	Page
6/8/2022 07:27:19	7 of 7
Order Number	
1925724	

LANL PO EP60028

Bill To:

DAHL SUPPLY
1000 SILER PARK LN
SANTA FE, NM 87507
505-471-1811

Ship To:

DAHL SUPPLY
1000 SILER PARK LN
SANTA FE, NM 87507

Customer ID: 102873

Order Date	*PO Number*	*Route*	*Ordered By*	*Entered By*
06/08/22	193-P004222718		: GARY GOODWIN	ISAAC

Quantities				*NASVI Part #* *Item Description* *Manufacturer Part #*	*UOM*
Ordered		*Shipped*	*Disp.*		
5		5		KUN6021HHT01 2x2 Male x Female Kunkle 6021HHT01AAM	EA

Set At : 100.0 PSI Sec 1 Steam
Flow Capacity : 4593 LB/H ***Seat Diameter :*** 1.0480
Spring # : 14394012 ***Code Stamp :*** V

****** We certify the above valve performed in full accordance ******
with all applicable safety valve standards and codes.

Ron Martin Quality Control Manager

Facility: F04 Unit: 530365 Proj:
Task Title: 530365 2Y INT PV INSP (BHW - 2)
W/O Type: PM W/O Group: Task Priority: 04
Planner: 112527 PADILLA
W/O Title: 530365 2Y INT PV INSP (BHW - 2) BHW-10411
Written To: LIST OF BUILDING 365 PRV (2 YR REPLACEMENT)
Task Dspln: FCOR Due Date: 09/30/2022
Job Type: PM D-B Determination:N
Hazard Level: LOW IWD Requirement:N/A LOW HZRD
Material Required?:

0073718501

Los Alamos NATIONAL LABORATORY EST. 1943

Work Order Task
00737185 01
MASTER

Date: 9/21/22

Work Order Task Written To

Facility: F04 **Unit:** 530365 **Op Sys:**
Room: **Area:** **Sys/Cls:** R
Equipment: **Component:**
LIST OF BUILDING 365 PRV (2 YR REPLACEMENT)
Equipment Tag: Alternate Tag:
Work item: 530365 2 YR PRV Tech Surv Reqmt Rel: N
PEG Equip Group Type: PEG Equip Group ID:
Crit Safety Control: Property Group:
Maintenance Programs: 1: 2: 3: 4: 5:

Authorization

Start Permission	R.D. Austin			Start Date	8-21	2022
Complete Notice				Complete Date	9/23/22	#334246

NOTE:

*** Refer to attached Form 2101 - Non-Tenant Activity Form - or Form 2102 - Tenant Activity Form - for a description of site specific training or escort and access requirements.**

Work Order Task Instructions

INTERNAL PRESSURE VESSEL INSPECTION

INSPECTOR MUST BE REQUESTED

Rework Reason/Cause

		Y/N
CDSG	CUSTOMER DESIGN	☐
IMCW	IMPROPER CONSTRUCTION/WORKMANSHIP	☐
IMDN	IMPROPER DESIGN	☐
PDMS	PARTS/MATERIAL DID NOT MEET SPECIFICATIONS	☐
WR	WARRANTY REWORK/REPAIR	☐

Date: Hours: Crew: Shift:
Comments:

FWC

Work Order 00737185 **Task** 01

Rework/Approval

Deficiency Tag No: Location: Tag Removed:

Rework Job: N Comments:

Trouble Found/Work Performed

Completion Comments Required: N

See attached BIR for deficiencies Boilers BHW-10 & 11
FSR 230117 & 230116

Continue on additional sheets? _____

Calibrated Tools

Calibrated Tool Used? ☐ Y/N

File ID	Date Used	File ID	Date Used

Work Delay Reason

A	ACCESS	☐ Y/N
EQPT	EQUIPMENT	☐ Y/N
ESC	ESCORT AVAILABILITY	☐ Y/N
IWD	IWD WORKABILITY	☐ Y/N
LOTO	LOCK OUT/TAG OUT	☐ Y/N
MAT	MATERIAL	☐ Y/N
OPS	OPERATIONS	☐ Y/N
RCT	RCT AVAILABILTY	☐ Y/N
SP	SAFETY PAUSE	☐ Y/N
TEL	TOOLS/EQUIP/LIFTS	☐ Y/N
W	WEATHER	☐ Y/N

Work Date: Hours: Crew: Shift:

Comments:

Work Order 00737185 **Task** 01

Major Failure/Action Taken

Major Failure:		
Major Action Taken:		
Deficiency Tag Removed:		Y/N
Deficiency Tag Location:		
Deficiency Tag ID:		
Limited Condition of Operation:		Y/N

Work Completion Signatures

Name	Function/Department	Date
RANDY AUSTIN	BOILER TECH / MSS-MP Supt	9/23/2022 9-29-22

Comments:
(Rework?)

Equipment List Exceptions

Equipment List	Revision	Equipment List Description
365 PRV 2Y	000	2 YR TEST/REPLACE PRV'S

Seq	Fac	Unit	Op Sys	Division	Area	System	Class
	F04	530365	VNT	403ER		HW	ML4
	Equipment:		BOILER	BHW-010	PRV	PRV-001	

Name: VALVE, RELIEF, PRESSURE
Location: S-53-0365-403ER
Exception Reason:
Comments:
Equipment Tag: PSID 3266

Seq	Fac	Unit	Op Sys	Division	Area	System	Class
	F04	530365	VNT	403ER		HW	ML4
	Equipment:		BOILER	BHW-011	PRV	PRV-002	

Name: VALVE, RELIEF, PRESSURE
Location: S-53-0365-403ER
Exception Reason:
Comments:
Equipment Tag: PSID 3266

Accounting

Percentage	Cost Center	Activity	Account No	Sub Account No
100.00	7D140C	640CL000	XEPR00	M1010000

* * * **End of Report** * * *

Los Alamos NATIONAL LABORATORY EST. 1943

Form 2101

Integrated Work Document (IWD) Part 2, FOD Requirements and Approval for Entry and Area Hazards and Controls

Non-Tenant Activity Form

IWD No./Work Request No: __ Revision #: 0

Facility Operation Director (FOD) must determine the facility entry and coordination requirements and identify the Environment, Safety, Health (ESH)/Security and Safeguards (S&S) hazards and controls associated with the activity location.

FOD	TA	Bldg.	Room	Other Location
04	53	0365	All	Outside parking lot
FOD Designated Facility Point-of-Contact	Name: Anthony George	Phone: 667-0242	Pager: 4-6007	Email: ageorge@lanl.gov

Entry and Coordination Requirements (*Check one or more of the following*)

- ☐ No Entry/Coordination Requirements
- ☒ Plan of the Day/Plan of the Week (POTD/POTW)
- ☐ Security Clearance Requirements
- ☐ Co-located Hazards/Concerns
- ☒ Check out at End of Work
- ☐ Escort Required
- ☐ FOD-designated facility Point-of-Contact must sign IWD Part 3
- ☒ Check in at Start of Work
- ☒ Work must be Scheduled
- ☐ Other Security Requirements (ex. Cellphone, No Foreign Nationals, etc.)
- ☐ Quality Issues
- ☐ Review under Authorization Basis (AB)/Safety Basis/Unreviewed Safety Question (USQ)
- ☒ Work-Area Traning Required
- ☒ Check in Daily
- ☒ Check out Daily
- ☒ Other Bounding Conditions: Experimental Area manager must be notified when work begans and ends on a daily basis.

Additional Comments (refer to Job Hazard Analysis [JHA] Tool Facility Notes)

All work must be approved by LANSCE FOD or designee and placed on the POD. Check LANL website for alerts and follow Fire requirments. Ensure the OMC and or the LANSCE area managers are aware of all work that is to take place in their assigned areas. TA53 SST course 57262, TA53 Bldg emergency plan Course 56903 TA 53 Facility Radiation Protection requirements Course #21395

Instructions: In the block below, identify work-area hazards that could potentially affect the worker(s) or others. Specify the facility controls and preventive measures that must be implemented by the worker(s) to protect against the site hazards as well as any special training required.

ESH/S&S WORK AREA HAZARDS & CONTROLS				
Work Area Hazards/Concerns Identify site hazards and concerns that could potentially affect the worker(s) or others.	**Work Area Hazard Present**	**Facility Controls/ Preventive Measures/ Bounding Conditions** Specify preventive measures, controls and bounding conditions for each site hazard	**Reference Documents** List permits, operating manuals, and other reference procedures	**Training and Qualification** List training requirements (P300, Integretated Work Management, Section 6.1)
☐ **No Work Area Hazards**				
Ionizing Radiation Work in posted radiological areas, work with radioactive materials, or work on or near radiation producing devices. **Specify Hazard:** Working in posted areas	☒ Yes ☐ No	TLD in posted areas. All personell entering area must wear TLD.	Door Postings P121 Radiation protection	TA 53 SST Course 57626 RAD II TA53 Bldg emergency Plan Course 56903 unless escorted. RAD II

IWD No./Work Request No: _____ Revision #: 0

ESH/S&S WORK AREA HAZARDS & CONTROLS				
Work Area Hazards/Concerns Identify site hazards and concerns that could potentially affect the worker(s) or others.	**Work Area Hazard Present**	**Facility Controls/ Preventive Measures/ Bounding Conditions** Specify preventive measures, controls and bounding conditions for each site hazard	**Reference Documents** List permits, operating manuals, and other reference procedures	**Training and Qualification** List training requirements (P300, Integretated Work Management, Section 6.1)
Worker Exposure Working near non-ionizing radiation, beryllium, noise, chemicals, hazardous biological materials, lead, asbestos, temperature/humidity extremes, or high explosives **Specify Hazards:** Noise	☒ Yes ☐ No	Observe area safety signage, Wear Hearing protection if noise exceeds 85dba	P101-31 hearing conservation P101-6 PPE	LANL hearing protection PPE
Energized and Operative Systems Working near energized electrical parts, pressure systems, steam lines, near unprotected belts, pulleys, chains or rotating equipment, fuel fired equipment other than vehicles, or spark or flame producing operations **Specify Hazards:** Electrical, pressure	☒ Yes ☐ No	Follow LANS electrical/pressure safety and LOTO for hazardous energy control requirments if applicable to task	P101-3 LOTO P101-13 Electrcial safety	LOTO if task requires
Confined Spaces Entry into tanks, manholes, cooling towers, sumps, or any other area with potentially low oxygen concentration or other hazards such as toxic vapors or engulfment. **Specify Hazards:**	☐ Yes ☒ No			
Elevated Work Surface Elevated work when fall protection is not provided by conventional handrail systems or required per P101-20, *Fall Protection Program*	☒ Yes ☐ No	if task involves work above 4 feet follow LANL fall requirments	P101-20 Fall protection	LANL fall protection Ladder safety
Environmental Impact Activities conducted in areas containing potential release site, contaminated soil, sensitive species, watercourse wetlands, floodplain, historical/archeological sites, or other work area condition that can be impacted by or can impact the environment. **Specify Hazards:**	☐ Yes ☒ No			
Security Requirements **Specify:**	☐ Yes ☒ No			
Other Hazards **Specify:** i	☐ Yes ☒ No			

I have verified that the hazards identified above adequately identify the area hazards and that the IWM process has been applied appropriately

FOD or Representative (Signature/Z #/Date) **Approval Required** [signature] 112877 10/19/2020

Date Approval Expires: 12-31-2022

Los Alamos NATIONAL LABORATORY EST. 1943

AP-WORK-004: Attachment 1
Maintenance & Site Services
Worker Engagement Questions

Worker engagement questions are intended to focus attention on the task and ensure uncertainties are addressed. Examples of worker engagement questions are provided below. Worker engagement questions should be tailored to the situation.

Each of the questions listed below will be discussed at each Pre-Job Brief with all affected personnel.

Topic	Completed (X)
What permits, permissions, or support are required to safely start this work?	✓
What is the most likely thing that could go wrong (not the worst thing) and what, specifically, will prevent it?	✓
What can cause us to go beyond the scope of the work?	✓
What hazards in the work area may not have been considered during planning of this job	✓

Los Alamos NATIONAL LABORATORY EST. 1943

AP-WORK-002: Attachment 11
Maintenance and Site Services
Work Completion Form

Work Order/Task: 737185.81

Start Date:	Completion Date:

SUMMARIZE THE WORK PERFORMED	
Date	
9/21+23	Border Inspection Wildf Violations

FOR CORRECTIVE WORK – WHAT FAILED AND WHAT WAS FIXED		
	Failure Mode Root Cause Code (Circle Root Causes that Apply)	
Failure Mode	Circuit Breaker Tasks	System Restoration Issues
	Digital Component Tasks	Pump Related Tasks
	Doors/Hatches	Procedure Use
	Electrical Determinations	Rigging/Lifting Tasks
	Failed Surveillance	Electrical Switches
	Fastener Tasks	Troubleshooting Issues
	FME Tasks	Valve Related Tasks
	I&C Calibration/Setpoints	Welding
	Mechanical Connections	Work Instruction Issues
	Other (Specify Root Cause)	
Failure Mode Comments	(Add Details)	
	Rework Mode (Circle Rework Causes that Apply)	
Rework	Cause Indeterminate	Life Cycle Management
	Design Deficiency	PM Deficiency
	Intentionally Abbreviated Maintenance	Rule Base Human Performance Deficiency
	Instructional Deficiency	Skill Base Human Performance Deficiency
	Knowledge Based Human Performance Error	Tools/Equipment/Lifts
	Deficiency	Vendor Deficiency
	Operational Deficiency	Work Management Deficiency
		Weather
	Other (Specify Rework Mode)	
Comments		

FOR PMs – SUMMARIZE AS FOUND AND AS LEFT CONDITIONS BELOW		
	As Found Conditions (Circle Conditions that Apply)	
As found	Unanticipated Failure Failure Not Normal Wear Failure Normal Wear Outside of Tolerance Reliability Degraded	Within Tolerance Satisfactory Superior, Like New Not Applicable
	Other (Specify As Found Condition)	
Comments		
As left		
Parts/Repairs		
Read/meas.		
Post test info.		
Problems Encountered (delays, safety, etc.):		
	Delay Codes (Circle Codes that Apply)	
Delay	Access Equipment IWD Workability Material	Operations RCT Availability Safety Pause Weather # of Hours____ Date(s)____
	Other (Specify Reason for Delay)	
Comments		
Lessons Learned/Recommendations:		
	N/A	
Name: RANDALL AUSTIN **Z#** 334246 **Signature:** RA **Date:** 9/26/22		

PIC/SUPT

☐ PM has been completed in its entirety and ready for closure.

IF A PM COULD NOT BE COMPLETED:

☐ Percentage complete is 100 %

☐ Sections that did not work and need to be rescheduled

Reasons why:

MAINTENANCE COORIDATOR/AREA WORK COORDINATOR

Work Package is Complete and may be closed out: YES ☐ NO ☐

IF no: State Reason

Additional Work Needed? ☐ YES ☐ NO

Document UP/WO/FSR Number: _____

ENGINEERING (FOR MD and CD Work Orders)

IF a configuration baseline has been changed, THEN indicate the changes are to be incorporated into the following documents and/or configuration baseline:

☐ Drawings	☐ FDD/SDD
☐ Procedures	☐ Master Equipment List
☐ Permits	☐ Checklists

SE Name: Signature: Date:

WORK CONTROL

Moderate/High Hazard – WMC/Planner reviewed for Lessons Learned/Feedback

☐ YES ☐ NO N/A ☒

☒ Review of the completed work package is complete per AP-WORK-005, and the work package is ready to be set to complete in CMMS.

Name:	**Z#**	**Signature:**	**Date:**
Linda Vargas	Z30995	LM	9/30/22

Work Order/Task: _____

Start Date:	Completion Date:

ADITIONAL DETAILS ON WORK PERFORMED

Date	(Add details on As Found, Failure Mode, and Lessons Learned etc.)
9/26/22	attached Inspection Report (BIR) with deficiencies - See FSL# 230116 + 230117

BOILER INSPECTION REPORT (BIR)

NBIC NB-23, Part 2 (This report to be completed by LANL Commissioned Inspector)

SECTION I – BOILER INFORMATION

Boiler ID#:	BHW-10	Insp Date: 9/23/2022	**Expiration Date:** 9/23/2024
Boiler Area:	53-0365-403	Ext. Inspection: ☐	Int. Inspection: ☒
National Board No.:	6742	Serial No.:	8628
Boiler Mfg.:	Sellers	Year Built:	1988
Boiler Type:	Steam ☐ Hot Water ☒ Others ☐	Firetube ☒	Watertube ☐
Safety Relief Valve (s) ID#:	N/A	Safety Valve (s) Size:	2" , , ,
Set Press:	1. 100 2. 3. (PSI)	Capacity:	1. 16263533 2. 3. (btu/hr)
Safety Valve (s):	Last Tested ☒ "VR" ☐ Replaced ☐	Date:	1. 9/24/22 2. 3. ,
Pressure Gauge Range:	0 to 100	Heating Surface Area (sqft):	491.9
Boiler MAWP:	100 (PSI)		
Pressure Allowed:	This Inspection: 100 (PSI)	Previous Inspection: 100 (PSI)	
Fuel:	NG	Method of Firing:	Auto
Inspection Finding:	Major ☐ Minor ☒	Permit Issued:	Yes ☐ No ☒

SECTION II – EXTERNAL/INSERVICE INSPECTION CONDITIONS

Planning, Coordination and Safety Requirements –

Verified Lockout/Tagout, Good

External Casing (cracks, leakage of fluids or combustion gases …) –

Good

Safety Valve (s) Testing and Conditions –

MSVRC 3,935,200 Btu/hr per ASME Code, Installed is 16,263,533 Btu/hr, therefor acceptable

Hangers and boiler supports Conditions –

Good

Piping External Surfaces Conditions – Good
Controls (Firing, Flame Detector, valves, …) Functionality Test – Boiler is shut off for internal inspection, will perform In-Service testing of controls and safety devices at a later date when boiler is in operation.
Low Water Cutoff Alarm Test – Boiler is shut off for internal inspection, will perform In-Service testing of controls and safety devices at a later date when boiler is in operation.
Other Observations / Notes – None

SECTION III – INTERNAL INSPECTION CONDITIONS			
Is the boiler prepared, drained and cleaned for internal inspection?	Yes ☒	No ☐	
Is the fuel shutoff valve locked and tagged?	Yes ☒	No ☐	
Is the boiler isolated from other boilers?	Yes ☒	No ☐	N/A ☐
Is the boiler atmosphere being monitored for safe entry (Boilers w/manway)?	Yes ☐	No ☐	N/A ☒
Is the boiler hydro tested for leaks? Yes ☐ No ☒	Pressure Test:	PSIG	

SECTION IV – FIRESIDE
Fire Box, Refractory, Burners, Flame Detectors Conditions – Good
Tubes External Condition (Pitting, bulging, misalignment, soot built up …) Watertube Boilers Only – Good
Tubesheets Condition (Bulging, leaks around the tubes connections, Cracks in the ligaments and weld joints) – Good

Staybolts Testing – Good
Other Observations / Notes – None
SECTION V – WATERSIDE
Tubes External Surfaces, if possible internal surfaces – Good
Water Columns, Gage Glasses, Floats Chambers Internal Surfaces or Low Water Level Rods Condition – Good, clean
Superheater Tubes External Surfaces (Power boilers Only) – N/A
Steam Drum/Vessel Internal Surfaces (If electric boilers the condition of the electric resistant coils) – N/A
Mud Drum Internal Surfaces (Power boilers) – N/A
Deaerator Tank Internals (Power boilers) – N/A

Deaerator Storage Tank (Power boilers) –

N/A

Any Repairs or Alteration Since Last Inspection (All repairs and Alteration requires 'R' Stamp R-1 or R-2 Form) –

None

water Chemistry Last Checked / Notes –

Unknown

SECTION VI – DEFICIENCIES SUMMARY

1) No leak test valve downstream of first SSOV as required by ASME CSD-1, CF-150(h) & CF-180(i)
2) The diaphragm gas pressure regulator for pilot line is vented to the boiler room and not outside the boiler room as required per ASME CSD-1, CF-190(a)(1).
3) The pressure gage range (0-100) is less than permitted based on the SRV (safety relief valve) set pressure per ASME Code, Section IV, HG-611(b).
4) There is a water heater located in the same room with BHW-10, & 11 that has a in-line gas pressure regulator that is not vented to a safe discharge outside the building as per NFPA 54, 9.1.19(1).
5) he vent valve discharge piping located between the two safety shutoff valves (SSOV) is combined to a common manifold with the diaphragm gas pressure regulator (1 ea) vent piping and gas pressure switches (2 ea) in violation of ASME CSD-1, CF-190(f)(2).
Note: The water heater drain valve is inoperable (encrusted with mineral deposits), and there is no thermometer installed at or near the outlet as required per ASME Code, Section IV, HLW-820

SECTION VII – RECOMMENDATIONS

1) Install leak test valve downstream of first SSOV (safety shutoff valve) on fuel train not less than 1/8".
2) Install vent piping from pilot gas pressure regulator outside of building and if installed to a common manifold insure correct size vent piping having a minimum cross-sectional area as required per ASME CSD-1, CF-190(f).
3) Replace pressure gage with one having a dial calibrated to not less than 0-150 (1.5 x 100) psi and not greater than 0-350 (3.5 x 100) psi.
4) Install vent piping from in-line gas pressure regulator on water heater fuel train to atmosphere outside of building and insure vent line meets NFPA 54, 9.1.19(3) requirements.
5) Install separate vent piping (SSOV vent valve & diaphragm regulators) leading outside of building with discharge directed downward and covered with fine mesh screen at the discharge to keep out moisture and insects per NFPA 54 and ASME CSD-1, CF-190(h)(1).

Person Conditions Reported To and/or FSR #, If Issued:	Z#	Phone No.:
Levi T. Gutierrez	341647	505 500 6912
LANL Commissioned Inspector Name and Signature:	Z#	National Board Commission No.:
Randall D. Austin	334246	10798, IS/AI, O,R

Reviewed By: Initial: Z# Date:

BOILER INSPECTION REPORT (BIR)

NBIC NB-23, Part 2 (This report to be completed by LANL Commissioned Inspector)

SECTION I – BOILER INFORMATION

Boiler ID#:	BHW-11	Insp Date: 9/21/2022	**Expiration Date:** 9/21/2024
Boiler Area:	53-0365-403	Ext. Inspection: ☐	Int. Inspection: ☒
National Board No.:	6743	Serial No.:	8629
Boiler Mfg.:	Sellers	Year Built:	1988
Boiler Type:	Steam ☐ Hot Water ☒ Others ☐	Firetube ☒	Watertube ☐
Safety Relief Valve (s) ID#:	N/A	Safety Valve (s) Size:	2" , _____ , _____ ,
Set Press:	1. 100 2. _____ 3. _____ (PSI)	Capacity:	1. 16263533 2. _____ 3. _____ (btu/hr)
Safety Valve (s):	Last Tested ☒ "VR" ☐ Replaced ☐	Date:	1. 9/21/22 2. _____ 3. _____ ,
Pressure Gauge Range:	0 to 100	Heating Surface Area (sqft):	491.9
Boiler MAWP:	100 (PSI)		
Pressure Allowed:	This Inspection: 100 (PSI)	Previous Inspection: 100 (PSI)	
Fuel:	NG	Method of Firing:	Auto
Inspection Finding:	Major ☐ Minor ☒	Permit Issued:	Yes ☐ No ☒

SECTION II – EXTERNAL/INSERVICE INSPECTION CONDITIONS

Planning, Coordination and Safety Requirements –

Verified Lockout/Tagout, Good

External Casing (cracks, leakage of fluids or combustion gases …) –

Good

Safety Valve (s) Testing and Conditions –

MSVRC 3,935,200 Btu/hr per ASME Code, Installed is 16,263,533 Btu/hr, therefor acceptable

Hangers and boiler supports Conditions –

Good

Piping External Surfaces Conditions –

Good

Controls (Firing, Flame Detector, valves, …) Functionality Test –

Boiler is shut off for internal inspection, will perform In-Service testing of controls and safety devices at a later date when boiler is in operation.

Low Water Cutoff Alarm Test –

Boiler is shut off for internal inspection, will perform In-Service testing of controls and safety devices at a later date when boiler is in operation.

Other Observations / Notes –

None

SECTION III – INTERNAL INSPECTION CONDITIONS			
Is the boiler prepared, drained and cleaned for internal inspection?	Yes ☒	No ☐	
Is the fuel shutoff valve locked and tagged?	Yes ☒	No ☐	
Is the boiler isolated from other boilers?	Yes ☒	No ☐	N/A ☐
Is the boiler atmosphere being monitored for safe entry (Boilers w/manway)?	Yes ☐	No ☐	N/A ☒
Is the boiler hydro tested for leaks? Yes ☐ No ☒	Pressure Test:	PSIG	

SECTION IV – FIRESIDE

Fire Box, Refractory, Burners, Flame Detectors Conditions –

Good

Tubes External Condition (Pitting, bulging, misalignment, soot built up …) Watertube Boilers Only –

Good

Tubesheets Condition (Bulging, leaks around the tubes connections, Cracks in the ligaments and weld joints) –

Good

Staybolts Testing – Good
Other Observations / Notes – None
SECTION V – WATERSIDE
Tubes External Surfaces, if possible internal surfaces – Good
Water Columns, Gage Glasses, Floats Chambers Internal Surfaces or Low Water Level Rods Condition – Good, clean
Superheater Tubes External Surfaces (Power boilers Only) – N/A
Steam Drum/Vessel Internal Surfaces (If electric boilers the condition of the electric resistant coils) – N/A
Mud Drum Internal Surfaces (Power boilers) – N/A
Deaerator Tank Internals (Power boilers) – N/A

Deaerator Storage Tank (Power boilers) –

N/A

Any Repairs or Alteration Since Last Inspection (All repairs and Alteration requires 'R' Stamp R-1 or R-2 Form) –

None

water Chemistry Last Checked / Notes –

Good

SECTION VI – DEFICIENCIES SUMMARY

1) No leak test valve downstream of first SSOV as required by ASME CSD-1, CF-150(h) & CF-180(i)
2) Gas diaphragm vent lines have been reduced in size (cross sectional area) to less than required size per the regulator openings and should be a total of the designed vent openings plus 50% of additional cross sectional area attached to manifold per ASME CSD-1, CF-190(f).
3) The pressure gage range (0-100) is less than permitted based on the SRV (safety relief valve) set pressure per ASME Code, Section IV, HG-611(b).
4) The vent valve discharge piping located between the two safety shutoff valves (SSOV) is combined to a common manifold with the diaphragm gas pressure regulator (1 ea) vent piping and gas pressure switches (2 ea) in violation of ASME CSD-1, CF-190(f)(2).

SECTION VII – RECOMMENDATIONS

1) Install leak test valve downstream of first SSOV (safety shutoff valve) on fuel train not less than 1/8".
2) Install correct size vent piping having a minimum cross-sectional area as required per ASME CSD-1.
3) Replace pressure gage with one having a dial calibrated to not less than 0-150 (1.5 x 100) psi and not greater than 0-350 (3.5 x 100) psi.
4) Install separate vent piping (SSOV vent valve & diaphragm regulators) leading outside of building with discharge directed downward and covered with fine mesh screen at the discharge to keep out moisture and insects per NFPA 54 and ASME CSD-1, CF-190(h)(1).

Person Conditions Reported To and/or FSR #, If Issued:	Z#	Phone No.:
Levi T. Gutierrez, FSR# 230117	341647	505 500 6912
LANL Commissioned Inspector Name and Signature:	Z#	National Board Commission No.:
Randall D. Austin	334246	10798, IS/AI, O,R

Reviewed By: Initial: Z# Date:

Facility : F04 **Unit :** 530365 **Proj :**
Task Title : 530365 ANNUAL BOILER MAINTENANCE
W/O Type : PM **W/O Group :** **Task Priority :** 04
Planner : 230995 VARGAS LYNDA Y
W/O Title : 530365 ANNUAL BOILER MAINTENANCE
Written To : 530365 BOILERS
Task Dspln : FTTR **Due Date :** 09/30/2022
Superintendant :

Hazard : MODERATE **IWD Reqmt :** TASK SPECIFC

Work Order Task

00727345 01

MASTER

Date: 06/28/2022

Work Order Task Written To

Facility : F04 **Unit :** 530365 **Op Sys :** HW
Room : **Area :** **Sys/Cls :** R
Equipment : **Component :**
Location :
Job Type : PM
Tag 1 : **Tag 2 :**
Work Item : BLDG 365 BOILERS **Ops Review Reqd :**

Authorization

Start Permission : Eric Martinez 153295 09-02-2022 12:05 **Start Date :** _____

Complete Notice : _____ **Complete Date :** _____

Work Order Task Instructions

PERFORM and COMPLETE ATTACHED PMI

QC Requirements / Comments

Facility : F04 **Unit :** 530365 **Proj :**
Task Title : 530365 ANNUAL BOILER MAINTENANCE
W/O Type : PM **W/O Group :** **Task Priority :** 04
Planner : 230995 VARGAS LYNDA Y
W/O Title : 530365 ANNUAL BOILER MAINTENANCE
Written To : 530365 BOILERS
Task Dspln : FTTR **Due Date :** 09/30/2022
Superintendant :

Hazard : MODERATE **IWD Reqmt :** TASK SPECIFC

Work Order Task

00727345 01

MASTER

Date: 06/28/2022

Work Completion Signatures

Name	Function/Dept.	Date
Note; See Attached Hard Copy for all Signatures and Documents		
Kenny J. Valdez 095161 I WEM / MSS-LFO I 9/26/2022		

Comments

(rework?)

Cost Accounting

Cost Center : 7D140C **Activity :** 640CL000

Percentage : 100 **Acct No :** XFM400 **Sub Acct :** 1G530365

Facility : F04 **Unit :** 530365 **Proj :**
Task Title : 530365 ANNUAL BOILER MAINTENANCE
W/O Type : PM **W/O Group :** **Task Priority :** 04
Planner : 230995 VARGAS LYNDA Y
W/O Title : 530365 ANNUAL BOILER MAINTENANCE
Written To : 530365 BOILERS
Task Dspln : FTTR **Due Date :** 09/30/2022
Superintendant :

Hazard : MODERATE **IWD Reqmt :** TASK SPECIFC

Work Order Task

00727345 01

MASTER

Date: 06/28/2022

Facility : F04 Unit : 530365 Proj :
Task Title : 530365 ANNUAL BOILER MAINTENANCE
W/O Type : PM W/O Group : Task Priority : 04
Planner : 230995 VARGAS LYNDA Y
W/O Title : 530365 ANNUAL BOILER MAINTENANCE
Written To : 530365 BOILERS
Task Dspln : FTTR Due Date : 09/30/2022
Superintendant : Drew Cummings 699-0776
Hazard : MODERATE IWD Reqmt : TASK SPECIFC

Work Order Task

00727345 01

MASTER

Date: 06/28/2022

Work Order Task Written To

Facility : F04 Unit : 530365 Op Sys : HW
Room : Area : Sys/Cls : R
Equipment : Component :
Location :
Job Type : PM
Tag 1 : Tag 2 :
Work Item : BLDG 365 BOILERS Ops Review Reqd :

Authorization

Start Permission : Eric Martinez 153295 09-02-2022 12:05 Start Date :

Complete Notice : Complete Date :

Work Order Task Instructions

PERFORM and COMPLETE ATTACHED PMI

QC Requirements / Comments

Facility : F04 **Unit :** 530365 **Proj :**
Task Title : 530365 ANNUAL BOILER MAINTENANCE
W/O Type : PM **W/O Group :** **Task Priority :** 04
Planner : 230995 VARGAS LYNDA Y
W/O Title : 530365 ANNUAL BOILER MAINTENANCE
Written To : 530365 BOILERS
Task Dspln : FTTR **Due Date :** 09/30/2022
Superintendant :

Hazard : MODERATE **IWD Reqmt :** TASK SPECIFC

Work Order Task

00727345 01

MASTER

Date: 06/28/2022

Work Completion Signatures

Name	Function/Dept.	Date
Barela Arman	Log-cs.	9-23-22
Jessica Arranga	Log-cs	9-23-22

Comments n.a.

(rework?) n.a.

Cost Accounting

Cost Center : 7D140C **Activity :** 640CL000

Percentage : 100 **Acct No :** XFM400 **Sub Acct :** 1G530365

Facility : F04 **Unit :** 530365 **Proj :**
Task Title : 530365 ANNUAL BOILER MAINTENANCE
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Written To : 530365 BOILERS
Task Dspln : FTTR **Due Date :** 09/30/2022
Superintendant :

Hazard : MODERATE **IWD Reqmt :** TASK SPECIFC

Work Order Task

00727345 01

MASTER

Date: 06/28/2022

Los Alamos NATIONAL LABORATORY EST.1943

Form 2101

Integrated Work Document (IWD) Part 2, FOD Requirements and Approval for Entry and Area Hazards and Controls

Non-Tenant Activity Form

IWD No./Work Request No: __ Revision #: 0

Facility Operation Director (FOD) must determine the facility entry and coordination requirements and identify the Environment, Safety, Health (ESH)/Security and Safeguards (S&S) hazards and controls associated with the activity location.

FOD 04	TA 53	Bldg. 0365	Room All	Other Location Outside parking lot
FOD Designated Facility Point-of-Contact	Name Anthony George	Phone 667-0242	Pager 4-6007	Email ageorge@lanl.gov

Entry and Coordination Requirements (*Check one or more of the following*)

- ☐ No Entry/Coordination Requirements
- ☒ Plan of the Day/Plan of the Week (POTD/POTW)
- ☐ Security Clearance Requirements
- ☐ Co-located Hazards/Concerns
- ☒ Check out at End of Work
- ☐ Escort Required
- ☐ FOD-designated facility Point-of-Contact must sign IWD Part 3
- ☒ Check in at Start of Work
- ☒ Work must be Scheduled
- ☐ Other Security Requirements (ex.: Cellphone, No Foreign Nationals, etc.)
- ☐ Quality Issues
- ☐ Review under Authorization Basis (AB)/Safety Basis/Unreviewed Safety Question (USQ)
- ☒ Work-Area Training Required
- ☒ Check in Daily
- ☒ Check out Daily
- ☒ Other Bounding Conditions: Experimental Area manager must be notified when work begans and ends on a daily basis.

Additional Comments (refer to Job Hazard Analysis [JHA] Tool Facility Notes)

All work must be approved by LANSCE FOD or designee and placed on the POD. Check LANL website for alerts and follow Fire requirments. Ensure the OMC and or the LANSCE area managers are aware of all work that is to take place in their assigned areas. TA53 SST course 57262, TA53 Bldg emergency plan Course 56903 TA 53 Facility Radiation Protection requirements Course #21395

Instructions: In the block below, identify work-area hazards that could potentially affect the worker(s) or others. Specify the facility controls and preventive measures that must be implemented by the worker(s) to protect against the site hazards as well as any special training required.

ESH/S&S WORK AREA HAZARDS & CONTROLS				
Work Area Hazards/Concerns Identify site hazards and concerns that could potentially affect the worker(s) or others.	**Work Area Hazard Present**	**Facility Controls/ Preventive Measures/ Bounding Conditions** Specify preventive measures, controls and bounding conditions for each site hazard	**Reference Documents** List permits, operating manuals, and other reference procedures	**Training and Qualification** List training requirements (P300, Integretated Work Management, Section 6.1)
☐ **No Work Area Hazards**				
Ionizing Radiation Work in posted radiological areas, work with radioactive materials, or work on or near radiation producing devices. **Specify Hazard:** Working in posted areas	☒ Yes ☐ No	TLD in posted areas. All personell entering area must wear TLD,	Door Postings P121 Radiation protection	TA 53 SST Course 57626 RAD II TA53 Bldg emergency Plan Course 56903 unless escorted. RAD II

IWD No./Work Request No: _____ Revision #: 0

ESH/S&S WORK AREA HAZARDS & CONTROLS				
Work Area Hazards/Concerns Identify site hazards and concerns that could potentially affect the worker(s) or others.	**Work Area Hazard Present**	**Facility Controls/ Preventive Measures/ Bounding Conditions** Specify preventive measures, controls and bounding conditions for each site hazard	**Reference Documents** List permits, operating manuals, and other reference procedures	**Training and Qualification** List training requirements (P300, Integretated Work Management, Section 6.1)
Worker Exposure Working near non-ionizing radiation, beryllium, noise, chemicals, hazardous biological materials, lead, asbestos, temperature/humidity extremes, or high explosives. **Specify Hazards:** Noise	☒ Yes ☐ No	Observe area safety signage, Wear Hearing protection if noise exceeds 85dba	P101-31 hearing conservation P101-6 PPE	LANL hearing protection PPE
Energized and Operative Systems Working near energized electrical parts, pressure systems, steam lines; near unprotected belts, pulleys, chains or rotating equipment; fuel fired equipment other than vehicles; or spark or flame producing operations. **Specify Hazards:** Electrical, pressure	☒ Yes ☐ No	Follow LANS electrical/pressure safety and LOTO for hazardous energy control requirments if applicable to task	P101-3 LOTO P101-13 Electrcial safety	LOTO If task requires
Confined Spaces Entry into tanks, manholes, cooling towers, sumps, or any other area with potentially low oxygen concentration or other hazards such as toxic vapors or engulfment. **Specify Hazards:**	☐ Yes ☒ No			
Elevated Work Surface Elevated work when fall protection is not provided by conventional handrail systems or required per P101-20, *Fall Protection Program*	☒ Yes ☐ No	if task involves work above 4 feet follow LANL fall requirments	P101-20 Fall protection	LANL fall protection Ladder safety
Environmental Impact Activities conducted in areas containing potential release site, contaminated soil, sensitive species, watercourse wetlands, floodplain, historical/archeological sites, or other work area condition that can be impacted by or can impact the environment. **Specify Hazards:**	☐ Yes ☒ No			
Security Requirements **Specify:**	☐ Yes ☒ No			
Other Hazards **Specify:** i	☐ Yes ☒ No			

I have verified that the hazards identified above adequately identify the area hazards and that the IWM process has been applied appropriately.

FOD or Representative (Signature/Z #/Date) **Approval Required** [signature] 112871 10/19/2020

Date Approval Expires: 12-31-2022

Los Alamos Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)			
Revision #: 0			**Activity/Task Title: 53-0365 2Y BOILER MAINTENANCE**
Work Document #: (WO # / Task) 727345-01			**Planner/Preparer (Name/Z#/Date) Troy Calloway #186163 8/30/22**
TA: 53	**Building : 0365**	**Room: 403**	**Additional Location Description:**

1. Scope of Work

1.1. **THIS PM REQUIRES SCHEDULING A BOILER INSPECTOR TO INSPECT AND CERTIFY UNIT.**

1.2. **PERFORM and COMPLETE ATTACHED PMI**

1.3. **Power source: CDD by MCC-B 53-752 3000 kva**

MC: Kenny Madrid 4-8327

Hazard Analysis (HA) Team: Troy Calloway, LANSCE IH & ESO , Lewis Mondragon

Date: 8/30/22

2. Precautions and Limitations

2.1. **IF** steps cannot be completed as described or **IF** unforeseen situations occur **THEN**
- 2.1.1. **PAUSE** work
- 2.1.2. **CONTACT** your supervisor
- 2.1.3. **AWAIT** further instructions before proceeding.

2.2. **ASSURE** materials are available and staged prior to commencing field work.

2.3. Signatures, Initials and Place keeping blocks at the end of a step signifies the completion of that step or series of steps.
- Steps **SHALL** be signed / marked upon completion.

2.4. **ENSURE** unique equipment identifier.
- 2.4.1. Equipment tag or unique equipment identifier (MEL ID) is used to designate which piece(s) of equipment are to be worked on.

2.5. **REVIEW** any personal experience or lessons learned applicable to requested work.

Los Alamos Facilities Maintenance IWD - (Facility Maintenance Activity Specific Information)			
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TA: 53	Building : 0365	Room: 403	Additional Location Description:

2.6. **INDIVIDUALS** to contact in case certain events occur

- **IF** there are any concerns about exposure to toxic chemicals or metals, noise, high heat, electrical or magnetic fields, or biological hazards, **CONTACT LFO-IH** for an assessment.
  - ☐ **Sylvie Adam** @ 695-8224
  - ☐ **Paul Martin** @ 795-3119
  - ☐ **Carly Blair** @ 500-2865

- **WEM - Kenny Valdez** @ 667-3512 or 699-0793
- **On Call Duty Officer** @ 4-7466 or 500-2072
- **LFO-MSS Group Office** @ 665-6393
- **HP Ops** @ 667-7069

3. Prerequisites/Initial Conditions

3.1. **VERIFY** with operations that no other activities are being conducted that could impact safe working conditions.

3.2. **IDENTIFY** required permits:

- LO/TO Attachments
- LOTO Orders 2244 and Prejob
- Spark and Flame Permit, form 1563

3.3. **IF** facility outage is required, **THEN NOTIFY** occupants.

3.4. **ENGAGE** *Matt Atenzana* Waste Management Coordinator (WMC) prior to performing work activities to ensure all materials/equipment slated for disposal are dispositioned in accordance with EPC-WMP-FSD-001 Waste Characterization Strategy.

3.4.1. *Matt Atenzana can be reached at 50 5-396-0645*

4. Special Training/Medical Requirements

4.1. TA 53 Site Specific training #57262

Los Alamos Facilities Maintenance IWD - (Facility Maintenance Activity Specific Information)			
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TA: 53	Building : 0365	Room: 403	Additional Location Description:

4.2. Training to perform maintenance work
- Curriculum ID 10968, WQ LOG Maintenance Worker
  - Low Voltage Circuit Breaker Operation #47180
  - Subcurriculum # 115 Radiological Worker II
    - Facility Specific Training

4.3. Training to perform **Pipefitter** work:
- Curriculum # 647 - WQ LOG Pipefitter Maintenance

4.4.2 **Boiler Fitter**:
- Curriculum 718

- **Operation of a breaker or disconnect: NON-Electricians**
  - ☐ MUST be performed by a qualified person (per NFPA 70E)
  - ☐ Curriculum #2908 (Utrain # 31083)
  - ☐ Wear the required PPE based on the Shock and Arc-Flash Risk Assessment.
  - ☐ IF Assessment determines Dielectric PPE is required: Demonstration of Proficiency (DoP) for Dielectric PPE - curriculum # 19653

5. Special Tools/Equipment

5.1.Cal 8 suit w/ dielectric gloves

6. Work Instructions

6.1.**SET** barricades at entrance to room and LOTO point.

6.2.**CYCLE** boiler and inspect operations
- 6.2.1. Only qualified personnel to perform operation of boiler
- 6.2.2. Coordinate efforts with facility coordinator
- 6.2.3. PPE per core training

6.3.**Purge** system (if necessary) per Page 1 of **PMI**

Los Alamos **Facilities Maintenance IWD - (Facility Maintenance Activity Specific Information)**			
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TA: 53	**Building : 0365**	**Room: 403**	**Additional Location Description:**

6.3.1. **NO spark or flame within area**

6.3.2. HAZCOM training

6.3.3. Purge gas to outside - **IF NOT possible PAUSE WORK** and contact LANSCE IH (695-8224) for air quality monitoring and LANL Fire Marshall (670-1958)

NOTE: **Arc Flash calculations provided by LFO Engineering.**

Power Source: CDD by MCC-B Voltage: 480v
Transformer: 53-752 3000 kva
Incident energy @ 18" = 2.66 cal / sq cm
Flash Protection Boundary = 29.33"
Limited Approach = 42"
Restricted Approach = 12"

6.4. **DON PPE:**

Long sleeve AR shirt and AR pants (8 cal/sq cm arc rated) **OR** AR coveralls (8 cal/sq cm arc rated) over non-melting daily wear, short sleeve 100% cotton shirt, hardhat, safety glasses, hearing protection, AR face shield with AR balaclava (8 cal/sq cm) **OR** AR flash suit hood (8 cal/sq cm arc rated). heavy duty leather gloves.

⚠WARNING

ELECTRIC ARC FLASH
BREAKER OPERATION CLASS 1.3b

6.5. **FILL** out applicable attachment

6.6. **TURN** off power source(s) and **APPLY** LOTO device

6.6.1. Ensure unit runs/starts

Los Alamos Facilities Maintenance IWD - (Facility Maintenance Activity Specific Information)			
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TA: 53	**Building : 0365**	**Room: 403**	**Additional Location Description:**

6.6.2. Open Disconnect / Breaker and verify the unit stops or will not start

Repeat process:

6.6.3. Close Disconnect / Breaker and ensure unit starts
6.6.4. Open Disconnect / Breaker and verify the unit stops or will not start
6.6.5. LOTO devices/tags shall be applied in accordance with P101-3

⚠WARNING

Release of Pressurized / Flammable Gas
NO SPARKS OR FLAME WITHIN WORK AREA

6.7.**TURN** off and **APPLY** LOTO to gas supply per appropriate procedure
6.7.1. Obtain locks and tags from FOD Designated Lock Coordinator
6.7.2. Make necessary notifications
6.7.3. Determine all sources of power with Equipment Owner / Operator
6.7.4. Turn off EQ - Close valves
6.7.5. LOTO devices/tags shall be applied in accordance with P101-3



⚠DANGER

DO NOT stand in front of boiler doors or breeching when firing boiler.

6.8.**PERFORM maintenance** per PMI section 2
6.9.**REMOVE** and replace defective components per PMI
6.9.1. Ensure all components are sufficiently cool before contact with skin
6.9.2.PPE per core training
6.9.3.Inspect all tools prior to use
6.9.4.Wear leather gloves and safety glasses
6.9.5.GFCI protection for all cords and electric devices



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TA: 53	**Building : 0365**	**Room: 403**	**Additional Location Description:**

6.9.6. Inspect all cords, plugs and electric tools for damage - remove and tag if found defective

6.9.7. Minimize exposure to noise. Wear hearing protection as applicable.

⚠WARNING

Soldering and Brazing Hazards:
Fire Hazard
Inhalation Hazard
Eye and Dermal Burn Hazard

6.10. Low temp **SOLDERING REPAIRS** - IF necessary

6.10.1. **Must have approved and signed spark and flame permit in package prior to working**

6.10.2. Review current LANL fire danger rating, follow appropriate cautions

6.10.3. Review spark and flame permit

6.10.4. Provide fire watch if permit deems necessary

6.10.5. Ensure adequate ventilation in work area

6.10.6. Wear leather gloves, long sleeve shirt and tinted goggles

6.10.7. Have a 5lb (minimum) ABC fire extinguisher present

6.10.8. Scope area for possible flammable material within spark/flame range

6.10.9. Verify NEAREST eyewash capabilities

6.11. **DON PPE:**

6.11.1. Long sleeve AR shirt and AR pants (8 cal/sq cm arc rated) **OR** AR coveralls (8 cal/sq cm arc rated) over non-melting daily wear, short sleeve 100% cotton shirt, hardhat, safety glasses, hearing protection, AR face shield with AR balaclava (8 cal/sq cm) **OR** AR flash suit hood (8 cal/sq cm arc rated). heavy duty leather gloves

⚠WARNING

Los Alamos Facilities Maintenance IWD - (Facility Maintenance Activity Specific Information)			
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Work Document #: (WO # / Task) 727345-01			**Planner/Preparer (Name/Z#/Date) Troy Calloway #186163 8/30/22**
TA: 53	**Building : 0365**	**Room: 403**	**Additional Location Description:**

ELECTRIC SHOCK / ARC
EQUIPMENT OPERATION CLASS 1.3b

6.12. **REMOVE** electrical LO/TO and energize equipment
6.12.1. Notify Designated Lock Coordinator and return locks.

6.13. **REMOVE** gas LO/TO and energize equipment
6.13.1. Notify Designated Lock Coordinator and return locks.

7. Post Work Activities

7.1. **PERFORM** combustion analyzer test (if required for testing or requested by MC)
7.2. **PERFORM** post-maintenance activities
7.2.1. Fire unit and verify proper operation
7.2.2. Verify proper operation of boiler
7.2.3. Verify boiler starts and fires properly.
7.2.4. Verify boiler stays operational for extended amount of time
7.2.5. Verify proper operation of flame rod
7.2.6. Verify no gas leakage
7.2.7. Verify proper operation of gauges and valves
7.2.8. Verify that the support or auxiliary systems related to the component are functioning properly.

7.3. **CLEAN** the work area of all work generated debris
7.3.1. Contact and coordinate any waste disposal with Area Waste Coordinator Isaac Atencio at 665-4627

7.4. **ENSURE** all panels, doors and/or guards are re-installed and secured
7.5. **REMOVE** any barricades / barriers.

7.6. **DOCUMENT** work done and lesson learned on MWP Work Progress Panel or Work Completion Form (AP-WORK-002)

Los Alamos **Facilities Maintenance IWD - (Facility Maintenance Activity Specific Information)**			
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Work Document #: (WO # / Task) 727345-01			**Planner/Preparer (Name/Z#/Date) Troy Calloway #186163 8/30/22**
TA: 53	**Building : 0365**	**Room: 403**	**Additional Location Description:**

8. CLOSEOUT

8.1. **CONTACT** the MC and Area Superintendent; **INFORM** them the work is completed

Insert Rows above for additional Tasks/Steps or attach pages to clearly communicate ESH&Q/S&S hazards and associated controls.	The RLM, and FOD or FOD Representative approval indicates IWM has been applied appropriately, work is authorized, workers are qualified, work will be performed in accordance with ESH&Q/S&S requirements and the IWD, and facility safety basis, aggregate hazards, and collocated hazards were	**RLM** (Signature/Z#/Date) **Required** *111385 09-06-2022 10:51* **FOD or Representative** *Anthony George 112877 09-02-2022 09:46* **ESO Review** (Signature/Z#/Date) **If Required** Lorenzo D. Martinez/211131/9-1-22

Los Alamos **Facilities Maintenance IWD - (Facility Maintenance Activity Specific Information)**			
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Work Document #: (WO # / Task) **727345-01**			**Planner/Preparer (Name/Z#/Date)** **Troy Calloway #186163 8/30/22**
TA: **53**	**Building :** **0365**	**Room:** **403**	**Additional Location Description:**

	appropriately included in the hazard analysis and acknowledges completion of a peer review.	**Safety Review** (Signature/Z#/Date) **Required** see attached email
IWD Type ☒ Moderate-Hazard ☐ High-Hazard/Complex ☐ Standing IWD	Date when RLM re-approval is required N/A 12-31-22 Other Conditions for Re-Approval (Print) If new hazards/controls are identified. Name of Primary PIC Joseph URAMA NR Name of Alternate PIC Name of Alternate PIC	Any required classification review completed, Signature/Date

Los Alamos NATIONAL LABORATORY EST 1943

Form 2244

Lockout/Tagout (LO/TO) Orders

LOTO 22-7040

Section 1: General Information

Work Document Number (e.g., Package/Procedure #): 727345-01	LO/TO Remedy ID:
Location of Equipment to be Isolated: TA: 53 Bldg: 365 Rm/Other 403	Description of Machinery, System & Equipment (MS&E) to be worked on:
MS&E Owner/Operator: K. MADRID Z Number: 117213	Phone: 231-0299
Shutdown to be performed by MS&E Owner/Operator (as determined by MS&E Owner/Operator) ☐ Yes ☑ No	Re-energize/restart to be performed by MS&E Owner/Operator (as determined by MS&E Owner/Operator) ☐ Yes ☑ No
Reason for LO/TO: BOILER MAINTENANCE FS/WLS	
Group LO/TO (2 or more)? ☑ Yes ☐ No *If yes, a lead authorized worker must be appointed.*	Group lock box used? ☑ Yes ☐ No
Shift or Personnel Changes? ☐ Yes ☑ No *If yes, a description of how the continuity of LO/TO protection will be ensured must be referenced or attached to this form (See Section 3.9.6 of P101-3 for details.)*	☐ Continuity of LO/TO protection details described in operating procedure, work instruction, or other work control document. Document Number:

Section 2: Energy Control Procedure

1. Plan the work.
2. Identify and assess hazardous energy.
3. Contact the MS&E owner/operator.
4. Obtain locks and tags from lock coordinator.
5. Notify affected workers.
6. Shutdown MS&E according to **Section 3: Shutdown Sequence.**
7. Isolate and lock out MS&E from energy source, relieve stored energy, and perform verification of isolation according to **Section 4: LO/TO Sequence.**
8. Perform the work.
9. Release MS&E from LO/TO according to **Section 5: Release MS&E from Lockout/Tagout Sequence.**

Section 3: Shutdown Sequence

☐ Perform shutdown according to operating procedure, work instruction, or other work control document (e.g., IWD, Owner's Manual, SOP).
Document Number:

☑ N/A; MS&E to be worked on will be isolated according to **Section 4: LO/TO Sequence** (e.g., cannot be shut down)
Detail the process to normally shut down the MS&E below, if not following other document referenced above or N/A

Step No.	Action/Description	Step No.	Action/Description
☐ 1		☐ 6	
☐ 2		☐ 7	
☐ 3		☐ 8	
☐ 4		☐ 9	
☐ 5		☐ 10	

☑ Perform LO/TO sequence according to operating procedure, work instruction, or other work control document (e.g., IWD, Owner's Manual, SOP).
Document Number:
Describe how to effectively isolate & lockout the MS&E below, if not following other document referenced above.

Isolate & Lockout (Step No.)	Equipment Descriptor (What is being locked out? e.g., machine drive motor, input power to MCC)	Energy Source (e.g., electrical, mechanical, pneumatic, hydraulic, chemical, thermal)	Energy Isolation Device (e.g., specific ID, description, circuit #, lock box #)	Location of Energy Isolation Device (e.g., room number, north wall, south wall)	Required LO/TO Position or Alignment (e.g., off, open, closed, on)	Verification Method (e.g., live/dead/live, crack open, on-off-on-off, peer checking, independent verification)	Verifier's Initials (if req'd)	See Section 5: Release (Step No.)
☐ (1)	supply	mech	valve					☑
☐ (2)	Return	mech	valve		closed	visual peer chk		☑
☐ (3)	MV	mech	valve	RM 403				☐
☐ (4)	gas	mech	valve					☐
☐ (5)	BHW-011	electrical	local disconnect			on off off/peer		☐
☐ (6)	lock box	other	lockbox		locked	visual peer		☐
☐ (7)	LOCK BOX	OTHER	LOCK BOX		LOCKED	VISUAL	JS	☐
☐ (8)								☐

1. Check the MS&E and immediate area for items that could result in damage or danger on start-up.
2. Check the work area to ensure that all workers have been safely positioned or removed from the work area.
3. Verify that the controls are in neutral or "off" position.
4. Notify the owner/operator and affected workers that work is complete and MS&E is ready to release from LO/TO.
5. Remove the LO/TO device, and re-energize (if appropriate according to MS&E owner/operator) according to the sequence as identified above under Release in **Section 4: LO/TO Sequence** or according to operating procedure, work instruction, or other work control document identified in **Section 4**.
6. Return lock and locking device to Lock Coordinator.

Energy Control Procedure prepared by:

Preparer (print name)	Z Number	Organization	Phone	Signature/Date
K MADRID	117813	LANSCE-EO	231 0299	[signature] 9-20-22

By signing below, you acknowledge that this energy control procedure and/or referenced documents identify the isolation devices, isolation points, and methods necessary to prevent any unexpected release of hazardous energy.

Energy Control Procedure approved by:

MS&E Owner/Operator (print name)	Z Number	Organization	Phone	Signature/Date
K MADRID	117813	LANSCE-EO	231-0299	[signature] 9-20-22

Los Alamos NATIONAL LABORATORY EST 1943

Form 2244

Lockout/Tagout (LO/TO) Orders

Section 6: All Authorized Workers (anyone applying a lock for this activity)

Fill out the following information or print and attach Authorized Workers information from the Lockout/Tagout Remedy Application.

Authorized Workers Name(s)	Z Number	Date Lock Applied	Date Lock Removed
Lead: JOSEPH URANGA	368069	9-21-22	
~~ADRIAN ESQUIBEL (506655) 64 box~~	~~282004~~		
Joshua Griego 363064	363064	9-21-22	
368069 505772	S.		
506683	R.		
0754H	MU.		
505207	G.		
54548	local dis.		
506364	lock box		
Barela Arron	367646	9-23-22	9-23-22
Vernon Valdez	235471	9-23-22	9-23-22

No: RN101-3-01 Interim Requirements for Hazardous Energy Identification and Control
Attachment A. Lockout/Tagout Pre-job Walk-down Checklist (Page 1 of 2)

Instructions: Perform the pre-job walk-down with the necessary people per Section 3.1 of the Requirements Notice 101-3-01. Complete this checklist and take signed checklist to the lock coordinator. All Authorized Workers are required to participate in the walk-down and sign the checklist in order to check out a lock and tag. If additional workers are added to the job, they must also perform a walk-down of the system and show a signed checklist to the lock coordinator. The signed checklists are to be kept with the parent work document (IWD, work package, etc.).

Work Document Number (e.g., Package/Procedure#): _____

- ☐ We have walked down and discussed the work to be performed.
- ☐ All energy isolation points and positions have been identified and documented.
- ☐ The proper energy control procedure is being used (Simple vs Complex LO/TO).
- ☐ All energy-isolating devices are labeled properly (e.g., labels aren't faded, no hand written modifications).
- ☐ No discrepancies are found between record drawings, labels, panel schedules, and LO/TO procedures.
- ☐ Lockout devices have been identified to support the work.

*If any of the above items are identified to be inadequate, pause work, report the issues to your RLM, and contact the appropriate SMEs to help resolve issues ***before*** performing/resuming work.

Simple Lockout/Tagout

By signing below, you acknowledge that you have completed the pre-job walk-down and there are no issues that need to be reported to your Responsible Line Manager before beginning work.

Lead Authorized Worker (print name)	Z Number	Signature/Date
Authorized Worker (print name)	Z Number	Signature/Date

Complex Lockout/Tagout

By signing below, you acknowledge that you have completed the pre-job walk-down and there are no issues that need to be reported to your Responsible Line Manager before beginning work.

MS&E Owner/Operator (print name)	Z Number 167413	Signature/Date 9-21-22
Preparer or PIC (print name) JOSEPH URIOS	Z Number 368069	Signature/Date 9-21-22
Lead Authorized Worker (print name) JOSEPH URIOS	Z Number 368069	Signature/Date 9/21/22
Authorized Worker (print name) Joshua Griego	Z Number 363664	Signature/Date 9-21-22
Authorized Worker (print name)	Z Number	Signature/Date

Note: Print additional sheets as necessary.

Los Alamos NATIONAL LABORATORY EST. 1943

Form 2103

Integrated Work Document (IWD) Part 3, Validation and Work Release

IWD # 727345 Revision #: 0 | Work Release

By signing below, I verify this activity is compatible with current facility configuration and operating conditions.
FOD designated Operations Manager or other facility point-of-contact for work area

Signature/Z#/Date (If required by FOD): X

Note: For Standing IWD, release may be given concurrently with signatures on Part 2.

By signing below, I have verified the following:

- I have verified authorization by ensuring approval signatures of the RLM and FOD.
- I have jointly conducted a validation walkdown with workers to confirm the IWD can be performed as written, and that required initial conditions and other prerequisites are in place.
- The assigned workers are authorized and are competent to perform the work in a safe, secure, and environmentally responsible manner.
- I have conducted the pre-job briefing, and all workers (including support workers) have been briefed.
- I have ensured coordination with any required FOD work-area representatives (e.g., area work coordinators).

PIC (Signature/Z#/Date) Required: Brandon Schleft 255039 09/23/22

Alternate PIC Signatures acknowledges PIC authority is assumed for the first time. *(Note: Alternate PICs are required to sign only once, but formal handoff includes conferring with previous PIC to obtain all required information associated with the handoff.)*

Alternate PIC (Signature/Z#/Date) Required: _____

Alternate PIC (Signature/Z#/Date) Required: _____

Pre-Job Brief Content

- What are the critical steps* or phases of this activity?
- How can we make a mistake at that point?
- What is the worst thing that can go wrong?
- What controls, preventive measures, and bounding conditions are needed?
- What work permits are required and how will we meet their requirements?
- What are the handoffs and coordination requirements among workers and multiple PICs?
- Are there hold-points including those that require sign-offs?
- What are the pause/stop work responsibilities and expectations (e.g., for unanticipated conditions or hazards)?
- How would we respond to alarms and emergencies?
- Are there lessons learned from previous similar work?
- Is other information needed to perform this activity in a safe, secure, and environmentally responsible manner?
- Does everyone agree to the work tasks/steps, hazards, and controls and commit to follow them?

* "Critical steps occur anytime human performance involves a substantial transfer of energy, or movement of solids, liquids, and gases, or the transmission of data and information that , if not performed under control, could cause serious harm to one or more important assets." (Performance Improvement, vol. 53, no. 9, October 2014)

Pre-Job Brief Attendance Roster

By signing below as required, I agree to the following:

- I agree to follow the work steps and implement the controls as written as applicable to my work assignments.
- I agree to pause/stop work when conditions or hazards change or when I encounter unexpected conditions during the execution of work, or when work cannot be performed as written, or instructions become unclear during execution.
- I confirm that I am authorized, qualified, and fit to perform the work.

Worker (Signature/Z#/Date) 367646 9-23-22	Worker (Signature/Z#/Date) 235471 9-23-22
Worker (Signature/Z#/Date) 363064 9.21-22	Worker (Signature/Z#/Date)
Worker (Signature/Z#/Date) 368069 9.21.22	Worker (Signature/Z#/Date)
Worker (Signature/Z#/Date)	Worker (Signature/Z#/Date)
Worker (Signature/Z#/Date)	Worker (Signature/Z#/Date)
Worker (Signature/Z#/Date)	Worker (Signature/Z#/Date)
Worker (Signature/Z#/Date)	Worker (Signature/Z#/Date)

Los Alamos NATIONAL LABORATORY EST. 1943

AP-WORK-004: Attachment 1
Maintenance & Site Services
Worker Engagement Questions

Worker engagement questions are intended to focus attention on the task and ensure uncertainties are addressed. Examples of worker engagement questions are provided below. Worker engagement questions should be tailored to the situation.

Each of the questions listed below will be discussed at each Pre-Job Brief with all affected personnel.

Topic	Completed (X)
What permits, permissions, or support are required to safely start this work?	X
What is the most likely thing that could go wrong (not the worst thing) and what, specifically, will prevent it?	X
What can cause us to go beyond the scope of the work?	X
What hazards in the work area may not have been considered during planning of this job	X

Los Alamos NATIONAL LABORATORY EST. 1943	*Preventive Maintenance Instruction* Low- and High-Pressure Steam Boiler and Low-Temperature Water Heating Boiler Inspection, Testing, and Maintenance **403-A.006: Hot Water Boiler Yearly Fireside/Waterside Inspection and Maintenance**
Work Order No.: 727345-01	Equipment ID No.: BHW-011

Instructions: Enter the requested information. All items marked **S** or **Y** are satisfactory. Document all items marked **U, N,** or **N/A** in the Remarks section below, noting the step number and reason. Notify the foreman or supervisor of problems involving imminent danger.

TA: 53 Building: 365 Room: 403 ER	
Date Inspected: 9/23/22	Inspectors:

1.0 PRE-MAINTENANCE ACTIVITIES

NOTE Preoperational and pre-maintenance activities shall be conducted per the work order package, e.g., lockout/tagout, permits, special instructions, etc.

! WARNING If purging of gas lines will be required during this maintenance, ensure that the purging activity is addressed in the Integrated Work Document (IWD). The following must be addressed (see Master Specification 23 1123):

1. Purged fuel gases shall be directly vented to a safe location outdoors, away from personnel and ignition sources. This may be accomplished through permanent piping or temporary piping or hosing.
2. If it is not possible to vent purged gases outdoors, the following conditions must be met:
   a. Purging activity must be approved by the LANL Fire Marshal based on a documented justification detailing why outdoor venting is not possible and IWD.
   b. Gas concentration in the space to which the purge is vented shall be maintained at no more than 25% of the Lower Explosive Limit (LEL). For natural gas, the LEL is a concentration of 5% in air or 50,000 ppm. Therefore a maximum concentration of 12,500 ppm is allowed for natural gas. The concentration may be controlled by providing adequate ventilation or by limiting the amount of purge gas.
   c. Combustible gas detectors shall be used during the purging operation to monitor the gas concentration.
   d. Nonessential personnel shall be evacuated from the vicinity (including adjacent spaces) during the purging operation.
   e. Ignition sources in the purging space shall be controlled or eliminated.

NOTE All repair work, adjustments, or the replacement of parts shall be done in accordance with the manufacturer's procedures, specifications, recommendations, and instructions.

Remarks:

Los Alamos NATIONAL LABORATORY EST 1943	*Preventive Maintenance Instruction* Low- and High-Pressure Steam Boiler and Low-Temperature Water Heating Boiler Inspection, Testing, and Maintenance **403-A.006: Hot Water Boiler Yearly Fireside/Waterside Inspection and Maintenance**
Work Order No.: 727340-01	Equipment ID No.: BHW-011

1.1	Notify maintenance coordinator (MC) that work will be in progress on the boiler system.		Initials:
2.0	**MAINTENANCE**		
NOTE	These selected hot water boilers are mainly boilers with power burners that have refractory in front and rear flue doors or have heat extractors in the fire-tubes as are found in most one-pass boilers (Sellers). Hot water heating boilers with atmospheric burners generally require minimal fireside preventative maintenance. Contact the MSS-MP Boiler subject matter expert (SME) at 7-8550 with questions or concerns.		
2.1	Lock and tag out electrical and all associated valves on boiler and shut off gas supply.		Initials:
2.2	Cool boiler, open air cock, and drain the boiler.		Initials:
2.3	Perform an internal and external inspection after thorough cleaning.	S ☑ U ☐ N/A ☐	Initials:
2.3.1	Check the fireside furnace and fire-tubes for any evidence of soot formation or corrosion.	S ☑ U ☐ N/A ☐	Initials:
2.3.2	Brush and vacuum furnace and fire-tubes if such conditions exist.		Initials:
2.3.3	Perform hydrostatic test based on the boiler's Maximum Allowable Working Pressure and/or facility potable water pressure as long as the potable water pressure is at least 30 psi over boiler operating pressure.	S ☐ U ☐ N/A ☐	Initials:
2.3.4	Note if any boiler tubes and/or fittings are leaking, and repair as required. For any major repairs (determined by the SME), request a work order for the repairs from the MC.		Initials:

Remarks: 2.3.4 = Changed Rear hatch gasket Seal was torn and Needed to be replaced

Work Order No.: 727345-01 Equipment ID No.: BHW-011

2.3.5 On one-pass boilers (Sellers), check condition of all heat extractors.	S ☑ U ☐ N/A ☐	Initials:
2.3.6 Check refractory materials.	S ☑ U ☐ N/A ☐	Initials:
2.3.7 Replace if needed.		Initials:
2.4 Perform maintenance on low-water cutoff float chamber and water feeder. Disassemble to ensure freedom from obstruction and proper functioning of the working parts.		Initials:
2.5 Perform routine burner maintenance.		Initials:
2.5.1 Observe temperature and operating pressure and general conditions.	S ☐ U ☐ N/A ☐	Initials:
2.5.2 Fire and cycle the burner.		Initials:
2.6 Perform routine maintenance of circulating pump and expansion pump equipment.		Initials:
2.6.1 Observe condition of expansion tank.	S ☑ U ☐ N/A ☐	Initials:
2.6.2 Drain expansion tank if it is of a non-bladder type and refill to reestablish an air cushion.	S ☐ U ☐ N/A ☑	Initials:
2.6.3 Check the air pressure on the bladder-type expansion tanks.	S ☐ U ☐ N/A ☐	Initials:

Remarks: 2.6.2 Does not apply

Work Order No.: 227345-01 Equipment ID No.: BHW-011

2.6.4 Observe operation of circulating pumps.	S ☑ U ☐ N/A ☐	Initials:
2.6.5 Lubricate pump motors.		Initials:
2.7 Perform routine maintenance of entire combustion control equipment.		Initials:
2.7.1 Check gas/air linkages and moving parts (on power burners that modulate) for positioning, tightness, and binding.	S ☐ U ☐ N/A ☐	Initials:
2.7.2 Adjust air/fuel mixture as needed.		Initials:
2.7.3 Test flame detection devices on boilers with flame scanners.	S ☐ U ☐ N/A ☐	Initials:
2.7.4 Remove the flame scanner with the burner firing.		Initials:
NOTE The burner should shut off as a flame failure condition.		
2.7.5 Clean the flame scanner, reinstall and test programmer.		Initials:
2.7.6 Check for proper operation as boiler goes through a firing cycle and light-off.	S ☑ U ☐ N/A ☐	Initials:
2.7.7 Check all electrical control and circuitry.	S ☑ U ☐ N/A ☐	Initials:

Remarks: None

2.7.8 Inspect for cracked mercury tubes, separation of mercury, cracked insulators (probe type), jumper tube conditions, loose connections, poor or deteriorated wiring, improperly used bypass switches, cutoff switches wired in parallel, shut-offs installed at improper levels, wedges behind mercury tubes.	S ☑ U ☐ N/A ☐	Initials:
2.7.9 Observe operation of forced draft fan motors on boilers with power burners and induced draft fan motors on horizontal breeching where applicable.	S ☑ U ☐ N/A ☐	Initials:
2.7.10 Lubricate fan motors where necessary.		Initials:
2.8 Perform combustion and draft tests.		Initials:
2.8.1 Visually inspect combustion.	S ☑ U ☐ N/A ☐	Initials:
NOTE Changes in flame shape, color, and sound are among early indicators of potential combustion-related problems. Changes may be due to changes in fuel pressure or gas/air linkage movement.		
2.9 Perform safety relief valve(s) pop test.	S ☑ U ☐ N/A ☐	Initials:
2.9.1 Check pressure-reducing valve.	S ☑ U ☐ N/A ☐	Initials:
2.9.2 Replace the strainer in the valve if needed.		Initials:
2.10 Perform slow drain test of low-water cutoff.	S ☑ U ☐ N/A ☐	Initials:

Remarks: 2.7.8 Satisfactory
NONE

2.11 Inspect gas piping for proper support and tightness.	S ☑ U ☐ N/A ☐	Initials:
2.11.1 Inspect fuel supply system and gas controls.	S ☑ U ☐ N/A ☐	Initials:
2.11.2 Leak check gas controls and associated gas piping with a gas detector or soap suds.	S ☑ U ☐ N/A ☐	Initials:
2.12 Inspect boiler room ventilation louvers and intake.	S ☑ U ☐ N/A ☐	Initials:
2.12.1 Listen for any unusual noises or conditions and correct as necessary.	S ☑ U ☐ N/A ☐	Initials:
2.12.2 Report any needed corrections to the MC for corrective maintenance.		Initials:
2.12.3 Check combustion air supply openings to ensure that they are not closed or stopped up.	S ☑ U ☐ N/A ☐	Initials:
2.12.4 Inspect conditions of stacks and rain caps.	S ☑ U ☐ N/A ☐	Initials:
2.12.5 Inspect flue door gaskets to ensure they are in good condition, and properly secured.	S ☑ U ☐ N/A ☐	Initials:
2.12.6 Replace if necessary.		Initials:

Remarks: 2.12.2 GAUGES Need to be ordered for Replacement. See INSECTORS Report from RANDY

3.0 POST-MAINTENANCE ACTIVITIES

NOTE Post-maintenance activities shall be conducted in accordance with the work order package instructions (e.g., lockout/tagout, special instructions, etc.).

3.1	Close and secure front and rear flue doors.		Initials:
3.2	Hook up all associated piping.		Initials:
3.3	IF water makeup feeds boiler directly, THEN open by-pass valve to refill boiler, AND close by-pass valve when boiler reaches operating pressure. -or- IF water makeup does NOT feed boiler directly, THEN open supply and return valves to refill boiler.	By-pass ☐ -or- Supply/ Return ☐	Initials:
3.4	Fire up boiler and check for air, gas, and water leaks.	S ☐ U ☐ N/A ☐	Initials:
3.5	Check gas/air linkages and moving parts (on power burners that modulate) for positioning, tightness, and binding.	S ☐ U ☐ N/A ☐	Initials:
3.6	Check pilot burners and ignition equipment for proper condition and adjustment.	S ☐ U ☐ N/A ☐	Initials:
3.7	Visually check burner for proper combustion.	S ☐ U ☐ N/A ☐	Initials:
3.8	Record all mechanical maintenance data, testing data, and other notable items.		Initials:

NOTE Combustion analysis is verifiable only with a flue gas analyzer and is performed mainly on boilers with power burners.

Remarks: NONE

Los Alamos NATIONAL LABORATORY EST 1943	*Preventive Maintenance Instruction* Low- and High-Pressure Steam Boiler and Low-Temperature Water Heating Boiler Inspection, Testing, and Maintenance **403-A.006: Hot Water Boiler Yearly Fireside/Waterside Inspection and Maintenance**
Work Order No.: 27395-09	Equipment ID No.: BHW-011

3.9	Test water for proper chemical levels. Test and treat water as defined on Datasheet 403-A.002.	S ☐ U ☐ N/A ☑	Initials:
3.10	Record all mechanical maintenance data, testing data, and other notable items.		Initials:
3.11	Notify MC that work on the boiler system is complete.		Initials:

Name of Craft Worker: Joesph Uranga Z Number: 368069

Signature: _____ Date: 9/23/22

Name of Craft Worker: Joshua Griego Z Number: 363064

Signature: _____ Date: 9/23/22

Foreman Verification: _____ Z Number: _____

Signature: _____ Date: ____/____/____

Remarks: _____

From: [redacted]
To: [redacted]
Subject: RE: COPY'S OF IWD
Date: Friday, September 2, 2022 9:20:16 AM

Hi Lynda,

I reviewed and approve the IWDs –
727328
727329
727335
727339
727345
731893

Leslie Puckett

From: Vargas, Lynda Yvonne <lynda@lanl.gov>
Sent: Friday, September 2, 2022 8:32 AM
To: Puckett, Leslie Michelle Guthrie <lpuckett@lanl.gov>
Subject: FW: COPY'S OF IWD

Please review the following IWO's and respond with IH approval or remarks.
Thank you

From: Calloway, Troy Wayne <[redacted]>
Sent: Friday, September 2, 2022 8:11 AM
To: Vargas, Lynda Yvonne <[redacted]>
Subject: RE: COPY'S OF IWD

From: Vargas, Lynda Yvonne <[redacted]>
Sent: Friday, September 2, 2022 8:08 AM
To: Calloway, Troy Wayne <[redacted]>
Cc: George, Anthony R <[redacted]>
Subject: RE: COPY'S OF IWD

727328	S30018 2Y BOILER MAINTENANCE	FITTERS	TC/KM	9/6/2022	sylvia
727329	S30038 2Y BOILER MAINTENANCE	FITTERS	TC/KM	9/6/2022	sylvia
727335	S30038 2Y BOILER MAINTENANCE	FITTERS	TC/KM	9/6/2022	sylvia
727339	S30950 2Y BOILER MAINTENANCE	FITTERS	TC/KM	9/6/2022	sylvia
727345	S30165 ANNUAL BOILER MAINTENANCE	FITTERS	TC/KM	9/2/2022	sylvia
731893	S30001 2Y BOILER MAINTENANCE	moderate	tc/ma	9/6/2022	sylvia

sorry

From: Vargas, Lynda Yvonne
Sent: Friday, September 2, 2022 8:08 AM
To: Calloway, Troy Wayne <[redacted]>
Cc: George, Anthony R <[redacted]>
Subject: COPY'S OF IWD

Troy,

Do you have copies in pdf of the following IWD's

They are currently with IH for approval, however, Leslie Puckett does not have access to MWP and is going to review and give a verbal or sign pdf.

Thank you.

Lynda Y. Vargas
LANSCE MSS-WC
Office: [redacted]
Email: lynda@lanl.gov
"A" Schedule

Los Alamos NATIONAL LABORATORY EST 1943	*Preventive Maintenance Instruction* Low- and High-Pressure Steam Boiler and Low-Temperature Water Heating Boiler Inspection, Testing, and Maintenance **403-A.006: Hot Water Boiler Yearly Fireside/Waterside Inspection and Maintenance**
Work Order No.: 727345-01	Equipment ID No.: BHW-010

Instructions: Enter the requested information. All items marked **S** or **Y** are satisfactory. Document all items marked **U**, **N**, or **N/A** in the Remarks section below, noting the step number and reason. Notify the foreman or supervisor of problems involving imminent danger.

TA: 53 Building: 365 Room: 403 ER

Date Inspected: 9 / 23 / 22 Inspectors: Barela Arrez

1.0 PRE-MAINTENANCE ACTIVITIES

NOTE Preoperational and pre-maintenance activities shall be conducted per the work order package, e.g., lockout/tagout, permits, special instructions, etc.

! WARNING If purging of gas lines will be required during this maintenance, ensure that the purging activity is addressed in the Integrated Work Document (IWD). The following must be addressed (see Master Specification 23 1123):

1. Purged fuel gases shall be directly vented to a safe location outdoors, away from personnel and ignition sources. This may be accomplished through permanent piping or temporary piping or hosing.
2. If it is not possible to vent purged gases outdoors, the following conditions must be met:
   a. Purging activity must be approved by the LANL Fire Marshal based on a documented justification detailing why outdoor venting is not possible and IWD.
   b. Gas concentration in the space to which the purge is vented shall be maintained at no more than 25% of the Lower Explosive Limit (LEL). For natural gas, the LEL is a concentration of 5% in air or 50,000 ppm. Therefore a maximum concentration of 12,500 ppm is allowed for natural gas. The concentration may be controlled by providing adequate ventilation or by limiting the amount of purge gas.
   c. Combustible gas detectors shall be used during the purging operation to monitor the gas concentration.
   d. Nonessential personnel shall be evacuated from the vicinity (including adjacent spaces) during the purging operation.
   e. Ignition sources in the purging space shall be controlled or eliminated.

NOTE All repair work, adjustments, or the replacement of parts shall be done in accordance with the manufacturer's procedures, specifications, recommendations, and instructions.

Remarks: N.A.

Work Order No.: 727345-01 Equipment ID No.: BHW-010

1.1	Notify maintenance coordinator (MC) that work will be in progress on the boiler system.		Initials: AB

2.0 MAINTENANCE

NOTE These selected hot water boilers are mainly boilers with power burners that have refractory in front and rear flue doors or have heat extractors in the fire-tubes as are found in most one-pass boilers (Sellers). Hot water heating boilers with atmospheric burners generally require minimal fireside preventative maintenance. Contact the MSS-MP Boiler subject matter expert (SME) at 7-8550 with questions or concerns.

2.1	Lock and tag out electrical and all associated valves on boiler and shut off gas supply.		Initials: AB
2.2	Cool boiler, open air cock, and drain the boiler.		Initials: AB
2.3	Perform an internal and external inspection after thorough cleaning.	S ☑ U ☐ N/A ☐	Initials: AB
2.3.1	Check the fireside furnace and fire-tubes for any evidence of soot formation or corrosion.	S ☑ U ☐ N/A ☐	Initials: AB
2.3.2	Brush and vacuum furnace and fire-tubes if such conditions exist.		Initials: AB
2.3.3	Perform hydrostatic test based on the boiler's Maximum Allowable Working Pressure and/or facility potable water pressure as long as the potable water pressure is at least 30 psi over boiler operating pressure.	S ☑ U ☐ N/A ☐	Initials: AB
2.3.4	Note if any boiler tubes and/or fittings are leaking, and repair as required. For any major repairs (determined by the SME), request a work order for the repairs from the MC.		Initials: AB

Remarks: None.

2.3.5 On one-pass boilers (Sellers), check condition of all heat extractors.	S ☑ U ☐ N/A ☐	Initials: AB
2.3.6 Check refractory materials.	S ☑ U ☐ N/A ☐	Initials: AB
2.3.7 Replace if needed.		Initials: AB
2.4 Perform maintenance on low-water cutoff float chamber and water feeder. Disassemble to ensure freedom from obstruction and proper functioning of the working parts.		Initials: AB
2.5 Perform routine burner maintenance.		Initials: AB
2.5.1 Observe temperature and operating pressure and general conditions.	S ☑ U ☐ N/A ☐	Initials: AB
2.5.2 Fire and cycle the burner.		Initials: AB
2.6 Perform routine maintenance of circulating pump and expansion pump equipment.		Initials: AB
2.6.1 Observe condition of expansion tank.	S ☑ U ☐ N/A ☐	Initials: AB
2.6.2 Drain expansion tank if it is of a non-bladder type and refill to reestablish an air cushion.	S ☐ U ☐ N/A ☑	Initials: AB
2.6.3 Check the air pressure on the bladder-type expansion tanks.	S ☑ U ☐ N/A ☐	Initials: AB

Remarks: None

2.6.4 Observe operation of circulating pumps.	S ☒ U ☐ N/A ☐	Initials: AB
2.6.5 Lubricate pump motors.		Initials: AB
2.7 Perform routine maintenance of entire combustion control equipment.		Initials: AB
2.7.1 Check gas/air linkages and moving parts (on power burners that modulate) for positioning, tightness, and binding.	S ☒ U ☐ N/A ☐	Initials: AB
2.7.2 Adjust air/fuel mixture as needed.		Initials: AB
2.7.3 Test flame detection devices on boilers with flame scanners.	S ☒ U ☐ N/A ☐	Initials: AB
2.7.4 Remove the flame scanner with the burner firing.		Initials: AB
NOTE The burner should shut off as a flame failure condition.		
2.7.5 Clean the flame scanner, reinstall and test programmer.		Initials: AB
2.7.6 Check for proper operation as boiler goes through a firing cycle and light-off.	S ☒ U ☐ N/A ☐	Initials: AB
2.7.7 Check all electrical control and circuitry.	S ☒ U ☐ N/A ☐	Initials: AB

Remarks: None.

2.7.8	Inspect for cracked mercury tubes, separation of mercury, cracked insulators (probe type), jumper tube conditions, loose connections, poor or deteriorated wiring, improperly used bypass switches, cutoff switches wired in parallel, shut-offs installed at improper levels, wedges behind mercury tubes.	S ☑ U ☐ N/A ☐	Initials: AB
2.7.9	Observe operation of forced draft fan motors on boilers with power burners and induced draft fan motors on horizontal breeching where applicable.	S ☑ U ☐ N/A ☐	Initials: AB
2.7.10	Lubricate fan motors where necessary.		Initials: AB
2.8	Perform combustion and draft tests.		Initials: AB
2.8.1	Visually inspect combustion.	S ☑ U ☐ N/A ☐	Initials: AB
NOTE	Changes in flame shape, color, and sound are among early indicators of potential combustion-related problems. Changes may be due to changes in fuel pressure or gas/air linkage movement.		
2.9	Perform safety relief valve(s) pop test.	S ☑ U ☐ N/A ☐	Initials: AB
2.9.1	Check pressure-reducing valve.	S ☑ U ☐ N/A ☐	Initials: AB
2.9.2	Replace the strainer in the valve if needed.		Initials: AB
2.10	Perform slow drain test of low-water cutoff.	S ☑ U ☐ N/A ☐	Initials: AB

Remarks: none

Work Order No.: 727345-01 Equipment ID No.: BHW-010

2.11 Inspect gas piping for proper support and tightness.	S ☑ U ☐ N/A ☐	Initials: AB
2.11.1 Inspect fuel supply system and gas controls.	S ☑ U ☐ N/A ☐	Initials: AB
2.11.2 Leak check gas controls and associated gas piping with a gas detector or soap suds.	S ☑ U ☐ N/A ☐	Initials: AB
2.12 Inspect boiler room ventilation louvers and intake.	S ☑ U ☐ N/A ☐	Initials: AB
2.12.1 Listen for any unusual noises or conditions and correct as necessary.	S ☑ U ☐ N/A ☐	Initials: AB
2.12.2 Report any needed corrections to the MC for corrective maintenance.		Initials: AB
2.12.3 Check combustion air supply openings to ensure that they are not closed or stopped up.	S ☑ U ☐ N/A ☐	Initials: AB
2.12.4 Inspect conditions of stacks and rain caps.	S ☑ U ☐ N/A ☐	Initials: AB
2.12.5 Inspect flue door gaskets to ensure they are in good condition, and properly secured.	S ☑ U ☐ N/A ☐	Initials: AB
2.12.6 Replace if necessary.		Initials: AB

Remarks: none.

3.0 POST-MAINTENANCE ACTIVITIES

NOTE Post-maintenance activities shall be conducted in accordance with the work order package instructions (e.g., lockout/tagout, special instructions, etc.).

3.1	Close and secure front and rear flue doors.		Initials: AB
3.2	Hook up all associated piping.		Initials: AB
3.3	IF water makeup feeds boiler directly, THEN open by-pass valve to refill boiler, AND close by-pass valve when boiler reaches operating pressure. -or- IF water makeup does NOT feed boiler directly, THEN open supply and return valves to refill boiler.	By-pass ☑ -or- Supply/ Return ☐	Initials: AB
3.4	Fire up boiler and check for air, gas, and water leaks.	S ☑ U ☐ N/A ☐	Initials: AB
3.5	Check gas/air linkages and moving parts (on power burners that modulate) for positioning, tightness, and binding.	S ☑ U ☐ N/A ☐	Initials: AB
3.6	Check pilot burners and ignition equipment for proper condition and adjustment.	S ☑ U ☐ N/A ☐	Initials: AB
3.7	Visually check burner for proper combustion.	S ☑ U ☐ N/A ☐	Initials: AB
3.8	Record all mechanical maintenance data, testing data, and other notable items.		Initials: AB

NOTE Combustion analysis is verifiable only with a flue gas analyzer and is performed mainly on boilers with power burners.

Remarks: None.

Los Alamos NATIONAL LABORATORY EST 1943	*Preventive Maintenance Instruction* Low- and High-Pressure Steam Boiler and Low-Temperature Water Heating Boiler Inspection, Testing, and Maintenance **403-A.006: Hot Water Boiler Yearly Fireside/Waterside Inspection and Maintenance**

Work Order No.: 727345-01 Equipment ID No.: BHW-010

3.9	Test water for proper chemical levels. Test and treat water as defined on Datasheet 403-A.002.	S ☑ U ☐ N/A ☐	Initials: AB
3.10	Record all mechanical maintenance data, testing data, and other notable items.		Initials: AB
3.11	Notify MC that work on the boiler system is complete.		Initials: AB

Name of Craft Worker: Barela Arron Z Number: 367646

Signature: _____ Date: 09 / 23 / 22

Name of Craft Worker: Vernon Valdez Z Number: 235171

Signature: _____ Date: 9 / 23 / 22

Foreman Verification: Joshua Z Number: _____

Signature: _____ Date: ___ / ___ / ___

Joshua Gray 363064

9-23-22

Remarks: None.

Facility: F01 **Unit:** 550006 **Proj:**

Task Title: 550006 (A) HOT WATER BOILER FS/WS INSP/MAINT (2 EA)

W/O Type: PM W/O Group: Task Priority: 4

Planner: 218305 TRUJILLO

W/O Title: 550006 (A) HOT WATER BOILER FIRESIDE INSP/MAINT.(2 EA)

Written To: PF-6 HOT WATER BOILERS

Task Dspln: FTTR Due Date: 06/30/2022

Job Type: PM D-B Determination:N

Hazard Level: MODERATE IWD Requirement:STANDING

Material Required?:

0071602301

Los Alamos NATIONAL LABORATORY EST.1943

Work Order Task

00716023 01

MASTER

Date: 4/19/22

Work Order Task Written To

Facility: F01 **Unit:** 550006 **Op Sys:**

Room: **Area:** **Sys/Cls:**

Equipment: **Component:**

PF-6 HOT WATER BOILERS

Equipment Tag: Alternate Tag:

Work item: PF6-BHW Tech Surv Reqmt Rel: N

PEG Equip Group Type: PEG Equip Group ID:

Crit Safety Control: Property Group:

Maintenance Programs: 1: 2: 3: 4: 5:

Authorization

Start Permission	340999			Start Date	6-6-22		
Complete Notice				Complete Date	7.29.22		

NOTE:

*** Refer to attached Form 2101 - Non-Tenant Activity Form - or Form 2102 - Tenant Activity Form - for a description of site specific training or escort and access requirements.**

Work Order 00716023 **Task** 01

Work Order Task Instructions

Location: 550006 room 103

.

Craft: PIPEFITTERS/ELECTRICIANS

.

Perform PM per: ATTACHED PMI 403-A.006

.

CAUTION - Proposed work could impact a facility Technical Safety Requirement
(TSR), Limiting Condition of Operation (LCO) and/or Action Statement.
Check-in at the Operation Center prior to performing work.

.

Do not perform work beyond scope of work order.

.

NOTE: AS PER SE NO START-UP / LAY-UP IS REQUIRED
AS THESE BOILERS OPERATE YEAR ROUND.

.

Caution: Proposed work could impact a facility technical safety requirement
(TSR), limiting condition of operation (LCO) and /or action statement

Rework Reason/Cause

		Y/N
CDSG	CUSTOMER DESIGN	☑
IMCW	IMPROPER CONSTRUCTION/WORKMANSHIP	☑
IMDN	IMPROPER DESIGN	☑
PDMS	PARTS/MATERIAL DID NOT MEET SPECIFICATIONS	☑
WR	WARRANTY REWORK/REPAIR	☑

Date: 7/29/2022 Hours: Crew: Shift:

Comments: NONE

Rework/Approval

Deficiency Tag No: Location: Tag Removed:

Rework Job: N Comments:

Work Order 00716023 **Task** 01

Trouble Found/Work Performed

Completion Comments Required: N

Work on 602 incomplete due to leaking valves, Work on 603 incomplete due to operability issues w/ 602

Continue on additional sheets? Work Doc + PMI

Calibrated Tools

Calibrated Tool Used? ☑ Y/N

File ID	Date Used	File ID	Date Used
D40937	06/06/22		

Work Delay Reason

A	ACCESS	☑ Y/N
EQPT	EQUIPMENT	☑ Y/N
ESC	ESCORT AVAILABILITY	☑ Y/N
IWD	IWD WORKABILITY	☑ Y/N
LOTO	LOCK OUT/TAG OUT	☑ Y/N
MAT	MATERIAL	☑ Y/N
OPS	OPERATIONS	☑ Y/N
RCT	RCT AVAILABILTY	☑ Y/N
SP	SAFETY PAUSE	☑ Y/N
TEL	TOOLS/EQUIP/LIFTS	☑ Y/N
W	WEATHER	☑ Y/N

Work Date: 7/29/2022 Hours: Crew: Shift:

Comments: NONE

Work Order 00716023 **Task** 01

Major Failure/Action Taken

Major Failure:		
Major Action Taken:		
Deficiency Tag Removed:		Y/N
Deficiency Tag Location:		
Deficiency Tag ID:		
Limited Condition of Operation:		Y/N

Work Completion Signatures

Name	Function/Department	Date
Dustin Wright 320732	Fitters / Cog-CS	4/29/2022

Comments: (Rework?)

Equipment List Exceptions

Equipment List	Revision	Equipment List Description
PF6-BHW	000	PF6-BHW

Seq	Fac	Unit	Op Sys	Division	Area	System	Class
	F01	550006	VNT	103		HW	ML4

Equipment: BHW BHW-602
Name: 98' HOT WATER BOILER 602
Location: East Unit.
Exception Reason: Incomplete waterside due to leaking valves; see notes from Lee
Comments:
Equipment Tag:

Seq	Fac	Unit	Op Sys	Division	Area	System	Class
	F01	550006	VNT	103		HW	ML4

Equipment: BHW BHW-603
Name: 99' HOT WATER BOILER 603
Location: West or Central Boiler.
Exception Reason: Incomplete due to operation issues on 602
Comments:
Equipment Tag:

References/Document Information

Facility	Type	Sub-Type	Document Number	Sheet
LNL	PROC	STD	403-A.006	
	Title	HOT WATER BOILERS ANNUAL FIRESIDE/WATERSIDE		INSPECTION AND MAINTENANCE

Accounting

Percentage	Cost Center	Activity	Account No	Sub Account No
100.00	7D150C	640CL000	XEPR00	M1010000

* * * **End of Report** * * *

Attachment D, TA-55 SSC Equipment Work Release and Acceptance Red Sheet (UET)

(Page 1 of 2)

#716023 04 **CAUTION**

Work Package # _____

REQUIRED: Proposed work is on a system/component requiring formal status control, and could impact a facility Technical Safety Requirement (TSR). This work package **REQUIRES** facility Operations Center (OC) release **immediately prior to the starting** of any associated work activities/tasks.

REQUIRED: All workers working on systems requiring this attachment must attest, or their RLM/PIC attest, to having the applicable VSS briefing. If workers and/or RLM/PIC CAN NOT attest to having the applicable VSS briefing a worker who does must be present and supervising the work. Not applicable to construction jobs; OCO or PIC/RLM mark training column N/A.

OC Authorization: Sheet ___ of ___

Worker Training Acknowledged (PIC/RLM initials/Z#)	Printed Name of OCO	OCO Signature	Date
M / 122002	SEYBERT	[signature]	6/6/22
TNA / 175267	ISSACK JIMENEZ Tyler	[signature]	6/7/22 / 6-7-22
BM / 360981	COCHRAN	[signature]	6/8/22
BM / 360981	COCHRAN	[signature]	6/8/22
MU / 204536	WELLS	[signature]	6/13/22
MU / 204536	[illegible]	[signature]	6-27-22
/			
/			

**Once all available rows have been filled out obtain a new sheet from Work Control.

REQUIRED: A **KNOWLEDGABLE** work package performer(s) is **REQUIRED** to report work package activity/task status to the Operations Center **every time workers stop work for the day.**

REQUIRED: This work package **REQUIRES** facility operations work acceptance **immediately following field completion** of the work. The following **SHALL** be complete prior to submitting for OC Acceptance.

This column to be Completed and Initialed by: Work Package Performer	This column to be Completed and Initialed by: OCS or OCO
N/A Steps if "not applicable"	**N/A Steps if "not applicable"**
DW PMT complete (criteria determined by appropriate CSE(s), SME or OCS; conducted under conditions emulating normal operation parameters)	N/A Applicable TSR, STP, ISI, system alignment (through operating procedure or SAC) required for the SSC to be declared OPERABLE have been completed, as applicable
N/A SSC left offline following PMT, as applicable	
DW All LOTOs cleared (locks and lockout devices are returned to the WCCS, or OC if during off-hours)	

Operations Center Acceptance: Confirms RTS (transfer of control from Maintenance to Operations)

Printed Name of OCO	Signature	Z#	Date
COCHRAN	[signature]	3/9/22	7/28/22

OCO Initial for Completion:

N/A OC System Status Board updated, as applicable

Attachment D, TA-55 SSC Equipment Work Release and Acceptance Red Sheet (UET)

(Page 2 of 2)

Daily Job Update Sheet

Work Package # 716023-01

Job Title 550006(A) Hot Water Boiler FS/WS Insp/Maint

REQUIRED: This sheet is to be filled out and dropped off, by a **KNOWLEDGABLE** worker, with the TA-55 Operations Center prior to commencing work each day. A **KNOWLEDGABLE** worker will pick up the sheet when work is completed for the day, and give the Operations Center a job status update. The sheet should be placed back into the work package so that it is available for the next day the job is worked.

Sheet 2 of 2

Date	Point of Contact	Pager #	Brief description of day's activities
6/1/22	Thomas Alton	4-7491	Boiler inspe/maint
6/8/22	B. McAfee	4-2326	" "
6/9/22	B. McAfee	4-2326	" "
6/13/22	Mario Vigil	4-7888	" "
6/27/22	Mario Vigil	4-7888	" "

**Once all available rows have been filled out obtain a new sheet from Work Control. Only drop off the most current sheet with the Operations Center.

Attachment D, TA-55 SSC Equipment Work Release and Acceptance Red Sheet (UET)

(Page 2 of 2)

Daily Job Update Sheet

Work Package # #716023 01

Job Title (N) BHW FS/WS INSP. MAINT.

REQUIRED: This sheet is to be filled out and dropped off, by a **KNOWLEDGABLE** worker, with the TA-55 Operations Center prior to commencing work each day. A **KNOWLEDGABLE** worker will pick up the sheet when work is completed for the day, and give the Operations Center a job status update. The sheet should be placed back into the work package so that it is available for the next day the job is worked.

Sheet ___ of ___

Date	Point of Contact	Pager #	Brief description of day's activities
6-6-22	Santiago J.	4-5472	(N) BHW FS/WS INSP./ MAINT.

**Once all available rows have been filled out obtain a new sheet from Work Control. Only drop off the most current sheet with the Operations Center.

Los Alamos NATIONAL LABORATORY

Form 2103

Integrated Work Document (IWD) Part 3, Validation and Work Release

IWD No: Revision No.:

By signing below, I verify that this activity is appropriate to be conducted in the facility and is within the scope of the facility safety basis; area/facility hazards have been identified and addressed; work meets applicable Laboratory environmental, safety, and security requirements, DOE Orders, and other applicable regulatory requirements; and that the appropriate Subject Matter Expert (SME) reviews have been completed.

FOD or FOD designee (e.g., Operations Manager)

Signature/Z-Number/Date **(If required by FOD)**: N/A

By signing below, I have verified the following:

- I have verified authorization by ensuring approval signatures of the RLM and FOD.
- I have jointly conducted a validation walkdown with workers to review tasks and steps for workability and to ensure that the hazards and controls are described correctly and have not changed.
- The assigned workers are authorized and competent to perform the work in a safe, secure, and environmentally responsible manner.
- I have conducted the pre-job briefing, and all workers (including support workers) have been briefed.
- I have ensured coordination with any required FOD work-area representatives (e.g., area work coordinators).

PIC (Signature/Z Number/Date) **Required**: [signature] 204536 6/27/2022

Alternate PIC signature **acknowledges** PIC authority is assumed for the first time. *(Note: Alternate PICs are required to sign only once, but formal handoff includes conferring with previous PIC to obtain all required information associated with the handoff and informing workers that they have a new PIC.)*

Alternate PIC (Signature/Z Number/Date) **Required**: _____

Alternate PIC (Signature/Z Number/Date) **Required**: _____

Pre-Job Brief Content

- Prerequisites, where applicable – things that must be staged, in place, or completed before the work starts
- Worker pause/stop work authority and obligation per P101-18, Procedure for Pause/Stop Work
- Scope of work and work activities including IWD/WCDs, procedures, work package documents, and drawings, as applicable
- Hazards and associated controls, including personal protective equipment, and the resolution of any related questions
- Critical steps* including where they are covered in the IWD/WCD and which HPI technique will be used for each critical step
- Permit and plan requirements and limitations (e.g., penetrations, spark flame) and how permit requirements will be met
- Applicable regulatory requirements [e.g., Technical Safety Requirements (TSR), Code of Federal Regulations (CFR)] including how these requirements can be inadvertently violated if the IWD/WCD is not followed
- Roles and responsibilities including person(s) responsible for making critical decisions (e.g., PIC)
- Handoffs and coordination requirements among workers and multiple PICs, if applicable
- Work site conditions including location of phone and emergency equipment (e.g., fire alarms, fire extinguisher, AED) and how to respond to alarms and emergencies
- Hold points and other notifications/signoffs (e.g., inspections, Industrial Hygiene, radiation protection)
- Applicable Lessons Learned (LL), especially from previous performance of the activity
- Any other information needed to perform this activity in a safe, secure, and environmentally responsible manner

Ask: Does everyone agree with the work tasks/steps and controls, and commit to follow them?

*Critical steps are when "a procedure step, series of steps, or action that, if performed improperly, will cause irreversible harm to equipment, people, or the environment" (DOE-HDBK-1028-2009, Volume 1).

IWD No:	Revision No.:
Pre-Job Brief Attendance Roster	
By signing below **as required**, I agree to the following: • I agree to follow the work steps and implement the controls as written, as applicable to my work assignments. • I agree to pause/stop work when conditions or hazards change or when I encounter unexpected conditions during the execution of work, or when work cannot be performed as written, or instructions become unclear during execution. • I confirm that I am authorized, qualified, and fit to perform the work.	
Worker (Signature/Z Number/Date) 237056 6/27/22	**Worker** (Signature/Z Number/Date) 355732 6/27/22
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date) 359449 6/27/22
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date)

Los Alamos NATIONAL LABORATORY

Form 2103

Integrated Work Document (IWD) Part 3, Validation and Work Release

IWD No: Revision No.:

By signing below, I verify that this activity is appropriate to be conducted in the facility and is within the scope of the facility safety basis; area/facility hazards have been identified and addressed; work meets applicable Laboratory environmental, safety, and security requirements, DOE Orders, and other applicable regulatory requirements; and that the appropriate Subject Matter Expert (SME) reviews have been completed.

FOD or FOD designee (e.g., Operations Manager)

Signature/Z-Number/Date **(If required by FOD)**: _____

By signing below, I have verified the following:

- I have verified authorization by ensuring approval signatures of the RLM and FOD.
- I have jointly conducted a validation walkdown with workers to review tasks and steps for workability and to ensure that the hazards and controls are described correctly and have not changed.
- The assigned workers are authorized and competent to perform the work in a safe, secure, and environmentally responsible manner.
- I have conducted the pre-job briefing, and all workers (including support workers) have been briefed.
- I have ensured coordination with any required FOD work-area representatives (e.g., area work coordinators).

PIC (Signature/Z Number/Date) **Required**: [signature] 204526 6/13/2022

Alternate PIC signature **acknowledges** PIC authority is assumed for the first time. *(Note: Alternate PICs are required to sign only once, but formal handoff includes conferring with previous PIC to obtain all required information associated with the handoff and informing workers that they have a new PIC.)*

Alternate PIC (Signature/Z Number/Date) **Required**: _____

Alternate PIC (Signature/Z Number/Date) **Required**: _____

Pre-Job Brief Content

- Prerequisites, where applicable – things that must be staged, in place, or completed before the work starts
- Worker pause/stop work authority and obligation per P101-18, Procedure for Pause/Stop Work
- Scope of work and work activities including IWD/WCDs, procedures, work package documents, and drawings, as applicable
- Hazards and associated controls, including personal protective equipment, and the resolution of any related questions
- Critical steps* including where they are covered in the IWD/WCD and which HPI technique will be used for each critical step
- Permit and plan requirements and limitations (e.g., penetrations, spark flame) and how permit requirements will be met
- Applicable regulatory requirements [e.g., Technical Safety Requirements (TSR), Code of Federal Regulations (CFR)] including how these requirements can be inadvertently violated if the IWD/WCD is not followed
- Roles and responsibilities including person(s) responsible for making critical decisions (e.g., PIC)
- Handoffs and coordination requirements among workers and multiple PICs, if applicable
- Work site conditions including location of phone and emergency equipment (e.g., fire alarms, fire extinguisher, AED) and how to respond to alarms and emergencies
- Hold points and other notifications/signoffs (e.g., inspections, Industrial Hygiene, radiation protection)
- Applicable Lessons Learned (LL), especially from previous performance of the activity
- Any other information needed to perform this activity in a safe, secure, and environmentally responsible manner

Ask: Does everyone agree with the work tasks/steps and controls, and commit to follow them?

*Critical steps are when "a procedure step, series of steps, or action that, if performed improperly, will cause irreversible harm to equipment, people, or the environment" (DOE-HDBK-1028-2009, Volume 1).

IWD No:	Revision No.:
Pre-Job Brief Attendance Roster	
By signing below **as required**, I agree to the following: • I agree to follow the work steps and implement the controls as written, as applicable to my work assignments. • I agree to pause/stop work when conditions or hazards change or when I encounter unexpected conditions during the execution of work, or when work cannot be performed as written, or instructions become unclear during execution. • I confirm that I am authorized, qualified, and fit to perform the work.	
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date)

Los Alamos NATIONAL LABORATORY

Form 2103

Integrated Work Document (IWD) Part 3, Validation and Work Release

IWD No:716023-01 Revision No.:

By signing below, I verify that this activity is appropriate to be conducted in the facility and is within the scope of the facility safety basis; area/facility hazards have been identified and addressed; work meets applicable Laboratory environmental, safety, and security requirements, DOE Orders, and other applicable regulatory requirements; and that the appropriate Subject Matter Expert (SME) reviews have been completed.

FOD or FOD designee (e.g., Operations Manager)

Signature/Z-Number/Date **(If required by FOD)**: N/A Per Telecom

By signing below, I have verified the following:

- I have verified authorization by ensuring approval signatures of the RLM and FOD.
- I have jointly conducted a validation walkdown with workers to review tasks and steps for workability and to ensure that the hazards and controls are described correctly and have not changed.
- The assigned workers are authorized and competent to perform the work in a safe, secure, and environmentally responsible manner.
- I have conducted the pre-job briefing, and all workers (including support workers) have been briefed.
- I have ensured coordination with any required FOD work-area representatives (e.g., area work coordinators).

PIC (Signature/Z Number/Date) **Required**: [signature] 175267 06/07/2022

Alternate PIC signature **acknowledges** PIC authority is assumed for the first time. *(Note: Alternate PICs are required to sign only once, but formal handoff includes conferring with previous PIC to obtain all required information associated with the handoff and informing workers that they have a new PIC.)*

Alternate PIC (Signature/Z Number/Date) **Required**: [signature] 360981 06/08/2022

Alternate PIC (Signature/Z Number/Date) **Required**: _____

Pre-Job Brief Content

- Prerequisites, where applicable – things that must be staged, in place, or completed before the work starts
- Worker pause/stop work authority and obligation per P101-18, Procedure for Pause/Stop Work
- Scope of work and work activities including IWD/WCDs, procedures, work package documents, and drawings, as applicable
- Hazards and associated controls, including personal protective equipment, and the resolution of any related questions
- Critical steps* including where they are covered in the IWD/WCD and which HPI technique will be used for each critical step
- Permit and plan requirements and limitations (e.g., penetrations, spark flame) and how permit requirements will be met
- Applicable regulatory requirements [e.g., Technical Safety Requirements (TSR), Code of Federal Regulations (CFR)] including how these requirements can be inadvertently violated if the IWD/WCD is not followed
- Roles and responsibilities including person(s) responsible for making critical decisions (e.g., PIC)
- Handoffs and coordination requirements among workers and multiple PICs, if applicable
- Work site conditions including location of phone and emergency equipment (e.g., fire alarms, fire extinguisher, AED) and how to respond to alarms and emergencies
- Hold points and other notifications/signoffs (e.g., inspections, Industrial Hygiene, radiation protection)
- Applicable Lessons Learned (LL), especially from previous performance of the activity
- Any other information needed to perform this activity in a safe, secure, and environmentally responsible manner

Ask: Does everyone agree with the work tasks/steps and controls, and commit to follow them?

*Critical steps are when "a procedure step, series of steps, or action that, if performed improperly, will cause irreversible harm to equipment, people, or the environment" (DOE-HDBK-1028-2009, Volume 1).

IWD No:716023-01

Revision No.:

Pre-Job Brief Attendance Roster

By signing below **as required**, I agree to the following:

- I agree to follow the work steps and implement the controls as written, as applicable to my work assignments.
- I agree to pause/stop work when conditions or hazards change or when I encounter unexpected conditions during the execution of work, or when work cannot be performed as written, or instructions become unclear during execution.
- I confirm that I am authorized, qualified, and fit to perform the work.

Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date) Saul S 355732 6/7/22
Worker (Signature/Z Number/Date) [signature] 282917 6/7/22	**Worker** (Signature/Z Number/Date) [signature] 359449 6/7/22
Worker (Signature/Z Number/Date) Mildred Valdez 154551 6-7-22	**Worker** (Signature/Z Number/Date) Norma Ramos 291737 6/7/22
Worker (Signature/Z Number/Date) [signature] 20386 6/7/22	**Worker** (Signature/Z Number/Date) Norma Ramos 291737 6/8/22
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date) Norma Ramos 291737 6/8/22
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date) Saul S 355732 6/9/22
Worker (Signature/Z Number/Date) Martin de Amusategui Z#292698 07 JUNE 2022 Martin de Amusategui Z#292698 08 JUNE 2022 Mildred Valdez 154551 6-8-22	**Worker** (Signature/Z Number/Date) [signature] 237056 6/8/22 [signature] 282917 6/9/22

Los Alamos NATIONAL LABORATORY

Form 2103

Integrated Work Document (IWD) Part 3, Validation and Work Release

IWD No: Revision No.:

By signing below, I verify that this activity is appropriate to be conducted in the facility and is within the scope of the facility safety basis; area/facility hazards have been identified and addressed; work meets applicable Laboratory environmental, safety, and security requirements, DOE Orders, and other applicable regulatory requirements; and that the appropriate Subject Matter Expert (SME) reviews have been completed.

FOD or FOD designee (e.g., Operations Manager)

Signature/Z-Number/Date **(If required by FOD)**: Kicy 340999 6-6-22

By signing below, I have verified the following:

- I have verified authorization by ensuring approval signatures of the RLM and FOD.
- I have jointly conducted a validation walkdown with workers to review tasks and steps for workability and to ensure that the hazards and controls are described correctly and have not changed.
- The assigned workers are authorized and competent to perform the work in a safe, secure, and environmentally responsible manner.
- I have conducted the pre-job briefing, and all workers (including support workers) have been briefed.
- I have ensured coordination with any required FOD work-area representatives (e.g., area work coordinators).

PIC (Signature/Z Number/Date) **Required**: _____

Alternate PIC signature **acknowledges** PIC authority is assumed for the first time. *(Note: Alternate PICs are required to sign only once, but formal handoff includes conferring with previous PIC to obtain all required information associated with the handoff and informing workers that they have a new PIC.)*

Alternate PIC (Signature/Z Number/Date) **Required**: [illegible] 175267 06/06/2022

Alternate PIC (Signature/Z Number/Date) **Required**: _____

Pre-Job Brief Content

- Prerequisites, where applicable – things that must be staged, in place, or completed before the work starts
- Worker pause/stop work authority and obligation per P101-18, Procedure for Pause/Stop Work
- Scope of work and work activities including IWD/WCDs, procedures, work package documents, and drawings, as applicable
- Hazards and associated controls, including personal protective equipment, and the resolution of any related questions
- Critical steps* including where they are covered in the IWD/WCD and which HPI technique will be used for each critical step
- Permit and plan requirements and limitations (e.g., penetrations, spark flame) and how permit requirements will be met
- Applicable regulatory requirements [e.g., Technical Safety Requirements (TSR), Code of Federal Regulations (CFR)] including how these requirements can be inadvertently violated if the IWD/WCD is not followed
- Roles and responsibilities including person(s) responsible for making critical decisions (e.g., PIC)
- Handoffs and coordination requirements among workers and multiple PICs, if applicable
- Work site conditions including location of phone and emergency equipment (e.g., fire alarms, fire extinguisher, AED) and how to respond to alarms and emergencies
- Hold points and other notifications/signoffs (e.g., inspections, Industrial Hygiene, radiation protection)
- Applicable Lessons Learned (LL), especially from previous performance of the activity
- Any other information needed to perform this activity in a safe, secure, and environmentally responsible manner

Ask: Does everyone agree with the work tasks/steps and controls, and commit to follow them?

*Critical steps are when "a procedure step, series of steps, or action that, if performed improperly, will cause irreversible harm to equipment, people, or the environment" (DOE-HDBK-1028-2009, Volume 1).

#716023 01

IWD No:	Revision No.:

Pre-Job Brief Attendance Roster

By signing below **as required**, I agree to the following:

- I agree to follow the work steps and implement the controls as written, as applicable to my work assignments.
- I agree to pause/stop work when conditions or hazards change or when I encounter unexpected conditions during the execution of work, or when work cannot be performed as written, or instructions become unclear during execution.
- I confirm that I am authorized, qualified, and fit to perform the work.

Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date)
	Saul S 355732 6/6/22
	Lucas Herrera 359449 6/6/22
	237056 6/6/22
	M Valdez 154551 6-6-22
M Matt 363901 6-7-22	
363903 6-7-22	
170386 06/06/22	Z#292698 06 JUNE 2022

#716023 01

Los Alamos NATIONAL LABORATORY

AP-WORK-004: Attachment 1
Maintenance & Site Services
Worker Engagement Questions

Worker engagement questions are intended to focus attention on the task and ensure uncertainties are addressed. Basic worker engagement questions are provided below. Additional worker engagement questions should be tailored to the situation.

Each of the questions listed below will be discussed at each Pre-Job Brief with all affected personnel.

Topic	Completed (X)
What permits, permissions, or support are required to safely start this work? Stat Pre-Job, Red Sheet	X
What is the most likely thing that could go wrong (not the worst thing) and what, specifically, will prevent it? STT	X
What can cause us to go beyond the scope of the work? NOTHING	X
What hazards in the work area may not have been considered during planning of this job Co-located work	X

[redacted] 360981 06/08/2022

#716023 01

NOTE: Use these buttons to print or save the form. DO NOT use the browser tool bar.

Los Alamos NATIONAL LABORATORY EST. 1943

Form 2244

Lockout/Tagout (LO/TO) Orders

Section 1: General Information

Work Document Number (e.g., Package/Procedure #): 716073-01	LO/TO Remedy ID: 22-4612
Location of Equipment to be Isolated: TA: 55 Bldg: 6 Rm/Other: 103	Description of Machinery, System & Equipment (MS&E) to be worked on: B607 / ~~B603~~
MS&E Owner/Operator: David Leyba Z Number: 118210	Phone: 5-6817
Shutdown to be performed by MS&E Owner/Operator (as determined by MS&E Owner/Operator) ☐ Yes ☒ No	Re-energize/restart to be performed by MS&E Owner/Operator (as determined by MS&E Owner/Operator) ☐ Yes ☒ No
Reason for LO/TO: (A) Fireside / waterside	
Group LO/TO (2 or more)? ☒ Yes ☐ No *If yes, a lead authorized worker must be appointed.*	Group lock box used? ☑ Yes ☐ No
Shift or Personnel Changes? ☐ Yes ☑ No *If yes, a description of how the continuity of LO/TO protection will be ensured must be referenced or attached to this form. (See Section 3.9.6 of P101-3 for details.)*	☐ Continuity of LO/TO protection details described in operating procedure, work instruction, or other work control document. Document Number:

Section 2: Energy Control Procedure

1. Plan the work.
2. Identify and assess hazardous energy.
3. Contact the MS&E owner/operator.
4. Obtain locks and tags from lock coordinator.
5. Notify affected workers.
6. Shutdown MS&E according to **Section 3: Shutdown Sequence**.
7. Isolate and lock out MS&E from energy source, relieve stored energy, and perform verification of isolation according to **Section 4: LO/TO Sequence**.
8. Perform the work.
9. Release MS&E from LO/TO according to **Section 5: Release MS&E from Lockout/Tagout Sequence**.

Section 3: Shutdown Sequence

☐ Perform shutdown according to operating procedure, work instruction, or other work control document (e.g., IWD, Owner's Manual, SOP).
Document Number: 716073-01

☐ **N/A**; MS&E to be worked on will be isolated according to **Section 4: LO/TO Sequence** (e.g., cannot be shut down)
Detail the process to normally shut down the MS&E below, if not following other document referenced above or N/A.

Step No.	Action/Description	Step No.	Action/Description
☐ 1		☐ 6	
☐ 2		☐ 7	
☐ 3		☐ 8	
☐ 4		☐ 9	
☐ 5		☐ 10	

Section 4: LO/TO Sequence

☐ Perform LO/TO sequence according to operating procedure, work instruction, or other work control document (e.g., IWD, Owner's Manual, SOP).
Document Number:
Describe how to effectively isolate & lockout the MS&E below, if not following other document referenced above.

Isolate & Lockout (Step No.)	Equipment Descriptor (What is being locked out? e.g., machine drive motor, input power to MCC)	Energy Source (e.g., electrical, mechanical, pneumatic, hydraulic, chemical, thermal)	Energy Isolation Device (e.g., specific ID, description, circuit #, lock box #)	Location of Energy Isolation Device (e.g., room number, north wall, south wall)	Required LO/TO Position or Alignment (e.g., off, open, closed, on)	Verification Method (e.g., live/dead/live, crack open, on-off-on-off, peer checking, independent verification)	Verifier's Initials (if req'd)	See Section 5: Release (Step No.)
☐ (1)	BL602	GAS	NG-BL602-V-1	TA 55 / bldg 6 Rm 103	closed	peer	NR	☐
☐ (2)	BL602	water	cchw - BL602 - V1	TA 55 / bldg 6 Rm 103	closed	peer	NR	☐
☐ (3)	BL602	Water	CCHW - BL602 -V2	TA 55 / bldg 6 Rm 103	closed	peer	NR	☐
☐ (4)	BL602	Electrical	MCC - 603D compt. B1L	TA 55 / bldg 6 Rm 103	off	on-off-on-off	NR	☐
☐ (5)	BL602	GAS	NG-BL602/	TA 55 bldg 6 Rm 103	closed	Peer	NR	☐
☐ (6)	Lockbox	Lockbox	Lockbox TA55-006	TA 55 / bldg 6 Room 103	Locked	Peer	NR	☐
☐ (7)								☐
☐ (8)								☐

Section 5: Release MS&E from Lockout/Tagout Sequence

1. Check the MS&E and immediate area for items that could result in damage or danger on start-up.
2. Check the work area to ensure that all workers have been safely positioned or removed from the work area.
3. Verify that the controls are in neutral or "off" position.
4. Notify the owner/operator and affected workers that work is complete and MS&E is ready to release from LO/TO.
5. Remove the LO/TO device, and re-energize (if appropriate according to MS&E owner/operator) according to the sequence as identified above under Release in **Section 4: LO/TO Sequence** or according to operating procedure, work instruction, or other work control document identified in **Section 4**.
6. Return lock and locking device to Lock Coordinator.

Energy Control Procedure prepared by:

Preparer (print name)	Z Number	Organization	Phone	Signature/Date
Andrew Ulibarri	237056	LOG-CS	4-8315	6/6/22

By signing below, you acknowledge that this energy control procedure and/or referenced documents identify the isolation devices, isolation points, and methods necessary to prevent any unexpected release of hazardous energy.

Energy Control Procedure approved by:

MS&E Owner/Operator (print name)	Z Number	Organization	Phone	Signature/Date
David Leyba	116210	MSSTA55	5-6812	6-6-22

Section 6: All Authorized Workers (anyone applying a lock for this activity)

Fill out the following information or print and attach Authorized Workers information from the Lockout/Tagout Remedy Application.

Authorized Workers Name(s)	Z Number	Date Lock Applied	Date Lock Removed
Lead: Andrew Ulibarri	237056	6-6-2022	
George M. Tsacas	170386	6-6-22	6/14/22
MARTIN DE AMUSATEGUI	# 292698 6/6/22 ~~06 JUNE 2022~~		6/14/22
Norma Ramos	291737	6-6-22	6/14/22
Timothy Fangio	282917	6-7-22	6/14/22

12 6-6-22

No: RN101-3-01 Interim Requirements for Hazardous Energy Identification and Control
Attachment A. Lockout/Tagout Pre-job Walk-down Checklist (Page 1 of 2)

Instructions: Perform the pre-job walk-down with the necessary people per Section 3.1 of the Requirements Notice 101-3-01. Complete this checklist and take signed checklist to the lock coordinator. All Authorized Workers are required to participate in the walk-down and sign the checklist in order to check out a lock and tag. If additional workers are added to the job, they must also perform a walk-down of the system and show a signed checklist to the lock coordinator. The signed checklists are to be kept with the parent work document (IWD, work package, etc.).

Work Document Number (e.g., Package/Procedure#): _____

- ☐ We have walked down and discussed the work to be performed.
- ☐ All energy isolation points and positions have been identified and documented.
- ☐ The proper energy control procedure is being used (Simple vs Complex LO/TO).
- ☐ All energy-isolating devices are labeled properly (e.g., labels aren't faded, no hand written modifications).
- ☐ No discrepancies are found between record drawings, labels, panel schedules, and LO/TO procedures.
- ☐ Lockout devices have been identified to support the work.

*If any of the above items are identified to be inadequate, pause work, report the issues to your RLM, and contact the appropriate SMEs to help resolve issues ***before*** performing/resuming work.

Simple Lockout/Tagout

By signing below, you acknowledge that you have completed the pre-job walk-down and there are no issues that need to be reported to your Responsible Line Manager before beginning work.

Lead Authorized Worker (print name)	Z Number	Signature/Date
Authorized Worker (print name)	Z Number	Signature/Date

Complex Lockout/Tagout

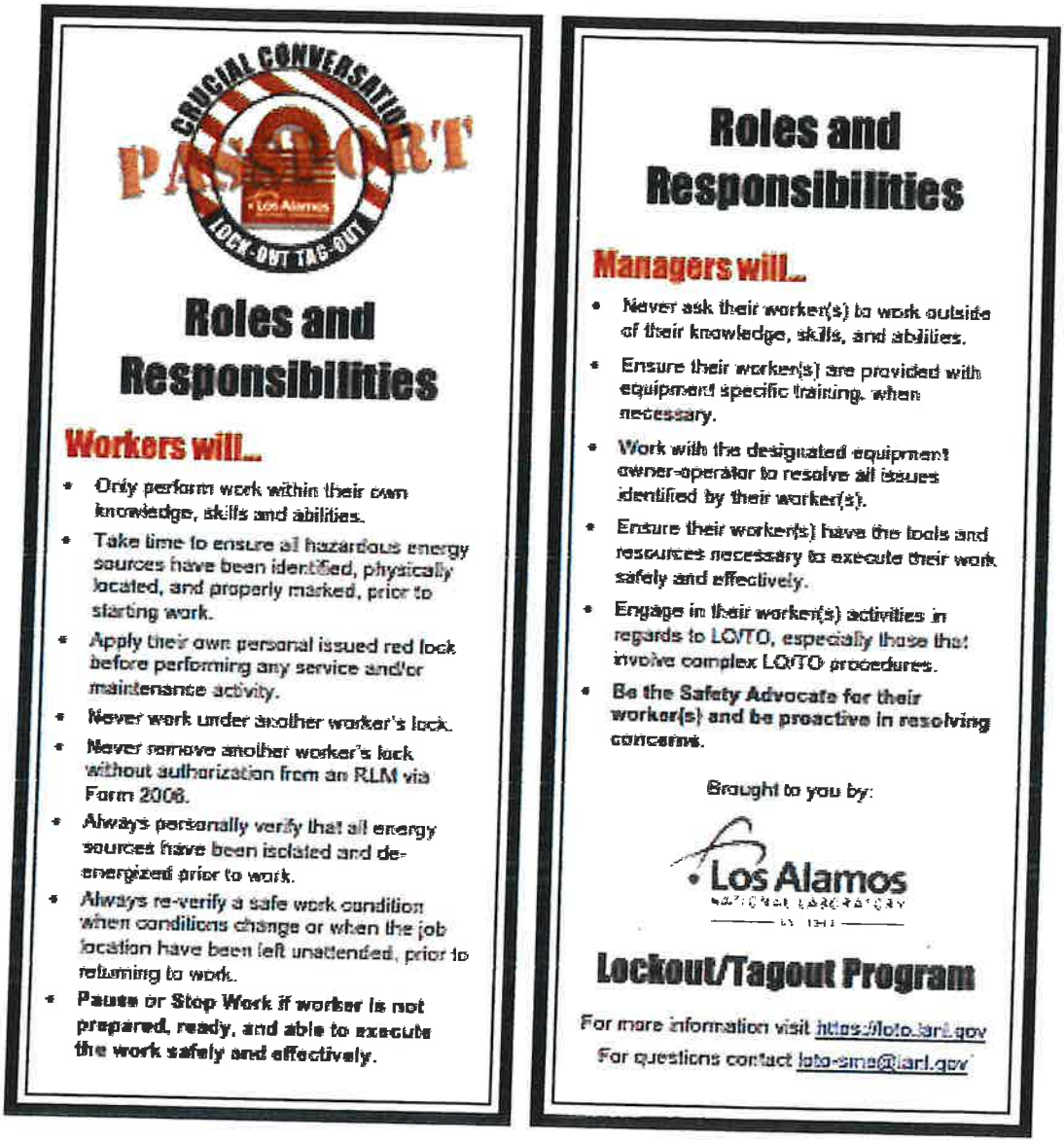
By signing below, you acknowledge that you have completed the pre-job walk-down and there are no issues that need to be reported to your Responsible Line Manager before beginning work.

MS&E Owner/Operator (print name)	Z Number	Signature/Date
David Leyba	118210	6-6-22
Preparer or PIC (print name)	Z Number	Signature/Date
Thomas Alton	175267	06/06/2022
Lead Authorized Worker (print name)	Z Number	Signature/Date
Andrew Ulibarri	237056	6/6/22
Authorized Worker (print name)	Z Number	Signature/Date
Norma Ramos	291737	6/6/22
Authorized Worker (print name)	Z Number	Signature/Date
MARTIN DE ANUSATEGUI	292698	06 JUNE 2022
TIMOTHY TAPIA	282917	6-7-22

Note: Print additional sheets as necessary.

No: RN101-3-01 Interim Requirements for Hazardous Energy Identification and Control
Attachment B. Lockout/Tagout Crucial Conversation Passport (Example Only) (Page 1 of 1)

Attachment B: LO/TO Crucial Conversation Passport



CRUCIAL CONVERSATION
PASSPORT
LOCK-OUT TAG-OUT

Roles and Responsibilities

Workers will..

- Only perform work within their own knowledge, skills and abilities.
- Take time to ensure all hazardous energy sources have been identified, physically located, and properly marked, prior to starting work.
- Apply their own personal issued red lock before performing any service and/or maintenance activity.
- Never work under another worker's lock.
- Never remove another worker's lock without authorization from an RLM via Form 2006.
- Always personally verify that all energy sources have been isolated and de-energized prior to work.
- Always re-verify a safe work condition when conditions change or when the job location have been left unattended, prior to returning to work.
- **Pause or Stop Work if worker is not prepared, ready, and able to execute the work safely and effectively.**

Roles and Responsibilities

Managers will..

- Never ask their worker(s) to work outside of their knowledge, skills, and abilities.
- Ensure their worker(s) are provided with equipment specific training, when necessary.
- Work with the designated equipment owner-operator to resolve all issues identified by their worker(s).
- Ensure their worker(s) have the tools and resources necessary to execute their work safely and effectively.
- Engage in their worker(s) activities in regards to LO/TO, especially those that involve complex LO/TO procedures.
- **Be the Safety Advocate for their worker(s) and be proactive in resolving concerns.**

Brought to you by:

Los Alamos
NATIONAL LABORATORY
EST. 1943

Lockout/Tagout Program

For more information visit https://loto.lanl.gov
For questions contact loto-sme@lanl.gov

Simple Lockout/Tagout
Complex Lockout/Tagout

By signing below, you acknowledge that you have completed the pre-job walk-down and there are no issues that need to be reported to your Responsible Line Manager before beginning work.

Authorized Worker (print name)	Z Number	Signature/Date
George M. Tracy	170386	George M. Tracy 06/06/22
Authorized Worker (print name)	Z Number	Signature/Date
Authorized Worker (print name)	Z Number	Signature/Date
Authorized Worker (print name)	Z Number	Signature/Date
Authorized Worker (print name)	Z Number	Signature/Date
Authorized Worker (print name)	Z Number	Signature/Date
Authorized Worker (print name)	Z Number	Signature/Date
Authorized Worker (print name)	Z Number	Signature/Date
Authorized Worker (print name)	Z Number	Signature/Date
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Authorized Worker (print name)	Z Number	Signature/Date
Authorized Worker (print name)	Z Number	Signature/Date
Authorized Worker (print name)	Z Number	Signature/Date
Authorized Worker (print name)	Z Number	Signature/Date
Authorized Worker (print name)	Z Number	Signature/Date
Authorized Worker (print name)	Z Number	Signature/Date

Note: Print additional sheets as necessary.

LOS ALAMOS NATIONAL LABS

PM INTEGRATED WORK DOCUMENT (IWD) COVER SHEET

WORK ORDER NO: **716023-01**

TITLE: 550006 (A) BHW FS/WS INSP./MAINT

	Name	Signature	Date
Planner:	Martin Nowakowski		5/24/2022
Peer Review:	Victoria Vasquez		05/26/2022

CONCURRENCE:

Based on my personal review, I agree that the work described in this package meets technical requirements under my cognizance, and contains the controls to perform the work safely.

	Name	Signature	Date
Craft/Tech:	TIMOTHY FANG, O		5/26/22
Craft/Tech:	HENRY ROMERO		6.01.22
~~Craft~~/Tech:	Devan Garcia		6-3-22
ESO/CSE:	SEE CSE E-MAIL APPOVAL		
TA55-RCT:	N/A		
DESH TA55 Safety:	SEE IH FORM	SECTION 4	
Supervisor:			
OPS Manager:			6/3/22

Nowakowski, Martin Anthony

From: Komathy, Josh
Sent: Wednesday, May 11, 2022 8:05 AM
To: Nowakowski, Martin Anthony
Cc: Ferran, Donna M; Monnet-Hannon, Amber Nichole; wwc55@lanl.gov
Subject: RE: ESO review of IWD
Attachments: 2193 for PF-6 boilers_signed.pdf

Martin,

I have reviewed the PM / IWD related to an ESO review for 550006 (A) FIRESIDE/WATERSIDE BOILER HOT WATER MAINT MODEL # 431775-06 and I approve with no comments at this time. Attached is the signed 2193 for this work.

Regards,
Josh

From: Nowakowski, Martin Anthony <manow@lanl.gov>
Sent: Monday, May 9, 2022 2:03 PM
To: Komathy, Josh <jgkomathy@lanl.gov>
Cc: Ferran, Donna M <donnaf@lanl.gov>; Monnet-Hannon, Amber Nichole <monnet@lanl.gov>; wwc55@lanl.gov
Subject: ESO review of IWD

Please provide ESO review of IWD for:

- Doc # & Rev: 713023-01 (model # 431775-06)
- Doc Title: **550006 (A) FIRESIDE/WATERSIDE BOILER HOT WATER MAINT**
- Area That Needs Review (i.e. TA-55, RLW, etc.): 550006
- DAR #:N/A
- Area (i.e. 100, 200, 300, 400) ***or*** Function (Facility Maintenance or Construction):
- Type of Review Requested (RP, IH): ESO REVIEW
- SME/POC w/Contact info: Lee Romero

I included the PM model, IWD, PMI 403-A.006, SDS sheets

Please contact for any questions.
thanks

Martin Nowakowski

Phone: 665-2822

Industrial Hygiene and Safety Review (DESHF-55/CMR)

Document Title: 550006 (A) FIRESIDE/WATERSIDE BOILER HOT WATER MAINT				
Document Number: 431775-06	**Revision or Issue Date:**			
Document Point of Contact: Martin Nowakowski Z# 194072				
Section 1: Activity/Document Screening			Y	N
1. Is the job classified as high hazard?				✓
2. Are multiple organizations involved?				✓
3. Is an IH/S designated posting required?				✓
4. Is work taking place in a Permit Required Confined Space?				✓
5. Is medical monitoring, sampling, or any type of IH/S monitoring required?				✓
6. Is IH/S requiring respiratory protection?				✓
Continue with remainder of form 1) if any "yes" answers above, or 2) at reviewer's discretion.				
Section 2: Hazard Review			Y	N
1. The Hazard Assessment has been completed and documented per P300?			✓	
2. The appropriate IH/S Subject Matter Experts have been engaged per identified hazards?			✓	
3. Is an IH/S designated posting required?				✓
Section 3: Activity Review		**NA**	**Y**	**N**
1. Is required IH/S sampling specifically identified?		✓		
2. Are all required permits specifically identified?			✓	
3. Are all posting requirements specifically identified?			✓	
4. Are release conditions specifically identified for the required postings?			✓	
5. Are all medical monitoring requirements identified?		✓		
6. Is required PPE specifically identified? (E.g., fire resistant clothing for sparking)			✓	
7. Are administrative & engineering controls identified and when to be used? (E.g., LEV during torch cutting or welding)			✓	
8. Are IH/S requirements for sequential tasks specifically identified? (E.g, when outer PPE layer(s) must be removed period to leaving an enclosure)			✓	
9. Is a single PIC identified prior to work when multiple organizations are involved?			✓	
10. Will controls introduce new hazards or exacerbate existing conditions? (E.g., heat stress)				✓
If yes, have those hazards been addressed?				
11. Have co-located personnel been identified and hazard communication indicated?			✓	
12. Are hazards from co-located activities anticipated and addressed?			✓	
13. Are hold points added when authorization to proceed is necessary? (E.g., additional or different controls to be determined pending sampling results)		✓		

Section 4: Issues and Comments

Complete this section for comments or any "no" questions in sections 2 and 3. Attach another sheet if needed.

Question	Issue/Comment
2.3	No IH/S designated posting required.
3.10	LO/TO controls in place per P101-3, Shock/Arc Flash Hazard controls in place per Form 2193.

Approval/Signature (IH/S Use Only) *(Signature indicates issues/comments are satisfactorily resolved; IWD is approved.)*

MICHAEL SLINKARD (Affiliate)

Digitally signed by MICHAEL SLINKARD (Affiliate)
Date: 2022.05.11 08:44:49 -06'00'

Cy: Planner
Document Requester

Nowakowski, Martin Anthony

From: Romero, Lee M
Sent: Tuesday, May 10, 2022 5:49 PM
To: Nowakowski, Martin Anthony
Cc: Ferran, Donna M; Monnet-Hannon, Amber Nichole; wwc55@lanl.gov
Subject: PF-6 annual FS/WS
Attachments: 431775-06 PM model.pdf; 550006 BHW Annual FSWS Maintenance (2022).docx; Cheveron SRI SDS.pdf; NALCO_TRASAR_TRAC105.PDF; NALCO_73310 _CORROSION_INHIBITOR_UsCuEg.pdf

Martin,

You're Awesome.

I read through the Annual PM for hot water boilers in PF-6. I read and approve the IWD for the PM.

The PM is work order 713023-01.
The PM is the annual FS/WS.

Let me know if you have any questions.

Thanks,
Lee

Attachment A, FOD-1 Nuclear Facilities QEV Evaluation Request Form

(Page 1 of 1)

Review/Evaluation Request Form

GENERAL DOCUMENT DETAILS *(To be completed by requester)*

USQ Review/Evaluation is requested for the following facilities (*check all that apply*)

☒ TA-55 ☐ CMR ☐ RLWTF ☐ TWF ☐ RANT ☐ WCRRF ☐ PF400

Doc ID# of the Document(s) to be evaluated:	**Revision:** (*if applicable*)	**Date of Request:**
716023-01 (model # 431775-06)		5/9/2022
Doc Title(s) of the Document(s) to be evaluated:		**Requested Return Date:**
550006 (A) FIRESIDE/WATERSIDE BOILER HOT WATER MAINT		5/13/2022

Document Type(s) to be evaluated:

☐ **Design Change (DCF, FCN, FCR, DRN, TMC, etc.) or legacy change, DCP, ECN, etc.**

☐ **Other (SCR, NCR, etc.)** *(Specify)*: _____

☐ **WO/IWD* and DCF****

☒ **WO/IWD* without DCF (below information also required):**

Associated Design Doc # previously evaluated through the USQ process and its USQ Evaluation #:

Design Doc ID#: _____ **Evaluation #:** _____

***For questions on WO/IWD, contact** *(Name/Phone)*: Martin Nowakowski 665-2822 *(Planner)*

****For questions on DESIGN, contact** *(Name/Phone)*: _____ *(PE or RE)*

Description of Requested Action/Change:
UQS screening

Requester Name/Z#:	**Email:**	**Phone:**
Martin Nowakowski	manow@lanl.gov	665-2822
Additional Name/Z# *(include when necessary)*:	**Email:**	**Phone:**

Functional Organization Area: *(Specify content owning organization)*	☒ Facility _____ ☐ Organization _____
Subject Matter Expert (SME): Lee Romero	Contact info: leeromero@lanl.gov 665-6027

QEV REVIEW OR USQ EVALUATION *(To be completed by USQ QEV)*

Review/Evaluation Tracking Number:	**Print Name/Z#:**	**Signature:**	**Date:**

Cite the reason if the change did not require review per SBP-112-3 (current revision):

PMs are excluded from USQ per FOD Memo 20-071.

152599 6/3/22

Los Alamos NATIONAL LABORATORY Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)			
Revision #:			**Activity/Task Title:** 550006 BHW Annual Fireside/Waterside Maintenance
Work Document #: (WO #/Task)			**Planner/Preparer (Name/Z#/Date)** Martin Nowakowski Z# 194072 5/6/2022
TA: 55	**Building:** 0006	**Room:**	**Additional Location Description:**

SECTION 1 – SCOPE OF WORK

SECTION 2 - PRECAUTIONS AND LIMITATIONS

SECTION 3 – PREREQUISITES/INITIAL CONDITIONS

SECTION 4 – SPECIAL TRAINING/MEDICAL REQUIREMENTS

SECTION 5 – SPECIAL TOOLS/EQUIPMENT

SECTION 6 – WORK INSTRUCTIONS

SECTION 7 – POST WORK ACTIVITIES

SECTION 8 – CLOSEOUT

1. SCOPE OF WORK

Perform annual fireside/waterside maintenance on Hot Water Boilers as per 403-A.006

Hazard Analysis (HA) Team: Martin Nowakowski, Tim Fangio

Date HA Performed :

NOT UCNI
Reviewing Official: Martin Buzzell/303827/MSS-WC
Date: May 9, 2022
Guidance Used: CG-SS-5 CH 1, DOE / OC 7/16

Los Alamos NATIONAL LABORATORY Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)			
Revision #:			**Activity/Task Title:** 550006 BHW Annual Fireside/Waterside Maintenance
Work Document #: (WO #/Task)			**Planner/Preparer (Name/Z#/Date)** Martin Nowakowski Z# 194072 5/6/2022
TA: 55	**Building:** 0006	**Room:**	**Additional Location Description:**

2. PRECAUTIONS AND LIMITATIONS

2.1. If steps cannot be completed as described, or if unforeseen situations occur, **PAUSE WORK**, stabilize the situation, contact your supervisor, and await further instructions before proceeding.

2.2. Work steps are sequenced in a logical flow to ensure that the work is performed safely, efficiently, and effectively. If work steps are required to be worked in a specific sequence, it will be identified in the applicable section of the IWD

2.3. Coordinate work to minimize equipment down time.
- Remove and reapply LOTO as needed to maintain system operability
- Refer to applicable steps in IWD for LOTO
- Verify "0" voltage every time locks are applied

3. PREREQUISITES/INITIAL CONDITIONS

3.1. **Entry Conditions:**
- (PF6) Obtain authorization and NMT-79 key from Ops Center prior to entering PF6.
- Follow ALL entry postings.
- Hearing protection required.
- Be aware of automatic starting equipment.
- Further PPE requirements will be task specific.

3.2. Verify Work Order is on the schedule for work release.

3.3. Ensure ALL material and special tools are available.

3.4. This work requires a LOTO pre-job walk-down for control of hazardous energy per P101-3 Lockout/Tagout for Hazardous Energy Control.

3.5 General hazards and associated PPE is required:
- Safety Shoes
- Safety Glasses with Side Shields
- Cut 4 Resistant Gloves shall be worn when workers are performing maintenance or other physical work activities, when hands are exposed to hazards
- Bump Caps/Hard Hats required. Bump caps can be used when working indoors where hard hats cannot be used due to space, safety or location.Otherwise, hard hats must be worn.
- Further PPE requirements will be task specific

Los Alamos NATIONAL LABORATORY Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)			
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TA: 55	**Building:** 0006	**Room:**	**Additional Location Description:**

3.6 Noise:
- Wear proper hearing protection in areas posted

3.7 Fall from stepladders/ladders/scaffolding:
- Inspect the stepladder/ladders prior to use
- Maintain 3-points of contact when ascending and descending the stepladder/ladder
- Scaffolding to be inspected daily

3.8 Working with Chemicals:
- Chemical splash – Wear safety goggles
- Use of Trionic gloves
- SDS –

4. SPECIAL TRAINING/MEDICAL REQUIREMENTS

1. **The following training is required for the General Hazards**
   - CU-10968 WQ LOG Maintenance Worker
2. **The following training is required when working in posted "high noise" areas:**
   - CU- 2307 Hearing Conservation/ Noise
3. **The following training is required for WQ LOG Electrician-Maintenance**
   - CU-642 WQ LOG Electrician-Maintenance
   - Cu-2559 Electricians/Apprentices and Facility Engineer (when performing zero voltage and trouble shooting)
4. **The following training is required for WQ LOG Pipefitter-Maintenance**
   - CU-647 WQ LOG Pipefitter-Maintenance
5. **The following training is required when working chemicals**
   - CU-4261 Chemical Workers Authorized (HAZCOM)
6. **The following training is required while performing work on scaffolding:**
   - CU-9257 Fall Protection Training
   - CU-3949 Scaffold User

5. SPECIAL TOOLS/EQUIPMENT

NONE

Los Alamos NATIONAL LABORATORY Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)			
Revision #:			**Activity/Task Title:** 550006 BHW Annual Fireside/Waterside Maintenance
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TA: 55	**Building:** 0006	**Room:**	**Additional Location Description:**

6. WORK INSTRUCTIONS

6.1 Contact the following prior to performing work.

6.1.1 Operations Center (7-3330)

6.1.2 Maintenance Coordinator David Leyba 665-6812

6.1.3 Operations Supervisor Patrick Connolly 667-2523

- Mobilize equipment/materials/tools to and from work site.
- Barricade designated work area using robust barrier rope/stanchion and/or signage, to establish boundaries
- Carpenters will erect and dismantle scaffolding per standing IWD as needed.

6.2 Standing IWD, located in work package

6.2.1 Scaffolding to be inspected daily

NOTE:

Ops tech to align system prior to performing work, and when work is complete.

1. Notify Operations Center prior to starting work.

LANL Boiler Inspector Randall Austin: 667-6740, cell 695-6036

Request copy of Boiler Inspection report for package.

2. Perform pre-maintenance step 1.1 as per 403-A.006

   Place and remove scaffolding as needed per standing scaffold IWD.

NOTE:

LOTO devices shall be applied in accordance with requirements of P101-3, Lockout/Tagout for Hazardous Energy Control

3. LOTO may be applied and removed LOTO as required to complete preventive maintenance and testing.

Los Alamos NATIONAL LABORATORY Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)			
Revision #:			**Activity/Task Title:** 550006 BHW Annual Fireside/Waterside Maintenance
Work Document #: (WO #/Task)			**Planner/Preparer (Name/Z#/Date)** Martin Nowakowski Z# 194072 5/6/2022
TA: 55	**Building:** 0006	**Room:**	**Additional Location Description:**

4. Step 2.1 Pipefitter (request Operations Tech to align system)

   a.) Close gas valves, apply LO/TO and verify zero energy by ensuring gas is bleed-off at union and area is well ventilated.
   located in rm.103

   B602: NG-B602-V-1, NG-B602/B603-V-1
   B603: NG-B603-V-1, NG-B602/B603-V-1

   b.) Close associated water valves, apply LO/TO and verify zero energy by opening drain valve.
   located in rm.103
   B602: CCHW-B602-V1, CCHW-B602-V2
   B603: CCHW-B603-V1, CCHW-B603-V2

   c.) Place boiler circuit in the OFF position located in rm.101 and apply LOTO and verify zero energy by attempting to start boiler.
   B602: MCC-603D compt. B1L
   B603: MCC-603C compt. A2R

Non melting long sleeve shirt and pants, safety glasses with side shields, hearing protection and leather gloves. Step 2.1 as per 403-A.006 section 2.0

5. Pipefitters ensure boiler temperature is cool to the touch prior to working on boiler. (under ≤100° F)
   perform preventive maintenance steps 2.2 thru 2.7.6 as per 403-A.006 section 2.0

When performing step 2.2, all boiler water and solids **MUST** be contained and not go down drain.

MSDS for Chevron SRI Grease NLGI 2, Nalco TRAC-105, and Nalco 73310.

PPE: Wear safety glasses with side shields, Nitrile rubber gloves, and use in a well-ventilated area.

Recommend chemical goggles when draining boiler water to prevent water splashing into eyes.

6. Electrician verify circuit in the OFF position and apply LOTO located in rm.101

B602: MCC-603D compt. B1L
B603: MCC-603C compt. A2R

Non melting long sleeve shirt and pants, safety glasses with side shields, hearing protection and leather gloves.

Los Alamos NATIONAL LABORATORY Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)			
Revision #:			**Activity/Task Title:** 550006 BHW Annual Fireside/Waterside Maintenance
Work Document #: (WO #/Task)			**Planner/Preparer (Name/Z#/Date)** Martin Nowakowski Z# 194072 5/6/2022
TA: 55	**Building:** 0006	**Room:**	**Additional Location Description:**

Step 2.1 as per 403-A.006 section 2.0

⚠WARNING

Electrical, contact with energized electrical system

Class 1.3b, mode 1
480v

PPE: v-rated gloves, leather gloves, non-conductive safety glasses, leather work footwear, hearing protection, FR long sleeve shirt ≥ 4 cal/cm² and FR long pants ≥ 4 cal/cm² or equivalent coveralls.
Reference Facility Electrical Hazard Analysis Record form 2193

Calibration Verification

Verify that the instrument to be used on this PM is within calibration:

Voltage meter: Manufacturer/ Model #. Fluke T-5 1000

File #. 040937 Cal. Due Date: 08/06/22

7. Verify "0" Voltage at line side of disconnect in room 103.
   B602: DISC-602-1
   B603: DISC-603-1

8. Electricians perform preventive maintenance steps 2.7.7 thru 2.7.8 as per 403-A.006 section 2.0

9. Pipefitters perform preventive maintenance steps 2.7.9 thru 2.7.10 as per 403-A.006 section 2.0

MSDS for Chevron SRI Grease NLGI 2

PERSONAL PROTECTIVE EQUIPMENT:
Wear safety glasses with side shields, Nitrile rubber gloves, and use in a well-ventilated area.

Los Alamos NATIONAL LABORATORY **Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)**			
Revision #:			**Activity/Task Title:** 550006 BHW Annual Fireside/Waterside Maintenance
Work Document #: (WO #/Task)			**Planner/Preparer (Name/Z#/Date)** Martin Nowakowski Z# 194072 5/6/2022
TA: 55	**Building:** 0006	**Room:**	**Additional Location Description:**

10. Pipefitters perform preventive maintenance steps 2.8 thru 2.12.6 as per 403-A.006 section 2.0

NOTE: When performing steps b. thru e. Boiler water and all solids MUST be contained and not go down the drain.

The following steps are needed to complete waterside maintenance.

a). Open flue door and inspect tube sheets for water leakage. It tube leakage is suspected call the system engineer for further evaluation. The narrow ligaments between tube holes are subject to tremendous stresses and should be watched for any sign of cracking mainly due to overheating.

b). Drain boiler and remove all hand hole and manhole covers, where applicable, to allow a visual check of all internal accessible areas. Example: shell, tubes and tube sheets.

c). Carefully examine waterside surfaces using a strong light and mirror where required. Look for evidence of scale, corrosion, blisters, or pitting, indicating adequacy of water treatment.

d). Use a high pressure hose to wash sediment out of the bottom and other internals of the boiler.

e). Remove both head covers from the bodies of the two float operated low water cut-offs (LWCs).

The float-assembly and mercury switches are located on these heads. Flush out both LWC bodies. Inspect floats and replace if necessary. Reinstall head covers. Remove caps from the inspection crosses associated with both LWCs and flush out piping connected to boiler. Reinstall caps.

11. Craft remove LOTO and place circuit in the **ON** position. Located in rm.101

B602: MCC-603D compt. B1L
B603: MCC-603C compt. A2R

- Non melting long sleeve shirt and pants, safety glasses with side shields, hearing protection and leather gloves.

Craft remove LOTO and **OPEN** associated water valves.

Located in rm.103 — B602: CCHW-B602-V1, CCHW-B602-V2
B603: CCHW-B603-V1, CCHW-B603-V2

Craft remove LOTO and **OPEN** gas valves. (Note: ensure the union used to verify zero energy is air tight.)

Located in rm.103 — B602: NG-B602-V-1, NG-B602/B603-V-1
B603: NG-B603-V-1, NG-B602/B603-V-1

Los Alamos NATIONAL LABORATORY Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)			
Revision #:			**Activity/Task Title:** 550006 BHW Annual Fireside/Waterside Maintenance
Work Document #: (WO #/Task)			**Planner/Preparer (Name/Z#/Date)** Martin Nowakowski Z# 194072 5/6/2022
TA: 55	**Building:** 0006	**Room:**	**Additional Location Description:**

12. Pipefitters perform post-maintenance steps 3.1 thru 3.11 as per 403-A.006 section 3.0

NOTE:

Omit step 3.9 of PMI 403-A.006 as per C.S.E.

Water Chemistry corrections are completed using the semi-annual water treatment PM.

13. Remove all barricades and signs.

14. Notify Operations Center work is complete, inform CSE of any deficiencies found.

7. POST WORK ACTIVITIES

7.1 **CLEAN-UP** work area.

7.2 **REMOVE** barricades from work area.

7.3 **CONTACT** Ruben Trujillo @ 665-6378, 664-4242 (pager), 551-2737 (cell) for guidance on waste disposal. Dispose of waste per their guidance.

8. CLOSEOUT

CONTACT the MC and inform them the work is completed. Complete all the required documentation.

COMPLETE all the required documentation.

Los Alamos NATIONAL LABORATORY **Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)**			
Revision #:			**Activity/Task Title:** 550006 BHW Annual Fireside/Waterside Maintenance
Work Document #: (WO #/Task)			**Planner/Preparer (Name/Z#/Date)** Martin Nowakowski Z# 194072 5/6/2022
TA: 55	**Building:** 0006	**Room:**	**Additional Location Description:**

***Insert Rows above** for additional Tasks/Steps or attach pages to clearly communicate ESH&Q/S&S hazards and associated controls.*	The RLM, and FOD or FOD Representative approval indicates IWM has been applied appropriately, work is authorized, workers are qualified, work will be performed in accordance with ESH&Q/S&S requirements and the IWD, and facility safety basis, aggregate hazards, and collocated hazards were appropriately included in the hazard analysis and acknowledges completion of a peer review.	**RLM** (Signature/Z#/Date) **Required** 194821 6/3/22 **FOD or Representative** (Signature/Z#/Date) 152595 6/3/22 **ESO Review** (Signature/Z#/Date) **If Required** SEE ESO E-MAIL **SME Review** (Signature/Z#/Date) **If Required** SEE IH SAFETY REVIEW
IWD Type ☒ Moderate-Hazard ☐ High-Hazard/Complex ☐ Standing IWD	Date when RLM re-approval is required 6/30/24 Other Conditions for Re-Approval HAZARD ; Scope Changes (Print) Name of Alternate PIC: Mario Ulibarri Z#204536 Name of Alternate PIC: Victor Mitchell Z#203921 Name of Alternate PIC: Scott Gould Z#326975 Name of Alternate PIC: Ryan Campbell Z#319242 Name of Alternate PIC: Arthur Trujillo Z#114452 Name of Alternate PIC: Alfonso Bernal Z#199770 Name of Alternate PIC: Jeffrey Woosley Z#355158 Name of Alternate PIC: Santiago Jaramillo Z#122002 Name of Alternate PIC: Patrick Salazar Z#299756 Name of Alternate PIC: George Staton Z#207210 Name of Alternate PIC: Thomas Alton Z#175267 Name of Alternate PIC: Nicholas Sage Z#362605 Name of Alternate PIC: Brian McAfee Z#360981 Name of Alternate PIC:	Any required classification review completed, NOT UCNI Reviewing Official: Martin Buzzell/303827/MSS-WC Date: May 9, 2022 Guidance Used: CG-SS-5 CH 1, DOE / OC 7/16

Nowakowski, Martin Anthony

From: Komathy, Josh
Sent: Wednesday, May 11, 2022 8:05 AM
To: Nowakowski, Martin Anthony
Cc: Ferran, Donna M; Monnet-Hannon, Amber Nichole; wwc55@lanl.gov
Subject: RE: ESO review of IWD
Attachments: 2193 for PF-6 boilers_signed.pdf

Martin,

I have reviewed the PM / IWD related to an ESO review for 550006 (A) FIRESIDE/WATERSIDE BOILER HOT WATER MAINT MODEL # 431775-06 and I approve with no comments at this time. Attached is the signed 2193 for this work.

Regards,
Josh

From: Nowakowski, Martin Anthony <manow@lanl.gov>
Sent: Monday, May 9, 2022 2:03 PM
To: Komathy, Josh <jgkomathy@lanl.gov>
Cc: Ferran, Donna M <donnaf@lanl.gov>; Monnet-Hannon, Amber Nichole <monnet@lanl.gov>; wwc55@lanl.gov
Subject: ESO review of IWD

Please provide ESO review of IWD for:

- Doc # & Rev: 713023-01 (model # 431775-06)
- Doc Title: **550006 (A) FIRESIDE/WATERSIDE BOILER HOT WATER MAINT**
- Area That Needs Review (i.e. TA-55, RLW, etc.): 550006
- DAR #:N/A
- Area (i.e. 100, 200, 300, 400) ***or*** Function (Facility Maintenance or Construction):
- Type of Review Requested (RP, IH): ESO REVIEW
- SME/POC w/Contact info: Lee Romero

I included the PM model, IWD, PMI 403-A.006, SDS sheets

Please contact for any questions.
thanks

Martin Nowakowski

Phone: 665-2822

Industrial Hygiene and Safety Review (DESHF-55/CMR)

Document Title: 550006 (A) FIRESIDE/WATERSIDE BOILER HOT WATER MAINT				
Document Number: 431775-06	**Revision or Issue Date:**			
Document Point of Contact: Martin Nowakowski Z# 194072				
Section 1: Activity/Document Screening			Y	N
1. Is the job classified as high hazard?				✓
2. Are multiple organizations involved?				✓
3. Is an IH/S designated posting required?				✓
4. Is work taking place in a Permit Required Confined Space?				✓
5. Is medical monitoring, sampling, or any type of IH/S monitoring required?				✓
6. Is IH/S requiring respiratory protection?				✓
Continue with remainder of form 1) if any "yes" answers above, or 2) at reviewer's discretion.				
Section 2: Hazard Review			Y	N
1. The Hazard Assessment has been completed and documented per P300?			✓	
2. The appropriate IH/S Subject Matter Experts have been engaged per identified hazards?			✓	
3. Is an IH/S designated posting required?				✓
Section 3: Activity Review		NA	Y	N
1. Is required IH/S sampling specifically identified?		✓		
2. Are all required permits specifically identified?			✓	
3. Are all posting requirements specifically identified?			✓	
4. Are release conditions specifically identified for the required postings?			✓	
5. Are all medical monitoring requirements identified?		✓		
6. Is required PPE specifically identified? (E.g., fire resistant clothing for sparking)			✓	
7. Are administrative & engineering controls identified and when to be used? (E.g., LEV during torch cutting or welding)			✓	
8. Are IH/S requirements for sequential tasks specifically identified? (E.g, when outer PPE layer(s) must be removed period to leaving an enclosure)			✓	
9. Is a single PIC identified prior to work when multiple organizations are involved?			✓	
10. Will controls introduce new hazards or exacerbate existing conditions? (E.g., heat stress)				✓
If yes, have those hazards been addressed?				
11. Have co-located personnel been identified and hazard communication indicated?			✓	
12. Are hazards from co-located activities anticipated and addressed?			✓	
13. Are hold points added when authorization to proceed is necessary? (E.g., additional or different controls to be determined pending sampling results)		✓		

Section 4: Issues and Comments

Complete this section for comments or any "no" questions in sections 2 and 3. Attach another sheet if needed.

Question	Issue/Comment
2.3	No IH/S designated posting required.
3.10	LO/TO controls in place per P101-3, Shock/Arc Flash Hazard controls in place per Form 2193.

Approval/Signature (IH/S Use Only) *(Signature indicates issues/comments are satisfactorily resolved; IWD is approved.)*

MICHAEL SLINKARD (Affiliate)

Digitally signed by MICHAEL SLINKARD (Affiliate)
Date: 2022.05.11 08:44:49 -06'00'

Cy: Planner
Document Requester

Los Alamos NATIONAL LABORATORY EST 1943	*Preventive Maintenance Instruction* Low- and High-Pressure Steam Boiler and Low-Temperature Water Heating Boiler Inspection, Testing, and Maintenance **403-A.006: Hot Water Boiler Yearly Fireside/Waterside Inspection and Maintenance**
Work Order No.: 716023-01	Equipment ID No.: B-612

Instructions: Enter the requested information. All items marked **S** or **Y** are satisfactory. Document all items marked **U**, **N**, or **N/A** in the Remarks section below, noting the step number and reason. Notify the foreman or supervisor of problems involving imminent danger.

TA: 55 Building: PF6 Room: 103

Date Inspected: 6 / 6 / 22 Inspectors: Timothy FANG 10

1.0 PRE-MAINTENANCE ACTIVITIES

NOTE Preoperational and pre-maintenance activities shall be conducted per the work order package, e.g., lockout/tagout, permits, special instructions, etc.

! WARNING If purging of gas lines will be required during this maintenance, ensure that the purging activity is addressed in the Integrated Work Document (IWD). The following must be addressed (see Master Specification 23 1123):

1. Purged fuel gases shall be directly vented to a safe location outdoors, away from personnel and ignition sources. This may be accomplished through permanent piping or temporary piping or hosing.
2. If it is not possible to vent purged gases outdoors, the following conditions must be met:
   a. Purging activity must be approved by the LANL Fire Marshal based on a documented justification detailing why outdoor venting is not possible and IWD.
   b. Gas concentration in the space to which the purge is vented shall be maintained at no more than 25% of the Lower Explosive Limit (LEL). For natural gas, the LEL is a concentration of 5% in air or 50,000 ppm. Therefore a maximum concentration of 12,500 ppm is allowed for natural gas. The concentration may be controlled by providing adequate ventilation or by limiting the amount of purge gas.
   c. Combustible gas detectors shall be used during the purging operation to monitor the gas concentration.
   d. Nonessential personnel shall be evacuated from the vicinity (including adjacent spaces) during the purging operation.
   e. Ignition sources in the purging space shall be controlled or eliminated.

NOTE All repair work, adjustments, or the replacement of parts shall be done in accordance with the manufacturer's procedures, specifications, recommendations, and instructions.

Remarks: NONE

Work Order No.: 716023-01 Equipment ID No.: B-602

1.1	Notify maintenance coordinator (MC) that work will be in progress on the boiler system.		Initials: TL

2.0 MAINTENANCE

NOTE These selected hot water boilers are mainly boilers with power burners that have refractory in front and rear flue doors or have heat extractors in the fire-tubes as are found in most one-pass boilers (Sellers). Hot water heating boilers with atmospheric burners generally require minimal fireside preventative maintenance. Contact the MSS-MP Boiler subject matter expert (SME) at 7-8550 with questions or concerns.

2.1	Lock and tag out electrical and all associated valves on boiler and shut off gas supply.		Initials: TL
2.2	Cool boiler, open air cock, and drain the boiler.		Initials: TL
2.3	Perform an internal and external inspection after thorough cleaning.	S ☐ U ☐ N/A ☒	Initials: N/A
2.3.1	Check the fireside furnace and fire-tubes for any evidence of soot formation or corrosion.	S ☒ U ☐ N/A ☐	Initials: TL
2.3.2	Brush and vacuum furnace and fire-tubes if such conditions exist.		Initials: TL
2.3.3	Perform hydrostatic test based on the boiler's Maximum Allowable Working Pressure and/or facility potable water pressure as long as the potable water pressure is at least 30 psi over boiler operating pressure.	S ☐ U ☐ N/A ☒	Initials: N/A
2.3.4	Note if any boiler tubes and/or fittings are leaking, and repair as required. For any major repairs (determined by the SME), request a work order for the repairs from the MC.		Initials: TL

Remarks: STEPS 2.3 UNABLE TO PERFORM DUE TO WATER VALVES LEAKING BY AND NOT HOLDING

STEP 2.3.3 NO HYDRO TEST PERFORMED

Work Order No.: 716023-01 Equipment ID No.: B-602

2.3.5 On one-pass boilers (Sellers), check condition of all heat extractors.	S ☒ U ☐ N/A ☐	Initials:
2.3.6 Check refractory materials.	S ☒ U ☐ N/A ☐	Initials:
2.3.7 Replace if needed.		Initials:
2.4 Perform maintenance on low-water cutoff float chamber and water feeder. Disassemble to ensure freedom from obstruction and proper functioning of the working parts.		Initials:
2.5 Perform routine burner maintenance.		Initials:
2.5.1 Observe temperature and operating pressure and general conditions.	S ☒ U ☐ N/A ☐	Initials:
2.5.2 Fire and cycle the burner.		Initials:
2.6 Perform routine maintenance of circulating pump and expansion pump equipment.		Initials:
2.6.1 Observe condition of expansion tank.	S ☒ U ☐ N/A ☐	Initials:
2.6.2 Drain expansion tank if it is of a non-bladder type and refill to reestablish an air cushion.	S ☒ U ☐ N/A ☐	Initials:
2.6.3 Check the air pressure on the bladder-type expansion tanks.	S ☒ U ☐ N/A ☐	Initials:

Remarks: NONE

Work Order No.: 716023-01 Equipment ID No.: B-602

2.6.4 Observe operation of circulating pumps.	S ☒ U ☐ N/A ☐	Initials: TL
2.6.5 Lubricate pump motors.		Initials: TL
2.7 Perform routine maintenance of entire combustion control equipment.		Initials: TL
2.7.1 Check gas/air linkages and moving parts (on power burners that modulate) for positioning, tightness, and binding.	S ☒ U ☐ N/A ☐	Initials: TL
2.7.2 Adjust air/fuel mixture as needed.		Initials: TL
2.7.3 Test flame detection devices on boilers with flame scanners.	S ☒ U ☐ N/A ☐	Initials: TL
2.7.4 Remove the flame scanner with the burner firing.		Initials: TL
NOTE The burner should shut off as a flame failure condition.		
2.7.5 Clean the flame scanner, reinstall and test programmer.		Initials: TL
2.7.6 Check for proper operation as boiler goes through a firing cycle and light-off.	S ☒ U ☐ N/A ☐	Initials: TL
2.7.7 Check all electrical control and circuitry.	S ☒ U ☐ N/A ☐	Initials: TL

Remarks: NONE

Work Order No.: 716023-01 Equipment ID No.: B-602

2.7.8	Inspect for cracked mercury tubes, separation of mercury, cracked insulators (probe type), jumper tube conditions, loose connections, poor or deteriorated wiring, improperly used bypass switches, cutoff switches wired in parallel, shut-offs installed at improper levels, wedges behind mercury tubes.	S ☐ U ☐ N/A ☒	Initials:
2.7.9	Observe operation of forced draft fan motors on boilers with power burners and induced draft fan motors on horizontal breeching where applicable.	S ☒ U ☐ N/A ☐	Initials:
2.7.10	Lubricate fan motors where necessary.		Initials:
2.8	Perform combustion and draft tests.		Initials:
2.8.1	Visually inspect combustion.	S ☒ U ☐ N/A ☐	Initials:
NOTE	Changes in flame shape, color, and sound are among early indicators of potential combustion-related problems. Changes may be due to changes in fuel pressure or gas/air linkage movement.		
2.9	Perform safety relief valve(s) pop test.	S ☒ U ☐ N/A ☐	Initials:
2.9.1	Check pressure-reducing valve.	S ☒ U ☐ N/A ☐	Initials:
2.9.2	Replace the strainer in the valve if needed.		Initials:
2.10	Perform slow drain test of low-water cutoff.	S ☒ U ☐ N/A ☐	Initials:

Remarks: STEP 2.7.8 N/A NO MERCURY TUBES.

Work Order No.: 716023-01 Equipment ID No.: B-602

2.11 Inspect gas piping for proper support and tightness.	S ☒ U ☐ N/A ☐	Initials:
2.11.1 Inspect fuel supply system and gas controls.	S ☒ U ☐ N/A ☐	Initials:
2.11.2 Leak check gas controls and associated gas piping with a gas detector or soap suds.	S ☒ U ☐ N/A ☐	Initials:
2.12 Inspect boiler room ventilation louvers and intake.	S ☒ U ☐ N/A ☐	Initials:
2.12.1 Listen for any unusual noises or conditions and correct as necessary.	S ☒ U ☐ N/A ☐	Initials:
2.12.2 Report any needed corrections to the MC for corrective maintenance.		Initials:
2.12.3 Check combustion air supply openings to ensure that they are not closed or stopped up.	S ☒ U ☐ N/A ☐	Initials:
2.12.4 Inspect conditions of stacks and rain caps.	S ☒ U ☐ N/A ☐	Initials:
2.12.5 Inspect flue door gaskets to ensure they are in good condition, and properly secured.	S ☒ U ☐ N/A ☐	Initials:
2.12.6 Replace if necessary.		Initials:

Remarks: NONE

Work Order No.: 716023-01 Equipment ID No.: B-602

3.0 POST-MAINTENANCE ACTIVITIES

NOTE Post-maintenance activities shall be conducted in accordance with the work order package instructions (e.g., lockout/tagout, special instructions, etc.).

3.1	Close and secure front and rear flue doors.		Initials:
3.2	Hook up all associated piping.		Initials:
3.3	IF water makeup feeds boiler directly, THEN open by-pass valve to refill boiler, AND close by-pass valve when boiler reaches operating pressure. -or- IF water makeup does NOT feed boiler directly, THEN open supply and return valves to refill boiler.	By-pass ☒ -or- Supply/ Return ☐	Initials:
3.4	Fire up boiler and check for air, gas, and water leaks.	S ☒ U ☐ N/A ☐	Initials:
3.5	Check gas/air linkages and moving parts (on power burners that modulate) for positioning, tightness, and binding.	S ☒ U ☐ N/A ☐	Initials:
3.6	Check pilot burners and ignition equipment for proper condition and adjustment.	S ☒ U ☐ N/A ☐	Initials:
3.7	Visually check burner for proper combustion.	S ☒ U ☐ N/A ☐	Initials:
3.8	Record all mechanical maintenance data, testing data, and other notable items.		Initials:

NOTE Combustion analysis is verifiable only with a flue gas analyzer and is performed mainly on boilers with power burners.

Remarks: NONE

Work Order No.: 716023-01 Equipment ID No.: B-602

3.9	Test water for proper chemical levels. Test and treat water as defined on Datasheet 403-A.002.	S ☒ U ☐ N/A ☐	Initials: TF
3.10	Record all mechanical maintenance data, testing data, and other notable items.		Initials: TF
3.11	Notify MC that work on the boiler system is complete.		Initials: TF

Name of Craft Worker: Timothy Fangio Z Number: 282917

Signature: TFangio Date: 7/29/22

Name of Craft Worker: _____ Z Number: _____

Signature: _____ Date: ___/___/___

Foreman Verification: Timothy Fangio Z Number: 282917

Signature: TFangio Date: 7/29/22

Lee M Romero
114748
7-29-22

Remarks: See work DOC

Los Alamos NATIONAL LABORATORY EST. 1943	*Preventive Maintenance Instruction* Low- and High-Pressure Steam Boiler and Low-Temperature Water Heating Boiler Inspection, Testing, and Maintenance **403-A.006: Hot Water Boiler Yearly Fireside/Waterside Inspection and Maintenance**
Work Order No.: #716023 01	Equipment ID No.: B-603

Instructions: Enter the requested information. All items marked **S** or **Y** are satisfactory. Document all items marked **U**, **N**, or **N/A** in the Remarks section below, noting the step number and reason. Notify the foreman or supervisor of problems involving imminent danger.

TA: 55 Building: PF-6 Room: 103

Date Inspected: 7 / 29 / 22 Inspectors: Timothy FANGUE

1.0 PRE-MAINTENANCE ACTIVITIES

NOTE Preoperational and pre-maintenance activities shall be conducted per the work order package, e.g., lockout/tagout, permits, special instructions, etc.

! WARNING If purging of gas lines will be required during this maintenance, ensure that the purging activity is addressed in the Integrated Work Document (IWD). The following must be addressed (see Master Specification 23 1123):

1. Purged fuel gases shall be directly vented to a safe location outdoors, away from personnel and ignition sources. This may be accomplished through permanent piping or temporary piping or hosing.
2. If it is not possible to vent purged gases outdoors, the following conditions must be met:
   a. Purging activity must be approved by the LANL Fire Marshal based on a documented justification detailing why outdoor venting is not possible and IWD.
   b. Gas concentration in the space to which the purge is vented shall be maintained at no more than 25% of the Lower Explosive Limit (LEL). For natural gas, the LEL is a concentration of 5% in air or 50,000 ppm. Therefore a maximum concentration of 12,500 ppm is allowed for natural gas. The concentration may be controlled by providing adequate ventilation or by limiting the amount of purge gas.
   c. Combustible gas detectors shall be used during the purging operation to monitor the gas concentration.
   d. Nonessential personnel shall be evacuated from the vicinity (including adjacent spaces) during the purging operation.
   e. Ignition sources in the purging space shall be controlled or eliminated.

NOTE All repair work, adjustments, or the replacement of parts shall be done in accordance with the manufacturer's procedures, specifications, recommendations, and instructions.

Remarks: UNABLE TO PERFORM (A) PM FIRESIDE/WATERSIDE ON B-603 DUE TO B-602 NOT BEING FULLY OPERATIONAL AT THIS TIME.

Lee Romero 114743 7/29/22

Work Order No. #716023 01 Equipment ID No.: B-603

1.1	Notify maintenance coordinator (MC) that work will be in progress on the boiler system.		Initials: TV

2.0 MAINTENANCE

NOTE These selected hot water boilers are mainly boilers with power burners that have refractory in front and rear flue doors or have heat extractors in the fire-tubes as are found in most one-pass boilers (Sellers). Hot water heating boilers with atmospheric burners generally require minimal fireside preventative maintenance. Contact the MSS-MP Boiler subject matter expert (SME) at 7-8550 with questions or concerns.

2.1	Lock and tag out electrical and all associated valves on boiler and shut off gas supply.		Initials:
2.2	Cool boiler, open air cock, and drain the boiler.		Initials:
2.3	Perform an internal and external inspection after thorough cleaning.	S ☐ U ☐ N/A ☐	Initials:
2.3.1	Check the fireside furnace and fire-tubes for any evidence of soot formation or corrosion.	S ☐ U ☐ N/A ☐	Initials:
2.3.2	Brush and vacuum furnace and fire-tubes if such conditions exist.		Initials:
2.3.3	Perform hydrostatic test based on the boiler's Maximum Allowable Working Pressure and/or facility potable water pressure as long as the potable water pressure is at least 30 psi over boiler operating pressure.	S ☐ U ☐ N/A ☐	Initials:
2.3.4	Note if any boiler tubes and/or fittings are leaking, and repair as required. For any major repairs (determined by the SME), request a work order for the repairs from the MC.		Initials:

Remarks: STEPS 2.0 – 2.3.4 UNABLE TO PERFORM DUE TO B-602 NOT BEING FULLY OPERATIONAL AT THIS TIME.

2.3.5 On one-pass boilers (Sellers), check condition of all heat extractors.	S ☐ U ☐ N/A ☐	Initials:
2.3.6 Check refractory materials.	S ☐ U ☐ N/A ☐	Initials:
2.3.7 Replace if needed.		Initials:
2.4 Perform maintenance on low-water cutoff float chamber and water feeder. Disassemble to ensure freedom from obstruction and proper functioning of the working parts.		Initials:
2.5 Perform routine burner maintenance.		Initials:
2.5.1 Observe temperature and operating pressure and general conditions.	S ☐ U ☐ N/A ☐	Initials:
2.5.2 Fire and cycle the burner.		Initials:
2.6 Perform routine maintenance of circulating pump and expansion pump equipment.		Initials:
2.6.1 Observe condition of expansion tank.	S ☐ U ☐ N/A ☐	Initials:
2.6.2 Drain expansion tank if it is of a non-bladder type and refill to reestablish an air cushion.	S ☐ U ☐ N/A ☐	Initials:
2.6.3 Check the air pressure on the bladder-type expansion tanks.	S ☐ U ☐ N/A ☐	Initials:

Remarks: STEPS 2.3.5 – 2.6.3 UNABLE TO PERFORM DUE TO B-602 NOT BEING FULLY OPERATIONAL AT THIS TIME.

Work Order No.: #716023 01 Equipment ID No.: B-603

2.6.4	Observe operation of circulating pumps.	S ☐ U ☐ N/A ☐	Initials:
2.6.5	Lubricate pump motors.		Initials:
2.7	Perform routine maintenance of entire combustion control equipment.		Initials:
2.7.1	Check gas/air linkages and moving parts (on power burners that modulate) for positioning, tightness, and binding.	S ☐ U ☐ N/A ☐	Initials:
2.7.2	Adjust air/fuel mixture as needed.		Initials:
2.7.3	Test flame detection devices on boilers with flame scanners.	S ☐ U ☐ N/A ☐	Initials:
2.7.4	Remove the flame scanner with the burner firing.		Initials:
NOTE	The burner should shut off as a flame failure condition.		
2.7.5	Clean the flame scanner, reinstall and test programmer.		Initials:
2.7.6	Check for proper operation as boiler goes through a firing cycle and light-off.	S ☐ U ☐ N/A ☐	Initials:
2.7.7	Check all electrical control and circuitry.	S ☐ U ☐ N/A ☐	Initials:

Remarks: STEPS 2.6.4 – 2.7.7 UNABLE TO PERFORM DUE TO B-602 NOT BEING FULLY OPERATIONAL AT THIS TIME.

Work Order No.: ~~#716023 01~~ Equipment ID No.: B-603

2.7.8 Inspect for cracked mercury tubes, separation of mercury, cracked insulators (probe type), jumper tube conditions, loose connections, poor or deteriorated wiring, improperly used bypass switches, cutoff switches wired in parallel, shut-offs installed at improper levels, wedges behind mercury tubes.	S ☐ U ☐ N/A ☐	Initials:
2.7.9 Observe operation of forced draft fan motors on boilers with power burners and induced draft fan motors on horizontal breeching where applicable.	S ☐ U ☐ N/A ☐	Initials:
2.7.10 Lubricate fan motors where necessary.		Initials:
2.8 Perform combustion and draft tests.		Initials:
2.8.1 Visually inspect combustion.	S ☐ U ☐ N/A ☐	Initials:
NOTE Changes in flame shape, color, and sound are among early indicators of potential combustion-related problems. Changes may be due to changes in fuel pressure or gas/air linkage movement.		
2.9 Perform safety relief valve(s) pop test.	S ☐ U ☐ N/A ☐	Initials:
2.9.1 Check pressure-reducing valve.	S ☐ U ☐ N/A ☐	Initials:
2.9.2 Replace the strainer in the valve if needed.		Initials:
2.10 Perform slow drain test of low-water cutoff.	S ☐ U ☐ N/A ☐	Initials:

Remarks: STEPS 2.7.8 – 2.10 UNABLE TO PERFORM DUE TO B-602 NOT BEING FULLY OPERATIONAL AT THIS TIME.

Work Order No.: ~~#7180023 01~~ Equipment ID No.: B-603

2.11 Inspect gas piping for proper support and tightness.	S ☐ U ☐ N/A ☐	Initials:
2.11.1 Inspect fuel supply system and gas controls.	S ☐ U ☐ N/A ☐	Initials:
2.11.2 Leak check gas controls and associated gas piping with a gas detector or soap suds.	S ☐ U ☐ N/A ☐	Initials:
2.12 Inspect boiler room ventilation louvers and intake.	S ☐ U ☐ N/A ☐	Initials:
2.12.1 Listen for any unusual noises or conditions and correct as necessary.	S ☐ U ☐ N/A ☐	Initials:
2.12.2 Report any needed corrections to the MC for corrective maintenance.		Initials:
2.12.3 Check combustion air supply openings to ensure that they are not closed or stopped up.	S ☐ U ☐ N/A ☐	Initials:
2.12.4 Inspect conditions of stacks and rain caps.	S ☐ U ☐ N/A ☐	Initials:
2.12.5 Inspect flue door gaskets to ensure they are in good condition, and properly secured.	S ☐ U ☐ N/A ☐	Initials:
2.12.6 Replace if necessary.		Initials:

Remarks: STEPS 2.11 – 2.12.6 UNABLE TO PERFORM DUE TO B-602 NOT BEING FULLY OPERATIONAL AT THIS TIME.

Work Order No.: #716023 01 Equipment ID No.: B-603

3.0 POST-MAINTENANCE ACTIVITIES

NOTE Post-maintenance activities shall be conducted in accordance with the work order package instructions (e.g., lockout/tagout, special instructions, etc.).

3.1	Close and secure front and rear flue doors.		Initials: ____
3.2	Hook up all associated piping.		Initials: ____
3.3	IF water makeup feeds boiler directly, THEN open by-pass valve to refill boiler, AND close by-pass valve when boiler reaches operating pressure. -or- IF water makeup does NOT feed boiler directly, THEN open supply and return valves to refill boiler.	By-pass ☐ -or- Supply/ Return ☐	Initials: ____
3.4	Fire up boiler and check for air, gas, and water leaks.	S ☐ U ☐ N/A ☐	Initials: ____
3.5	Check gas/air linkages and moving parts (on power burners that modulate) for positioning, tightness, and binding.	S ☐ U ☐ N/A ☐	Initials: ____
3.6	Check pilot burners and ignition equipment for proper condition and adjustment.	S ☐ U ☐ N/A ☐	Initials: ____
3.7	Visually check burner for proper combustion.	S ☐ U ☐ N/A ☐	Initials: ____
3.8	Record all mechanical maintenance data, testing data, and other notable items.		Initials: ____

NOTE Combustion analysis is verifiable only with a flue gas analyzer and is performed mainly on boilers with power burners.

Remarks: STEPS 3.0 – 3.8 UNABLE TO PERFORM DUE TO B-602 NOT BEING FULLY OPERATIONAL AT THIS TIME.

Work Order No.: #716025 01 Equipment ID No.: B-603

3.9	Test water for proper chemical levels. Test and treat water as defined on Datasheet 403-A.002.	S ☐ U ☐ N/A ☐	Initials:
3.10	Record all mechanical maintenance data, testing data, and other notable items.		Initials:
3.11	Notify MC that work on the boiler system is complete.		Initials:

Name of Craft Worker: TIMOTHY FANGIO Z Number: 282917

Signature: [signature] Date: 7/29/22

Name of Craft Worker: _____ Z Number: _____

Signature: _____ Date: ___/___/___

Foreman Verification: TIMOTHY FANGIO Z Number: 282917

Signature: [signature] Date: 7/29/22

Remarks: STEPS 3.9 - 3.11 UNABLE TO PERFORM DUE TO B-602 NOT BEING FULLY OPERATIONAL AT THIS TIME.

Los Alamos NATIONAL LABORATORY EST. 1943

Form 2193

Electrical Risk/Hazard Assessment Record

1. Description of Work to be Performed ☐ NA*

Annual fireside / waterside preventative maintenance on boilers in PF-6. Highest incident energy will be used for both pieces of equipment.

2 Equipment ID(s)	TA	Building	Room(s)
B-602 (rm101,MCC-603C-A2R) / B-603 (rm101,MCC-603D-B1L)	55	6	103

3. P101-13, *Electrical Safety Program*, Hazard Class(es)
1.3b

4. Type of Work
☒ Mode 1 ☐ Mode 2 ☐ Mode 3 ☐ Equipment Operation ☐ NA*

5. Equipment Condition(s)
☒ Maintained ☐ Properly Installed ☐ No Evidence of Impending Failure ☐ NA*

6. Environmental Conditions
☒ Dry ☐ Damp ☐ Wet ☐ Confined Space ☐ Elevated Work Surface ☐ NA*

7. Risk Level per P101-13 (See Attachment A, Sections 4.5.2 through 4.5.4)
☐ Low ☒ Moderate ☐ High ☐ NA*

8. Electrical Worker(s)
☐ Alone ☒ Two-Person ☐ Safety Watch ☐ NA*

9. Results of Thermal Risk Assessment (Applies when there is no shock and/or arc flash hazard but there is exposure to a thermal burn [e.g., high current, low voltage]) (See P101-13, Attachment A, Section 4.8):
☒ No Thermal Hazard
☐ No Metallic Items ☐ Heavy Duty Leather Gloves ☐ NA*
☐ Listed Insulated Tools ☐ Safety Glasses or Goggles ☐ Non-Sparking Tools
Other PPE:

10. Results of the Shock Risk Assessment
☐ No Shock Hazard (Equipment <50 VAC or <100 VDC)
Voltage: 480 ☒ AC ☐ DC
Limited Approach Boundary: 3 ft 6 in.
Restricted Approach Boundary: 1 ft 0 in. ☐ Avoid Contact
Dielectric PPE ☐ NA*
☐ Class 00 (500 VAC/750 VDC) ☒ Class 0 (1,000 VAC/1,500 VDC)
☐ Class 1 (7,500 VAC/11,250 VDC) ☐ Class 2 (17,000 VAC/25,500 VDC)
☐ Class 3 (26,000 VAC/39,750 VDC) ☐ Class 4 (36,000 VAC/54,000 VDC)
☐ Gloves ☐ Boots ☐ Blankets ☐ Sleeves ☐ Mats
Other PPE:

Must be documented in the Integrated Work Document (IWD).

11. Results of Arc Flash Risk Assessment:

☐ No Arc Flash Hazard (Equipment <240 VAC supplied by <125 kVA transformer **or** ≤500 A DC)

Method Used:

☐ Facility Electrical Hazard Analysis Tool ☐ Arc Flash Label Information ☐ NFPA 70E (D.2 Lee)

☐ NFPA 70E (D.3 Doughty) ☐ NFPA 70E (D.4 IEEE 1584)/IEEE 1584 ☐ NFPA 70E (D.5 Doan DC)

☐ EFCOG Doan ☐ EFCOG Non-Linear ☒ Other: Facility SKM calculation

Arc Flash Boundary: 2 ft 8 in. Incident Energy: 3.0 cal/cm^2 Working Distance: 18 in.

Arc Flash PPE: (AN-As Needed, AR-Arc Rated) ☐ NA*

☐ <1.2 cal/cm^2 **CATEGORY 0**

Non-melting or untreated natural fiber long-sleeve shirt and long pants, safety glasses or safety goggles, hearing protection, and heavy duty leather gloves or dielectric gloves with leather protectors.

☒ [≥1.2–4] cal/cm^2 1.2 cal/cm^2 **CATEGORY 1** *(8 cal/cm^2 must be specified for LOG crafts)*

AR long-sleeve shirt and pants, or AR coverall; AR face shield and AR balaclava, or AR flash suit hood; AR jacket, parka, rainwear, or hard hat liner (AN); Hard hat, safety glasses or safety goggles, hearing protection, and heavy duty leather gloves, or AR gloves, or dielectric gloves with leather protectors.

☐ [≥4–8] cal/cm^2 _____ cal/cm^2 **CATEGORY 2** *(8 cal/cm^2 must be specified for LOG crafts)*

AR long-sleeve shirt and pants, or AR coverall; AR face shield and AR balaclava, or AR flash suit hood; AR jacket, parka, rainwear, or hard hat liner (AN); Hard hat, safety glasses or safety goggles, hearing protection, leather footwear and heavy duty leather gloves, or AR gloves, or dielectric gloves with leather protectors.

☐ [≥8–25] cal/cm^2 _____ cal/cm^2 **CATEGORY 3** *(25 or 40 cal/cm^2 must be specified for LOG crafts)*

AR long-sleeve shirt and pants, or AR coverall; AR flash suit hood; AR jacket, parka, rainwear, or hard hat liner (AN); Hard hat, safety glasses or safety goggles, hearing protection, leather footwear and AR gloves, or dielectric gloves with leather protectors.

☐ [≥25–40] cal/cm^2 _____ cal/cm^2 **CATEGORY 4** *(40 cal/cm^2 must be specified for LOG crafts)*

AR long-sleeve shirt and pants, or AR coverall; AR flash suit hood; AR jacket, parka, rainwear, or hard hat liner (AN); Hard hat, safety glasses or safety goggles, hearing protection, leather footwear and AR gloves, or dielectric gloves with leather protectors.

Other PPE:

12. Additional Risk Control Measures: ☐ NA*

Shock hazard, use barricades as needed.

Must be documented in the Integrated Work Document (IWD).

Preparer (print name) Martin Nowakowski	Z Number 194072	Organization MSS-WC	Phone 5-2822	Date 10MAY2022
Qualified Person or Engineer providing calculations (print name) Josh Komathy	Z Number 354836	Organization PFE-CV	Phone 7-0146	Date 10MAY2022
Electrical Safety Officer (print name) Josh Komathy	Z Number 354836	Organization PFE-CV	Phone 7-0146	Date 10MAY2022
Electrical Safety Officer Signature JOSHUA KOMATHY (Affiliate)	Digitally signed by JOSHUA KOMATHY (Affiliate) Date: 2022.05.11 08:04:48 -06'00'			

Los Alamos NATIONAL LABORATORY EST. 1943

TA-55 Preventive Maintenance Close Out Sheet

Work Order No.: #716023 01

Instructions: Enter the requested information prior to submitting PM package for closeout.

Maintenance Coordinator:

- Is the equipment listed for this PM: ☐ ML1 ☐ ML2 ☐ ML3 ☑ ML4
- If deficiencies were noted, provide the FSR # and WO # created to correct the PM deficiency:

FSR #: TBD and WO #: TBD

MC Signature/Z# & Date [signature] 299913 7.29.22

MC will create WO# once walkdown by engr is completed

System Engineer:

If corrective action is needed, must it be completed prior to next PM performance: ☑ Yes ☐ No

SE Signature/Z# & Date Lee M Romero 114748 7/29/22

Craft/PM Superintendent:

Was Material used from a TA55 Warehouse? ☐ Yes ☑ No

If "Yes," a Material Pick list must be included in the PM work package.

Signature/Z# & Date [signature] 122002 7-29-22

Verification signatures:

PM Coordinator Signature/Z# & Date [signature] 357128 9/14/22

* FSR submitted to replace B602 & B-603 isolation valves.

+ Waiting for gas regulator rebuild-kits. Will perform Annual FS/WS @S PMT for gas regulator repair.

Lee M Romero
114748 7/29/22

Los Alamos NATIONAL LABORATORY EST. 1943

AP-WORK-002: Attachment 11
Maintenance and Site Services
Work Completion Form

Work Order/Task: #716023 01

Start Date: 6-6-22	Completion Date: 7-29-22

SUMMARIZE THE WORK PERFORMED

Date	
7-29-22	PERFORMED (A) PM ON B-602 EXCEPT FOR TAS WATERSIDE DUE TO VALVES LEAKING BY UNABLE TO PERFORM (A) ON B-603 DUE TO B-602 NOT BEING FULLY OPERATIONAL.

FOR CORRECTIVE WORK – WHAT FAILED AND WHAT WAS FIXED

Failure Mode Root Cause Code (Circle Root Causes that Apply)

Failure Mode		
NONE	Circuit Breaker Tasks	System Restoration Issues
	Digital Component Tasks	Pump Related Tasks
	Doors/Hatches	Procedure Use
	Electrical Determinations	Rigging/Lifting Tasks
	Failed Surveillance	Electrical Switches
	Fastener Tasks	Troubleshooting Issues
	FME Tasks	Valve Related Tasks
	I&C Calibration/Setpoints	Welding
	Mechanical Connections	Work Instruction Issues
	Other (Specify Root Cause)	NONE
Failure Mode Comments	(Add Details)	

Rework Mode (Circle Rework Causes that Apply)

Rework		
NONE	Cause Indeterminate	Life Cycle Management
	Design Deficiency	PM Deficiency
	Intentionally Abbreviated Maintenance	Rule Base Human Performance Deficiency
	Instructional Deficiency	Skill Base Human Performance Deficiency
	Knowledge Based Human Performance Error	Tools/Equipment/Lifts
	Deficiency	Vendor Deficiency
	Operational Deficiency	Work Management Deficiency
		Weather
	Other (Specify Rework Mode)	
Comments	NONE	

#716023 01

FOR PMs – SUMMARIZE AS FOUND AND AS LEFT CONDITIONS BELOW		
	As Found Conditions (Circle Conditions that Apply)	
As found	Unanticipated Failure	Within Tolerance
	Failure Not Normal Wear	Satisfactory
	Failure Normal Wear	Superior, Like New
	Outside of Tolerance	Not Applicable
	Reliability Degraded	
	Other (Specify As Found Condition)	
Comments	SEE WORK DOC	
As left	—	
Parts/Repairs	NONE	
Read/meas.	N/A	
Post test info.	N/A	
Problems Encountered (delays, safety, etc.):		
	Delay Codes (Circle Codes that Apply) NONE	
Delay	Access	Operations
	Equipment	RCT Availability
	IWD Workability	Safety Pause
	Material	Weather
		# of Hours_____ Date(s)_____
	Other (Specify Reason for Delay)	
Comments	NONE	
Lessons Learned/Recommendations:		
	NONE	
Name: TIMOTHY FANJOY **Z#** 282917 **Signature:**		**Date:** 7/29/22

#716023 01

PIC/SUPT

☑ PM has been completed in its entirety and ready for closure.

122002
7-29-22

IF A PM COULD NOT BE COMPLETED:

☐ Percentage complete is _____%

☐ Sections that did not work and need to be rescheduled

_____

Reasons why:

MAINTENANCE COORIDATOR/AREA WORK COORDINATOR

Work Package is Complete and may be closed out: YES ☑ NO ☐

IF no: State Reason

7.29.22
R299913

Additional Work Needed? ☑ YES ☐ NO

Document UP/WO/FSR Number: WO# will be written after walk by engineer

ENGINEERING (FOR MD and CD Work Orders)

IF a configuration baseline has been changed, THEN indicate the changes are to be incorporated into the following documents and/or configuration baseline:

☐	Drawings	☐	FDD/SDD
☐	Procedures	☐	Master Equipment List
☐	Permits	☐	Checklists

N/A

SE Name: Signature: 114748 Date: 7/29/22

WORK CONTROL

Moderate/High Hazard – WMC/Planner reviewed for Lessons Learned/Feedback

☐ YES ☐ NO N/A ☒

☑ Review of the completed work package is complete per AP-WORK-005, and the work package is ready to be set to complete in CMMS.

Name:	**Z#**	**Signature:**	**Date:**
Samantha Sanchez	357128		9/14/22

Los Alamos NATIONAL LABORATORY EST. 1943

AP-WORK-002: Attachment 11
Maintenance and Site Services
Work Completion Form

Work Order/Task: #716023 01

Start Date:	Completion Date:

ADITIONAL DETAILS ON WORK PERFORMED

Date	(Add details on As Found, Failure Mode, and Lessons Learned etc.)
6/6/22	Got pre jobbed, got LOTO. worked on getting B602 Locked out. Also got materials together for boiler maintanance.
6/7/22	Got Pre Jobbed, got all our materials needed for Job. Started draining boilers and removing heating coils. Getting ready for clean up. SS
6/6/22 TO 6/13/22	PERFORMED (A) FIRESIDE/WATERSIDE ON B-602 @ PF-6 AS PER WORK PACKAGE WE WERE ABLE TO COMPLETE ALL OF THE FIRESIDE BUT UNABLE TO COMPLETE THE WATERSIDE DUE TO THE MAKEUP WATER VALVES LEAKING BY DRAINED & TIGHTENED VALVES AND STILL LEAKING BY THE WATER VALVES WILL NEED TO BE REPLACED. REPLACED ALL GASKETS ON THE Boiler B-602 COMPLETED ALL BUT WATERSIDE FIRESIDE WAS Good. Boiler Closed up AND FILLED BACK UP.
7-29-22	B-603 UNABLE TO HAVE THE (A) PERFORMED DUE TO B-602 NOT BEING Fully OPERATIONAL AT THIS TIME.
*	Waiting for gas regulator parts to rebuild. repair will allow B-602 to operate. Will perform Annual FS/WS on B-603 for PMT. will check safties on B-603. 7-29-22 Lee Romero 114748

Facility: F01 Unit: 550006 Proj:
Task Title: 550006 (6M) HOT WATER BOILER MAINTENANCE (2 EA)
W/O Type: PM W/O Group: Task Priority: 4
Planner: 218305 TRUJILLO
W/O Title: 550006 (6M) HOT WATER BOILER MAINTENANCE (2 EA)
Written To: PF-6 HOT WATER BOILERS
Task Dspln: FTTR Due Date: 06/30/2022
Job Type: PM D-B Determination:N
Hazard Level: MODERATE IWD Requirement:STANDING
Material Required?: Y


0071604201

Los Alamos NATIONAL LABORATORY EST.1943

Work Order Task
00716042 01
MASTER

Date: 4/12/22

Work Order Task Written To

Facility: F01 Unit: 550006 Op Sys:
Room: Area: Sys/Cls:
Equipment: Component:
PF-6 HOT WATER BOILERS
Equipment Tag: Alternate Tag:
Work item: PF6-BHW Tech Surv Reqmt Rel: N
PEG Equip Group Type: PEG Equip Group ID:
Crit Safety Control: Property Group:
Maintenance Programs: 1: 2: 3: 4: 5:

Authorization

Start Permission	K... 340999		✓	Start Date	6-6-22	✓	
Complete Notice				Complete Date	7-29-22		

NOTE:

*** Refer to attached Form 2101 - Non-Tenant Activity Form - or Form 2102 - Tenant Activity Form - for a description of site specific training or escort and access requirements.**

Work Order 00716042 Task 01

Work Order Task Instructions

Location: 550006 room 103

.

Craft: PIPEFITTER & ELECTRICIANS

.

Perform PM per: ATTACHED CSE CHECKLIST & IWD

.

CAUTION - Proposed work could impact a facility Technical Safety Requirement (TSR), Limiting Condition of Operation (LCO) and/or Action Statement. Check-in at the Operation Center prior to performing work.

.

Do not perform work beyond scope of work order.

.

NOTE: AS PER SE NO START-UP / LAY-UP IS REQUIRED AS THESE BOILERS OPERATE YEAR ROUND.

.

CAUTION: Proposed work could impact a facility Technical Safety Requirement (TSR), Limiting Condition of Operation (LCO) and/or Action Statement.

Rework Reason/Cause

		Y/N
CDSG	CUSTOMER DESIGN	☑
IMCW	IMPROPER CONSTRUCTION/WORKMANSHIP	☑
IMDN	IMPROPER DESIGN	☑
PDMS	PARTS/MATERIAL DID NOT MEET SPECIFICATIONS	☑
WR	WARRANTY REWORK/REPAIR	☑

Date: 7/29/2022 Hours: Crew: Shift:

Comments: See Work Doc + PMT

Rework/Approval

Deficiency Tag No: Location: Tag Removed:

Rework Job: N Comments:

Work Order 00716042 **Task** 01

Trouble Found/Work Performed

Completion Comments Required: N

Work on 602 complete, work on 603 incomplete due to 602 operability issues

Continue on additional sheets? Work Doc + PMT

Calibrated Tools

Calibrated Tool Used? ☑ Y/N

File ID	Date Used	File ID	Date Used
N/A	7/29/2022		

Work Delay Reason

A	ACCESS	☑ Y/N
EQPT	EQUIPMENT	☑ Y/N
ESC	ESCORT AVAILABILITY	☑ Y/N
IWD	IWD WORKABILITY	☑ Y/N
LOTO	LOCK OUT/TAG OUT	☑ Y/N
MAT	MATERIAL	☑ Y/N
OPS	OPERATIONS	☑ Y/N
RCT	RCT AVAILABILTY	☑ Y/N
SP	SAFETY PAUSE	☑ Y/N
TEL	TOOLS/EQUIP/LIFTS	☑ Y/N
W	WEATHER	☑ Y/N

Work Date: 7/29/2022 Hours: Crew: Shift:

Comments: NONE

Work Order 00716042 **Task** 01

Major Failure/Action Taken

Major Failure:		
Major Action Taken:		
Deficiency Tag Removed:		Y/N
Deficiency Tag Location:		
Deficiency Tag ID:		
Limited Condition of Operation:		Y/N

Work Completion Signatures

Name	Function/Department	Date
Dustin Wright 320232	Fitters / Log - CS	7/29/2022

Comments: See Work Doc + PMI
(Rework?)

Equipment List Exceptions

Equipment List	Revision	Equipment List Description
PF6-BHW	000	PF6-BHW

Seq	Fac	Unit	Op Sys	Division	Area	System	Class
	F01	550006	VNT	103		HW	ML4

Equipment: BHW BHW-602
Name: 98' HOT WATER BOILER 602
Location: East Unit.
Exception Reason: Complete
Comments:
Equipment Tag:

Seq	Fac	Unit	Op Sys	Division	Area	System	Class
	F01	550006	VNT	103		HW	ML4

Equipment: BHW BHW-603
Name: 99' HOT WATER BOILER 603
Location: West or Central Boiler.
Exception Reason: Uncomplete due to 602 operability issues
Comments:
Equipment Tag:

Accounting

Percentage	Cost Center	Activity	Account No	Sub Account No
100.00	7D150C	640CL000	XEPR00	M1010000

* * * **End of Report** * * *

Attachment D, TA-55 SSC Equipment Work Release and Acceptance Red Sheet (UET)

(Page 1 of 2)

CAUTION

Work Package # 716042 01

REQUIRED: Proposed work is on a system/component requiring formal status control, and could impact a facility Technical Safety Requirement (TSR). This work package **REQUIRES** facility Operations Center (OC) release **immediately prior to the starting** of any associated work activities/tasks.

REQUIRED: All workers working on systems requiring this attachment must attest, or their RLM/PIC attest, to having the applicable VSS briefing. If workers and/or RLM/PIC CAN NOT attest to having the applicable VSS briefing a worker who does must be present and supervising the work. Not applicable to construction jobs; OCO or PIC/RLM mark training column N/A.

OC Authorization: Sheet ___ of ___

Worker Training Acknowledged (PIC/RLM initials/Z#)	Printed Name of OCO	OCO Signature	Date
[illegible] / 122002	[illegible]	[illegible]	6/16/22
TNA / 175267	Issack Jimenez Tyler	[illegible]	6/7/22 / 6-7-22
[illegible] / 360981	[illegible]	[illegible]	6/8/22
[illegible] / 360981	[illegible]	[illegible]	6/8/22
/	J. Cedillo	[illegible]	6-27-22
/			
/			
/			

**Once all available rows have been filled out obtain a new sheet from Work Control.

REQUIRED: A **KNOWLEDGABLE** work package performer(s) is **REQUIRED** to report work package activity/task status to the Operations Center **every time workers stop work for the day.**

REQUIRED: This work package **REQUIRES** facility operations work acceptance **immediately following field completion** of the work. The following **SHALL** be complete prior to submitting for OC Acceptance.

This column to be Completed and Initialed by: Work Package Performer	This column to be Completed and Initialed by: OCS or OCO
N/A Steps if "not applicable"	**N/A Steps if "not applicable"**
DW PMT complete (criteria determined by appropriate CSE(s), SME or OCS; conducted under conditions emulating normal operation parameters)	N/A Applicable TSR, STP, ISI, system alignment (through operating procedure or SAC) required for the SSC to be declared OPERABLE have been completed, as applicable
N/A SSC left offline following PMT, as applicable	
DW All LOTOs cleared (locks and lockout devices are returned to the WCCS, or OC if during off-hours)	

Operations Center Acceptance: Confirms RTS (transfer of control from Maintenance to Operations)

Printed Name of OCO	Signature	Z#	Date
[illegible]	[illegible]	3/9/22	7/28/22

OCO Initial for Completion:

N/A OC System Status Board updated, as applicable

Attachment C, TA-55 SSC Equipment Work Release and Acceptance Red Sheet (UET)

(Page 2 of 2)

Daily Job Update Sheet

Work Package # 716042-01

Job Title 550006 (GM) Hot Water Boiler Maintenance

REQUIRED: This sheet is to be filled out and dropped off, by a **KNOWLEDGABLE** worker, with the TA-55 Operations Center prior to commencing work each day. A **KNOWLEDGABLE** worker will pick up the sheet when work is completed for the day, and give the Operations Center a job status update. The sheet should be placed back into the work package so that it is available for the next day the job is worked.

Sheet 2 of 2

Date	Point of Contact	Pager #	Brief description of day's activities
6/1/22	Thomas Hilton	4-7491	Boiler maintenance
6/8/22	B. McAfee	4-2326	" "
6/9/22	B. McAfee	4-2326	" "
6/27/22	Mark Wheeler	4-7288	" "

**Once all available rows have been filled out obtain a new sheet from Work Control. Only drop off the most current sheet with the Operations Center.

Attachment D, TA-55 SSC Equipment Work Release and Acceptance Red Sheet (UET)

(Page 2 of 2)

Daily Job Update Sheet

Work Package #716042 01

Job Title 6m HW Boiler Maint

REQUIRED: This sheet is to be filled out and dropped off, by a **KNOWLEDGABLE** worker, with the TA-55 Operations Center prior to commencing work each day. A **KNOWLEDGABLE** worker will pick up the sheet when work is completed for the day, and give the Operations Center a job status update. The sheet should be placed back into the work package so that it is available for the next day the job is worked.

Sheet ___ of ___

Date	Point of Contact	Pager #	Brief description of day's activities
6/6/22	Santiago J.	4-5472	6m HW Boiler Maint.
6/22/22	Marco Ubarri	4-7288	" " " "

**Once all available rows have been filled out obtain a new sheet from Work Control. Only drop off the most current sheet with the Operations Center.

Los Alamos NATIONAL LABORATORY

Form 2103

Integrated Work Document (IWD) Part 3, Validation and Work Release

IWD No: Revision No.:

By signing below, I verify that this activity is appropriate to be conducted in the facility and is within the scope of the facility safety basis; area/facility hazards have been identified and addressed; work meets applicable Laboratory environmental, safety, and security requirements, DOE Orders, and other applicable regulatory requirements; and that the appropriate Subject Matter Expert (SME) reviews have been completed.

FOD or FOD designee (e.g., Operations Manager)

Signature/Z-Number/Date **(If required by FOD)**: MA

By signing below, I have verified the following:

- I have verified authorization by ensuring approval signatures of the RLM and FOD.
- I have jointly conducted a validation walkdown with workers to review tasks and steps for workability and to ensure that the hazards and controls are described correctly and have not changed.
- The assigned workers are authorized and competent to perform the work in a safe, secure, and environmentally responsible manner.
- I have conducted the pre-job briefing, and all workers (including support workers) have been briefed.
- I have ensured coordination with any required FOD work-area representatives (e.g., area work coordinators).

PIC (Signature/Z Number/Date) **Required**: Ma Chi 201536 6/27/2022

Alternate PIC signature **acknowledges** PIC authority is assumed for the first time. *(Note: Alternate PICs are required to sign only once, but formal handoff includes conferring with previous PIC to obtain all required information associated with the handoff and informing workers that they have a new PIC.)*

Alternate PIC (Signature/Z Number/Date) **Required**: _____

Alternate PIC (Signature/Z Number/Date) **Required**: _____

Pre-Job Brief Content

- Prerequisites, where applicable – things that must be staged, in place, or completed before the work starts
- Worker pause/stop work authority and obligation per P101-18, Procedure for Pause/Stop Work
- Scope of work and work activities including IWD/WCDs, procedures, work package documents, and drawings, as applicable
- Hazards and associated controls, including personal protective equipment, and the resolution of any related questions
- Critical steps* including where they are covered in the IWD/WCD and which HPI technique will be used for each critical step
- Permit and plan requirements and limitations (e.g., penetrations, spark flame) and how permit requirements will be met
- Applicable regulatory requirements [e.g., Technical Safety Requirements (TSR), Code of Federal Regulations (CFR)] including how these requirements can be inadvertently violated if the IWD/WCD is not followed
- Roles and responsibilities including person(s) responsible for making critical decisions (e.g., PIC)
- Handoffs and coordination requirements among workers and multiple PICs, if applicable
- Work site conditions including location of phone and emergency equipment (e.g., fire alarms, fire extinguisher, AED) and how to respond to alarms and emergencies
- Hold points and other notifications/signoffs (e.g., inspections, Industrial Hygiene, radiation protection)
- Applicable Lessons Learned (LL), especially from previous performance of the activity
- Any other information needed to perform this activity in a safe, secure, and environmentally responsible manner

Ask: Does everyone agree with the work tasks/steps and controls, and commit to follow them?

*Critical steps are when "a procedure step, series of steps, or action that, if performed improperly, will cause irreversible harm to equipment, people, or the environment" (DOE-HDBK-1028-2009, Volume 1).

IWD No:	Revision No.:
Pre-Job Brief Attendance Roster	
By signing below **as required**, I agree to the following: • I agree to follow the work steps and implement the controls as written, as applicable to my work assignments. • I agree to pause/stop work when conditions or hazards change or when I encounter unexpected conditions during the execution of work, or when work cannot be performed as written, or instructions become unclear during execution. • I confirm that I am authorized, qualified, and fit to perform the work.	
Worker (Signature/Z Number/Date) Sal S 355732 6/27/22	**Worker** (Signature/Z Number/Date) Andrew Wu 237056 6/27/22
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date) Lucas Hewson 359449 6/27/22
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date)

Los Alamos NATIONAL LABORATORY

Form 2103

Integrated Work Document (IWD) Part 3, Validation and Work Release

IWD No:716042-01 Revision No.:

By signing below, I verify that this activity is appropriate to be conducted in the facility and is within the scope of the facility safety basis; area/facility hazards have been identified and addressed; work meets applicable Laboratory environmental, safety, and security requirements, DOE Orders, and other applicable regulatory requirements; and that the appropriate Subject Matter Expert (SME) reviews have been completed.

FOD or FOD designee (e.g., Operations Manager)

Signature/Z-Number/Date **(If required by FOD)**: N/A Per Telecom

By signing below, I have verified the following:

- I have verified authorization by ensuring approval signatures of the RLM and FOD.
- I have jointly conducted a validation walkdown with workers to review tasks and steps for workability and to ensure that the hazards and controls are described correctly and have not changed.
- The assigned workers are authorized and competent to perform the work in a safe, secure, and environmentally responsible manner.
- I have conducted the pre-job briefing, and all workers (including support workers) have been briefed.
- I have ensured coordination with any required FOD work-area representatives (e.g., area work coordinators).

PIC (Signature/Z Number/Date) **Required**: [signature] 175267 06/07/2022

Alternate PIC signature **acknowledges** PIC authority is assumed for the first time. *(Note: Alternate PICs are required to sign only once, but formal handoff includes conferring with previous PIC to obtain all required information associated with the handoff and informing workers that they have a new PIC.)*

Alternate PIC (Signature/Z Number/Date) **Required**: [signature] 360098 / 06/08/2022

Alternate PIC (Signature/Z Number/Date) **Required**: _____

Pre-Job Brief Content

- Prerequisites, where applicable – things that must be staged, in place, or completed before the work starts
- Worker pause/stop work authority and obligation per P101-18, Procedure for Pause/Stop Work
- Scope of work and work activities including IWD/WCDs, procedures, work package documents, and drawings, as applicable
- Hazards and associated controls, including personal protective equipment, and the resolution of any related questions
- Critical steps* including where they are covered in the IWD/WCD and which HPI technique will be used for each critical step
- Permit and plan requirements and limitations (e.g., penetrations, spark flame) and how permit requirements will be met
- Applicable regulatory requirements [e.g., Technical Safety Requirements (TSR), Code of Federal Regulations (CFR)] including how these requirements can be inadvertently violated if the IWD/WCD is not followed
- Roles and responsibilities including person(s) responsible for making critical decisions (e.g., PIC)
- Handoffs and coordination requirements among workers and multiple PICs, if applicable
- Work site conditions including location of phone and emergency equipment (e.g., fire alarms, fire extinguisher, AED) and how to respond to alarms and emergencies
- Hold points and other notifications/signoffs (e.g., inspections, Industrial Hygiene, radiation protection)
- Applicable Lessons Learned (LL), especially from previous performance of the activity
- Any other information needed to perform this activity in a safe, secure, and environmentally responsible manner

Ask: Does everyone agree with the work tasks/steps and controls, and commit to follow them?

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IWD No:716042-01

Revision No.:

Pre-Job Brief Attendance Roster

By signing below **as required**, I agree to the following:

- I agree to follow the work steps and implement the controls as written, as applicable to my work assignments.
- I agree to pause/stop work when conditions or hazards change or when I encounter unexpected conditions during the execution of work, or when work cannot be performed as written, or instructions become unclear during execution.
- I confirm that I am authorized, qualified, and fit to perform the work.

Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date)
323644 6/7/22	Sal S 355732 6/7/22
282917 6/7/22	Lucas Herrera 359449 6/7/22
Norma Ramos 291737 6/7/22	170386 06/07/22
Mahdy 154551 6-7-22	Norma Ramos 291737 6/8/22
	Norma Ramos 291737 6/9/22
	Sal S 355732 6/9/22
Martin de Fonsalegui Z#292698 07 JUNE 2022 Mahdy 154551 6-8-22 Martin de Fonsalegui Z#292698 08 JUNE 2022	237056 6/8/22 282917 6/9/22

Los Alamos NATIONAL LABORATORY

Form 2103

Integrated Work Document (IWD) Part 3, Validation and Work Release

#716042 01

IWD No: Revision No.:

By signing below, I verify that this activity is appropriate to be conducted in the facility and is within the scope of the facility safety basis; area/facility hazards have been identified and addressed; work meets applicable Laboratory environmental, safety, and security requirements, DOE Orders, and other applicable regulatory requirements; and that the appropriate Subject Matter Expert (SME) reviews have been completed.

FOD or FOD designee (e.g., Operations Manager)

Signature/Z-Number/Date **(If required by FOD)**: [illegible] 340929 6-6-22

By signing below, I have verified the following:

- I have verified authorization by ensuring approval signatures of the RLM and FOD.
- I have jointly conducted a validation walkdown with workers to review tasks and steps for workability and to ensure that the hazards and controls are described correctly and have not changed.
- The assigned workers are authorized and competent to perform the work in a safe, secure, and environmentally responsible manner.
- I have conducted the pre-job briefing, and all workers (including support workers) have been briefed.
- I have ensured coordination with any required FOD work-area representatives (e.g., area work coordinators).

PIC (Signature/Z Number/Date) **Required**: _____

Alternate PIC signature **acknowledges** PIC authority is assumed for the first time. *(Note: Alternate PICs are required to sign only once, but formal handoff includes conferring with previous PIC to obtain all required information associated with the handoff and informing workers that they have a new PIC.)*

Alternate PIC (Signature/Z Number/Date) **Required**: [illegible] 175267 06/06/2022

Alternate PIC (Signature/Z Number/Date) **Required**: _____

Pre-Job Brief Content

- Prerequisites, where applicable – things that must be staged, in place, or completed before the work starts
- Worker pause/stop work authority and obligation per P101-18, Procedure for Pause/Stop Work
- Scope of work and work activities including IWD/WCDs, procedures, work package documents, and drawings, as applicable
- Hazards and associated controls, including personal protective equipment, and the resolution of any related questions
- Critical steps* including where they are covered in the IWD/WCD and which HPI technique will be used for each critical step
- Permit and plan requirements and limitations (e.g., penetrations, spark flame) and how permit requirements will be met
- Applicable regulatory requirements [e.g., Technical Safety Requirements (TSR), Code of Federal Regulations (CFR)] including how these requirements can be inadvertently violated if the IWD/WCD is not followed
- Roles and responsibilities including person(s) responsible for making critical decisions (e.g., PIC)
- Handoffs and coordination requirements among workers and multiple PICs, if applicable
- Work site conditions including location of phone and emergency equipment (e.g., fire alarms, fire extinguisher, AED) and how to respond to alarms and emergencies
- Hold points and other notifications/signoffs (e.g., inspections, Industrial Hygiene, radiation protection)
- Applicable Lessons Learned (LL), especially from previous performance of the activity
- Any other information needed to perform this activity in a safe, secure, and environmentally responsible manner

Ask: Does everyone agree with the work tasks/steps and controls, and commit to follow them?

*Critical steps are when "a procedure step, series of steps, or action that, if performed improperly, will cause irreversible harm to equipment, people, or the environment" (DOE-HDBK-1028-2009, Volume 1).

#716042 01

IWD No:	Revision No.:

Pre-Job Brief Attendance Roster

By signing below **as required**, I agree to the following:

- I agree to follow the work steps and implement the controls as written, as applicable to my work assignments.
- I agree to pause/stop work when conditions or hazards change or when I encounter unexpected conditions during the execution of work, or when work cannot be performed as written, or instructions become unclear during execution.
- I confirm that I am authorized, qualified, and fit to perform the work.

Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date) Sam S 355732 6/6/22
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date) Lucas Herrera 359449 6/6/22
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date) [signature] 237056 6/6/22
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date) Mildred Valdy 154551 6-6-22
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date) [signature] 170386 06/06/22	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date) Martin de Amesategui Z#292698 06 JUNE 2022	**Worker** (Signature/Z Number/Date)

Los Alamos NATIONAL LABORATORY

AP-WORK-004: Attachment 1
Maintenance & Site Services
Worker Engagement Questions

#716042 01

Worker engagement questions are intended to focus attention on the task and ensure uncertainties are addressed. Basic worker engagement questions are provided below. Additional worker engagement questions should be tailored to the situation.

Each of the questions listed below will be discussed at each Pre-Job Brief with all affected personnel.

Topic	Completed (X)
What permits, permissions, or support are required to safely start this work? Start, Pre-Job, Red Sheet	XX
What is the most likely thing that could go wrong (not the worst thing) and what, specifically, will prevent it? CTF	XX
What can cause us to go beyond the scope of the work? NOTHING	XX
What hazards in the work area may not have been considered during planning of this job Co-located work	XX

360981 06/08/2022

360981 06/09/2022

LOS ALAMOS NATIONAL LABS

PM INTEGRATED WORK DOCUMENT (IWD) COVER SHEET

WORK ORDER NO: **431775-05**

TITLE: 550006 (6M) HOT WATER BOILER MAINTENANCE

	Name	Signature	Date
Planner:	Jennifer Simmons		4/18/2022
Peer Review:	MARTIN NOWAKOWSK		5/17/2022

CONCURRENCE:

Based on my personal review, I agree that the work described in this package meets technical requirements under my cognizance, and contains the controls to perform the work safely.

	Name	Signature	Date
Craft/Tech::	Chris Sharp		4/27/22
Craft/Tech:	DevanGarcia		5/3/22
Craft/Tech:	Dustin Wright	Dustin Wright	5/3/2022
ESO/CSE:	Claudia Papola ESO: See attached email		4/27/22
TA55-RCT:	N/A		
DESH TA55 Safety:	See attached form		
Supervisor:			5/16/2022
OPS Manager:	Michael Washburn		5/12/2022

0076042001

Simmons, Jennifer

From: White, Dave
Sent: Tuesday, April 19, 2022 1:33 PM
To: Simmons, Jennifer
Cc: Velasquez, Victoria A; Ferran, Donna M
Subject: RE: 550006 (6M) HOT WATER BOILER MAINTENANCE WO# 431775-05
Attachments: PF_6_Boiler_PM_2193.pdf

Jennifer,

I have reviewed and approve of IWD 550006 WO#431775-05. Attached is an updated 2193 that Aaron ran new calcs for today. Please disregard the 2193's you had originally included.

Kind Regards,

Dave White
Systems Engineer
PFE-CV

Office: 505.667.7610
Pager: 505.644.7600
E-mail: dkwhite@lanl.gov
Schedule: 4x10 Tue-Fri

Los Alamos National Laboratory
lanl.gov

From: Simmons, Jennifer <jlsimmons@lanl.gov>
Sent: Thursday, April 14, 2022 12:23
To: White, Dave <dkwhite@lanl.gov>
Cc: Velasquez, Victoria A <vavelasquez@lanl.gov>; Ferran, Donna M <donnaf@lanl.gov>
Subject: 550006 (6M) HOT WATER BOILER MAINTENANCE WO# 431775-05

Dave,

Can you please review the attached IWD? There are two 2193s (attached) associated with the scope of work that have differing requirements. Please advise which should be used for performance of this activity.

If you approve, please reply to this email referencing the work order number title to include in the package in place of your signature.

0076042001

Industrial Hygiene and Safety Review (DESHF-55/CMR)

Document Title: 550006 (6M) HOT WATER BOILER MAINTENANCE (2EA)			
Document Number: 431775-05	**Revision or Issue Date:** 1		
Document Point of Contact: Jennifer Simmons Z# 364268			
Section 1: Activity/Document Screening		**Y**	**N**
1. Is the job classified as high hazard?			✓
2. Are multiple organizations involved?			✓
3. Is an IH/S designated posting required?			✓
4. Is work taking place in a Permit Required Confined Space?			✓
5. Is medical monitoring, sampling, or any type of IH/S monitoring required?		✓	
6. Is IH/S requiring respiratory protection?			✓
Continue with remainder of form 1) if any "yes" answers above, or 2) at reviewer's discretion.			
Section 2: Hazard Review		**Y**	**N**
1. The Hazard Assessment has been completed and documented per P300?		✓	
2. The appropriate IH/S Subject Matter Experts have been engaged per identified hazards?		✓	
3. Is an IH/S designated posting required?			✓
Section 3: Activity Review	**NA**	**Y**	**N**
1. Is required IH/S sampling specifically identified?	✓		
2. Are all required permits specifically identified?		✓	
3. Are all posting requirements specifically identified?		✓	
4. Are release conditions specifically identified for the required postings?		✓	
5. Are all medical monitoring requirements identified?	✓		
6. Is required PPE specifically identified? (E.g., fire resistant clothing for sparking)		✓	
7. Are administrative & engineering controls identified and when to be used? (E.g., LEV during torch cutting or welding)		✓	
8. Are IH/S requirements for sequential tasks specifically identified? (E.g, when outer PPE layer(s) must be removed period to leaving an enclosure)		✓	
9. Is a single PIC identified prior to work when multiple organizations are involved?		✓	
10. Will controls introduce new hazards or exacerbate existing conditions? (E.g., heat stress)			✓
If yes, have those hazards been addressed?			
11. Have co-located personnel been identified and hazard communication indicated?		✓	
12. Are hazards from co-located activities anticipated and addressed?		✓	
13. Are hold points added when authorization to proceed is necessary? (E.g., additional or different controls to be determined pending sampling results)	✓		

Section 4: Issues and Comments

Complete this section for comments or any "no" questions in sections 2 and 3. Attach another sheet if needed.

Question	Issue/Comment
1.5	Yes for Hearing Conservation Program (HCP) enrollment for workers in high noise areas (PF6)
2.3	No IH/S designated posting required.
3.10	LO/TO controls in place per P101-3, Shock/Arc Flash Hazard Controls in place per Form 2193.

Approval/Signature (IH/S Use Only) *(Signature indicates issues/comments are satisfactorily resolved; IWD is approved.)*

MICHAEL SLINKARD (Affiliate)

Digitally signed by MICHAEL SLINKARD (Affiliate)
Date: 2022.04.19 16:25:18 -06'00'

Cy: Planner
Document Requester

00760420001

Los Alamos NATIONAL LABORATORY Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)			
Revision #: 1			**Activity/Task Title:** 550006 (6M) HOT WATER BOILER MAINTENANCE
Work Document #: (WO#/Task) 00760420001			**Planner/Preparer (Name/Z#/Date)** Jennifer Simmons Z # 364268 Date 4/13/2022
TA: 55	**Building:** 0006	**Room:** 103	**Additional Location Description:**

SECTION 1 – SCOPE OF WORK

SECTION 2 - PRECAUTIONS AND LIMITATIONS

SECTION 3 – PREREQUISITES/INITIAL CONDITIONS

SECTION 4 – SPECIAL TRAINING/MEDICAL REQUIREMENTS

SECTION 5 – SPECIAL TOOLS/EQUIPMENT

SECTION 6 – WORK INSTRUCTIONS

SECTION 7 – POST WORK ACTIVITIES

SECTION 8 – CLOSEOUT

NOT UCNI

Reviewing Official: Martin Buzzell/303827/MSS-WC

Date: April 18, 2022

Guidance Used: CG-SS-5 CH 1, DOE / OC 7/16

Los Alamos NATIONAL LABORATORY **Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)**			
Revision #: 1			**Activity/Task Title:** 550006 (6M) HOT WATER BOILER MAINTENANCE
Work Document #: (WO#/Task) 607604 2001			**Planner/Preparer (Name/Z#/Date)** Jennifer Simmons Z # 364268 Date 4/13/2022
TA: 55	**Building:** 0006	**Room:** 103	**Additional Location Description:**

1. SCOPE OF WORK

1.1. **PERFORM** semi-annual maintenance per CSE checklist





Hazard Analysis (HA) Team: Jennifer Simmons, Mario Ulibarri,
Date: 4/13/2022

2. PRECAUTIONS AND LIMITATIONS

2.1. If steps cannot be completed as described, or if unforeseen situations occur, **PAUSE WORK**, stabilize the situation, contact your supervisor, and await further instructions before proceeding.

2.2. Work steps are sequenced in a logical flow to ensure that the work is performed safely, efficiently, and effectively. If work steps are required to work in a specific sequence, it will be identified in the applicable section of the IWD.

Los Alamos NATIONAL LABORATORY Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)			
Revision #: 1			**Activity/Task Title:** 550006 (6M) HOT WATER BOILER MAINTENANCE
Work Document #: (WO#/Task) 0076042001			**Planner/Preparer (Name/Z#/Date)** Jennifer Simmons Z # 364268 Date 4/13/2022
TA: 55	**Building:** 0006	**Room:** 103	**Additional Location Description:**

3. Prerequisites/Initial Conditions

3.1. Verify Work Order is on the schedule for work release.

3.2. Ensure ALL material and special tools are available.
- Recommend that spare material such as nuts, bolts, washers (fasteners), etc. are on hand prior to start of work. Use of these items can be used to prevent reuse of potentially contaminated components.

3.3. Ensure ALL necessary permits are obtained prior to performing work.

3.4. This work requires a LOTO pre-job walk-down for control of hazardous energy per P101-3 Lockout/Tagout for Hazardous Energy Control.

3.5. **Entry Conditions:**
- Obtain authorization and Videx Key #61 from Ops Center prior to entering **PF6 RM101**.
- Follow ALL entry postings.
- Hearing protection required.
- Be aware of automatic starting equipment.

3.6. **General hazards and associated PPE required:**
- Safety Shoes
- Safety Glasses with Side Shields
- Level 4 Cut-Resistant Gloves shall be worn when workers are performing maintenance or other physical work activities when hands are exposed to hazards.
- Bump caps/hard hats required. Bump caps can be used when working indoors where hard hats cannot be used due to space, safety, or location. Otherwise, hard hats must be worn.
- Further PPE requirements will be task specific

3.7. **Noise:**
- Wear proper hearing protection in areas posted

4. Special Training/Medical Requirements

4.1. **The following training is required for the General Hazard Section:**
- Cu-10968 WQ-LOG Maintenance Worker

4.2. **The following training is required for Electricians:**
- Cu-642 WQ-LOG Electrician-Maintenance

4.3. **The following training is required to perform troubleshooting, trace electrical circuits, take voltage/amperage readings, verify "0" voltage and to re-energize circuit breakers:**
- Cu-2559 Electricians/Apprentices and Facility Engineer

4.4. **The following training is required for Pipefitters:**
- Cu-647 WQ-LOG Pipefitter-Maintenance
- Cu-717 WQ-LOG Pipefitter-Backflow Prevention

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Work Document #: (WO#/Task) 007604201			**Planner/Preparer (Name/Z#/Date)** Jennifer Simmons Z # 364268 Date 4/13/2022
TA: 55	**Building:** 0006	**Room:** 103	**Additional Location Description:**

- Cu-718 WQ-LOG Pipefitter-Boiler Fitter
- Cu-720 WQ-LOG Pipefitter-Welding

4.5. **The following training is required to for Refrigeration Pipefitters:**
- Cu-647 WQ-LOG Pipefitter-Maintenance
- Certified Boiler Operations

4.6. **The following training is required when working in posted "high noise" areas:**
- Cu-2307 Hearing Conservation/Noise Training

4.7. **The following training is required for working with chemicals:**
- Cu-4261 Chemical Workers, Authorized (HAZCOM)

5. Special Tools/Equipment

5.1. None

6. Work Instructions

6.1. **CONTACT** the following prior to performing work.
- Operations Center: 667-3330
- Ops Tech Supervisor: Patrick Connolly 667-2325 or 664-8808
- Supervisor: Mario Ulibarri 665-4592 or 664-7288
- MC: David Leyba 665-6812 or 664-7634

6.2. **PERFORM** a LOTO pre-job walk-down for control of hazardous energy per P101-3 Lockout/Tagout for Hazardous Energy Control.

6.3. **MOBILIZE** equipment/materials/tools to and from work site.

6.4. **BARRICADE** designated work area using robust barrier rope/stanchion and/or signage, to establish boundaries.

⚠ CAUTION

Congested area. Trip hazards – floor drains and piping systems.

NOTE:

Ops tech to align system prior to performing work and when work is complete.

MAINTENANCE

6.5. **OBSERVE** temperature and operating pressure general conditions. Fire cycle boiler. The boiler should start smoothly without unusual noises.

6.6. **VISUALLY** inspect combustion. Changes in flame shape, color, and sound are among early indicators of potential combustion-related problems. Changes may be due to changes in fuel pressure or gas/air linkage movement.

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Work Document #: (WO#/Task#) 00700042001			**Planner/Preparer (Name/Z#/Date)** Jennifer Simmons Z # 364268 Date 4/13/2022
TA: 55	**Building:** 0006	**Room:** 103	**Additional Location Description:**

6.7. **CHECK** gas/air linkages on power burners that modulate for positioning, tightness, and binding. Combustion analysis is verifiable only with a flue gas analyzer and is performed mainly on boilers with power burners. Adjust air/fuel mixture as needed.

6.8. **DETERMINE** the cause of any unusual noises or conditions and correct as needed. Report any needed corrections to the Facility Coordinator for corrective maintenance.

6.9. **INSPECT** fuel supply system and gas controls. Leak-check gas controls and associated gas piping with a gas detector or soapsuds. **VERIFY** gas pressure at utility regulator is the same pressure at the boiler to ensure the natural gas piping does not contain any restriction or blockage.

6.10. **TEST** float-operated low water fuel cut-off (LWC) by pressing the *Manual Reset Low Water* button (hold button for approximately 8 seconds). This will simulate a low water condition by turning off the boiler.

6.11. **TEST** the safety relief valve (Try Lever Test). Manually open the valve by lifting up on the handle while boiler is under pressure. Water should flow when this is done and should shut off completely when the handle is released. Some boilers have two of these devices.

⚠CAUTION

The discharge from valves is under pressure and at high temperatures. Exercise caution to avoid personal injury or injury to others.

6.12. **OBSERVE** the operation of operating controls. Operating controls start, stop, and modulate some burners (if desired) in response to system demand, keeping water temperature at or below controller setting.

6.13. **TEST** limit controls: high limit, air switch, etc.

6.14. **TEST** flame detection devices on boilers with flame scanners. Remove the flame scanner with the burner firing. The burner should shut off as a flame failure condition. Clean the flame scanner, reinstall and reset programmer. Check for proper operation as boiler goes through a firing cycle and light off.

Electricians perform steps 6.15.1 through 6.15.4

⚠WARNING

ELECTRICAL

Contact with Energized Electrical Systems

Mode 1 Class 1.3b (480v)

Refer to 2193 for PPE requirements

Los Alamos NATIONAL LABORATORY **Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)**			
Revision #: 1			**Activity/Task Title:** 550006 (6M) HOT WATER BOILER MAINTENANCE
Work Document #: (WO#/Task) 007604 2001			**Planner/Preparer (Name/Z#/Date)** Jennifer Simmons Z # 364268 Date 4/13/2022
TA: 55	**Building:** 0006	**Room:** 103	**Additional Location Description:**

NOTE:

LOTO devices shall be applied in accordance with requirements of P101-3, Lockout/Tagout for Hazardous Energy Control.

6.15. **PLACE** B602 and B603 in the OFF position at Boiler Control Panel. Work on only one boiler at a time.

6.15.1. **PLACE** MCC compartment located in Rm 101 in the OFF position and apply LOTO. When de-energizing B602, place MCC-603D-B1L in the OFF position and apply LOTO. When de-energizing B603, place MCC-603C-A2R in the OFF position and apply LOTO.

Calibration Verification

Verify that the instrument to be used on this PM is within calibration:

Voltage meter: Manufacturer/ Model #: Fluke T-5 1000

File #: 040937 Expiration Date: 08/06/22

6.15.2. **VERIFY** "0" voltage at line side of disconnect

- **B602: DISC-602-1**
- **B603: DISC-603-1**

6.15.3. **CHECK** all electrical controls and circuitry. Careful inspection may disclose any of the following items: cracked insulators (probe type), jumpered conditions, loose connections, poor or deteriorated wiring and contact points of foreign matter, improperly used bypass switches, cut-off switches wired in parallel, shutoffs installed at improper levels. Document any issues on the work document.

6.15.4. **REMOVE** LOTO devices. Place boiler circuit in the ON position.

- **B602: MCC-603D-B1L**
- **B603: MCC-603C-A2R**

6.15.5. **PLACE** boiler back in service to complete preventive maintenance.

6.16. **OBSERVE** condition of expansion tank. A waterlogged expansion tank will cause the safety relief valve on a hot water heating boiler to relieve every time that it fires. This causes the introduction of makeup water, causing a dilution of the water chemistry in a treated system. Drain expansion tank if it is of a non-bladder type and refill to reestablish an air cushion. Check the air pressure on bladder-type expansion tanks.

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Work Document #: (WO#/Task) 07000420 01			**Planner/Preparer (Name/Z#/Date)** Jennifer Simmons Z # 364268 Date 4/13/2022
TA: 55	**Building:** 0006	**Room:** 103	**Additional Location Description:**

6.17. **OBSERVE** operation of circulating pumps. Lubricate pump motors if they are of the type that needs lubrication.

6.18. **OBSERVE** operation of forced draft fan motors on boilers with power burners and induced draft fan motors on horizontal breeching where applicable. Lubricate fan motors if they are of the type that needs lubrication.

⚠ CAUTION

HOT SURFACES AND SHARP EDGES

Wear leather gloves as needed

6.19. **CHECK** pressure-reducing valve. Replace the strainer in the valve if needed.

6.20. **CHECK** condition of heating surfaces (Example: leaking handhole covers, hot spots, etc.)

6.21. **CHECK** combustion air supply openings to ensure they are not closed or stopped up.

6.22. **INSPECT** condition of stacks and rain caps.

6.23. **ENSURE** that the boiler is operating within normal parameters prior to leaving the area.

7. Post Work Activities

7.1. **CLEAN-UP** work area.

7.2. **REMOVE** barricades from work area.

7.3. **CONTACT** Ruben Trujillo @ 665-6378 or 664-4242 (pager), for guidance on waste disposal. **DISPOSE** of waste per their guidance.

8. Closeout

8.1. **CONTACT** Supervisor Mario @ 5-4592 or 4-7288, Ops Center @ 7-3330 and MC David @ 5-6182 or 4-7634 to inform them the work is completed.

8.2. **COMPLETE** all the required documentation and **RETURN** Work Package to Work Management Center.

Los Alamos NATIONAL LABORATORY Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)			
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Work Document #: (WO#/Task) 0076042001			**Planner/Preparer (Name/Z#/Date)** Jennifer Simmons Z # 364268 Date 4/13/2022
TA: 55	**Building:** 0006	**Room:** 103	**Additional Location Description:**

***Insert Rows above** for additional Tasks/Steps or attach pages to clearly communicate ESH&Q/S&S hazards and associated controls.*	The RLM, and FOD or FOD Representative approval indicates IWM has been applied appropriately, work is authorized, workers are qualified, work will be performed in accordance with ESH&Q/S&S requirements and the IWD, and facility safety basis, aggregate hazards, and collocated hazards were appropriately included in the hazard analysis and acknowledges completion of a peer review.	**RLM** (Signature/Z#/Date) **Required** 321332 5/19/21 **FOD or Representative** (Signature/Z#/Date) 304241 5/17/2022 **ESO Review** (Signature/Z#/Date) **If Required** JLS per attached email 4.19.22 **Safety Review** (Signature/Z#/Date) **Required** JLS per attached 4.19.22
IWD Type ☒ Moderate-Hazard ☐ High-Hazard/Complex ☐ Standing IWD	Date when RLM re-approval is required 5/31/24 Other Conditions for Re-Approval: **SCOPE OF WORK OR HAZARDS CHANGE** (Print) Name of Alternate PIC SantiagoJaramilloZ#122002 Name of Alternate PIC Alfonso Bernal Z# 199770 Name of Alternate PIC Arthur Trujillo Z# 114452 Name of Alternate PIC Donald Schmitt Z# 350663 Name of Alternate PIC Mario Ulibarri Z# 204536 Name of Alternate PIC Ryan Campbell Z# 319242 Name of Alternate PIC Scott Gould Z# 326975 Name of Alternate PIC Victor Mitchell Z# 203921 Name of Alternate PIC George Staton Z# 207210 Name of Alternate PIC Patrick Salazar Z# 299756 Name of Alternate PIC Brian McAfee Z# 360981 Name of Alternate PIC Thomas Alton Z# 175267 Name of Alternate PIC Nicholas Sage Z# 362605 Name of Alternate PIC_____ Name of Alternate PIC_____ Name of Alternate PIC_____ Name of Alternate PIC_____	Unclassified Not UCNI Any required classification review completed, NOT UCNI Reviewing Official: Martin Buzzell/303827/MSS-WC Date: April 18, 2022 Guidance Used: CG-SS-5 CH 1, DOE / OC 7/16

Simmons, Jennifer

From: White, Dave
Sent: Tuesday, April 19, 2022 1:33 PM
To: Simmons, Jennifer
Cc: Velasquez, Victoria A; Ferran, Donna M
Subject: RE: 550006 (6M) HOT WATER BOILER MAINTENANCE WO# 431775-05
Attachments: PF_6_Boiler_PM_2193.pdf

Jennifer,

I have reviewed and approve of IWD 550006 WO#431775-05. Attached is an updated 2193 that Aaron ran new calcs for today. Please disregard the 2193's you had originally included.

Kind Regards,

Dave White
Systems Engineer
PFE-CV

Office: 505.667.7610
Pager: 505.644.7600
E-mail: dkwhite@lanl.gov
Schedule: 4x10 Tue-Fri

Los Alamos National Laboratory
lanl.gov

From: Simmons, Jennifer <jlsimmons@lanl.gov>
Sent: Thursday, April 14, 2022 12:23
To: White, Dave <dkwhite@lanl.gov>
Cc: Velasquez, Victoria A <vavelasquez@lanl.gov>; Ferran, Donna M <donnaf@lanl.gov>
Subject: 550006 (6M) HOT WATER BOILER MAINTENANCE WO# 431775-05

Dave,

Can you please review the attached IWD? There are two 2193s (attached) associated with the scope of work that have differing requirements. Please advise which should be used for performance of this activity.

If you approve, please reply to this email referencing the work order number title to include in the package in place of your signature.

0076042001

Industrial Hygiene and Safety Review (DESHF-55/CMR)

Document Title: 550006 (6M) HOT WATER BOILER MAINTENANCE (2EA)			
Document Number: 431775-05	**Revision or Issue Date:** 1		
Document Point of Contact: Jennifer Simmons Z# 364268			
Section 1: Activity/Document Screening		**Y**	**N**
1. Is the job classified as high hazard?			✓
2. Are multiple organizations involved?			✓
3. Is an IH/S designated posting required?			✓
4. Is work taking place in a Permit Required Confined Space?			✓
5. Is medical monitoring, sampling, or any type of IH/S monitoring required?		✓	
6. Is IH/S requiring respiratory protection?			✓
Continue with remainder of form 1) if any "yes" answers above, or 2) at reviewer's discretion.			
Section 2: Hazard Review		**Y**	**N**
1. The Hazard Assessment has been completed and documented per P300?		✓	
2. The appropriate IH/S Subject Matter Experts have been engaged per identified hazards?		✓	
3. Is an IH/S designated posting required?			✓
Section 3: Activity Review	**NA**	**Y**	**N**
1. Is required IH/S sampling specifically identified?	✓		
2. Are all required permits specifically identified?		✓	
3. Are all posting requirements specifically identified?		✓	
4. Are release conditions specifically identified for the required postings?		✓	
5. Are all medical monitoring requirements identified?	✓		
6. Is required PPE specifically identified? (E.g., fire resistant clothing for sparking)		✓	
7. Are administrative & engineering controls identified and when to be used? (E.g., LEV during torch cutting or welding)		✓	
8. Are IH/S requirements for sequential tasks specifically identified? (E.g, when outer PPE layer(s) must be removed period to leaving an enclosure)		✓	
9. Is a single PIC identified prior to work when multiple organizations are involved?		✓	
10. Will controls introduce new hazards or exacerbate existing conditions? (E.g., heat stress)			✓
If yes, have those hazards been addressed?			
11. Have co-located personnel been identified and hazard communication indicated?		✓	
12. Are hazards from co-located activities anticipated and addressed?		✓	
13. Are hold points added when authorization to proceed is necessary? (E.g., additional or different controls to be determined pending sampling results)	✓		

Section 4: Issues and Comments

Complete this section for comments or any "no" questions in sections 2 and 3. Attach another sheet if needed.

Question	Issue/Comment
1.5	Yes for Hearing Conservation Program (HCP) enrollment for workers in high noise areas (PF6)
2.3	No IH/S designated posting required.
3.10	LO/TO controls in place per P101-3, Shock/Arc Flash Hazard Controls in place per Form 2193.

Approval/Signature (IH/S Use Only) *(Signature indicates issues/comments are satisfactorily resolved; IWD is approved.)*

MICHAEL SLINKARD (Affiliate)

Digitally signed by MICHAEL SLINKARD (Affiliate)
Date: 2022.04.19 16:25:18 -06'00'

Cy: Planner
Document Requester

00760420 01

Attachment A, FOD-1 Nuclear Facilities QEV Evaluation Request Form

(Page 1 of 1)

Review/Evaluation Request Form

GENERAL DOCUMENT DETAILS *(To be completed by requester)*

USQ Review/Evaluation is requested for the following facilities (*check all that apply*)

☒ TA-55 ☐ CMR ☐ RLWTF ☐ TWF ☐ RANT ☐ WCRRF

Doc ID# of the Document(s) to be evaluated:	**Revision:** (*if applicable*)	**Date of Request:**
MODEL PM WO / IWD #431775-05	N/A	04/28/2021
Doc Title(s) of the Document(s) to be evaluated: 550006 (6M) HOT WATER BOILER MAINTENANCE (2EA)		**Requested Return Date:** 5/11/2021

Document Type(s) to be evaluated:

☐ **Design Change (DCF, FCN, FCR, DRN, TMC, etc.) or legacy change, DCP, ECN, etc.**

☐ **Other (SCR, NCR, etc.)** *(Specify)*: _____

☐ **WO/IWD* and DCF****

☒ **WO/IWD* without DCF (below information also required):**

Associated Design Doc # previously evaluated through the USQ process and its USQ Evaluation #:

Design Doc ID#: _____ **Evaluation #:** _____

***For questions on WO/IWD, contact** *(Name/Phone)*: Abe Peralta 606-1857 *(Planner)*

****For questions on DESIGN, contact** *(Name/Phone)*: _____ *(PE or RE)*

Description of Requested Action/Change:

Model PM Each time this activity is performed a new WO/IWD # will be generated but the model # and procedural task will remain the same

Requester Name/Z#:	**Email:**	**Phone:**
David Leyba Z# 118210	djleyba@lanl.gov	665-6812
Additional Name/Z# *(include when necessary)*:	**Email:**	**Phone:**
Leroy Brazfield Z# 201548	leroyb@lanl.gov	667-3266

Functional Organization Area: *(Specify content owning organization)*	☒ Facility TA-55
	☐ Organization _____
Subject Matter Expert (SME):	Contact info:

QEV REVIEW OR USQ EVALUATION *(To be completed by USQ QEV)*

Review/Evaluation Tracking Number	**Print Name/Z#**	**Signature**	**Date**

Cite the reason if the change did not require review per SBP-112-3 (current revision):

No USQ required per POD Memo 20-071. 6/4/21

0076042001

No: RN101-3-01 Interim Requirements for Hazardous Energy Identification and Control
Attachment A. Lockout/Tagout Pre-job Walk-down Checklist (Page 1 of 2)

Instructions: Perform the pre-job walk-down with the necessary people per Section 3.1 of the Requirements Notice 101-3-01. Complete this checklist and take signed checklist to the lock coordinator. All Authorized Workers are required to participate in the walk-down and sign the checklist in order to check out a lock and tag. If additional workers are added to the job, they must also perform a walk-down of the system and show a signed checklist to the lock coordinator. The signed checklists are to be kept with the parent work document (IWD, work package, etc.)

Work Document Number (e.g., Package/Procedure#): _____

- ☐ We have walked down and discussed the work to be performed.
- ☐ All energy isolation points and positions have been identified and documented.
- ☐ The proper energy control procedure is being used (Simple vs Complex LO/TO).
- ☐ All energy-isolating devices are labeled properly (e.g., labels aren't faded, no hand written modifications).
- ☐ No discrepancies are found between record drawings, labels, panel schedules, and LO/TO procedures.
- ☐ Lockout devices have been identified to support the work.

*If any of the above items are identified to be inadequate, pause work, report the issues to your RLM, and contact the appropriate SMEs to help resolve issues ***before*** performing/resuming work.

Simple Lockout/Tagout

By signing below, you acknowledge that you have completed the pre-job walk-down and there are no issues that need to be reported to your Responsible Line Manager before beginning work.

Lead Authorized Worker (print name)	Z Number	Signature/Date
Authorized Worker (print name)	Z Number	Signature/Date

Complex Lockout/Tagout

By signing below, you acknowledge that you have completed the pre-job walk-down and there are no issues that need to be reported to your Responsible Line Manager before beginning work.

MS&E Owner/Operator (print name)	Z Number	Signature/Date
David Lyon	118210	6-6-22
Preparer or PIC (print name)	Z Number	Signature/Date
Thomas Alton	175267	06/06/2022
Lead Authorized Worker (print name)	Z Number	Signature/Date
Andrew Ulibarri	237056	6/6/22
Authorized Worker (print name)	Z Number	Signature/Date
Norma Ramos	291737	6/6/22
Authorized Worker (print name)	Z Number	Signature/Date
MARTIN DE ANUSATEGUI	292698	06 JUNE 2022
TIMOTHY FANGIO	282917	6-7-22

Note: Print additional sheets as necessary.

NOTE: Use these buttons to print or save the form. DO NOT use the browser tool bar.

Los Alamos NATIONAL LABORATORY EST 1943

Form 2244

Lockout/Tagout (LO/TO) Orders

Section 1: General Information

Work Document Number (e.g., Package/Procedure #): 716023-01	LO/TO Remedy ID: 22-4612
Location of Equipment to be Isolated: TA: 55 Bldg: 6 Rm/Other: 103	Description of Machinery, System & Equipment (MS&E) to be worked on: B607 / ~~B603~~
MS&E Owner/Operator: David Leyba Z Number: 114210 Phone: 5-6817	
Shutdown to be performed by MS&E Owner/Operator (as determined by MS&E Owner/Operator) ☐ Yes ☒ No	Re-energize/restart to be performed by MS&E Owner/Operator (as determined by MS&E Owner/Operator) ☐ Yes ☒ No
Reason for LO/TO: (A) Fireside / waterside	
Group LO/TO (2 or more)? ☒ Yes ☐ No *If yes, a lead authorized worker must be appointed.*	Group lock box used? ☑ Yes ☐ No
Shift or Personnel Changes? ☐ Yes ☑ No *If yes, a description of how the continuity of LO/TO protection will be ensured must be referenced or attached to this form. (See Section 3.9.6 of P101-3 for details.)*	☐ Continuity of LO/TO protection details described in operating procedure, work instruction, or other work control document. Document Number:

Section 2: Energy Control Procedure

1. Plan the work.
2. Identify and assess hazardous energy.
3. Contact the MS&E owner/operator.
4. Obtain locks and tags from lock coordinator.
5. Notify affected workers.
6. Shutdown MS&E according to **Section 3: Shutdown Sequence**.
7. Isolate and lock out MS&E from energy source, relieve stored energy, and perform verification of isolation according to **Section 4: LO/TO Sequence**.
8. Perform the work.
9. Release MS&E from LO/TO according to **Section 5: Release MS&E from Lockout/Tagout Sequence**.

Section 3: Shutdown Sequence

☐ Perform shutdown according to operating procedure, work instruction, or other work control document (e.g., IWD, Owner's Manual, SOP).
Document Number: 716023-01

☐ **N/A**; MS&E to be worked on will be isolated according to **Section 4: LO/TO Sequence** (e.g., cannot be shut down)

Detail the process to normally shut down the MS&E below, if not following other document referenced above or N/A.

Step No.	Action/Description	Step No.	Action/Description
☐ 1		☐ 6	
☐ 2		☐ 7	
☐ 3		☐ 8	
☐ 4		☐ 9	
☐ 5		☐ 10	

Section 4: LO/TO Sequence

☐ Perform LO/TO sequence according to operating procedure, work instruction, or other work control document (e.g., IWD, Owner's Manual, SOP).
Document Number:
Describe how to effectively isolate & lockout the MS&E below, if not following other document referenced above.

Isolate & Lockout (Step No.)	Equipment Descriptor (What is being locked out? e.g., machine drive motor, input power to MCC)	Energy Source (e.g., electrical, mechanical, pneumatic, hydraulic, chemical, thermal)	Energy Isolation Device (e.g., specific ID, description, circuit #, lock box #)	Location of Energy Isolation Device (e.g., room number, north wall, south wall)	Required LO/TO Position or Alignment (e.g., off, open, closed, on)	Verification Method (e.g., live/dead/live, crack open, on-off-on-off, peer checking, independent verification)	Verifier's Initials (if req'd)	See Section 5: Release (Step No.)
☐ (1)	BL002	GAS	NG-BL002-V-1	TA 55 / bldg 6 Rm 103	closed	peer	NR	☐
☐ (2)	BL002	water	CCHW - BL002 - V1	TA 55 / bldg 6 Rm 103	closed	peer	NR	☐
☐ (3)	BL002	Water	CCHW - BL002 -V2	TA 55 / bldg 6 Rm 103	closed	peer	NR	☐
☐ (4)	BL002	Electrical	MCC - 603D compt. B1L	TA 55 / bldg 6 Rm 103	off	on-off-on-off	NR	☐
☐ (5)	BL002	GAS	NG - BL002 /	TA 55 bldg 6 Rm 103	closed	Peer	NR	☐
☐ (6)	Lockbox	Lockbox	Lockbox TA55-006	TA 55 / bldg 6 Room 103	Locked	Peer	NR	☐
☐ (7)								☐
☐ (8)								☐

Section 5: Release MS&E from Lockout/Tagout Sequence

1. Check the MS&E and immediate area for items that could result in damage or danger on start-up.
2. Check the work area to ensure that all workers have been safely positioned or removed from the work area.
3. Verify that the controls are in neutral or "off" position.
4. Notify the owner/operator and affected workers that work is complete and MS&E is ready to release from LO/TO.
5. Remove the LO/TO device, and re-energize (if appropriate according to MS&E owner/operator) according to the sequence as identified above under Release in **Section 4: LO/TO Sequence** or according to operating procedure, work instruction, or other work control document identified in **Section 4**.
6. Return lock and locking device to Lock Coordinator.

Energy Control Procedure prepared by:

Preparer (print name)	Z Number	Organization	Phone	Signature/Date
Andrew Ulibarri	237056	LOG-CS	4-8315	6/6/22

By signing below, you acknowledge that this energy control procedure and/or referenced documents identify the isolation devices, isolation points, and methods necessary to prevent any unexpected release of hazardous energy.

Energy Control Procedure approved by:

MS&E Owner/Operator (print name)	Z Number	Organization	Phone	Signature/Date
David Leyba	116210	MSSTA55	5-6812	6-6-22

Section 6: All Authorized Workers (anyone applying a lock for this activity)

Fill out the following information or print and attach Authorized Workers information from the Lockout/Tagout Remedy Application.

Authorized Workers Name(s)	Z Number	Date Lock Applied	Date Lock Removed
Lead: Andrew Ulibarri	237056	6-6-2022	
George M. Tracy	170386	6-6-22	6/14/22
MARTIN DE AMUSATEGUI	# 292698	6/6/22 ~~06 JUNE 2022~~	6/14/22
Norma Ramos	291737	6-6-22	6/14/22
Timothy Fangio	282917	6-7-22	6/14/22

ATTACHMENT A: SEMI- ANNUAL MAINTENANCE DATA SHEET FOR HOT WATER BOILER

TA	55	ROOM	103	DATE	06/06/22
BLDG	6	EQUIP. ID	B-602		

STEP	DESCRIPTION	S	U	N/A	COMMENTS AND DEFICIENCIES
1.0	***Pre-Maintenance***				
	NOTE: **Preoperational and pre-maintenance activities shall be conducted per the work order package, e.g.: lock out/tag out, permits, special instructions, etc.**				
	NOTE: **All repair work, adjustments, or the replacement of parts shall be done in accordance with the manufacturer's procedures, specifications, recommendations and instructions**				
1.1	Notify area Operations Center that work will be in progress on the boiler system.	✓			
2.0	***Maintenance***				
2.1	Observe temperature and operating pressure and general conditions. Fire and cycle boiler. The burner should start smoothly without unusual noises.	✓			
2.2	Visually inspect combustion. Changes in flame shape, color and sound are among early indicators of potential combustion-related problems. Changes may be due to changes in fuel pressure or gas/air linkage movement.	✓			
2.3	Check gas/air linkages, on power burners that modulate, for positioning, tightness and binding. Combustion analysis is verifiable only with a flue gas analyzer and is performed mainly on boilers with power burners. Adjust air/fuel mixture as needed.	✓			
2.4	Determine the cause of any unusual noises or conditions and correct as necessary. Report any needed corrections to the Facility Coordinator for corrective maintenance.	✓			
2.5	Inspect fuel supply system and gas controls. Leak check gas controls and associated gas piping with a gas detector or soapsuds. Verify gas pressure at utility regulator is the same pressure at the boiler. To ensure the natural gas piping does not contain any restriction or blockage.	✓			
2.6	Test float-operated low water fuel cut-off (LWC) by pressing the '*Manual Reset Low Water*' button (hold button down for approximately 8 seconds). This will simulate a low water condition by turning off the boiler.	✓			

#716042 01

STEP	DESCRIPTION	S	U	N/A	COMMENTS AND DEFICIENCIES
	NOTE: **On hot water heating boilers it may be necessary to trip the float assembly linkage manually, after blowing down the LWC, to make the mercury switch trip. This is done because a hot water boiler is full of water and will not always trip the mercury switch in the LWC, like a steam boiler will, when the LWC is blown down. Remove the cover on top of the LWC to access the float assembly linkage. It is crucial that the burner shuts off immediately after this test.**				
2.7	Test safety relief valve (Try Lever Test). Manually open the valve by lifting up on the handle while boiler is under pressure. Water should flow when this is done and should shut off completely when the handle is released. Some boilers have two of these devices.	✓			
	⚠ CAUTION **The discharge from these valves is under pressure and is at high temperatures. Exercise caution to avoid personal injury or injury to others.**				
2.8	Observe the operation of operating control. Operating controls start, stop and modulate some burners (if desired) in response to the systems demand, keeping water temperature at or below controller setting.	✓			
2.9	Test limit controls: high limit, air switch, etc.	✓			
2.10	Test flame detection devices on boilers with flame scanners. Remove the flame scanner with the burner firing. The burner should shut off as a flame failure condition. Clean the flame scanner, reinstall and reset programmer. Check for proper operation as boiler goes through a firing cycle and light off.	✓			
2.11	Check all electrical controls and circuitry. Careful inspection may disclose any of the following items: cracked mercury tubes, separation of mercury, cracked insulators (probe type), jumpered conditions, loose connections, poor or deteriorated wiring and contact points of foreign matter, improperly used bypass switches, cut-off switches wired in parallel, shutoffs installed at improper levels, wedges behind mercury tubes.	S			GT 17386
2.12	Observe condition of expansion tank. A waterlogged expansion tank will cause the safety relief valve, on a hot water heating boiler, to relieve every time that it fires. This causes the introduction of makeup water, causing a dilution of the water chemistry in a treated system. Drain expansion tank if it is of a non-bladder type and refill to reestablish an air cushion. Check the air pressure on bladder-type expansion tanks.	✓			

#716042 01

STEP	DESCRIPTION	S	U	N/A	COMMENTS AND DEFICIENCIES
2.13	Observe operation of circulating pumps. Lubricate pump motors if they are of the type that needs lubrication.	✓			
2.14	Observe operation of forced draft fan motors on boilers with power burners and induced draft fan motors on horizontal breeching where applicable. Lubricate fan motors if they are of the type that needs lubrication.	✓			
2.15	Check pressure-reducing valve. Replace the strainer in the valve if needed.	✓			
2.16	Check condition of heating surfaces. (Example: leaking handhole covers, hot spots, etc.)	✓			
2.17	Check combustion air supply openings to ensure that they are not closed or stopped up.	✓			
2.18	Inspect condition of stacks and rain caps.	✓			
2.19	Ensure that the boiler is operating within normal parameters prior to leaving the area.	✓			
3.0	***Post Maintenance***				
3.1	Record all mechanical maintenance data, testing data and other notable items.	✓			

NOTE:

Post maintenance activities shall be conducted in accordance the work order package instructions, e.g. lock out/tag out, special 2101instructions, etc.

REMARKS: NONE

Approved by CSE 2/28/2013

#716042 01

ATTACHMENT A: SEMI- ANNUAL MAINTENANCE DATA SHEET FOR HOT WATER BOILER

TA	55	ROOM	103	DATE	7/29/22
BLDG	PF-6	EQUIP. ID	B-603		

STEP	DESCRIPTION	S	U	N/A	COMMENTS AND DEFICIENCIES
1.0	***Pre-Maintenance***				
	NOTE: **Preoperational and pre-maintenance activities shall be conducted per the work order package, e.g.: lock out/tag out, permits, special instructions, etc.**				
	NOTE: **All repair work, adjustments, or the replacement of parts shall be done in accordance with the manufacturer's procedures, specifications, recommendations and instructions**				
1.1	Notify area Operations Center that work will be in progress on the boiler system.			✓	
2.0	***Maintenance***				
2.1	Observe temperature and operating pressure and general conditions. Fire and cycle boiler. The burner should start smoothly without unusual noises.			✓	
2.2	Visually inspect combustion. Changes in flame shape, color and sound are among early indicators of potential combustion-related problems. Changes may be due to changes in fuel pressure or gas/air linkage movement.			✓	
2.3	Check gas/air linkages, on power burners that modulate, for positioning, tightness and binding. Combustion analysis is verifiable only with a flue gas analyzer and is performed mainly on boilers with power burners. Adjust air/fuel mixture as needed.			✓	
2.4	Determine the cause of any unusual noises or conditions and correct as necessary. Report any needed corrections to the Facility Coordinator for corrective maintenance.			✓	N/A
2.5	Inspect fuel supply system and gas controls. Leak check gas controls and associated gas piping with a gas detector or soapsuds. Verify gas pressure at utility regulator is the same pressure at the boiler. To ensure the natural gas piping does not contain any restriction or blockage.			✓	
2.6	Test float-operated low water fuel cut-off (LWC) by pressing the '*Manual Reset Low Water*' button (hold button down for approximately 8 seconds). This will simulate a low water condition by turning off the boiler.			✓	✓

#716042 01

STEP	DESCRIPTION	S	U	N/A	COMMENTS AND DEFICIENCIES
	NOTE: **On hot water heating boilers it may be necessary to trip the float assembly linkage manually, after blowing down the LWC, to make the mercury switch trip. This is done because a hot water boiler is full of water and will not always trip the mercury switch in the LWC, like a steam boiler will, when the LWC is blown down. Remove the cover on top of the LWC to access the float assembly linkage. It is crucial that the burner shuts off immediately after this test.**				
2.7	Test safety relief valve (Try Lever Test). Manually open the valve by lifting up on the handle while boiler is under pressure. Water should flow when this is done and should shut off completely when the handle is released. Some boilers have two of these devices.			✓	
	⚠ CAUTION **The discharge from these valves is under pressure and is at high temperatures. Exercise caution to avoid personal injury or injury to others.**				
2.8	Observe the operation of operating control. Operating controls start, stop and modulate some burners (if desired) in response to the systems demand, keeping water temperature at or below controller setting.			✓	
2.9	Test limit controls: high limit, air switch, etc.			✓	
2.10	Test flame detection devices on boilers with flame scanners. Remove the flame scanner with the burner firing. The burner should shut off as a flame failure condition. Clean the flame scanner, reinstall and reset programmer. Check for proper operation as boiler goes through a firing cycle and light off.			✓	
2.11	Check all electrical controls and circuitry. Careful inspection may disclose any of the following items: cracked mercury tubes, separation of mercury, cracked insulators (probe type), jumpered conditions, loose connections, poor or deteriorated wiring and contact points of foreign matter, improperly used bypass switches, cut-off switches wired in parallel, shutoffs installed at improper levels, wedges behind mercury tubes.			✓	N/A
2.12	Observe condition of expansion tank. A waterlogged expansion tank will cause the safety relief valve, on a hot water heating boiler, to relieve every time that it fires. This causes the introduction of makeup water, causing a dilution of the water chemistry in a treated system. Drain expansion tank if it is of a non-bladder type and refill to reestablish an air cushion. Check the air pressure on bladder-type expansion tanks.			✓	

#716042 01

STEP	DESCRIPTION	S	U	N/A	COMMENTS AND DEFICIENCIES
2.13	Observe operation of circulating pumps. Lubricate pump motors if they are of the type that needs lubrication.			✓	
2.14	Observe operation of forced draft fan motors on boilers with power burners and induced draft fan motors on horizontal breeching where applicable. Lubricate fan motors if they are of the type that needs lubrication.			✓	
2.15	Check pressure-reducing valve. Replace the strainer in the valve if needed.			✓	N/A
2.16	Check condition of heating surfaces. (Example: leaking handhole covers, hot spots, etc.)			✓	
2.17	Check combustion air supply openings to ensure that they are not closed or stopped up.			✓	
2.18	Inspect condition of stacks and rain caps.			✓	
2.19	Ensure that the boiler is operating within normal parameters prior to leaving the area.			✓	✓
3.0	***Post Maintenance***				
3.1	Record all mechanical maintenance data, testing data and other notable items.			✓	

NOTE:

Post maintenance activities shall be conducted in accordance the work order package instructions, e.g. lock out/tag out, special 2101instructions, etc.

REMARKS: B-603 (6M) PM UNABLE TO PERFORM DUE TO B-602 NOT RUNNING AT THIS TIME

Approved by CSE 2/28/2013

#716042 01

Los Alamos NATIONAL LABORATORY EST.1943

Form 2193

Electrical Risk/Hazard Assessment Record

1. Description of Work to be Performed ☐ NA*

Perform maintenance on the PF6 boilers. LOTO breakers in MCC-603D-B1/L and MCC-603C-A2/R and perform zero voltage verification.

2 Equipment ID(s)	TA	Building	Room(s)
B-602 & B-603	55	0006	

3. P101-13, *Electrical Safety Program*, Hazard Class(es)
Class 1.3b

4. Type of Work
☒ Mode 1 ☐ Mode 2 ☐ Mode 3 ☐ Equipment Operation ☐ NA*

5. Equipment Condition(s)
☒ Maintained ☐ Properly Installed ☐ No Evidence of Impending Failure ☐ NA*

6. Environmental Conditions
☒ Dry ☐ Damp ☐ Wet ☐ Confined Space ☐ Elevated Work Surface ☐ NA*

7. Risk Level per P101-13 (See Attachment A, Sections 4.5.2 through 4.5.4)
☐ Low ☒ Moderate ☐ High ☐ NA*

8. Electrical Worker(s)
☐ Alone ☒ Two-Person ☐ Safety Watch ☐ NA*

9. Results of Thermal Risk Assessment (Applies when there is no shock and/or arc flash hazard but there is exposure to a thermal burn [e.g., high current, low voltage]) (See P101-13, Attachment A, Section 4.8):
☒ No Thermal Hazard
☐ No Metallic Items ☐ Heavy Duty Leather Gloves ☐ NA*
☐ Listed Insulated Tools ☐ Safety Glasses or Goggles ☐ Non-Sparking Tools
Other PPE:

10. Results of the Shock Risk Assessment
☐ No Shock Hazard (Equipment <50 VAC or <100 VDC)
Voltage: 480 ☒ AC ☐ DC
Limited Approach Boundary: 3 ft 6 in.
Restricted Approach Boundary: 1 ft 0 in. ☐ Avoid Contact
Dielectric PPE ☐ NA*
☐ Class 00 (500 VAC/750 VDC) ☒ Class 0 (1,000 VAC/1,500 VDC)
☐ Class 1 (7,500 VAC/11,250 VDC) ☐ Class 2 (17,000 VAC/25,500 VDC)
☐ Class 3 (26,000 VAC/39,750 VDC) ☐ Class 4 (36,000 VAC/54,000 VDC)
☐ Gloves ☐ Boots ☐ Blankets ☐ Sleeves ☐ Mats
Other PPE:

Must be documented in the Integrated Work Document (IWD).

#716042 01

11. Results of Arc Flash Risk Assessment:

☐ No Arc Flash Hazard (Equipment <240 VAC supplied by <125 kVA transformer **or** ≤500 A DC)

Method Used:

☐ Facility Electrical Hazard Analysis Tool ☐ Arc Flash Label Information ☐ NFPA 70E (D.2 Lee)

☐ NFPA 70E (D.3 Doughty) ☐ NFPA 70E (D.4 IEEE 1584)/IEEE 1584 ☐ NFPA 70E (D.5 Doan DC)

☐ EFCOG Doan ☐ EFCOG Non-Linear ☐ Other: _____

Arc Flash Boundary: 2 ft 8 in. Incident Energy: .06 cal/cm^2 Working Distance: 18 in.

Arc Flash PPE: (AN-As Needed, AR-Arc Rated) ☐ NA*

☒ <1.2 cal/cm^2 **CATEGORY 0**

Non-melting or untreated natural fiber long-sleeve shirt and long pants, safety glasses or safety goggles, hearing protection, and heavy duty leather gloves or dielectric gloves with leather protectors.

☐ [≥1.2–4] cal/cm^2 _____ cal/cm^2 **CATEGORY 1** *(8 cal/cm^2 must be specified for LOG crafts)*

AR long-sleeve shirt and pants, or AR coverall; AR face shield and AR balaclava, or AR flash suit hood; AR jacket, parka, rainwear, or hard hat liner (AN); Hard hat, safety glasses or safety goggles, hearing protection, and heavy duty leather gloves, or AR gloves, or dielectric gloves with leather protectors.

☐ [≥4–8] cal/cm^2 _____ cal/cm^2 **CATEGORY 2** *(8 cal/cm^2 must be specified for LOG crafts)*

AR long-sleeve shirt and pants, or AR coverall; AR face shield and AR balaclava, or AR flash suit hood; AR jacket, parka, rainwear, or hard hat liner (AN); Hard hat, safety glasses or safety goggles, hearing protection, leather footwear and heavy duty leather gloves, or AR gloves, or dielectric gloves with leather protectors.

☐ [≥8–25] cal/cm^2 _____ cal/cm^2 **CATEGORY 3** *(25 or 40 cal/cm^2 must be specified for LOG crafts)*

AR long-sleeve shirt and pants, or AR coverall; AR flash suit hood; AR jacket, parka, rainwear, or hard hat liner (AN); Hard hat, safety glasses or safety goggles, hearing protection, leather footwear and AR gloves, or dielectric gloves with leather protectors.

☐ [≥25–40] cal/cm^2 _____ cal/cm^2 **CATEGORY 4** *(40 cal/cm^2 must be specified for LOG crafts)*

AR long-sleeve shirt and pants, or AR coverall; AR flash suit hood; AR jacket, parka, rainwear, or hard hat liner (AN); Hard hat, safety glasses or safety goggles, hearing protection, leather footwear and AR gloves, or dielectric gloves with leather protectors.

Other PPE:

12. Additional Risk Control Measures: ☐ NA*

Barricades/Shock Hazards

Must be documented in the Integrated Work Document (IWD).

Preparer (print name)	Z Number	Organization	Phone	Date
Qualified Person or Engineer providing calculations (print name) Eleazar Martinez	Z Number 190284	Organization ES-55	Phone 606-0885	Date 3/9/21
Electrical Safety Officer (print name) Eleazar Martinez	Z Number 190284	Organization ES-55	Phone 606-0885	Date 3/9/21
Electrical Safety Officer Signature ELEAZAR MARTINEZ (Affiliate)	Digitally signed by ELEAZAR MARTINEZ (Affiliate) Date: 2021.03.09 13:55:33 -07'00'			

#716042 01

Los Alamos NATIONAL LABORATORY EST. 1943

TA-55 Preventive Maintenance Close Out Sheet

Work Order No: #716042 01

Instructions: Enter the requested information prior to submitting PM package for closeout.

Maintenance Coordinator:

- Is the equipment listed for this PM: ☐ ML1 ☐ ML2 ☐ ML3 ☒ ~~ML4~~
- If deficiencies were noted, provide the FSR # and WO # created to correct the PM deficiency:

FSR #: NA and WO #: Provided after walkdown

MC Signature/Z# & Date [signature] 299913 7.29.22

System Engineer:

If corrective action is needed, must it be completed prior to next PM performance: ☒ ~~Yes~~ ☐ No

SE Signature/Z# & Date Lee M Romero 7/29/22 114748

Craft/PM Superintendent:

Was Material used from a TA55 Warehouse? ☐ Yes ☑ No

If "Yes," a Material Pick list must be included in the PM work package.

Signature/Z# & Date [signature] 122002 7-29-22

Verification signatures:

PM Coordinator Signature/Z# & Date [signature] 357128 9/14/22

* PMT for the TS&R package to address B-602 issues WILL cover 6-month Boiler saffies on B-602 and B-603

Lee Romero 114748 7/29/22

Los Alamos NATIONAL LABORATORY EST.1943

AP-WORK-002: Attachment 11
Maintenance and Site Services
Work Completion Form

Work Order/Task: #716042 01

Start Date: 6-6-22	Completion Date: 7/29/22

SUMMARIZE THE WORK PERFORMED

Date	
7-29-22	COMPLETED (6M) PM ON B-602 BUT COULD NOT COMPLETE (6M) PM ON B-603 DUE TO NOT BEING FULLY OPERATIONAL B-602 AT THIS TIME

FOR CORRECTIVE WORK – WHAT FAILED AND WHAT WAS FIXED

	Failure Mode Root Cause Code (Circle Root Causes that Apply)	
Failure Mode	Circuit Breaker Tasks	System Restoration Issues
	Digital Component Tasks	Pump Related Tasks
	Doors/Hatches	Procedure Use
	Electrical Determinations	Rigging/Lifting Tasks
NONE	Failed Surveillance	Electrical Switches
	Fastener Tasks	Troubleshooting Issues
	FME Tasks	Valve Related Tasks
	I&C Calibration/Setpoints	Welding
	Mechanical Connections	Work Instruction Issues
	Other (Specify Root Cause)	NONE
Failure Mode Comments	(Add Details)	
	Rework Mode (Circle Rework Causes that Apply)	
Rework	Cause Indeterminate	Life Cycle Management
	Design Deficiency	PM Deficiency
	Intentionally Abbreviated Maintenance	Rule Base Human Performance Deficiency
NONE	Instructional Deficiency	Skill Base Human Performance Deficiency
	Knowledge Based Human Performance Error	Tools/Equipment/Lifts
	Deficiency	Vendor Deficiency
	Operational Deficiency	Work Management Deficiency
		Weather
	Other (Specify Rework Mode)	NONE
Comments		

#716042 01

FOR PMs – SUMMARIZE AS FOUND AND AS LEFT CONDITIONS BELOW		
	As Found Conditions (Circle Conditions that Apply)	
As found	(Unanticipated Failure)	Within Tolerance
	Failure Not Normal Wear	Satisfactory
	Failure Normal Wear	Superior, Like New
	(Outside of Tolerance)	Not Applicable
	(Reliability Degraded)	
	Other (Specify As Found Condition)	
Comments	PM Could not BE Completed on B-603 Cause B-602 NOT WORKING	
As left		
Parts/Repairs	NONE	
Read/meas.	N/A	
Post test info.	N/A	
Problems Encountered (delays, safety, etc.):		
	Delay Codes (Circle Codes that Apply)	
Delay	Access	Operations
	Equipment	RCT Availability
	IWD Workability	Safety Pause
	Material	Weather
		# of Hours_____ Date(s)_____
	Other (Specify Reason for Delay)	
Comments	NONE	
Lessons Learned/Recommendations:		
	NONE	
Name: TIMOTHY FANGIO Z# 282917 **Signature:**		**Date:** 7/29/22

Los Alamos NATIONAL LABORATORY EST. 1943

AP-WORK-002: Attachment 11
Maintenance and Site Services
Work Completion Form

#716042 01

PIC/SUPT

☑ PM has been completed in its entirety and ready for closure.

IF A PM COULD NOT BE COMPLETED:

☐ Percentage complete is _____%

☐ Sections that did not work and need to be rescheduled

_____

Reasons why:

122002
7-29-22

MAINTENANCE COORIDATOR/AREA WORK COORDINATOR

Work Package is Complete and may be closed out: YES ☑ NO ☐

IF no: State Reason

7-29-22
A299913

Additional Work Needed? ☑ YES ☐ NO

Document UP/WO/FSR Number: WO# will be entered after walkdown

ENGINEERING (FOR MD and CD Work Orders)

IF a configuration baseline has been changed, THEN indicate the changes are to be incorporated into the following documents and/or configuration baseline:

☐	Drawings	☐	FDD/SDD
☐	Procedures	☐	Master Equipment List
☐	Permits	☐	Checklists

N/A

SE Name: Signature: Date: 7-29-22

WORK CONTROL

Moderate/High Hazard – WMC/Planner reviewed for Lessons Learned/Feedback

☐ YES ☐ NO N/A ☒

☒ Review of the completed work package is complete per AP-WORK-005, and the work package is ready to be set to complete in CMMS.

Name:	**Z#**	**Signature:**	**Date:**
Samantha Sanchez	357128		9/14/22

Work Order/Task: #716042 01

Start Date: 6-6-22	Completion Date: 7-29-22

ADITIONAL DETAILS ON WORK PERFORMED

Date	(Add details on As Found, Failure Mode, and Lessons Learned etc.)
7.29.22	(6M) PM WAS COMPLETE ON B-602 HOWEVER (6M) PM ON B-603 WAS NOT ABLE TO BE PERFORMED DUE TO B-602 NOT BEING FULLY OPERATIONAL AT THIS TIME. 7/29 - 282917
–	B-603 6-MONTH COULD NOT BE complete due to B-602 operation issues. The PMT for TS&R of gas regulator will complete the 6-month steps. Saftied will be tested prior to next PM interval. Lee Romero 114748 7/29/22

ATTACHMENT A807.F.b.

External Combustion

Revised Maintenance Procedures for Sources listed in Table 800.A.

Revisions to procedures did not occur during this monitoring period.

ATTACHMENT A907.A.

Chemical Usage

Chemical Purchases from ChemDB

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1420164	-	SILICONE II CLEAR HOUSEHOLD GLUE	2.8	Ounces(OZ)	07/01/22
1642638	-	MOBIL DTE 24	5	Gallon(GAL)	07/05/22
1642336	-	MOBIL DTE 24	5	Gallon(GAL)	07/05/22
1648925	7664-93-9	SULFIDE 1 REAGENT	100	Milliliter(ML)	07/05/22
1648926	7664-93-9	SULFIDE 1 REAGENT	100	Milliliter(ML)	07/05/22
1648927	-	SULFIDE 2 REAGENT	100	Milliliter(ML)	07/05/22
1648928	-	SULFIDE 2 REAGENT	100	Milliliter(ML)	07/05/22
1149103	-	BIO-RAD CHELEX 100 SODIUM FORM	500	Gram(GM)	07/05/22
1149095	-	AG 50W-X8 Resin Hydrogen Form	500	Gram(GM)	07/05/22
1149094	-	BUFFER SOLUTION PH 7.0	500	Milliliter(ML)	07/05/22
1714522	-	FS-One Max	300	Milliliter(ML)	07/05/22
1714531	-	FS-One Max	300	Milliliter(ML)	07/05/22
1714530	-	FS-One Max	300	Milliliter(ML)	07/05/22
1714529	-	FS-One Max	300	Milliliter(ML)	07/05/22
1714525	-	FS-One Max	300	Milliliter(ML)	07/05/22
1714528	-	FS-One Max	300	Milliliter(ML)	07/05/22
1714524	-	FS-One Max	300	Milliliter(ML)	07/05/22
1714523	-	FS-One Max	300	Milliliter(ML)	07/05/22
1714527	-	FS-One Max	300	Milliliter(ML)	07/05/22
1714526	-	FS-One Max	300	Milliliter(ML)	07/05/22
1539401	111-42-2	DIETHANOLAMINE	1	Liters(L)	07/05/22
1688924	7440-37-1	ARGON GAS	7	Liters(L)	07/05/22
1688925	-	Oxygen Nitrogen	103	Liters(L)	07/05/22
1688926	-	Oxygen Nitrogen	103	Liters(L)	07/05/22
1539402	-	EPOXY RESIN	6	Pint(PT)	07/05/22
1539407	-	EPOXY RESIN	6	Pint(PT)	07/05/22
1539406	-	EPOXY RESIN	6	Pint(PT)	07/05/22
1539405	-	EPOXY RESIN	6	Pint(PT)	07/05/22
1539404	-	EPOXY RESIN	6	Pint(PT)	07/05/22
1539403	-	EPOXY RESIN	6	Pint(PT)	07/05/22
1688927	-	15% OXYGEN BAL. NITROGEN	12	Pounds(LB)	07/05/22
1688929	-	15% OXYGEN BAL. NITROGEN	12	Pounds(LB)	07/05/22
1688928	-	15% OXYGEN BAL. NITROGEN	12	Pounds(LB)	07/05/22
1688930	7440-59-7	HELIUM GAS	100	Liters(L)	07/05/22
1688931	7664-41-7	AMMONIA ANHYDROUS	0.51	Kilograms(KG)	07/05/22
1688932	7664-41-7	AMMONIA ANHYDROUS	0.51	Kilograms(KG)	07/05/22
1688933	7664-41-7	AMMONIA ANHYDROUS	0.51	Kilograms(KG)	07/05/22
1688934	7664-41-7	AMMONIA ANHYDROUS	0.51	Kilograms(KG)	07/05/22
1688935	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688981	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688977	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688988	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688978	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688975	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688979	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1688980	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688976	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688982	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688983	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688984	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688985	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688987	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688989	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688990	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688991	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688974	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688986	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1689003	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688999	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688998	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688997	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688996	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688992	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688994	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688995	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688993	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688973	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1689002	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1689001	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688968	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688969	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688970	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688971	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688972	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1689000	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1689052	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1689048	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1689050	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1689051	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1689054	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1689055	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1689056	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1689057	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1689058	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1689059	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1689060	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1689061	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1689049	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1689053	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/05/22
1688936	2551-62-4	SULFUR HEXAFLUORIDE	220	Cubic Feet(CF)	07/05/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1688937	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/05/22
1689039	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/05/22
1689033	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/05/22
1689034	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/05/22
1689035	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/05/22
1689036	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/05/22
1689047	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/05/22
1689038	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/05/22
1689040	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/05/22
1689041	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/05/22
1689042	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/05/22
1689043	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/05/22
1689044	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/05/22
1689045	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/05/22
1689046	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/05/22
1689037	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/05/22
1688938	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1688957	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1688967	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1688966	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1688965	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1688963	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1688961	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1688951	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1688943	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1688944	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1688942	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1688941	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1688945	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1688946	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1688947	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1688948	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1688959	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1688950	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1688960	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1688952	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1688953	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1688954	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1688940	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1688939	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1688955	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1688956	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1688964	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1688958	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1688949	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1688962	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1689091	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1689090	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1689089	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1689098	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/05/22
1689004	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	07/05/22
1689012	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	07/05/22
1689018	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	07/05/22
1689017	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	07/05/22
1689016	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	07/05/22
1689015	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	07/05/22
1689032	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	07/05/22
1689013	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	07/05/22
1689010	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	07/05/22
1689009	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	07/05/22
1689008	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	07/05/22
1689007	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	07/05/22
1689006	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	07/05/22
1689005	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	07/05/22
1689014	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	07/05/22
1689024	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	07/05/22
1689011	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	07/05/22
1689029	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	07/05/22
1689030	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	07/05/22
1689028	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	07/05/22
1689031	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	07/05/22
1689027	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	07/05/22
1689019	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	07/05/22
1689025	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	07/05/22
1689023	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	07/05/22
1689022	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	07/05/22
1689021	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	07/05/22
1689020	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	07/05/22
1689026	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	07/05/22
1689092	-	Compressed Air	220	Cubic Feet(CF)	07/05/22
1689093	-	Compressed Air	220	Cubic Feet(CF)	07/05/22
1717122	7647-01-0	Hydrochloric Acid 30-31%	3000	Pounds(LB)	07/05/22
1717123	7647-01-0	Hydrochloric Acid 30-31%	3000	Pounds(LB)	07/05/22
1740066	824-94-2	4-METHOXYBENZYL CHLORIDE	25	Milliliter(ML)	07/05/22
1740073	-	100ug/mL THORIUM	125	Milliliter(ML)	07/05/22
1740422	7778-74-7	POTASSIUM PERCHLORATE	500	Gram(GM)	07/05/22
1740445	110-82-7	CYCLOHEXANE	20	Liters(L)	07/05/22
1740446	110-82-7	CYCLOHEXANE	20	Liters(L)	07/05/22
1740447	110-82-7	CYCLOHEXANE	20	Liters(L)	07/05/22
1740448	110-82-7	CYCLOHEXANE	20	Liters(L)	07/05/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1740449	-	Eichrom TEVA Resin Columns	100	Gram(GM)	07/05/22
1740450	3648-18-8	DIOCTYLDILAURYLTIN tech-95	25	Gram(GM)	07/05/22
1740451	56275-01-5	SILANOL-TRIMETHYLSILYL MODIFIED Q RESIN	100	Gram(GM)	07/05/22
1740452	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	07/05/22
1740453	-	AG 1-X8 Resin Chloride Form.	500	Gram(GM)	07/05/22
1740454	7783-20-2	AMMONIUM SULFATE	500	Gram(GM)	07/05/22
1740455	7778-80-5	POTASSIUM SULFATE	1	Kilograms(KG)	07/05/22
1740456	-	DOWSIL SE 1700 Clear	1.1	Kilograms(KG)	07/05/22
1740457	2226-96-2	4-HYDROXY-2 2 6 6-TETRAMETHYLPIPERIDINOOXY	100	Gram(GM)	07/05/22
1740458	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	1	Liters(L)	07/05/22
1740460	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	1	Liters(L)	07/05/22
1740461	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	1	Liters(L)	07/05/22
1740459	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	1	Liters(L)	07/05/22
1740462	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	1	Liters(L)	07/05/22
1740463	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	07/05/22
1740464	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	07/05/22
1740465	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	07/05/22
1740466	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	07/05/22
1740470	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	07/05/22
1740482	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	07/05/22
1740481	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	07/05/22
1740479	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	07/05/22
1740477	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	07/05/22
1740476	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	07/05/22
1740475	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	07/05/22
1740474	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	07/05/22
1740473	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	07/05/22
1740471	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	07/05/22
1740480	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	07/05/22
1740469	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	07/05/22
1740468	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	07/05/22
1740467	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	07/05/22
1740483	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	07/05/22
1740472	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	07/05/22
1740478	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	07/05/22
1726753	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	07/06/22
1726755	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	07/06/22
1726756	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	07/06/22
1726757	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	07/06/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1726758	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	07/06/22
1726754	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	07/06/22
1726759	-	PREMIUM HYDRAULIC FLUID AW-32	5	Gallon(GAL)	07/06/22
1726761	-	PREMIUM HYDRAULIC FLUID AW-32	5	Gallon(GAL)	07/06/22
1726760	-	PREMIUM HYDRAULIC FLUID AW-32	5	Gallon(GAL)	07/06/22
V00000BC3D	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/06/22
V00000BC48	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/06/22
V00000BC47	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/06/22
V00000BC46	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/06/22
V00000BC45	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/06/22
V00000BC44	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/06/22
V00000BC43	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/06/22
V00000BC42	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/06/22
V00000BC41	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/06/22
V00000BC40	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/06/22
V00000BC3E	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/06/22
V00000BC3C	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/06/22
V00000BC36	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/06/22
V00000BC31	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/06/22
V00000BC32	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/06/22
V00000BC33	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/06/22
V00000BC3F	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/06/22
V00000BC35	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/06/22
V00000BC3B	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/06/22
V00000BC37	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/06/22
V00000BC38	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/06/22
V00000BC39	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/06/22
V00000BC3A	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/06/22
V00000BC34	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/06/22
V00000BC4D	-	HENRY 440 Cove Base Adhesive	1	Gallon(GAL)	07/06/22
V00000BC4E	-	HENRY 440 Cove Base Adhesive	1	Gallon(GAL)	07/06/22
V00000BC49	-	HENRY 440 Cove Base Adhesive	1	Gallon(GAL)	07/06/22
V00000BC4A	-	HENRY 440 Cove Base Adhesive	1	Gallon(GAL)	07/06/22
V00000BC4B	-	HENRY 440 Cove Base Adhesive	1	Gallon(GAL)	07/06/22
V00000BC4C	-	HENRY 440 Cove Base Adhesive	1	Gallon(GAL)	07/06/22
1718791	-	LIQUID GASKET	3.5	Ounces(OZ)	07/06/22
1718792	-	LIQUID GASKET	3.5	Ounces(OZ)	07/06/22
1718796	-	LIQUID GASKET	3.5	Ounces(OZ)	07/06/22
1718795	-	LIQUID GASKET	3.5	Ounces(OZ)	07/06/22
1718793	-	LIQUID GASKET	3.5	Ounces(OZ)	07/06/22
1718794	-	LIQUID GASKET	3.5	Ounces(OZ)	07/06/22
1726744	-	Ardex P 51	4	Gallon(GAL)	07/06/22
1740484	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	07/06/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1740488	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	07/06/22
1740495	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	07/06/22
1740498	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	07/06/22
1740485	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	07/06/22
1740497	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	07/06/22
1740487	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	07/06/22
1740489	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	07/06/22
1740490	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	07/06/22
1740491	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	07/06/22
1740492	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	07/06/22
1740493	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	07/06/22
1740494	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	07/06/22
1740496	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	07/06/22
1740486	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	07/06/22
1740499	-	SR RESIN	50	Gram(GM)	07/06/22
1726670	-	3M Rubberized Undercoating Black PN08883	19.7	Ounces(OZ)	07/06/22
V00000BC4F	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	07/06/22
V00000BC50	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	07/06/22
V00000BC51	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/06/22
V00000BC52	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/06/22
V00000BC5B	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	07/06/22
V00000BC5E	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	07/06/22
V00000BC53	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	07/06/22
V00000BC5C	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	07/06/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000BC5A	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	07/06/22
V00000BC59	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	07/06/22
V00000BC58	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	07/06/22
V00000BC57	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	07/06/22
V00000BC56	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	07/06/22
V00000BC55	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	07/06/22
V00000BC54	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	07/06/22
V00000BC5D	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	07/06/22
V00000BC5F	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
V00000BC60	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
V00000BC61	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
V00000BC62	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
V00000BC65	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
V00000BC64	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
V00000BC7A	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
V00000BC7E	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
V00000BC7D	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
V00000BC63	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
V00000BC7B	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
V00000BC66	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
V00000BC79	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
V00000BC78	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
V00000BC77	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
V00000BC76	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
V00000BC75	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
V00000BC74	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
V00000BC73	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
V00000BC6B	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
V00000BC72	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
V00000BC68	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
V00000BC7C	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
V00000BC6A	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
V00000BC67	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
V00000BC6C	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
V00000BC6D	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
V00000BC6E	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
V00000BC6F	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000BC70	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
V00000BC71	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
V00000BC69	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/06/22
1726671	-	Avalon Premium 100% Acrylic Interior Satin W/B	18	Liters(L)	07/06/22
1726673	-	Avalon Premium 100% Acrylic Interior Satin W/B	18	Liters(L)	07/06/22
1726674	-	Avalon Premium 100% Acrylic Interior Satin W/B	18	Liters(L)	07/06/22
1726672	-	Avalon Premium 100% Acrylic Interior Satin W/B	18	Liters(L)	07/06/22
1726675	-	Finium DTM-AT S/G Acrylic W/B	18	Liters(L)	07/06/22
1726679	-	Finium DTM-AT S/G Acrylic W/B	18	Liters(L)	07/06/22
1726678	-	Finium DTM-AT S/G Acrylic W/B	18	Liters(L)	07/06/22
1726676	-	Finium DTM-AT S/G Acrylic W/B	18	Liters(L)	07/06/22
1726677	-	Finium DTM-AT S/G Acrylic W/B	18	Liters(L)	07/06/22
1726681	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	07/06/22
1726690	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	07/06/22
1726688	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	07/06/22
1726686	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	07/06/22
1726689	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	07/06/22
1726684	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	07/06/22
1726687	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	07/06/22
1726683	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	07/06/22
1726685	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	07/06/22
1726692	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	07/06/22
1726691	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	07/06/22
1726682	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	07/06/22
1726693	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	07/06/22
1726695	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	07/06/22
1726694	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	07/06/22
1726696	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	07/06/22
1726697	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	07/06/22
1726698	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	07/06/22
1726699	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	07/06/22
1726711	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	07/06/22
1726715	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	07/06/22
1726714	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	07/06/22
1726713	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	07/06/22
1726712	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	07/06/22
1726716	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	07/06/22
1726710	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	07/06/22
1726709	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	07/06/22
1726708	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	07/06/22
1726707	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	07/06/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1726705	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	07/06/22
1726704	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	07/06/22
1726703	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	07/06/22
1726702	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	07/06/22
1726701	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	07/06/22
1726700	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	07/06/22
1726706	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	07/06/22
1726717	-	808-1045 COLORTREND F RED OXIDE	32	Ounces(OZ)	07/06/22
1726727	-	808-1045 COLORTREND F RED OXIDE	32	Ounces(OZ)	07/06/22
1726721	-	808-1045 COLORTREND F RED OXIDE	32	Ounces(OZ)	07/06/22
1726728	-	808-1045 COLORTREND F RED OXIDE	32	Ounces(OZ)	07/06/22
1726720	-	808-1045 COLORTREND F RED OXIDE	32	Ounces(OZ)	07/06/22
1726723	-	808-1045 COLORTREND F RED OXIDE	32	Ounces(OZ)	07/06/22
1726719	-	808-1045 COLORTREND F RED OXIDE	32	Ounces(OZ)	07/06/22
1726726	-	808-1045 COLORTREND F RED OXIDE	32	Ounces(OZ)	07/06/22
1726722	-	808-1045 COLORTREND F RED OXIDE	32	Ounces(OZ)	07/06/22
1726718	-	808-1045 COLORTREND F RED OXIDE	32	Ounces(OZ)	07/06/22
1726725	-	808-1045 COLORTREND F RED OXIDE	32	Ounces(OZ)	07/06/22
1726724	-	808-1045 COLORTREND F RED OXIDE	32	Ounces(OZ)	07/06/22
1726729	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	07/06/22
1726738	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	07/06/22
1726730	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	07/06/22
1726731	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	07/06/22
1726739	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	07/06/22
1726737	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	07/06/22
1726736	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	07/06/22
1726735	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	07/06/22
1726734	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	07/06/22
1726733	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	07/06/22
1726732	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	07/06/22
1726740	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	07/06/22
1726741	-	MOBIL SHC GEAR 460	35	Pounds(LB)	07/06/22
1726742	-	CHEMSAFE CLEAR (CARB Compliant)	5	Gallon(GAL)	07/06/22
1726743	-	CHEMSAFE CLEAR (CARB Compliant)	5	Gallon(GAL)	07/06/22
V00000BC83	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/06/22
V00000BC82	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/06/22
V00000BC81	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/06/22
V00000BC7F	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/06/22
V00000BC80	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/06/22
1740500	-	Indicator solution Amtax 0.2 -12 mg/L and 0.2-30 mg/L	1000	Milliliter(ML)	07/06/22
1740501	-	Indicator solution Amtax 0.2 -12 mg/L and 0.2-30 mg/L	1000	Milliliter(ML)	07/06/22
1740502	-	Indicator solution Amtax 0.2 -12 mg/L and 0.2-30 mg/L	1000	Milliliter(ML)	07/06/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1740503	-	Indicator solution Amtax 0.2 -12 mg/L and 0.2-30 mg/L	1000	Milliliter(ML)	07/06/22
1714830	-	CHICO X FIBER	1	Pounds(LB)	07/06/22
1715388	-	CHICO X FIBER	1	Pounds(LB)	07/06/22
1740504	-	10 000 ug/mL Barium	125	Milliliter(ML)	07/06/22
1740505	-	10 000 ug/mL Strontium	125	Milliliter(ML)	07/06/22
1740506	-	Dichloro(1 3-bis(2 4 6-trimethylphenyl)imidazolidin-2-ylidene){2-[(ethoxy-2-oxoethylidene) amino]benzylidene}ruthenium(II) HeatMet	500	Milligram(MG)	07/06/22
1740507	-	Clear Resin	1	Liters(L)	07/06/22
1740508	-	Clear Resin	1	Liters(L)	07/06/22
1740509	-	Clear Resin	1	Liters(L)	07/06/22
1689096	124-38-9	CARBON DIOXIDE	50	Pounds(LB)	07/06/22
1689097	124-38-9	CARBON DIOXIDE	50	Pounds(LB)	07/06/22
1740512	6711-48-4	3 3'-IMINOBIS(N N-DIMETHYLPROPYLAMINE)	100	Milliliter(ML)	07/06/22
1740513	6711-48-4	3 3'-IMINOBIS(N N-DIMETHYLPROPYLAMINE)	100	Milliliter(ML)	07/06/22
1740102	209986-17-4	Compound E	500	Gram(GM)	07/07/22
1740575	110-63-4	1 4-BUTANEDIOL	100	Gram(GM)	07/07/22
1740576	110-63-4	1 4-BUTANEDIOL	100	Gram(GM)	07/07/22
1740577	110-63-4	1 4-BUTANEDIOL	100	Gram(GM)	07/07/22
1740579	326-90-9	4 4 4-Trifluoro-1-(2-furyl)-1 3-butanedione	1	Gram(GM)	07/07/22
1740580	326-90-9	4 4 4-Trifluoro-1-(2-furyl)-1 3-butanedione	1	Gram(GM)	07/07/22
1740582	64-17-5	MOLECULAR BIOLOGY GRADE ETHANOL	500	Milliliter(ML)	07/07/22
1740583	110-54-3	HEXANES (CERTIFIED ACS)	4	Liters(L)	07/07/22
1740584	110-54-3	HEXANES (CERTIFIED ACS)	4	Liters(L)	07/07/22
1740585	110-54-3	HEXANES (CERTIFIED ACS)	4	Liters(L)	07/07/22
1740586	110-54-3	HEXANES (CERTIFIED ACS)	4	Liters(L)	07/07/22
1740587	141-78-6	Ethyl Acetate (Certified ACS)	4	Liters(L)	07/07/22
1726915	-	PREMA Innerliner Overbuff Sealant	16	Ounces(OZ)	07/07/22
1740590	141-78-6	Ethyl Acetate (Certified ACS)	4	Liters(L)	07/07/22
1740589	141-78-6	Ethyl Acetate (Certified ACS)	4	Liters(L)	07/07/22
1740588	141-78-6	Ethyl Acetate (Certified ACS)	4	Liters(L)	07/07/22
1726916	-	PREMA Bead Sealer Flammable	32	Ounces(OZ)	07/07/22
1726917	79-01-6	Pre-Buff Cleaner	11.1	Ounces(OZ)	07/07/22
1726918	-	LEAK DETECTOR SOLUTION	32	Ounces(OZ)	07/07/22
V00000BC91	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/07/22
V00000BC8C	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/07/22
V00000BC8B	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/07/22
V00000BC8A	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/07/22
V00000BC89	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/07/22
V00000BC88	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/07/22
V00000BC87	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/07/22
V00000BC86	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/07/22
V00000BC85	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/07/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000BC84	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/07/22
V00000BC8F	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/07/22
V00000BC90	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/07/22
V00000BC8E	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/07/22
V00000BC8D	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/07/22
1740639	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	07/07/22
1740640	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	07/07/22
1740641	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	07/07/22
1740642	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	07/07/22
1740643	26628-22-8	Agencourt AMPure XP	60	Milliliter(ML)	07/07/22
1740645	26628-22-8	Agencourt AMPure XP	60	Milliliter(ML)	07/07/22
1740644	26628-22-8	Agencourt AMPure XP	60	Milliliter(ML)	07/07/22
1660460	-	Semi-Synthetic Industrial Gear Lube 460	1	Quarts(QT)	07/07/22
1740646	6009-70-7	AMMONIUM OXALATE MONOHYDRATE	100	Gram(GM)	07/07/22
1740648	6009-70-7	AMMONIUM OXALATE MONOHYDRATE	100	Gram(GM)	07/07/22
1740647	6009-70-7	AMMONIUM OXALATE MONOHYDRATE	100	Gram(GM)	07/07/22
1740649	143-74-8	PHENOL RED	25	Gram(GM)	07/07/22
1660462	-	Part A for: Clear Flex 50 and 95	1	Gallon(GAL)	07/07/22
1660461	-	Part A for: Clear Flex 50 and 95	1	Gallon(GAL)	07/07/22
1740650	11/4/7758	POTASSIUM PHOSPHATE DIBASIC	500	Gram(GM)	07/07/22
1740653	28210-41-5	Poly(4-styrenesulfonic acid) solution MW 75 000 18 wt. % in H2O	100	Gram(GM)	07/07/22
1740591	-	MICROAMP (R) OPTICAL 96-WELL REACTION PLATE	0.1	Milliliter(ML)	07/07/22
1740592	-	MICROAMP (R) OPTICAL 96-WELL REACTION PLATE	0.1	Milliliter(ML)	07/07/22
1740578	-	Electrode Polishing Kit	20	Milligram(MG)	07/07/22
1740581	-	Bacto Brain Heart Infusion	500	Gram(GM)	07/07/22
1740593	2595314-46-6	WEHI-9625	10	Milligram(MG)	07/07/22
1740594	618385-01-6	Vorapaxar	5	Milligram(MG)	07/07/22
1740567	-	Phenylboron dichloride	1	Gram(GM)	07/07/22
1740568	-	Phenylboron dichloride	1	Gram(GM)	07/07/22
1740564	-	Dimethyl Sulfoxide-d6 (D 99.9%)	100	Gram(GM)	07/07/22
1740566	-	Dimethyl Sulfoxide-d6 (D 99.9%)	100	Gram(GM)	07/07/22
1740565	-	Dimethyl Sulfoxide-d6 (D 99.9%)	100	Gram(GM)	07/07/22
1740563	490-59-5	ALLOXAZINE	1	Gram(GM)	07/07/22
1740550	-	PACKARD ULTIMA GOLD SCINTILLATION LIQUID	5	Liters(L)	07/07/22
1740552	-	PACKARD ULTIMA GOLD SCINTILLATION LIQUID	5	Liters(L)	07/07/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1740559	-	PACKARD ULTIMA GOLD SCINTILLATION LIQUID	5	Liters(L)	07/07/22
1740558	-	PACKARD ULTIMA GOLD SCINTILLATION LIQUID	5	Liters(L)	07/07/22
1740557	-	PACKARD ULTIMA GOLD SCINTILLATION LIQUID	5	Liters(L)	07/07/22
1740556	-	PACKARD ULTIMA GOLD SCINTILLATION LIQUID	5	Liters(L)	07/07/22
1740555	-	PACKARD ULTIMA GOLD SCINTILLATION LIQUID	5	Liters(L)	07/07/22
1740553	-	PACKARD ULTIMA GOLD SCINTILLATION LIQUID	5	Liters(L)	07/07/22
1740551	-	PACKARD ULTIMA GOLD SCINTILLATION LIQUID	5	Liters(L)	07/07/22
1740554	-	PACKARD ULTIMA GOLD SCINTILLATION LIQUID	5	Liters(L)	07/07/22
1740538	-	SPARKLEEN 2	1.5	Kilograms(KG)	07/07/22
1740539	-	SPARKLEEN 2	1.5	Kilograms(KG)	07/07/22
1740549	-	SPARKLEEN 2	1.5	Kilograms(KG)	07/07/22
1740548	-	SPARKLEEN 2	1.5	Kilograms(KG)	07/07/22
1740547	-	SPARKLEEN 2	1.5	Kilograms(KG)	07/07/22
1740546	-	SPARKLEEN 2	1.5	Kilograms(KG)	07/07/22
1740545	-	SPARKLEEN 2	1.5	Kilograms(KG)	07/07/22
1740544	-	SPARKLEEN 2	1.5	Kilograms(KG)	07/07/22
1740543	-	SPARKLEEN 2	1.5	Kilograms(KG)	07/07/22
1740542	-	SPARKLEEN 2	1.5	Kilograms(KG)	07/07/22
1740541	-	SPARKLEEN 2	1.5	Kilograms(KG)	07/07/22
1740540	-	SPARKLEEN 2	1.5	Kilograms(KG)	07/07/22
1740094	7783-20-2	AMMONIUM SULFATE	1	Kilograms(KG)	07/07/22
1740520	78-10-4	TETRAETHYL ORTHOSILICATE	500	Milliliter(ML)	07/07/22
1740523	-	EASE RELEASE 200	12	Ounces(OZ)	07/07/22
1740524	-	EASE RELEASE 200	12	Ounces(OZ)	07/07/22
1740525	-	Coomassie Brilliant Blue R 250	1	Liters(L)	07/07/22
1740526	1336-21-6	Ammonium hydroxide reagent acs	2.5	Liters(L)	07/07/22
1740527	11/6/9003	PLURONIC F127	250	Gram(GM)	07/07/22
1740528	5144-89-8	1 10-PHENANTHROLINE MONOHYDRATE	5	Gram(GM)	07/07/22
1740529	7440-32-6	TITANIUM	13	Gram(GM)	07/07/22
1740533	10099-66-8	LUTETIUM (III) CHLORIDE	5	Gram(GM)	07/07/22
1740534	288-32-4	IMIDAZOLE 99%	500	Gram(GM)	07/07/22
1740537	7647-14-5	SODIUM CHLORIDE	2.5	Kilograms(KG)	07/07/22
1740522	-	Soma Foama 25 Silicone Foam	1	Gallon(GAL)	07/07/22
1740532	7664-38-2	Phosphoric acid ACS reagent 85+ wt. % in H2O	500	Milliliter(ML)	07/07/22
1740562	598-21-0	Bromoacetyl bromide 98+%	500	Gram(GM)	07/07/22
1740515	-	RT2 PCR Array	0.2	Gram(GM)	07/07/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1740516	-	RT2 PCR Array	0.2	Gram(GM)	07/07/22
1740517	-	RT2 PCR Array	0.2	Gram(GM)	07/07/22
1740518	-	RT2 PCR Array	0.2	Gram(GM)	07/07/22
1740519	-	RT2 PCR Array	0.2	Gram(GM)	07/07/22
V00000BCA2	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/08/22
V00000BC9E	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/08/22
V00000BC9C	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/08/22
V00000BC9B	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/08/22
V00000BC9A	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/08/22
V00000BC98	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/08/22
V00000BC9F	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/08/22
V00000BC97	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/08/22
V00000BC96	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/08/22
V00000BC95	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/08/22
V00000BC99	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/08/22
V00000BC9D	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/08/22
V00000BCA0	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/08/22
V00000BCA1	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/08/22
1740535	252237-40-4	1H 1H 2H 2H- PERFLUOROOCTANEPHOSPHONIC ACID	5	Gram(GM)	07/08/22
1740536	143-24-8	TETRAETHYLENE GLYCOL DIMETHYL ETHER	1	Kilograms(KG)	07/08/22
1726914	-	Chemical Vulcanizing Cement	8	Ounces(OZ)	07/08/22
1726762	-	5080 PRESSURE SENSITIVE ADHESIVE	4	Gallon(GAL)	07/08/22
1726763	-	5080 PRESSURE SENSITIVE ADHESIVE	4	Gallon(GAL)	07/08/22
1726764	-	5080 PRESSURE SENSITIVE ADHESIVE	4	Gallon(GAL)	07/08/22
1726766	-	5080 PRESSURE SENSITIVE ADHESIVE	4	Gallon(GAL)	07/08/22
1726767	-	5080 PRESSURE SENSITIVE ADHESIVE	4	Gallon(GAL)	07/08/22
1726765	-	5080 PRESSURE SENSITIVE ADHESIVE	4	Gallon(GAL)	07/08/22
1726768	-	Ardex P 51	4	Gallon(GAL)	07/08/22
1726769	-	Ardex P 51	4	Gallon(GAL)	07/08/22
1726770	-	HENRY 430	4	Gallon(GAL)	07/08/22
1726771	-	HENRY 430	4	Gallon(GAL)	07/08/22
1726772	-	Startex Green Lacquer Thinner	12	Gallon(GAL)	07/08/22
1726777	-	Startex Green Lacquer Thinner	12	Gallon(GAL)	07/08/22
1726776	-	Startex Green Lacquer Thinner	12	Gallon(GAL)	07/08/22
1726774	-	Startex Green Lacquer Thinner	12	Gallon(GAL)	07/08/22
1726773	-	Startex Green Lacquer Thinner	12	Gallon(GAL)	07/08/22
1726775	-	Startex Green Lacquer Thinner	12	Gallon(GAL)	07/08/22
1726778	-	DENATURED ALCOHOL	1	Gallon(GAL)	07/08/22
1726782	-	DENATURED ALCOHOL	1	Gallon(GAL)	07/08/22
1726783	-	DENATURED ALCOHOL	1	Gallon(GAL)	07/08/22
1726779	-	DENATURED ALCOHOL	1	Gallon(GAL)	07/08/22
1726780	-	DENATURED ALCOHOL	1	Gallon(GAL)	07/08/22
1726781	-	DENATURED ALCOHOL	1	Gallon(GAL)	07/08/22
1726784	-	Finium DTM-AT S/G Acrylic W/B	18	Liters(L)	07/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000BCA6	-	HENRY 440 Cove Base Adhesive	1	Gallon(GAL)	07/08/22
V00000BCA3	-	HENRY 440 Cove Base Adhesive	1	Gallon(GAL)	07/08/22
V00000BCA4	-	HENRY 440 Cove Base Adhesive	1	Gallon(GAL)	07/08/22
V00000BCA5	-	HENRY 440 Cove Base Adhesive	1	Gallon(GAL)	07/08/22
V00000BCAC	-	Diamond Spray Paint - Flat Black	12	Ounces(OZ)	07/08/22
V00000BCA8	-	Diamond Spray Paint - Flat Black	12	Ounces(OZ)	07/08/22
V00000BCA9	-	Diamond Spray Paint - Flat Black	12	Ounces(OZ)	07/08/22
V00000BCAA	-	Diamond Spray Paint - Flat Black	12	Ounces(OZ)	07/08/22
V00000BCAB	-	Diamond Spray Paint - Flat Black	12	Ounces(OZ)	07/08/22
V00000BCA7	-	Diamond Spray Paint - Flat Black	12	Ounces(OZ)	07/08/22
1726809	-	Diamond Spray Paint Gloss Black	12	Ounces(OZ)	07/08/22
1726814	-	Diamond Spray Paint Gloss Black	12	Ounces(OZ)	07/08/22
1726810	-	Diamond Spray Paint Gloss Black	12	Ounces(OZ)	07/08/22
1726811	-	Diamond Spray Paint Gloss Black	12	Ounces(OZ)	07/08/22
1726813	-	Diamond Spray Paint Gloss Black	12	Ounces(OZ)	07/08/22
1726812	-	Diamond Spray Paint Gloss Black	12	Ounces(OZ)	07/08/22
1740560	69991-67-9	LV CryoOil	50	Milliliter(ML)	07/08/22
1740561	-	CARGILLE IMMERSION OIL TYPE NVH CODE 658	4	Ounces(OZ)	07/08/22
1740074	13465-08-2	HYDROXYLAMINE NITRATE	1	Kilograms(KG)	07/08/22
1740076	13465-08-2	HYDROXYLAMINE NITRATE	1	Kilograms(KG)	07/08/22
1740077	13465-08-2	HYDROXYLAMINE NITRATE	1	Kilograms(KG)	07/08/22
1740078	13465-08-2	HYDROXYLAMINE NITRATE	1	Kilograms(KG)	07/08/22
1740079	13465-08-2	HYDROXYLAMINE NITRATE	1	Kilograms(KG)	07/08/22
1740080	13465-08-2	HYDROXYLAMINE NITRATE	1	Kilograms(KG)	07/08/22
1740081	13465-08-2	HYDROXYLAMINE NITRATE	1	Kilograms(KG)	07/08/22
1740082	13465-08-2	HYDROXYLAMINE NITRATE	1	Kilograms(KG)	07/08/22
1740083	13465-08-2	HYDROXYLAMINE NITRATE	1	Kilograms(KG)	07/08/22
1740089	13465-08-2	HYDROXYLAMINE NITRATE	1	Kilograms(KG)	07/08/22
1740075	13465-08-2	HYDROXYLAMINE NITRATE	1	Kilograms(KG)	07/08/22
1740090	13465-08-2	HYDROXYLAMINE NITRATE	1	Kilograms(KG)	07/08/22
1740087	13465-08-2	HYDROXYLAMINE NITRATE	1	Kilograms(KG)	07/08/22
1740092	13465-08-2	HYDROXYLAMINE NITRATE	1	Kilograms(KG)	07/08/22
1740084	13465-08-2	HYDROXYLAMINE NITRATE	1	Kilograms(KG)	07/08/22
1740091	13465-08-2	HYDROXYLAMINE NITRATE	1	Kilograms(KG)	07/08/22
1740093	13465-08-2	HYDROXYLAMINE NITRATE	1	Kilograms(KG)	07/08/22
1740085	13465-08-2	HYDROXYLAMINE NITRATE	1	Kilograms(KG)	07/08/22
1740086	13465-08-2	HYDROXYLAMINE NITRATE	1	Kilograms(KG)	07/08/22
1740088	13465-08-2	HYDROXYLAMINE NITRATE	1	Kilograms(KG)	07/08/22
1149091	-	SILVER STANDARD SOLUTION	500	Milliliter(ML)	07/08/22
1717124	7647-01-0	Hydrochloric Acid 30-31%	3000	Pounds(LB)	07/08/22
1736536	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	07/08/22
1740569	-	GLASS BEADS	70	Gram(GM)	07/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1740570	-	Thermal Spray Powder - Particle Size Distribution	14	Gram(GM)	07/08/22
1740571	-	Thermal Spray Powder - Particle Size Distribution	14	Gram(GM)	07/08/22
1740572	-	THERMAL SPRAY POWDER (SPHEROIDAL)	14	Gram(GM)	07/08/22
1740573	-	THERMAL SPRAY POWDER (SPHEROIDAL)	14	Gram(GM)	07/08/22
1740679	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740709	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740692	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740691	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740690	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740689	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740693	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740688	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740687	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740686	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740685	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740694	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740683	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740703	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740684	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740704	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740682	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740681	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740706	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740712	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740711	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740701	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740705	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740695	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740702	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740700	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740699	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740698	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740697	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740696	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740710	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740718	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740731	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740724	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740723	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740722	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740721	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740726	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740719	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1740727	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740717	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740716	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740715	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740714	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740713	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740707	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740720	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740735	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740742	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740741	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740740	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740739	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740738	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740725	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740736	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740680	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740734	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740733	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740708	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740729	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740732	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740728	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740737	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1740730	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/08/22
1736537	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	07/08/22
1736538	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	07/08/22
1736539	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	07/08/22
1736540	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	07/08/22
1736541	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	07/08/22
1736542	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	07/08/22
1736543	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	07/08/22
1736549	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	07/08/22
1736548	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	07/08/22
1736547	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	07/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1736546	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	07/08/22
1736545	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	07/08/22
1740574	1314-23-4	ZIRCONIUM(IV) OXIDE	10	Gram(GM)	07/08/22
1740608	25322-68-3	POLYETHYLENE GLYCOL 400	1	Liters(L)	07/08/22
1740614	-	RT2 PCR Array	0.2	Gram(GM)	07/08/22
1740617	-	RT2 PCR Array	0.2	Gram(GM)	07/08/22
1740616	-	RT2 PCR Array	0.2	Gram(GM)	07/08/22
1740615	-	RT2 PCR Array	0.2	Gram(GM)	07/08/22
1726821	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726844	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726854	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726853	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726879	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726880	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726841	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726843	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726848	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726845	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726846	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726857	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726852	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726851	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726850	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726842	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726861	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726873	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726872	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726871	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726870	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726869	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726868	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726867	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726866	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726865	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726864	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726855	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726862	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726856	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726860	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726847	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726875	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726840	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726876	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1726877	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726878	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726859	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726858	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726874	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726863	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726831	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726822	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726823	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726824	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726825	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726826	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726827	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726828	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726829	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726839	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726830	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726832	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726849	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726833	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726834	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726835	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726836	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726837	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726838	-	SILICONE RUBBER	10	Ounces(OZ)	07/08/22
1726881	-	Excelsior AW-510	4	Gallon(GAL)	07/08/22
1726882	-	Excelsior AW-510	4	Gallon(GAL)	07/08/22
1740743	3317-61-1	5 5-Dimethyl-1-pyrroline N-oxide	100	Milligram(MG)	07/08/22
1740744	107-95-9	BETA-ALANINE	25	Gram(GM)	07/08/22
1726785	-	Diamond Spray Paint Gloss White	12	Ounces(OZ)	07/08/22
1726787	-	Diamond Spray Paint Gloss White	12	Ounces(OZ)	07/08/22
1726788	-	Diamond Spray Paint Gloss White	12	Ounces(OZ)	07/08/22
1726789	-	Diamond Spray Paint Gloss White	12	Ounces(OZ)	07/08/22
1726790	-	Diamond Spray Paint Gloss White	12	Ounces(OZ)	07/08/22
1726786	-	Diamond Spray Paint Gloss White	12	Ounces(OZ)	07/08/22
1740746	-	MUCIC ACID	100	Gram(GM)	07/08/22
1726791	-	CHERRY RED DIAMOND SPRAY PAINT#DS550-013	12	Ounces(OZ)	07/08/22
1726792	-	CHERRY RED DIAMOND SPRAY PAINT#DS550-013	12	Ounces(OZ)	07/08/22
1726793	-	CHERRY RED DIAMOND SPRAY PAINT#DS550-013	12	Ounces(OZ)	07/08/22
1726794	-	CHERRY RED DIAMOND SPRAY PAINT#DS550-013	12	Ounces(OZ)	07/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1726795	-	CHERRY RED DIAMOND SPRAY PAINT#DS550-013	12	Ounces(OZ)	07/08/22
1726796	-	CHERRY RED DIAMOND SPRAY PAINT#DS550-013	12	Ounces(OZ)	07/08/22
1726797	-	Diamond Spray Paint Aluminum	12	Ounces(OZ)	07/08/22
1726800	-	Diamond Spray Paint Aluminum	12	Ounces(OZ)	07/08/22
1726801	-	Diamond Spray Paint Aluminum	12	Ounces(OZ)	07/08/22
1726799	-	Diamond Spray Paint Aluminum	12	Ounces(OZ)	07/08/22
1726798	-	Diamond Spray Paint Aluminum	12	Ounces(OZ)	07/08/22
1726802	-	Diamond Spray Paint Aluminum	12	Ounces(OZ)	07/08/22
1726803	-	Diamond Spray Paint Flat White	12	Ounces(OZ)	07/08/22
1726804	-	Diamond Spray Paint Flat White	12	Ounces(OZ)	07/08/22
1726805	-	Diamond Spray Paint Flat White	12	Ounces(OZ)	07/08/22
1726808	-	Diamond Spray Paint Flat White	12	Ounces(OZ)	07/08/22
1726807	-	Diamond Spray Paint Flat White	12	Ounces(OZ)	07/08/22
1726806	-	Diamond Spray Paint Flat White	12	Ounces(OZ)	07/08/22
1740745	501-98-4	p-Coumaric Acid	1	Gram(GM)	07/08/22
1740747	79-10-7	Acrylic Acid Anhydrous	5	Gram(GM)	07/08/22
1740620	1314-13-2	ZINC OXIDE	100	Gram(GM)	07/08/22
1740621	592-41-6	1-HEXENE	100	Milliliter(ML)	07/08/22
1740623	Multi	Iloform Stick Wax	15	Ounces(OZ)	07/08/22
1740624	Multi	Iloform Stick Wax	15	Ounces(OZ)	07/08/22
1740625	-	Intellipack SmartFoam A	55	Gallon(GAL)	07/08/22
1740626	-	Intellipack SmartFoam B	55	Gallon(GAL)	07/08/22
1689094	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/08/22
1689095	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/08/22
1740609	50-99-7	DEXTROSE ANHYDROUS	500	Gram(GM)	07/08/22
1740610	50-99-7	DEXTROSE ANHYDROUS	500	Gram(GM)	07/08/22
1689062	-	5% HYDROGNE/95% NITROGEN	220	Cubic Feet(CF)	07/08/22
1689070	-	5% HYDROGNE/95% NITROGEN	220	Cubic Feet(CF)	07/08/22
1689073	-	5% HYDROGNE/95% NITROGEN	220	Cubic Feet(CF)	07/08/22
1689071	-	5% HYDROGNE/95% NITROGEN	220	Cubic Feet(CF)	07/08/22
1689068	-	5% HYDROGNE/95% NITROGEN	220	Cubic Feet(CF)	07/08/22
1689067	-	5% HYDROGNE/95% NITROGEN	220	Cubic Feet(CF)	07/08/22
1689066	-	5% HYDROGNE/95% NITROGEN	220	Cubic Feet(CF)	07/08/22
1689063	-	5% HYDROGNE/95% NITROGEN	220	Cubic Feet(CF)	07/08/22
1689064	-	5% HYDROGNE/95% NITROGEN	220	Cubic Feet(CF)	07/08/22
1689065	-	5% HYDROGNE/95% NITROGEN	220	Cubic Feet(CF)	07/08/22
1689072	-	5% HYDROGNE/95% NITROGEN	220	Cubic Feet(CF)	07/08/22
1689069	-	5% HYDROGNE/95% NITROGEN	220	Cubic Feet(CF)	07/08/22
1740611	7647-01-0	Hydrochloric Acid Optima	500	Milliliter(ML)	07/08/22
1689074	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	07/08/22
1689085	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	07/08/22
1689088	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	07/08/22
1689086	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	07/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1689084	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	07/08/22
1689082	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	07/08/22
1689081	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	07/08/22
1689080	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	07/08/22
1689079	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	07/08/22
1689078	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	07/08/22
1689077	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	07/08/22
1689076	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	07/08/22
1689075	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	07/08/22
1689083	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	07/08/22
1689087	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	07/08/22
1740612	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	07/08/22
1740613	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	07/08/22
1689102	7440-59-7	HELIUM GAS	100	Liters(L)	07/08/22
1689105	7440-59-7	HELIUM GAS	100	Liters(L)	07/08/22
1689104	7440-59-7	HELIUM GAS	100	Liters(L)	07/08/22
1689103	7440-59-7	HELIUM GAS	100	Liters(L)	07/08/22
1689106	7727-37-9	NITROGEN GAS	100	Liters(L)	07/08/22
1726942	-	XIM Primer White 400	3.61	Liters(L)	07/08/22
1740607	583-53-9	1 2-Dibromobenzene 98%	25	Milliliter(ML)	07/08/22
1726961	-	XIM Primer White 400	3.61	Liters(L)	07/08/22
1726958	-	XIM Primer White 400	3.61	Liters(L)	07/08/22
1726960	-	XIM Primer White 400	3.61	Liters(L)	07/08/22
1726959	-	XIM Primer White 400	3.61	Liters(L)	07/08/22
1726946	-	XIM Primer White 400	3.61	Liters(L)	07/08/22
1726952	-	XIM Primer White 400	3.61	Liters(L)	07/08/22
1726950	-	XIM Primer White 400	3.61	Liters(L)	07/08/22
1726944	-	XIM Primer White 400	3.61	Liters(L)	07/08/22
1726949	-	XIM Primer White 400	3.61	Liters(L)	07/08/22
1726948	-	XIM Primer White 400	3.61	Liters(L)	07/08/22
1726957	-	XIM Primer White 400	3.61	Liters(L)	07/08/22
1726947	-	XIM Primer White 400	3.61	Liters(L)	07/08/22
1726951	-	XIM Primer White 400	3.61	Liters(L)	07/08/22
1726954	-	XIM Primer White 400	3.61	Liters(L)	07/08/22
1726953	-	XIM Primer White 400	3.61	Liters(L)	07/08/22
1726943	-	XIM Primer White 400	3.61	Liters(L)	07/08/22
1726945	-	XIM Primer White 400	3.61	Liters(L)	07/08/22
1726955	-	XIM Primer White 400	3.61	Liters(L)	07/08/22
1726956	-	XIM Primer White 400	3.61	Liters(L)	07/08/22
1726962	-	888-1572 COLORTREND BROWN OXIDE	32	Ounces(OZ)	07/08/22
1726965	-	888-1572 COLORTREND BROWN OXIDE	32	Ounces(OZ)	07/08/22
1726966	-	888-1572 COLORTREND BROWN OXIDE	32	Ounces(OZ)	07/08/22
1726967	-	888-1572 COLORTREND BROWN OXIDE	32	Ounces(OZ)	07/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1726964	-	888-1572 COLORTREND BROWN OXIDE	32	Ounces(OZ)	07/08/22
1726963	-	888-1572 COLORTREND BROWN OXIDE	32	Ounces(OZ)	07/08/22
1726968	-	808-2009 COLORTREND L RAW UMBER	32	Ounces(OZ)	07/08/22
1689107	-	NITROGEN & OXYGEN	0.5	Kilograms(KG)	07/08/22
1726969	-	808-2009 COLORTREND L RAW UMBER	32	Ounces(OZ)	07/08/22
1726970	-	808-2009 COLORTREND L RAW UMBER	32	Ounces(OZ)	07/08/22
1726971	-	808-2009 COLORTREND L RAW UMBER	32	Ounces(OZ)	07/08/22
1726972	-	808-2009 COLORTREND L RAW UMBER	32	Ounces(OZ)	07/08/22
1726973	-	808-2009 COLORTREND L RAW UMBER	32	Ounces(OZ)	07/08/22
1726974	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	07/08/22
1726977	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	07/08/22
1726978	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	07/08/22
1726979	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	07/08/22
1726975	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	07/08/22
1726976	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	07/08/22
1740622	-	RTV 630 SILICONE BLUE	1.01	Pounds(LB)	07/08/22
1726919	-	MOLYKOTE High Vacuum Grease	5.3	Ounces(OZ)	07/08/22
1726920	-	SAE 75W-140 GEAR OIL	32	Ounces(OZ)	07/08/22
1740618	-	Ammonium hydroxide 5% in water	2.5	Liters(L)	07/08/22
1740619	-	Ammonium hydroxide 5% in water	2.5	Liters(L)	07/08/22
1726921	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/08/22
1726923	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/08/22
1726928	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/08/22
1726930	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/08/22
1726927	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/08/22
1726931	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/08/22
1726926	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/08/22
1726929	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/08/22
1726924	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/08/22
1726932	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/08/22
1726922	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/08/22
1726925	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/08/22
1726933	-	Simple Green All-Purpose Cleaner	32	Ounces(OZ)	07/08/22
1726941	-	Simple Green All-Purpose Cleaner	32	Ounces(OZ)	07/08/22
1726940	-	Simple Green All-Purpose Cleaner	32	Ounces(OZ)	07/08/22
1726934	-	Simple Green All-Purpose Cleaner	32	Ounces(OZ)	07/08/22
1726939	-	Simple Green All-Purpose Cleaner	32	Ounces(OZ)	07/08/22
1726938	-	Simple Green All-Purpose Cleaner	32	Ounces(OZ)	07/08/22
1726937	-	Simple Green All-Purpose Cleaner	32	Ounces(OZ)	07/08/22
1726935	-	Simple Green All-Purpose Cleaner	32	Ounces(OZ)	07/08/22
1726936	-	Simple Green All-Purpose Cleaner	32	Ounces(OZ)	07/08/22
1718883	-	SILVER PAINT	15.5	Gram(GM)	07/08/22
1718884	-	SILVER PAINT THINNER	30	Milliliter(ML)	07/08/22
1727004	-	Excelsior ASD-800	2	Gallon(GAL)	07/11/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727005	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727008	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727012	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727009	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727007	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727013	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727014	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727011	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727018	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727010	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727006	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727034	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727040	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727039	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727038	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727037	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727036	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727016	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727035	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727033	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727032	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727031	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727030	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727029	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727028	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727020	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727027	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727015	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727019	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727021	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727022	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727023	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727024	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727025	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727026	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727017	-	WHITE LIGHTNING SILICONE ULTRA ALL PURPOSE	10	Ounces(OZ)	07/11/22
1727041	-	Vers-Acryl 222 S/G Finish Safety Red	128	Ounces(OZ)	07/11/22
1727043	-	Vers-Acryl 222 S/G Finish Safety Red	128	Ounces(OZ)	07/11/22
1727042	-	Vers-Acryl 222 S/G Finish Safety Red	128	Ounces(OZ)	07/11/22
1727044	-	Vers-Acryl 222 S/G Finish Midtone Base	120.3	Ounces(OZ)	07/11/22
1727046	-	Vers-Acryl 222 S/G Finish Midtone Base	120.3	Ounces(OZ)	07/11/22
1727045	-	Vers-Acryl 222 S/G Finish Midtone Base	120.3	Ounces(OZ)	07/11/22
1726980	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	07/11/22
1726983	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	07/11/22
1726981	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	07/11/22
1726984	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	07/11/22
1726982	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	07/11/22
1726985	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	07/11/22
1726986	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	07/11/22
1726991	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	07/11/22
1726990	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	07/11/22
1726989	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	07/11/22
1726987	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	07/11/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1726988	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	07/11/22
1642759	-	Simple Green All-Purpose Cleaner	24	Ounces(OZ)	07/11/22
1642766	-	Simple Green All-Purpose Cleaner	24	Ounces(OZ)	07/11/22
1642767	-	Simple Green All-Purpose Cleaner	24	Ounces(OZ)	07/11/22
1642776	-	Simple Green All-Purpose Cleaner	24	Ounces(OZ)	07/11/22
1642775	-	Simple Green All-Purpose Cleaner	24	Ounces(OZ)	07/11/22
1642774	-	Simple Green All-Purpose Cleaner	24	Ounces(OZ)	07/11/22
1642773	-	Simple Green All-Purpose Cleaner	24	Ounces(OZ)	07/11/22
1642760	-	Simple Green All-Purpose Cleaner	24	Ounces(OZ)	07/11/22
1642777	-	Simple Green All-Purpose Cleaner	24	Ounces(OZ)	07/11/22
1642769	-	Simple Green All-Purpose Cleaner	24	Ounces(OZ)	07/11/22
1642772	-	Simple Green All-Purpose Cleaner	24	Ounces(OZ)	07/11/22
1642765	-	Simple Green All-Purpose Cleaner	24	Ounces(OZ)	07/11/22
1642764	-	Simple Green All-Purpose Cleaner	24	Ounces(OZ)	07/11/22
1642763	-	Simple Green All-Purpose Cleaner	24	Ounces(OZ)	07/11/22
1642762	-	Simple Green All-Purpose Cleaner	24	Ounces(OZ)	07/11/22
1642761	-	Simple Green All-Purpose Cleaner	24	Ounces(OZ)	07/11/22
1642768	-	Simple Green All-Purpose Cleaner	24	Ounces(OZ)	07/11/22
1642771	-	Simple Green All-Purpose Cleaner	24	Ounces(OZ)	07/11/22
1642779	-	Simple Green All-Purpose Cleaner	24	Ounces(OZ)	07/11/22
1642780	-	Simple Green All-Purpose Cleaner	24	Ounces(OZ)	07/11/22
1642781	-	Simple Green All-Purpose Cleaner	24	Ounces(OZ)	07/11/22
1642782	-	Simple Green All-Purpose Cleaner	24	Ounces(OZ)	07/11/22
1726992	-	808-1045 COLORTREND F RED OXIDE	32	Ounces(OZ)	07/11/22
1642778	-	Simple Green All-Purpose Cleaner	24	Ounces(OZ)	07/11/22
1642770	-	Simple Green All-Purpose Cleaner	24	Ounces(OZ)	07/11/22
1726994	-	808-1045 COLORTREND F RED OXIDE	32	Ounces(OZ)	07/11/22
1726997	-	808-1045 COLORTREND F RED OXIDE	32	Ounces(OZ)	07/11/22
1726996	-	808-1045 COLORTREND F RED OXIDE	32	Ounces(OZ)	07/11/22
1726995	-	808-1045 COLORTREND F RED OXIDE	32	Ounces(OZ)	07/11/22
1726993	-	808-1045 COLORTREND F RED OXIDE	32	Ounces(OZ)	07/11/22
1726998	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	07/11/22
1727000	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	07/11/22
1727002	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	07/11/22
1727003	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	07/11/22
1727001	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	07/11/22
1726999	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	07/11/22
1727066	-	Vers-Acryl 222 S/G Finish Midtone Base	120.3	Ounces(OZ)	07/11/22
1727067	-	Vers-Acryl 222 S/G Finish Midtone Base	120.3	Ounces(OZ)	07/11/22
1727068	-	Vers-Acryl 222 S/G Finish Midtone Base	120.3	Ounces(OZ)	07/11/22
1727069	-	Vers-Acryl 222 S/G Finish Midtone Base	120.3	Ounces(OZ)	07/11/22
1727070	-	Vers-Acryl 222 S/G Finish Safety Yellow	128	Ounces(OZ)	07/11/22
1727073	-	Vers-Acryl 222 S/G Finish Safety Yellow	128	Ounces(OZ)	07/11/22
1727072	-	Vers-Acryl 222 S/G Finish Safety Yellow	128	Ounces(OZ)	07/11/22
1727071	-	Vers-Acryl 222 S/G Finish Safety Yellow	128	Ounces(OZ)	07/11/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727074	-	Vers-Acryl 222 S/G Finish White Base	121.6	Ounces(OZ)	07/11/22
1727077	-	Vers-Acryl 222 S/G Finish White Base	121.6	Ounces(OZ)	07/11/22
1727076	-	Vers-Acryl 222 S/G Finish White Base	121.6	Ounces(OZ)	07/11/22
1727075	-	Vers-Acryl 222 S/G Finish White Base	121.6	Ounces(OZ)	07/11/22
1727078	-	Vers-Acryl 222 S/G Finish Safety Red	128	Ounces(OZ)	07/11/22
1727081	-	Vers-Acryl 222 S/G Finish Safety Red	128	Ounces(OZ)	07/11/22
1727080	-	Vers-Acryl 222 S/G Finish Safety Red	128	Ounces(OZ)	07/11/22
1727079	-	Vers-Acryl 222 S/G Finish Safety Red	128	Ounces(OZ)	07/11/22
1727047	-	VERS-ACRYL 222	128	Ounces(OZ)	07/11/22
1727050	-	VERS-ACRYL 222	128	Ounces(OZ)	07/11/22
1727049	-	VERS-ACRYL 222	128	Ounces(OZ)	07/11/22
1727048	-	VERS-ACRYL 222	128	Ounces(OZ)	07/11/22
1727054	-	VERS-ACRYL 222	128	Ounces(OZ)	07/11/22
1727055	-	VERS-ACRYL 222	128	Ounces(OZ)	07/11/22
1727056	-	VERS-ACRYL 222	128	Ounces(OZ)	07/11/22
1727057	-	VERS-ACRYL 222	128	Ounces(OZ)	07/11/22
1727051	-	Cote All Aluminum	128	Ounces(OZ)	07/11/22
1727052	-	Cote All Aluminum	128	Ounces(OZ)	07/11/22
1727053	-	Cote All Aluminum	128	Ounces(OZ)	07/11/22
1727058	-	Vers-Acryl 222 S/G Finish White Base	121.6	Ounces(OZ)	07/11/22
1727061	-	Vers-Acryl 222 S/G Finish White Base	121.6	Ounces(OZ)	07/11/22
1727059	-	Vers-Acryl 222 S/G Finish White Base	121.6	Ounces(OZ)	07/11/22
1727060	-	Vers-Acryl 222 S/G Finish White Base	121.6	Ounces(OZ)	07/11/22
1727062	-	EnduraZinc 703 Brite Cold Galvanizing Primer Finish	128	Ounces(OZ)	07/11/22
1727065	-	EnduraZinc 703 Brite Cold Galvanizing Primer Finish	128	Ounces(OZ)	07/11/22
1727063	-	EnduraZinc 703 Brite Cold Galvanizing Primer Finish	128	Ounces(OZ)	07/11/22
1727064	-	EnduraZinc 703 Brite Cold Galvanizing Primer Finish	128	Ounces(OZ)	07/11/22
V00000BCBD	-	OFF! Deep Woods Dry Insect Repellent	9	Ounces(OZ)	07/11/22
V00000BCBE	-	OFF! Deep Woods Dry Insect Repellent	9	Ounces(OZ)	07/11/22
1727122	-	GOJO Scrubbing Towels	2	Quarts(QT)	07/11/22
1727123	-	GOJO Scrubbing Towels	2	Quarts(QT)	07/11/22
1727124	-	GOJO Scrubbing Towels	2	Quarts(QT)	07/11/22
1727126	-	GOJO Scrubbing Towels	2	Quarts(QT)	07/11/22
1727129	-	GOJO Scrubbing Towels	2	Quarts(QT)	07/11/22
1727128	-	GOJO Scrubbing Towels	2	Quarts(QT)	07/11/22
1727127	-	GOJO Scrubbing Towels	2	Quarts(QT)	07/11/22
1727130	-	GOJO Scrubbing Towels	2	Quarts(QT)	07/11/22
1727125	-	GOJO Scrubbing Towels	2	Quarts(QT)	07/11/22
1727082	-	Vers-Acryl 222 S/G Finish Deep Base	117.8	Ounces(OZ)	07/11/22
1642727	-	3-IN-ONE MULTIPURPOSE OIL	3	Ounces(OZ)	07/11/22
1727083	-	Vers-Acryl 222 S/G Finish Deep Base	117.8	Ounces(OZ)	07/11/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727088	-	Vers-Acryl 222 S/G Finish Deep Base	117.8	Ounces(OZ)	07/11/22
1727087	-	Vers-Acryl 222 S/G Finish Deep Base	117.8	Ounces(OZ)	07/11/22
1727086	-	Vers-Acryl 222 S/G Finish Deep Base	117.8	Ounces(OZ)	07/11/22
1727084	-	Vers-Acryl 222 S/G Finish Deep Base	117.8	Ounces(OZ)	07/11/22
1727085	-	Vers-Acryl 222 S/G Finish Deep Base	117.8	Ounces(OZ)	07/11/22
1642736	-	3-IN-ONE MULTIPURPOSE OIL	3	Ounces(OZ)	07/11/22
1642735	-	3-IN-ONE MULTIPURPOSE OIL	3	Ounces(OZ)	07/11/22
1642734	-	3-IN-ONE MULTIPURPOSE OIL	3	Ounces(OZ)	07/11/22
1642733	-	3-IN-ONE MULTIPURPOSE OIL	3	Ounces(OZ)	07/11/22
1642732	-	3-IN-ONE MULTIPURPOSE OIL	3	Ounces(OZ)	07/11/22
1642731	-	3-IN-ONE MULTIPURPOSE OIL	3	Ounces(OZ)	07/11/22
1642730	-	3-IN-ONE MULTIPURPOSE OIL	3	Ounces(OZ)	07/11/22
1642729	-	3-IN-ONE MULTIPURPOSE OIL	3	Ounces(OZ)	07/11/22
1642728	-	3-IN-ONE MULTIPURPOSE OIL	3	Ounces(OZ)	07/11/22
1727089	-	Vers-Acryl 222 S/G Finish Safety Yellow	128	Ounces(OZ)	07/11/22
1727090	-	Vers-Acryl 222 S/G Finish Safety Yellow	128	Ounces(OZ)	07/11/22
1727091	-	Vers-Acryl 222 S/G Finish Safety Yellow	128	Ounces(OZ)	07/11/22
1727092	-	Vers-Acryl 222 S/G Finish Safety Yellow	128	Ounces(OZ)	07/11/22
1727093	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	07/11/22
1727110	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	07/11/22
1727097	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	07/11/22
1727116	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	07/11/22
1727115	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	07/11/22
1727114	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	07/11/22
1727113	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	07/11/22
1727112	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	07/11/22
1727111	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	07/11/22
1727103	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	07/11/22
1727094	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	07/11/22
1727095	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	07/11/22
1727096	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	07/11/22
1727098	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	07/11/22
1727100	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	07/11/22
1727099	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	07/11/22
1727102	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	07/11/22
1727109	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	07/11/22
1727104	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	07/11/22
1727105	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	07/11/22
1727106	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	07/11/22
1727107	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	07/11/22
1727108	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	07/11/22
1727101	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	07/11/22
V00000BCBF	-	OFF! Deep Woods Dry Insect Repellent	6	Ounces(OZ)	07/11/22
V00000BCC0	-	OFF! Deep Woods Dry Insect Repellent	6	Ounces(OZ)	07/11/22
1718365	-	Be Finder Detection Solution	1	Liters(L)	07/11/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1718366	-	Be Finder Detection Solution	1	Liters(L)	07/11/22
V00000BCC3	-	Diamond Spray Paint - Flat Black	12	Ounces(OZ)	07/11/22
V00000BCC1	-	Diamond Spray Paint - Flat Black	12	Ounces(OZ)	07/11/22
V00000BCC8	-	Diamond Spray Paint - Flat Black	12	Ounces(OZ)	07/11/22
V00000BCC2	-	Diamond Spray Paint - Flat Black	12	Ounces(OZ)	07/11/22
V00000BCD2	-	Diamond Spray Paint - Flat Black	12	Ounces(OZ)	07/11/22
V00000BCD8	-	Diamond Spray Paint - Flat Black	12	Ounces(OZ)	07/11/22
V00000BCD7	-	Diamond Spray Paint - Flat Black	12	Ounces(OZ)	07/11/22
V00000BCD6	-	Diamond Spray Paint - Flat Black	12	Ounces(OZ)	07/11/22
V00000BCD5	-	Diamond Spray Paint - Flat Black	12	Ounces(OZ)	07/11/22
V00000BCC6	-	Diamond Spray Paint - Flat Black	12	Ounces(OZ)	07/11/22
V00000BCD3	-	Diamond Spray Paint - Flat Black	12	Ounces(OZ)	07/11/22
V00000BCC4	-	Diamond Spray Paint - Flat Black	12	Ounces(OZ)	07/11/22
V00000BCD1	-	Diamond Spray Paint - Flat Black	12	Ounces(OZ)	07/11/22
V00000BCD0	-	Diamond Spray Paint - Flat Black	12	Ounces(OZ)	07/11/22
V00000BCC7	-	Diamond Spray Paint - Flat Black	12	Ounces(OZ)	07/11/22
V00000BCD4	-	Diamond Spray Paint - Flat Black	12	Ounces(OZ)	07/11/22
V00000BCC5	-	Diamond Spray Paint - Flat Black	12	Ounces(OZ)	07/11/22
V00000BCCF	-	Diamond Spray Paint - Flat Black	12	Ounces(OZ)	07/11/22
V00000BCC9	-	Diamond Spray Paint - Flat Black	12	Ounces(OZ)	07/11/22
V00000BCCA	-	Diamond Spray Paint - Flat Black	12	Ounces(OZ)	07/11/22
V00000BCCB	-	Diamond Spray Paint - Flat Black	12	Ounces(OZ)	07/11/22
V00000BCCC	-	Diamond Spray Paint - Flat Black	12	Ounces(OZ)	07/11/22
V00000BCCD	-	Diamond Spray Paint - Flat Black	12	Ounces(OZ)	07/11/22
V00000BCCE	-	Diamond Spray Paint - Flat Black	12	Ounces(OZ)	07/11/22
1727193	-	Diamond Spray Paint Flat White	12	Ounces(OZ)	07/11/22
1727205	-	Diamond Spray Paint Flat White	12	Ounces(OZ)	07/11/22
1727194	-	Diamond Spray Paint Flat White	12	Ounces(OZ)	07/11/22
1727195	-	Diamond Spray Paint Flat White	12	Ounces(OZ)	07/11/22
1727196	-	Diamond Spray Paint Flat White	12	Ounces(OZ)	07/11/22
1727197	-	Diamond Spray Paint Flat White	12	Ounces(OZ)	07/11/22
1727198	-	Diamond Spray Paint Flat White	12	Ounces(OZ)	07/11/22
1727199	-	Diamond Spray Paint Flat White	12	Ounces(OZ)	07/11/22
1727200	-	Diamond Spray Paint Flat White	12	Ounces(OZ)	07/11/22
1727201	-	Diamond Spray Paint Flat White	12	Ounces(OZ)	07/11/22
1727202	-	Diamond Spray Paint Flat White	12	Ounces(OZ)	07/11/22
1727204	-	Diamond Spray Paint Flat White	12	Ounces(OZ)	07/11/22
1727215	-	Diamond Spray Paint Flat White	12	Ounces(OZ)	07/11/22
1727206	-	Diamond Spray Paint Flat White	12	Ounces(OZ)	07/11/22
1727207	-	Diamond Spray Paint Flat White	12	Ounces(OZ)	07/11/22
1727208	-	Diamond Spray Paint Flat White	12	Ounces(OZ)	07/11/22
1727209	-	Diamond Spray Paint Flat White	12	Ounces(OZ)	07/11/22
1727210	-	Diamond Spray Paint Flat White	12	Ounces(OZ)	07/11/22
1727211	-	Diamond Spray Paint Flat White	12	Ounces(OZ)	07/11/22
1727212	-	Diamond Spray Paint Flat White	12	Ounces(OZ)	07/11/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727213	-	Diamond Spray Paint Flat White	12	Ounces(OZ)	07/11/22
1727214	-	Diamond Spray Paint Flat White	12	Ounces(OZ)	07/11/22
1727216	-	Diamond Spray Paint Flat White	12	Ounces(OZ)	07/11/22
1727203	-	Diamond Spray Paint Flat White	12	Ounces(OZ)	07/11/22
V00000BCDF	-	MOBILITH SHC 220	13.4	Ounces(OZ)	07/11/22
V00000BCDA	-	MOBILITH SHC 220	13.4	Ounces(OZ)	07/11/22
V00000BCDB	-	MOBILITH SHC 220	13.4	Ounces(OZ)	07/11/22
V00000BCDC	-	MOBILITH SHC 220	13.4	Ounces(OZ)	07/11/22
V00000BCDD	-	MOBILITH SHC 220	13.4	Ounces(OZ)	07/11/22
V00000BCDE	-	MOBILITH SHC 220	13.4	Ounces(OZ)	07/11/22
V00000BCE0	-	MOBILITH SHC 220	13.4	Ounces(OZ)	07/11/22
V00000BCE2	-	MOBILITH SHC 220	13.4	Ounces(OZ)	07/11/22
V00000BCD9	-	MOBILITH SHC 220	13.4	Ounces(OZ)	07/11/22
V00000BCE1	-	MOBILITH SHC 220	13.4	Ounces(OZ)	07/11/22
1727217	-	KRYLON SPRAY PAINT	12	Ounces(OZ)	07/11/22
1727218	-	KRYLON SPRAY PAINT	12	Ounces(OZ)	07/11/22
1727133	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727136	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727143	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727142	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727141	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727140	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727139	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727174	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727137	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727146	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727135	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727163	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727134	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727161	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727162	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727138	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727153	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727160	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727159	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727158	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727157	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727156	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727144	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727154	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727145	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727152	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727151	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727150	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727149	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727148	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727147	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727155	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727172	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727180	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727179	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727178	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727177	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727176	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727164	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727165	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727166	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727167	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727175	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727168	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727169	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727171	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727173	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727170	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	07/11/22
1727181	-	YELLOW SPRAY ENAMEL	12	Ounces(OZ)	07/11/22
1437119	-	Rectorseek Low-Temp Leak Detector	1	Gallon(GAL)	07/11/22
1437124	-	Rectorseek Low-Temp Leak Detector	1	Gallon(GAL)	07/11/22
1437130	-	Rectorseek Low-Temp Leak Detector	1	Gallon(GAL)	07/11/22
1437120	-	Rectorseek Low-Temp Leak Detector	1	Gallon(GAL)	07/11/22
1437121	-	Rectorseek Low-Temp Leak Detector	1	Gallon(GAL)	07/11/22
1437123	-	Rectorseek Low-Temp Leak Detector	1	Gallon(GAL)	07/11/22
1437125	-	Rectorseek Low-Temp Leak Detector	1	Gallon(GAL)	07/11/22
1437126	-	Rectorseek Low-Temp Leak Detector	1	Gallon(GAL)	07/11/22
1437128	-	Rectorseek Low-Temp Leak Detector	1	Gallon(GAL)	07/11/22
1437129	-	Rectorseek Low-Temp Leak Detector	1	Gallon(GAL)	07/11/22
1437127	-	Rectorseek Low-Temp Leak Detector	1	Gallon(GAL)	07/11/22
1437122	-	Rectorseek Low-Temp Leak Detector	1	Gallon(GAL)	07/11/22
V00000BCE3	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/11/22
V00000BCE4	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/11/22
V00000BCE5	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/11/22
1727227	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	07/11/22
1727228	-	AW 32 HYDRAULIC FLUID	5	Gallon(GAL)	07/11/22
1727229	-	AW 32 HYDRAULIC FLUID	5	Gallon(GAL)	07/11/22
V00000BCEF	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/11/22
V00000BCF2	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/11/22
V00000BCF3	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/11/22
V00000BCF4	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/11/22
V00000BCF5	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/11/22
V00000BCF7	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/11/22
V00000BCF6	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/11/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000BCF0	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/11/22
V00000BCED	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/11/22
V00000BCE6	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/11/22
V00000BCEC	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/11/22
V00000BCEB	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/11/22
V00000BCEE	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/11/22
V00000BCE7	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/11/22
V00000BCF1	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/11/22
V00000BCEA	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/11/22
V00000BCE9	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/11/22
V00000BCE8	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/11/22
1727219	-	BRAKLEEN	510	Gram(GM)	07/11/22
1736544	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	07/11/22
V00000BCF8	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	07/11/22
V00000BCFB	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	07/11/22
V00000BCF9	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	07/11/22
V00000BCFC	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	07/11/22
V00000BCFD	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	07/11/22
V00000BCFA	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	07/11/22
V00000BD02	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/11/22
V00000BCFE	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/11/22
V00000BCFF	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/11/22
V00000BD03	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/11/22
V00000BD01	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/11/22
V00000BD00	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/11/22
1740895	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740917	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740916	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740915	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740909	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740918	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740896	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740914	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740913	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740912	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740911	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740910	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740919	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1740897	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740898	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740900	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740908	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740901	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740907	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740902	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740906	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740905	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740904	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740903	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740920	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740930	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740899	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740938	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740928	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740921	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740943	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740942	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740941	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740939	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740944	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740937	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740936	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740935	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740934	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740923	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740940	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740922	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740933	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740924	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740925	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740926	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740927	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740929	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740931	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1740932	25068-38-6	ResinLab Epoxy Encapsulant Black	50	Milliliter(ML)	07/11/22
1729050	-	SULLUBE COMPRESSOR FLUID	5	Gallon(GAL)	07/12/22
1729053	-	GACO SF2000 SEAM SEALER	5	Gallon(GAL)	07/12/22
1729054	-	GACO SF2000 SEAM SEALER	5	Gallon(GAL)	07/12/22
1729051	-	GACO E5320 EPOXY PRIMER PART A	5	Gallon(GAL)	07/12/22
1729052	-	GACO E5320 EPOXY PRIMER PART B	5	Gallon(GAL)	07/12/22
1729055	-	WHITE SOLVENTLESS SILICONE	5	Gallon(GAL)	07/12/22
1729061	-	WHITE SOLVENTLESS SILICONE	5	Gallon(GAL)	07/12/22
1729063	-	WHITE SOLVENTLESS SILICONE	5	Gallon(GAL)	07/12/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1729060	-	WHITE SOLVENTLESS SILICONE	5	Gallon(GAL)	07/12/22
1729058	-	WHITE SOLVENTLESS SILICONE	5	Gallon(GAL)	07/12/22
1729062	-	WHITE SOLVENTLESS SILICONE	5	Gallon(GAL)	07/12/22
1729057	-	WHITE SOLVENTLESS SILICONE	5	Gallon(GAL)	07/12/22
1729056	-	WHITE SOLVENTLESS SILICONE	5	Gallon(GAL)	07/12/22
1729059	-	WHITE SOLVENTLESS SILICONE	5	Gallon(GAL)	07/12/22
1729064	-	WHITE SOLVENTLESS SILICONE	5	Gallon(GAL)	07/12/22
V00000BD12	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/12/22
V00000BD1C	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/12/22
V00000BD1A	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/12/22
V00000BD19	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/12/22
V00000BD18	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/12/22
V00000BD17	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/12/22
V00000BD16	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/12/22
V00000BD15	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/12/22
V00000BD14	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/12/22
V00000BD13	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/12/22
V00000BD1B	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/12/22
V00000BD11	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/12/22
V00000BD10	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/12/22
V00000BD0F	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/12/22
V00000BD0E	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/12/22
V00000BD0D	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/12/22
V00000BD0C	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/12/22
V00000BD0B	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/12/22
V00000BD0A	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/12/22
V00000BD09	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/12/22
V00000BD08	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/12/22
V00000BD04	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/12/22
V00000BD05	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/12/22
V00000BD06	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/12/22
V00000BD07	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/12/22
1729065	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729130	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729143	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729144	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729145	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729146	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1729147	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729142	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729149	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729127	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729126	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729125	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729148	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729092	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729140	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729124	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729139	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729133	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729134	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729135	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729132	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729129	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729128	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729138	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729137	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729136	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729131	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729141	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1729079	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729071	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729072	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729073	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729074	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729075	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729076	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729086	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729078	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729068	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729080	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729081	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729082	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729083	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729084	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729094	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729077	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729154	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729162	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729161	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729160	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729159	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1729158	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729157	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729070	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729155	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729069	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729153	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729152	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729151	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729150	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729066	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729067	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729087	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729156	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729115	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729085	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729108	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729109	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729110	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729111	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729112	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729106	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729114	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1729105	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729116	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729117	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729118	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729119	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729120	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729121	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729122	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729113	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729097	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729088	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729089	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729090	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729091	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729093	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729095	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729107	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729096	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729123	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729098	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729099	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729100	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1729101	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729102	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729103	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1729104	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/12/22
1714532	-	FS-One Max	10.1	Ounces(OZ)	07/12/22
1715473	-	FS-One Max	10.1	Ounces(OZ)	07/12/22
1715474	-	FS-One Max	10.1	Ounces(OZ)	07/12/22
1715475	-	FS-One Max	10.1	Ounces(OZ)	07/12/22
1715478	-	FS-One Max	10.1	Ounces(OZ)	07/12/22
1715476	-	FS-One Max	10.1	Ounces(OZ)	07/12/22
1715472	-	FS-One Max	10.1	Ounces(OZ)	07/12/22
1715471	-	FS-One Max	10.1	Ounces(OZ)	07/12/22
1715470	-	FS-One Max	10.1	Ounces(OZ)	07/12/22
1715469	-	FS-One Max	10.1	Ounces(OZ)	07/12/22
1715477	-	FS-One Max	10.1	Ounces(OZ)	07/12/22
1714533	-	FS-One Max	10.1	Ounces(OZ)	07/12/22
1714534	-	FS-One Max	10.1	Ounces(OZ)	07/12/22
1714535	-	FS-One Max	10.1	Ounces(OZ)	07/12/22
1727220	-	Premium Blue¿ EXTREME FULL SYNTHETIC HEAVY DUTY DIESEL SAE 5W-40 ENGINE OIL VV70518	1	Gallon(GAL)	07/12/22
1727225	-	Premium Blue¿ EXTREME FULL SYNTHETIC HEAVY DUTY DIESEL SAE 5W-40 ENGINE OIL VV70518	1	Gallon(GAL)	07/12/22
1727224	-	Premium Blue¿ EXTREME FULL SYNTHETIC HEAVY DUTY DIESEL SAE 5W-40 ENGINE OIL VV70518	1	Gallon(GAL)	07/12/22
1727223	-	Premium Blue¿ EXTREME FULL SYNTHETIC HEAVY DUTY DIESEL SAE 5W-40 ENGINE OIL VV70518	1	Gallon(GAL)	07/12/22
1727222	-	Premium Blue¿ EXTREME FULL SYNTHETIC HEAVY DUTY DIESEL SAE 5W-40 ENGINE OIL VV70518	1	Gallon(GAL)	07/12/22
1727221	-	Premium Blue¿ EXTREME FULL SYNTHETIC HEAVY DUTY DIESEL SAE 5W-40 ENGINE OIL VV70518	1	Gallon(GAL)	07/12/22
1727226	-	Premium Blue¿ EXTREME FULL SYNTHETIC HEAVY DUTY DIESEL SAE 5W-40 ENGINE OIL VV70518	1	Gallon(GAL)	07/12/22
1740097	3317-61-1	5 5-Dimethyl-1-pyrroline N-oxide	5	Gram(GM)	07/12/22
1740604	-	Buehler EpoThin 2 Hardener	64	Ounces(OZ)	07/12/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1740605	-	Buehler EpoThin 2 Epoxy Resin	1	Gallon(GAL)	07/12/22
1740606	63148-57-2	XIAMETER MHX-1107 Fluid	500	Milliliter(ML)	07/12/22
1740770	183319-69-9	Erlotinib hydrochloride	100	Milligram(MG)	07/12/22
1740771	-	RESIN ANALYTICAL GRADE ANION EXCHANGE	500	Gram(GM)	07/12/22
1740772	144-62-7	OXALIC ACID	250	Gram(GM)	07/12/22
1740773	-	UTEVA RESIN	200	Gram(GM)	07/12/22
1740774	1076-43-3	Benzene-d6 (D 99.96%)	1	Milliliter(ML)	07/12/22
1740775	1076-43-3	Benzene-d6 (D 99.96%)	1	Milliliter(ML)	07/12/22
1740776	1076-43-3	Benzene-d6 (D 99.96%)	1	Milliliter(ML)	07/12/22
1740777	7601-54-9	SODIUM PHOSPHATE 96%	500	Gram(GM)	07/12/22
1740778	106-88-7	1 2-EPOXYBUTANE	250	Milliliter(ML)	07/12/22
1740779	-	Copper Reagent Set Porphyrin	10	Milliliter(ML)	07/12/22
1740780	-	Copper Reagent Set Porphyrin	10	Milliliter(ML)	07/12/22
1740781	-	Copper Reagent Set Porphyrin	10	Milliliter(ML)	07/12/22
1740782	814-68-6	ACRYLOYL CHLORIDE	500	Gram(GM)	07/12/22
1740783	7440-66-6	ZINC POWDER	250	Gram(GM)	07/12/22
1740784	119-61-9	BENZOPHENONE	25	Gram(GM)	07/12/22
1740785	1271-19-8	TITANOCENE DICHLORIDE	10	Gram(GM)	07/12/22
1740786	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	1	Liters(L)	07/12/22
1740787	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	1	Liters(L)	07/12/22
1740788	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	1	Liters(L)	07/12/22
1740867	128-09-6	N-CHLOROSUCCINIMIDE	100	Gram(GM)	07/12/22
1740868	26570-48-9	POLY(ETHYLENE GLYCOL)DIACRYLATE	100	Milliliter(ML)	07/12/22
1740869	26570-48-9	POLY(ETHYLENE GLYCOL)DIACRYLATE	100	Milliliter(ML)	07/12/22
1726745	-	9100 System DTM Epoxy Mastic	3.25	Ounces(OZ)	07/12/22
1726746	-	9100 System DTM Epoxy Mastic	3.25	Ounces(OZ)	07/12/22
1740098	-	RT2 PCR Array	10	MicroGram(UGM	07/12/22
1740790	25322-68-3	POLYETHYLENE GLYCOL	250	Gram(GM)	07/12/22
1740791	7726-95-6	Bromine liquid 99.8%	50	Milliliter(ML)	07/12/22
1740792	9/7/7440	Potassium cubes stored in mineral oil	10	Gram(GM)	07/12/22
1740793	83-56-7	1 5-DIHYDROXY-NAPHTHALENE	500	Gram(GM)	07/12/22
1740804	83-56-7	1 5-DIHYDROXY-NAPHTHALENE	500	Gram(GM)	07/12/22
1740794	83-56-7	1 5-DIHYDROXY-NAPHTHALENE	500	Gram(GM)	07/12/22
1740795	83-56-7	1 5-DIHYDROXY-NAPHTHALENE	500	Gram(GM)	07/12/22
1740796	83-56-7	1 5-DIHYDROXY-NAPHTHALENE	500	Gram(GM)	07/12/22
1740797	83-56-7	1 5-DIHYDROXY-NAPHTHALENE	500	Gram(GM)	07/12/22
1740798	83-56-7	1 5-DIHYDROXY-NAPHTHALENE	500	Gram(GM)	07/12/22
1740799	83-56-7	1 5-DIHYDROXY-NAPHTHALENE	500	Gram(GM)	07/12/22
1740800	83-56-7	1 5-DIHYDROXY-NAPHTHALENE	500	Gram(GM)	07/12/22
1740801	83-56-7	1 5-DIHYDROXY-NAPHTHALENE	500	Gram(GM)	07/12/22
1740802	83-56-7	1 5-DIHYDROXY-NAPHTHALENE	500	Gram(GM)	07/12/22
1740805	83-56-7	1 5-DIHYDROXY-NAPHTHALENE	500	Gram(GM)	07/12/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1740806	83-56-7	1 5-DIHYDROXY-NAPHTHALENE	500	Gram(GM)	07/12/22
1740807	83-56-7	1 5-DIHYDROXY-NAPHTHALENE	500	Gram(GM)	07/12/22
1740808	83-56-7	1 5-DIHYDROXY-NAPHTHALENE	500	Gram(GM)	07/12/22
1740809	83-56-7	1 5-DIHYDROXY-NAPHTHALENE	500	Gram(GM)	07/12/22
1740810	83-56-7	1 5-DIHYDROXY-NAPHTHALENE	500	Gram(GM)	07/12/22
1740803	83-56-7	1 5-DIHYDROXY-NAPHTHALENE	500	Gram(GM)	07/12/22
1740811	67-63-0	2-Propanol (Certified ACS)	4	Liters(L)	07/12/22
1740815	506-87-6	AMMONIUM CARBONATE	100	Gram(GM)	07/12/22
1740816	133745-75-2	N-Fluorobenzenesulfonimide	5	Gram(GM)	07/12/22
1740812	67-63-0	2-Propanol (Certified ACS)	4	Liters(L)	07/12/22
1740813	67-63-0	2-Propanol (Certified ACS)	4	Liters(L)	07/12/22
1740814	67-63-0	2-Propanol (Certified ACS)	4	Liters(L)	07/12/22
1727306	-	Lysol Sanitizing Spray (All Scents)	539	Gram(GM)	07/12/22
1727311	-	Ardex P 51	1	Gallon(GAL)	07/12/22
V00000BD21	-	HENRY 440 Cove Base Adhesive	1	Gallon(GAL)	07/12/22
1727309	-	Lysol Sanitizing Spray (All Scents)	539	Gram(GM)	07/12/22
1727308	-	Lysol Sanitizing Spray (All Scents)	539	Gram(GM)	07/12/22
1727307	-	Lysol Sanitizing Spray (All Scents)	539	Gram(GM)	07/12/22
1727310	-	Lysol Sanitizing Spray (All Scents)	539	Gram(GM)	07/12/22
1740819	-	TUNGSTEN POWDER	200	Gram(GM)	07/12/22
1740820	471-47-6	OXAMIC ACID	25	Gram(GM)	07/12/22
1740821	7647-17-8	CESIUM CHLORIDE	100	Gram(GM)	07/12/22
1689219	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	07/13/22
1689225	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	07/13/22
1689221	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	07/13/22
1689224	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	07/13/22
1689220	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	07/13/22
1689223	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	07/13/22
1689222	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	07/13/22
1689226	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	07/13/22
1689227	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/13/22
1689114	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/13/22
1689122	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/13/22
1689121	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/13/22
1689120	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/13/22
1689118	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/13/22
1689113	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/13/22
1689112	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/13/22
1689115	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/13/22
1689111	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/13/22
1689117	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/13/22
1689116	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/13/22
1689108	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/13/22
1689109	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/13/22
1689110	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1689119	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/13/22
1689228	-	AMMONIA 9.99% BAL ARGON	125	Cubic Feet(CF)	07/13/22
1689123	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/13/22
1689125	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/13/22
1689124	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/13/22
1689132	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/13/22
1689126	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/13/22
1689135	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/13/22
1689133	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/13/22
1689136	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/13/22
1689131	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/13/22
1689130	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/13/22
1689129	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/13/22
1689128	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/13/22
1689127	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/13/22
1689134	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/13/22
1689194	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/13/22
1689189	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/13/22
1689195	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/13/22
1689193	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/13/22
1689192	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/13/22
1689191	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/13/22
1689190	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/13/22
1689197	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/13/22
1689198	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/13/22
1689199	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/13/22
1689200	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/13/22
1689203	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/13/22
1689196	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/13/22
1689201	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/13/22
1689202	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/13/22
1642739	-	HIT-HY 270	11.1	Ounces(OZ)	07/13/22
1642754	-	HIT-HY 270	11.1	Ounces(OZ)	07/13/22
1642742	-	HIT-HY 270	11.1	Ounces(OZ)	07/13/22
1642741	-	HIT-HY 270	11.1	Ounces(OZ)	07/13/22
1642740	-	HIT-HY 270	11.1	Ounces(OZ)	07/13/22
1642750	-	HIT-HY 270	11.1	Ounces(OZ)	07/13/22
1642758	-	HIT-HY 270	11.1	Ounces(OZ)	07/13/22
1642757	-	HIT-HY 270	11.1	Ounces(OZ)	07/13/22
1642755	-	HIT-HY 270	11.1	Ounces(OZ)	07/13/22
1642753	-	HIT-HY 270	11.1	Ounces(OZ)	07/13/22
1642743	-	HIT-HY 270	11.1	Ounces(OZ)	07/13/22
1642749	-	HIT-HY 270	11.1	Ounces(OZ)	07/13/22
1642744	-	HIT-HY 270	11.1	Ounces(OZ)	07/13/22
1642756	-	HIT-HY 270	11.1	Ounces(OZ)	07/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1642748	-	HIT-HY 270	11.1	Ounces(OZ)	07/13/22
1642747	-	HIT-HY 270	11.1	Ounces(OZ)	07/13/22
1642751	-	HIT-HY 270	11.1	Ounces(OZ)	07/13/22
1642752	-	HIT-HY 270	11.1	Ounces(OZ)	07/13/22
1642745	-	HIT-HY 270	11.1	Ounces(OZ)	07/13/22
1642746	-	HIT-HY 270	11.1	Ounces(OZ)	07/13/22
1740870	5/7/7698	Deuterium chloride for NMR 20 wt. % solution in D2O 100.0 atom % D	5	Gram(GM)	07/13/22
1740876	5/7/7698	Deuterium chloride for NMR 20 wt. % solution in D2O 100.0 atom % D	5	Gram(GM)	07/13/22
1740877	5/7/7698	Deuterium chloride for NMR 20 wt. % solution in D2O 100.0 atom % D	5	Gram(GM)	07/13/22
1740871	5/7/7698	Deuterium chloride for NMR 20 wt. % solution in D2O 100.0 atom % D	5	Gram(GM)	07/13/22
1740872	5/7/7698	Deuterium chloride for NMR 20 wt. % solution in D2O 100.0 atom % D	5	Gram(GM)	07/13/22
1740873	5/7/7698	Deuterium chloride for NMR 20 wt. % solution in D2O 100.0 atom % D	5	Gram(GM)	07/13/22
1740874	5/7/7698	Deuterium chloride for NMR 20 wt. % solution in D2O 100.0 atom % D	5	Gram(GM)	07/13/22
1740875	5/7/7698	Deuterium chloride for NMR 20 wt. % solution in D2O 100.0 atom % D	5	Gram(GM)	07/13/22
1740878	7782-42-5	Graphite powder synthetic	250	Gram(GM)	07/13/22
1740879	462-06-6	Fluorobenzene 99%	500	Gram(GM)	07/13/22
1740880	67-63-0	Isopropyl Alcohol 70% (v/v) Solvent Grade	4	Liters(L)	07/13/22
1740881	67-63-0	Isopropyl Alcohol 70% (v/v) Solvent Grade	4	Liters(L)	07/13/22
1740817	108-94-1	Cyclohexanone ACS Reagent 99%	25	Milliliter(ML)	07/13/22
1740818	288-36-8	1 2 3-Triazole 98%	5	Gram(GM)	07/13/22
1740865	-	ZIRCONIUM FOIL	12	Ounces(OZ)	07/13/22
1740866	7440-67-7	ZIRCONIUM SPONGE	50	Gram(GM)	07/13/22
1727232	-	LOCTITE 242 THREADLOCKER	0.34	Ounces(OZ)	07/13/22
1727233	-	LOCTITE 242 THREADLOCKER	0.34	Ounces(OZ)	07/13/22
1727234	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727281	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727269	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727270	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727271	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727272	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727273	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727274	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727275	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727276	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727277	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727278	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727284	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727280	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727285	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727282	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727283	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727292	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727291	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727290	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727293	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727289	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727288	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727287	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727286	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727266	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727279	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727247	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727254	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727252	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727267	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727268	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727250	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727251	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727248	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727255	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727246	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727245	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727244	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727243	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727242	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727241	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727249	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727258	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727236	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727265	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727264	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727263	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727262	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727261	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727253	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727259	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727240	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727257	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727256	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727235	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727237	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727238	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727239	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727260	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	07/13/22
1727294	-	Ardex P 51	4	Gallon(GAL)	07/13/22
1727298	-	Ardex P 51	4	Gallon(GAL)	07/13/22
1727297	-	Ardex P 51	4	Gallon(GAL)	07/13/22
1727299	-	Ardex P 51	4	Gallon(GAL)	07/13/22
1727295	-	Ardex P 51	4	Gallon(GAL)	07/13/22
1727296	-	Ardex P 51	4	Gallon(GAL)	07/13/22
1716070	-	SYLGARD 184 CURING AGENT	3.6	Kilograms(KG)	07/13/22
1716075	-	SYLGARD 184 CURING AGENT	3.6	Kilograms(KG)	07/13/22
1716074	-	SYLGARD 184 CURING AGENT	3.6	Kilograms(KG)	07/13/22
1716073	-	SYLGARD 184 CURING AGENT	3.6	Kilograms(KG)	07/13/22
1716072	-	SYLGARD 184 CURING AGENT	3.6	Kilograms(KG)	07/13/22
1716071	-	SYLGARD 184 CURING AGENT	3.6	Kilograms(KG)	07/13/22
1716076	-	3-6559 CURE ACCELERATOR	0.454	Kilograms(KG)	07/13/22
1716080	-	3-6559 CURE ACCELERATOR	0.454	Kilograms(KG)	07/13/22
1716094	-	3-6559 CURE ACCELERATOR	0.454	Kilograms(KG)	07/13/22
1716083	-	3-6559 CURE ACCELERATOR	0.454	Kilograms(KG)	07/13/22
1716084	-	3-6559 CURE ACCELERATOR	0.454	Kilograms(KG)	07/13/22
1716085	-	3-6559 CURE ACCELERATOR	0.454	Kilograms(KG)	07/13/22
1716086	-	3-6559 CURE ACCELERATOR	0.454	Kilograms(KG)	07/13/22
1716087	-	3-6559 CURE ACCELERATOR	0.454	Kilograms(KG)	07/13/22
1716088	-	3-6559 CURE ACCELERATOR	0.454	Kilograms(KG)	07/13/22
1716089	-	3-6559 CURE ACCELERATOR	0.454	Kilograms(KG)	07/13/22
1716081	-	3-6559 CURE ACCELERATOR	0.454	Kilograms(KG)	07/13/22
1716093	-	3-6559 CURE ACCELERATOR	0.454	Kilograms(KG)	07/13/22
1716090	-	3-6559 CURE ACCELERATOR	0.454	Kilograms(KG)	07/13/22
1716095	-	3-6559 CURE ACCELERATOR	0.454	Kilograms(KG)	07/13/22
1716096	-	3-6559 CURE ACCELERATOR	0.454	Kilograms(KG)	07/13/22
1716097	-	3-6559 CURE ACCELERATOR	0.454	Kilograms(KG)	07/13/22
1716098	-	3-6559 CURE ACCELERATOR	0.454	Kilograms(KG)	07/13/22
1716099	-	3-6559 CURE ACCELERATOR	0.454	Kilograms(KG)	07/13/22
1716100	-	3-6559 CURE ACCELERATOR	0.454	Kilograms(KG)	07/13/22
1716101	-	3-6559 CURE ACCELERATOR	0.454	Kilograms(KG)	07/13/22
1716102	-	3-6559 CURE ACCELERATOR	0.454	Kilograms(KG)	07/13/22
1716091	-	3-6559 CURE ACCELERATOR	0.454	Kilograms(KG)	07/13/22
1716079	-	3-6559 CURE ACCELERATOR	0.454	Kilograms(KG)	07/13/22
1716092	-	3-6559 CURE ACCELERATOR	0.454	Kilograms(KG)	07/13/22
1716082	-	3-6559 CURE ACCELERATOR	0.454	Kilograms(KG)	07/13/22
1716077	-	3-6559 CURE ACCELERATOR	0.454	Kilograms(KG)	07/13/22
1716078	-	3-6559 CURE ACCELERATOR	0.454	Kilograms(KG)	07/13/22
1716103	-	MUELLER HINTON BROTH DEHYDRATED	500	Milliliter(ML)	07/13/22
1739937	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	07/13/22
1716104	-	MUELLER HINTON BROTH DEHYDRATED	500	Milliliter(ML)	07/13/22
1716107	-	MUELLER HINTON BROTH DEHYDRATED	500	Milliliter(ML)	07/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1716106	-	MUELLER HINTON BROTH DEHYDRATED	500	Milliliter(ML)	07/13/22
1716105	-	MUELLER HINTON BROTH DEHYDRATED	500	Milliliter(ML)	07/13/22
1739945	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	07/13/22
1739944	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	07/13/22
1739943	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	07/13/22
1739941	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	07/13/22
1739940	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	07/13/22
1739939	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	07/13/22
1739938	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	07/13/22
1739946	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	07/13/22
1739942	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	07/13/22
1716128	-	3-6559 CURE ACCELERATOR	0.454	Kilograms(KG)	07/13/22
1716127	-	3-6559 CURE ACCELERATOR	0.454	Kilograms(KG)	07/13/22
1663257	-	SYLGARD 184 SILICONE ELASTOMER BASE	3.6	Kilograms(KG)	07/13/22
1663254	-	SYLGARD 184 SILICONE ELASTOMER BASE	3.6	Kilograms(KG)	07/13/22
1663256	-	SYLGARD 184 SILICONE ELASTOMER BASE	3.6	Kilograms(KG)	07/13/22
1663258	-	SYLGARD 184 SILICONE ELASTOMER BASE	3.6	Kilograms(KG)	07/13/22
1663255	-	SYLGARD 184 SILICONE ELASTOMER BASE	3.6	Kilograms(KG)	07/13/22
1663263	-	SYLGARD 184 CURING AGENT	3.6	Kilograms(KG)	07/13/22
1663260	-	SYLGARD 184 CURING AGENT	3.6	Kilograms(KG)	07/13/22
1663262	-	SYLGARD 184 CURING AGENT	3.6	Kilograms(KG)	07/13/22
1663261	-	SYLGARD 184 CURING AGENT	3.6	Kilograms(KG)	07/13/22
1663259	-	SYLGARD 184 CURING AGENT	3.6	Kilograms(KG)	07/13/22
1716114	-	SYLGARD 186 SILICONE ELASTOMER CURING AGENT	45.4	Gram(GM)	07/13/22
1716122	-	SYLGARD 186 SILICONE ELASTOMER CURING AGENT	45.4	Gram(GM)	07/13/22
1716121	-	SYLGARD 186 SILICONE ELASTOMER CURING AGENT	45.4	Gram(GM)	07/13/22
1716120	-	SYLGARD 186 SILICONE ELASTOMER CURING AGENT	45.4	Gram(GM)	07/13/22
1716119	-	SYLGARD 186 SILICONE ELASTOMER CURING AGENT	45.4	Gram(GM)	07/13/22
1716118	-	SYLGARD 186 SILICONE ELASTOMER CURING AGENT	45.4	Gram(GM)	07/13/22
1716117	-	SYLGARD 186 SILICONE ELASTOMER CURING AGENT	45.4	Gram(GM)	07/13/22
1716116	-	SYLGARD 186 SILICONE ELASTOMER CURING AGENT	45.4	Gram(GM)	07/13/22
1716124	-	SYLGARD 186 SILICONE ELASTOMER CURING AGENT	45.4	Gram(GM)	07/13/22
1716125	-	SYLGARD 186 SILICONE ELASTOMER CURING AGENT	45.4	Gram(GM)	07/13/22
1716123	-	SYLGARD 186 SILICONE ELASTOMER CURING AGENT	45.4	Gram(GM)	07/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1716115	-	SYLGARD 186 SILICONE ELASTOMER CURING AGENT	45.4	Gram(GM)	07/13/22
1663285	-	HALTHANE PREPOLYMER 88	1	Quarts(QT)	07/13/22
1663286	-	HALTHANE PREPOLYMER 88	1	Quarts(QT)	07/13/22
1663273	-	HALTHANE PREPOLYMER 88	1	Quarts(QT)	07/13/22
1663274	-	HALTHANE PREPOLYMER 88	1	Quarts(QT)	07/13/22
1663272	-	HALTHANE PREPOLYMER 88	1	Quarts(QT)	07/13/22
1716136	-	RTV11	1	Pounds(LB)	07/13/22
1716137	-	RTV11	1	Pounds(LB)	07/13/22
1716140	-	RTV11	1	Pounds(LB)	07/13/22
1716141	-	RTV11	1	Pounds(LB)	07/13/22
1716142	-	RTV11	1	Pounds(LB)	07/13/22
1716143	-	RTV11	1	Pounds(LB)	07/13/22
1716145	-	RTV11	1	Pounds(LB)	07/13/22
1716146	-	RTV11	1	Pounds(LB)	07/13/22
1716138	-	RTV11	1	Pounds(LB)	07/13/22
1716144	-	RTV11	1	Pounds(LB)	07/13/22
1716139	-	RTV11	1	Pounds(LB)	07/13/22
1663277	-	ASILAMINE AROMATIC DIAMINE CURATIVE	1	Quarts(QT)	07/13/22
1663291	-	ASILAMINE AROMATIC DIAMINE CURATIVE	1	Quarts(QT)	07/13/22
1663292	-	ADIPRENE L-167	1	Quarts(QT)	07/13/22
1738852	7705-08-0	FERRIC CHLORIDE 42 BE	55	Gallon(GAL)	07/13/22
1738853	7705-08-0	FERRIC CHLORIDE 42 BE	55	Gallon(GAL)	07/13/22
1738854	7705-08-0	FERRIC CHLORIDE 42 BE	55	Gallon(GAL)	07/13/22
1663251	-	CAB-O-SIL	20	Pounds(LB)	07/13/22
1663250	-	CAB-O-SIL	10	Pounds(LB)	07/13/22
1663252	-	CELITE	20	Pounds(LB)	07/13/22
1663253	-	CELITE	20	Pounds(LB)	07/13/22
1663284	-	Isoyanate ¿ CHICO Speedseal (SS2 & SS6)	1	Quarts(QT)	07/13/22
1740101	-	Cyanine 5.5 azide	10	Milligram(MG)	07/13/22
1663231	-	RTV CATALYST	0.1	Ounces(OZ)	07/13/22
1663240	-	RTV CATALYST	0.1	Ounces(OZ)	07/13/22
1663241	-	RTV CATALYST	0.1	Ounces(OZ)	07/13/22
1663238	-	RTV CATALYST	0.1	Ounces(OZ)	07/13/22
1663237	-	RTV CATALYST	0.1	Ounces(OZ)	07/13/22
1663236	-	RTV CATALYST	0.1	Ounces(OZ)	07/13/22
1663235	-	RTV CATALYST	0.1	Ounces(OZ)	07/13/22
1663234	-	RTV CATALYST	0.1	Ounces(OZ)	07/13/22
1663233	-	RTV CATALYST	0.1	Ounces(OZ)	07/13/22
1663232	-	RTV CATALYST	0.1	Ounces(OZ)	07/13/22
1663239	-	RTV CATALYST	0.1	Ounces(OZ)	07/13/22
1663242	-	RTV CATALYST	0.1	Ounces(OZ)	07/13/22
1740822	26062-79-3	POLY(DIALYLL DIMETHYL AMMONIUM CHLORIDE)	1	Liters(L)	07/13/22
1740883	1314-35-8	TUNGSTEN(VI) OXIDE	500	Gram(GM)	07/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1740884	12064-62-9	Gadolinium(III) oxide 99.9% trace metals basis	100	Gram(GM)	07/13/22
1740967	-	HIGH VACUUM GREASE	5.3	Ounces(OZ)	07/13/22
1740969	-	HIGH VACUUM GREASE	5.3	Ounces(OZ)	07/13/22
1740968	-	HIGH VACUUM GREASE	5.3	Ounces(OZ)	07/13/22
1740970	75-05-8	Acetonitrile anhydrous 99.8%	100	Milliliter(ML)	07/13/22
1740971	75-05-8	Acetonitrile anhydrous 99.8%	100	Milliliter(ML)	07/13/22
1740972	75-05-8	Acetonitrile anhydrous 99.8%	100	Milliliter(ML)	07/13/22
1740973	67-68-5	Dimethyl sulfoxide anhydrous 99.9%	100	Milliliter(ML)	07/13/22
1740974	67-68-5	Dimethyl sulfoxide anhydrous 99.9%	100	Milliliter(ML)	07/13/22
1740975	67-68-5	Dimethyl sulfoxide anhydrous 99.9%	100	Milliliter(ML)	07/13/22
1740976	56-34-8	TETRAETHYL AMMONIUM CHLORIDE	25	Gram(GM)	07/13/22
1740977	68-12-2	N N-Dimethylformamide anhydrous 99.8%	100	Milliliter(ML)	07/13/22
1740978	541-41-3	ETHYL CHLOROFORMATE	100	Gram(GM)	07/13/22
1740979	50-81-7	L-ASCORBIC ACID	500	Gram(GM)	07/13/22
1740980	77-92-9	CITRIC ACID	500	Gram(GM)	07/13/22
1740981	112-80-1	OLEIC ACID TECHNICAL GRADE 90%	1	Liters(L)	07/13/22
1740982	103-50-4	BENZYL ETHER	1	Kilograms(KG)	07/13/22
1740983	1686-23-3	Vanadium(V) oxytripropoxide	10	Gram(GM)	07/13/22
1740984	7473-98-5	2-Hydroxy-2-methylpropiophenone	50	Milliliter(ML)	07/13/22
1718797	-	SYLGARD 184	1.8	Kilograms(KG)	07/14/22
1718798	-	REN-WELD 103 RESIN US	3.632	Kilograms(KG)	07/14/22
1718799	-	EPOXY HARDENER	2.82	Pounds(LB)	07/14/22
1721346	1405-10-3	Neomycin solution with 10 mg/mL neomycin in 0.9% NaCl 0.1 um filtered BioReagent	20	Milliliter(ML)	07/14/22
1740887	-	10000 ug/mL Palladium	125	Milliliter(ML)	07/14/22
1740888	2206-27-1	Dimethyl sulfoxide-d6 99.9 atom % D	100	Gram(GM)	07/14/22
1740892	108-24-7	Acetic anhydride ReagentPlus 99%	1	Liters(L)	07/14/22
1740894	108-24-7	Acetic anhydride ReagentPlus 99%	1	Liters(L)	07/14/22
1740893	108-24-7	Acetic anhydride ReagentPlus 99%	1	Liters(L)	07/14/22
1740945	1493-13-6	Trifluoromethanesulfonic acid 98%	50	Gram(GM)	07/14/22
1740946	78-93-3	2-Butanone suitable for HPLC 99.7%	100	Milliliter(ML)	07/14/22
1740947	64-18-6	FORMIC ACID 96%	100	Milliliter(ML)	07/14/22
1740985	60022-62-0	L-Serine benzyl ester hydrochloride 98%	100	Gram(GM)	07/14/22
1740986	25322-68-3	POLYETHYLENE GLYCOL 200	1	Liters(L)	07/14/22
1719151	-	PH BUFFER 7.00	500	Milliliter(ML)	07/14/22
1719152	-	PH BUFFER 7.00	500	Milliliter(ML)	07/14/22
1719153	-	PH BUFFER 7.00	500	Milliliter(ML)	07/14/22
1719154	-	BUFFER SOLUTION PH 8.0	500	Milliliter(ML)	07/14/22
1719155	-	BUFFER SOLUTION PH 8.0	500	Milliliter(ML)	07/14/22
1719156	1310-73-2	NaOH Preservation for 250 ml Container	100	Milliliter(ML)	07/14/22
1719158	1310-73-2	NaOH Preservation for 250 ml Container	100	Milliliter(ML)	07/14/22
1719159	1310-73-2	NaOH Preservation for 250 ml Container	100	Milliliter(ML)	07/14/22
1719160	1310-73-2	NaOH Preservation for 250 ml Container	100	Milliliter(ML)	07/14/22
1719157	1310-73-2	NaOH Preservation for 250 ml Container	100	Milliliter(ML)	07/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1719161	7664-93-9	H2SO4 500ML PRESERVATION VIALS	100	Milliliter(ML)	07/14/22
1719162	7664-93-9	H2SO4 500ML PRESERVATION VIALS	100	Milliliter(ML)	07/14/22
1719164	7664-93-9	H2SO4 500ML PRESERVATION VIALS	100	Milliliter(ML)	07/14/22
1719165	7664-93-9	H2SO4 500ML PRESERVATION VIALS	100	Milliliter(ML)	07/14/22
1719166	7664-93-9	H2SO4 500ML PRESERVATION VIALS	100	Milliliter(ML)	07/14/22
1719163	7664-93-9	H2SO4 500ML PRESERVATION VIALS	100	Milliliter(ML)	07/14/22
1719180	7664-93-9	H2SO4 500ML PRESERVATION VIALS	4	Milliliter(ML)	07/14/22
1719177	7664-93-9	H2SO4 500ML PRESERVATION VIALS	4	Milliliter(ML)	07/14/22
1719179	7664-93-9	H2SO4 500ML PRESERVATION VIALS	4	Milliliter(ML)	07/14/22
1719181	7664-93-9	H2SO4 500ML PRESERVATION VIALS	4	Milliliter(ML)	07/14/22
1719182	7664-93-9	H2SO4 500ML PRESERVATION VIALS	4	Milliliter(ML)	07/14/22
1719178	7664-93-9	H2SO4 500ML PRESERVATION VIALS	4	Milliliter(ML)	07/14/22
1719194	-	DPD TOTAL CHLORINE REAGENT	100	Milligram(MG)	07/14/22
1719200	-	DPD TOTAL CHLORINE REAGENT	100	Milligram(MG)	07/14/22
1719198	-	DPD TOTAL CHLORINE REAGENT	100	Milligram(MG)	07/14/22
1719197	-	DPD TOTAL CHLORINE REAGENT	100	Milligram(MG)	07/14/22
1719196	-	DPD TOTAL CHLORINE REAGENT	100	Milligram(MG)	07/14/22
1719195	-	DPD TOTAL CHLORINE REAGENT	100	Milligram(MG)	07/14/22
1719201	-	DPD TOTAL CHLORINE REAGENT	100	Milligram(MG)	07/14/22
1719199	-	DPD TOTAL CHLORINE REAGENT	100	Milligram(MG)	07/14/22
1689137	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689149	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689164	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689163	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689162	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689161	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689159	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689157	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689156	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689155	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689154	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689153	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689152	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689165	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689150	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689160	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689148	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689147	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689146	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689145	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689144	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689143	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689142	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689141	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689140	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1689139	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689138	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689151	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689158	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689188	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689183	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689185	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689187	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689182	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689184	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689186	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/14/22
1689174	-	Compressed Air	220	Cubic Feet(CF)	07/14/22
1689175	-	Compressed Air	220	Cubic Feet(CF)	07/14/22
1689179	-	Compressed Air	220	Cubic Feet(CF)	07/14/22
1689181	-	Compressed Air	220	Cubic Feet(CF)	07/14/22
1689176	-	Compressed Air	220	Cubic Feet(CF)	07/14/22
1689180	-	Compressed Air	220	Cubic Feet(CF)	07/14/22
1689177	-	Compressed Air	220	Cubic Feet(CF)	07/14/22
1689178	-	Compressed Air	220	Cubic Feet(CF)	07/14/22
1689166	-	25ppm Hydrogen Chloride/Balance Nitrogen	100	Cubic Feet(CF)	07/14/22
1689173	-	25ppm Hydrogen Chloride/Balance Nitrogen	100	Cubic Feet(CF)	07/14/22
1689172	-	25ppm Hydrogen Chloride/Balance Nitrogen	100	Cubic Feet(CF)	07/14/22
1689171	-	25ppm Hydrogen Chloride/Balance Nitrogen	100	Cubic Feet(CF)	07/14/22
1689170	-	25ppm Hydrogen Chloride/Balance Nitrogen	100	Cubic Feet(CF)	07/14/22
1689169	-	25ppm Hydrogen Chloride/Balance Nitrogen	100	Cubic Feet(CF)	07/14/22
1689167	-	25ppm Hydrogen Chloride/Balance Nitrogen	100	Cubic Feet(CF)	07/14/22
1689168	-	25ppm Hydrogen Chloride/Balance Nitrogen	100	Cubic Feet(CF)	07/14/22
1689204	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/14/22
1689205	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/14/22
1689213	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/14/22
1689212	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/14/22
1689211	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/14/22
1689210	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/14/22
1689209	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/14/22
1689214	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/14/22
1689207	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/14/22
1689215	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/14/22
1689216	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/14/22
1689217	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/14/22
1689218	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/14/22
1689208	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/14/22
1689206	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/14/22
1689229	74-98-6	PROPANE	11	Gallon(GAL)	07/14/22
1689231	74-98-6	PROPANE	11	Gallon(GAL)	07/14/22
1689246	74-98-6	PROPANE	11	Gallon(GAL)	07/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1689244	74-98-6	PROPANE	11	Gallon(GAL)	07/14/22
1689243	74-98-6	PROPANE	11	Gallon(GAL)	07/14/22
1689242	74-98-6	PROPANE	11	Gallon(GAL)	07/14/22
1689241	74-98-6	PROPANE	11	Gallon(GAL)	07/14/22
1689234	74-98-6	PROPANE	11	Gallon(GAL)	07/14/22
1689240	74-98-6	PROPANE	11	Gallon(GAL)	07/14/22
1689248	74-98-6	PROPANE	11	Gallon(GAL)	07/14/22
1689232	74-98-6	PROPANE	11	Gallon(GAL)	07/14/22
1689247	74-98-6	PROPANE	11	Gallon(GAL)	07/14/22
1689230	74-98-6	PROPANE	11	Gallon(GAL)	07/14/22
1689239	74-98-6	PROPANE	11	Gallon(GAL)	07/14/22
1689238	74-98-6	PROPANE	11	Gallon(GAL)	07/14/22
1689237	74-98-6	PROPANE	11	Gallon(GAL)	07/14/22
1689236	74-98-6	PROPANE	11	Gallon(GAL)	07/14/22
1689235	74-98-6	PROPANE	11	Gallon(GAL)	07/14/22
1689233	74-98-6	PROPANE	11	Gallon(GAL)	07/14/22
1689245	74-98-6	PROPANE	11	Gallon(GAL)	07/14/22
1689249	7440-59-7	HELIUM GAS	150	Cubic Centimete	07/14/22
1689252	7440-59-7	HELIUM GAS	150	Cubic Centimete	07/14/22
1689253	7440-59-7	HELIUM GAS	150	Cubic Centimete	07/14/22
1689250	7440-59-7	HELIUM GAS	150	Cubic Centimete	07/14/22
1689251	7440-59-7	HELIUM GAS	150	Cubic Centimete	07/14/22
1689254	7440-59-7	HELIUM GAS	150	Cubic Centimete	07/14/22
1689255	7440-59-7	HELIUM REFRIGERATED LIQUID (CRYOGENIC LIQUID)	100	Liters(L)	07/14/22
1740987	107-12-0	Propionitrile 99%	100	Milliliter(ML)	07/14/22
1740988	142-82-5	Heptane Anhydrous 99%	1	Liters(L)	07/14/22
1740990	35622-27-6	4-Aminobutylphosphonic acid	250	Milligram(MG)	07/14/22
1740991	12036-41-8	Terbium(III) oxide 99.99% trace metals basis	2	Gram(GM)	07/14/22
1740886	-	10000 ug/mL Palladium	250	Milliliter(ML)	07/14/22
1740989	-	Fluoride Standard 2 ppm F	500	Milliliter(ML)	07/14/22
1740992	67-63-0	ISOPROPYL ALCOHOL REAGENT ACS 99.5%	4	Liters(L)	07/14/22
1740993	67-63-0	ISOPROPYL ALCOHOL REAGENT ACS 99.5%	4	Liters(L)	07/14/22
1740994	67-64-1	ACETONE TECHNICAL	4	Liters(L)	07/14/22
1740995	67-64-1	ACETONE TECHNICAL	4	Liters(L)	07/14/22
1740996	9005-64-5	TWEEN 20	100	Milliliter(ML)	07/14/22
1740998	1119-97-7	MYRISTYLTRIMETHYLAMMONIUM BROMIDE	250	Gram(GM)	07/14/22
1740997	4/7/9003	Poly(acrylic acid sodium salt)	500	Gram(GM)	07/14/22
1740999	91-20-3	NAPHTHALENE	25	Gram(GM)	07/14/22
1741039	-	10 ug/ml SCANDIUM	30	Milliliter(ML)	07/14/22
1437095	-	Blue Monster PTFE Pipe Thread Sealant	2	Ounces(OZ)	07/15/22
1437096	-	Blue Monster PTFE Pipe Thread Sealant	2	Ounces(OZ)	07/15/22
1437116	-	Blue Monster PTFE Pipe Thread Sealant	2	Ounces(OZ)	07/15/22
1437115	-	Blue Monster PTFE Pipe Thread Sealant	2	Ounces(OZ)	07/15/22
1437114	-	Blue Monster PTFE Pipe Thread Sealant	2	Ounces(OZ)	07/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1437097	-	Blue Monster PTFE Pipe Thread Sealant	2	Ounces(OZ)	07/15/22
1437098	-	Blue Monster PTFE Pipe Thread Sealant	2	Ounces(OZ)	07/15/22
1437099	-	Blue Monster PTFE Pipe Thread Sealant	2	Ounces(OZ)	07/15/22
1437100	-	Blue Monster PTFE Pipe Thread Sealant	2	Ounces(OZ)	07/15/22
1437101	-	Blue Monster PTFE Pipe Thread Sealant	2	Ounces(OZ)	07/15/22
1437103	-	Blue Monster PTFE Pipe Thread Sealant	2	Ounces(OZ)	07/15/22
1437110	-	Blue Monster PTFE Pipe Thread Sealant	2	Ounces(OZ)	07/15/22
1437113	-	Blue Monster PTFE Pipe Thread Sealant	2	Ounces(OZ)	07/15/22
1437112	-	Blue Monster PTFE Pipe Thread Sealant	2	Ounces(OZ)	07/15/22
1437111	-	Blue Monster PTFE Pipe Thread Sealant	2	Ounces(OZ)	07/15/22
1437104	-	Blue Monster PTFE Pipe Thread Sealant	2	Ounces(OZ)	07/15/22
1437105	-	Blue Monster PTFE Pipe Thread Sealant	2	Ounces(OZ)	07/15/22
1437106	-	Blue Monster PTFE Pipe Thread Sealant	2	Ounces(OZ)	07/15/22
1437107	-	Blue Monster PTFE Pipe Thread Sealant	2	Ounces(OZ)	07/15/22
1437117	-	Blue Monster PTFE Pipe Thread Sealant	2	Ounces(OZ)	07/15/22
1437108	-	Blue Monster PTFE Pipe Thread Sealant	2	Ounces(OZ)	07/15/22
1437118	-	Blue Monster PTFE Pipe Thread Sealant	2	Ounces(OZ)	07/15/22
1437109	-	Blue Monster PTFE Pipe Thread Sealant	2	Ounces(OZ)	07/15/22
1437102	-	Blue Monster PTFE Pipe Thread Sealant	2	Ounces(OZ)	07/15/22
1437139	-	HERCULES PVC CEMENT CLEAR MEDIUM BODY MEDIUM AND FAST SET	32	Ounces(OZ)	07/15/22
1437140	-	HERCULES PVC CEMENT CLEAR MEDIUM BODY MEDIUM AND FAST SET	32	Ounces(OZ)	07/15/22
1437137	-	PVC PURPLE PRIMER	32	Ounces(OZ)	07/15/22
1437138	-	PVC PURPLE PRIMER	32	Ounces(OZ)	07/15/22
1719167	-	H2SO4 PRESERVATION KIT FOR 250 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719168	-	H2SO4 PRESERVATION KIT FOR 250 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719170	-	H2SO4 PRESERVATION KIT FOR 250 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719171	-	H2SO4 PRESERVATION KIT FOR 250 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719172	-	H2SO4 PRESERVATION KIT FOR 250 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719173	-	H2SO4 PRESERVATION KIT FOR 250 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719174	-	H2SO4 PRESERVATION KIT FOR 250 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719175	-	H2SO4 PRESERVATION KIT FOR 250 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719176	-	H2SO4 PRESERVATION KIT FOR 250 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719169	-	H2SO4 PRESERVATION KIT FOR 250 ML CONTAINER	100	Milliliter(ML)	07/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1642783	-	MOBIL VELOCITE OIL NO. 3	5	Gallon(GAL)	07/15/22
1642786	-	MOBIL VELOCITE OIL NO. 3	5	Gallon(GAL)	07/15/22
1642784	-	MOBIL VELOCITE OIL NO. 3	5	Gallon(GAL)	07/15/22
1642785	-	MOBIL VELOCITE OIL NO. 3	5	Gallon(GAL)	07/15/22
1719213	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719220	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719207	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719208	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719209	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719210	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719206	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719212	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719205	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719215	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719216	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719217	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719218	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719202	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719203	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719204	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719214	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719219	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719211	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719222	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719221	7697-37-2	HNO3 Preservation for 500 ml Container	100	Milliliter(ML)	07/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1719224	7697-37-2	HNO3 Preservation for 500 ml Container	100	Milliliter(ML)	07/15/22
1719226	7697-37-2	HNO3 Preservation for 500 ml Container	100	Milliliter(ML)	07/15/22
1719225	7697-37-2	HNO3 Preservation for 500 ml Container	100	Milliliter(ML)	07/15/22
1719223	7697-37-2	HNO3 Preservation for 500 ml Container	100	Milliliter(ML)	07/15/22
1719231	7697-37-2	HNO3 Preservation for 500 ml Container	100	Milliliter(ML)	07/15/22
1719230	7697-37-2	HNO3 Preservation for 500 ml Container	100	Milliliter(ML)	07/15/22
1719229	7697-37-2	HNO3 Preservation for 500 ml Container	100	Milliliter(ML)	07/15/22
1719228	7697-37-2	HNO3 Preservation for 500 ml Container	100	Milliliter(ML)	07/15/22
1719227	7697-37-2	HNO3 Preservation for 500 ml Container	100	Milliliter(ML)	07/15/22
1719232	-	HNO3 PRESERVATION FOR 250 ML	100	Milliliter(ML)	07/15/22
1719236	-	HNO3 PRESERVATION FOR 250 ML	100	Milliliter(ML)	07/15/22
1719237	-	HNO3 PRESERVATION FOR 250 ML	100	Milliliter(ML)	07/15/22
1719234	-	HNO3 PRESERVATION FOR 250 ML	100	Milliliter(ML)	07/15/22
1719233	-	HNO3 PRESERVATION FOR 250 ML	100	Milliliter(ML)	07/15/22
1719235	-	HNO3 PRESERVATION FOR 250 ML	100	Milliliter(ML)	07/15/22
1719239	-	HNO3 PRESERVATION FOR 250 ML	100	Milliliter(ML)	07/15/22
1719240	-	HNO3 PRESERVATION FOR 250 ML	100	Milliliter(ML)	07/15/22
1719241	-	HNO3 PRESERVATION FOR 250 ML	100	Milliliter(ML)	07/15/22
1719238	-	HNO3 PRESERVATION FOR 250 ML	100	Milliliter(ML)	07/15/22
1719242	7664-93-9	H2SO4 500ML PRESERVATION VIALS	100	Milliliter(ML)	07/15/22
1719243	7664-93-9	H2SO4 500ML PRESERVATION VIALS	100	Milliliter(ML)	07/15/22
1719244	7664-93-9	H2SO4 500ML PRESERVATION VIALS	100	Milliliter(ML)	07/15/22
1719245	7664-93-9	H2SO4 500ML PRESERVATION VIALS	100	Milliliter(ML)	07/15/22
1719252	-	H2SO4 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719246	-	H2SO4 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719247	-	H2SO4 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719248	-	H2SO4 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719249	-	H2SO4 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719251	-	H2SO4 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719253	-	H2SO4 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719250	-	H2SO4 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719254	-	H2SO4 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719255	-	H2SO4 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719256	-	H2SO4 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1719257	-	H2SO4 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719258	-	H2SO4 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719261	-	H2SO4 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719264	-	H2SO4 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719263	-	H2SO4 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1719262	-	H2SO4 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	07/15/22
1054744	112-24-3	TRIETHYLENETETRAMINE	500	Milliliter(ML)	07/15/22
1054743	25068-38-6	EPON 828	500	Gram(GM)	07/15/22
1689256	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	07/18/22
1714536	-	Dottie Duct Seal	5	Pounds(LB)	07/18/22
1714540	-	Dottie Duct Seal	5	Pounds(LB)	07/18/22
1714537	-	Dottie Duct Seal	5	Pounds(LB)	07/18/22
1714538	-	Dottie Duct Seal	5	Pounds(LB)	07/18/22
1714539	-	Dottie Duct Seal	5	Pounds(LB)	07/18/22
1715401	-	ALL-PURPOSE JOINT COMPOUND	5	Gallon(GAL)	07/18/22
1717999	-	Dottie Duct Seal	1	Pounds(LB)	07/18/22
1718009	-	Dottie Duct Seal	1	Pounds(LB)	07/18/22
1718000	-	Dottie Duct Seal	1	Pounds(LB)	07/18/22
1718014	-	Dottie Duct Seal	1	Pounds(LB)	07/18/22
1718001	-	Dottie Duct Seal	1	Pounds(LB)	07/18/22
1718007	-	Dottie Duct Seal	1	Pounds(LB)	07/18/22
1718017	-	Dottie Duct Seal	1	Pounds(LB)	07/18/22
1718016	-	Dottie Duct Seal	1	Pounds(LB)	07/18/22
1718015	-	Dottie Duct Seal	1	Pounds(LB)	07/18/22
1718013	-	Dottie Duct Seal	1	Pounds(LB)	07/18/22
1718012	-	Dottie Duct Seal	1	Pounds(LB)	07/18/22
1718011	-	Dottie Duct Seal	1	Pounds(LB)	07/18/22
1718004	-	Dottie Duct Seal	1	Pounds(LB)	07/18/22
1718008	-	Dottie Duct Seal	1	Pounds(LB)	07/18/22
1718006	-	Dottie Duct Seal	1	Pounds(LB)	07/18/22
1718005	-	Dottie Duct Seal	1	Pounds(LB)	07/18/22
1718010	-	Dottie Duct Seal	1	Pounds(LB)	07/18/22
1718002	-	Dottie Duct Seal	1	Pounds(LB)	07/18/22
1718003	-	Dottie Duct Seal	1	Pounds(LB)	07/18/22
1717125	-	NALCO 7408 CHLORINE SCAVENGER SOLUTION	55	Gram(GM)	07/18/22
1717126	-	NALCO 7408 CHLORINE SCAVENGER SOLUTION	55	Gram(GM)	07/18/22
1717127	-	NALCO 1720 OXYGEN SCAVENGER SOLUTION	528	Pounds(LB)	07/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1740521	7664-38-2	Phosphoric acid 85% aqueous solution	10	Liters(L)	07/18/22
1740948	-	VEROBLACKPLUS RGD875	3.6	Kilograms(KG)	07/18/22
1740949	-	VEROCLEAR RGD810	3.6	Kilograms(KG)	07/18/22
1740950	-	VEROCLEAR RGD810	3.6	Kilograms(KG)	07/18/22
1740951	7664-39-3	HYDROFLUORIC ACID OPTIMA	500	Milliliter(ML)	07/18/22
1740952	7664-39-3	HYDROFLUORIC ACID OPTIMA	500	Milliliter(ML)	07/18/22
1740953	-	CATALYST 23LV	1	Pounds(LB)	07/18/22
1741000	7664-38-2	Phosphoric acid 85% aqueous solution	10	Liters(L)	07/18/22
1741002	112-89-9	1-OCTADECENE TECH 90%	1	Liters(L)	07/18/22
1741003	7647-01-0	Hydrochloric acid Trace Metal Grade	500	Milliliter(ML)	07/18/22
1741004	-	SYLGARD 184 SILICONE ELASTOMER	0.5	Kilograms(KG)	07/18/22
1741005	461-58-5	DICYANDIAMIDE	250	Gram(GM)	07/18/22
1741006	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	07/18/22
1741011	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	07/18/22
1741025	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	07/18/22
1741012	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	07/18/22
1741010	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	07/18/22
1741009	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	07/18/22
1741008	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	07/18/22
1741007	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	07/18/22
1741013	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	07/18/22
1741014	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	07/18/22
1741019	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	07/18/22
1741015	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	07/18/22
1741016	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	07/18/22
1741027	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	07/18/22
1741018	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	07/18/22
1741020	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	07/18/22
1741021	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	07/18/22
1741022	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	07/18/22
1741029	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	07/18/22
1741024	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	07/18/22
1741026	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	07/18/22
1741028	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	07/18/22
1741023	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	07/18/22
1741017	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	07/18/22
1741030	109-97-7	PYRROLE 98%	25	Milliliter(ML)	07/18/22
1741031	621-23-8	1 3 5-TRIMETHOXYBENZENE	10	Gram(GM)	07/18/22
1423103	-	FS-ONE MAX Firestop intumescent sealant	300	Milliliter(ML)	07/18/22
1423116	-	FS-ONE MAX Firestop intumescent sealant	300	Milliliter(ML)	07/18/22
1423113	-	FS-ONE MAX Firestop intumescent sealant	300	Milliliter(ML)	07/18/22
1423114	-	FS-ONE MAX Firestop intumescent sealant	300	Milliliter(ML)	07/18/22
1423117	-	FS-ONE MAX Firestop intumescent sealant	300	Milliliter(ML)	07/18/22
1423123	-	FS-ONE MAX Firestop intumescent sealant	300	Milliliter(ML)	07/18/22
1423115	-	FS-ONE MAX Firestop intumescent sealant	300	Milliliter(ML)	07/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1423118	-	FS-ONE MAX Firestop intumescent sealant	300	Milliliter(ML)	07/18/22
1423119	-	FS-ONE MAX Firestop intumescent sealant	300	Milliliter(ML)	07/18/22
1423120	-	FS-ONE MAX Firestop intumescent sealant	300	Milliliter(ML)	07/18/22
1423112	-	FS-ONE MAX Firestop intumescent sealant	300	Milliliter(ML)	07/18/22
1423122	-	FS-ONE MAX Firestop intumescent sealant	300	Milliliter(ML)	07/18/22
1423124	-	FS-ONE MAX Firestop intumescent sealant	300	Milliliter(ML)	07/18/22
1423125	-	FS-ONE MAX Firestop intumescent sealant	300	Milliliter(ML)	07/18/22
1423121	-	FS-ONE MAX Firestop intumescent sealant	300	Milliliter(ML)	07/18/22
1423106	-	FS-ONE MAX Firestop intumescent sealant	300	Milliliter(ML)	07/18/22
1423111	-	FS-ONE MAX Firestop intumescent sealant	300	Milliliter(ML)	07/18/22
1423105	-	FS-ONE MAX Firestop intumescent sealant	300	Milliliter(ML)	07/18/22
1423107	-	FS-ONE MAX Firestop intumescent sealant	300	Milliliter(ML)	07/18/22
1423108	-	FS-ONE MAX Firestop intumescent sealant	300	Milliliter(ML)	07/18/22
1423104	-	FS-ONE MAX Firestop intumescent sealant	300	Milliliter(ML)	07/18/22
1423110	-	FS-ONE MAX Firestop intumescent sealant	300	Milliliter(ML)	07/18/22
1423109	-	FS-ONE MAX Firestop intumescent sealant	300	Milliliter(ML)	07/18/22
1423126	-	HILTI HY150 ANCHOR ADHSEIVE	11.1	Ounces(OZ)	07/18/22
1423131	-	HILTI HY150 ANCHOR ADHSEIVE	11.1	Ounces(OZ)	07/18/22
1423130	-	HILTI HY150 ANCHOR ADHSEIVE	11.1	Ounces(OZ)	07/18/22
1423129	-	HILTI HY150 ANCHOR ADHSEIVE	11.1	Ounces(OZ)	07/18/22
1423127	-	HILTI HY150 ANCHOR ADHSEIVE	11.1	Ounces(OZ)	07/18/22
1423128	-	HILTI HY150 ANCHOR ADHSEIVE	11.1	Ounces(OZ)	07/18/22
1729163	-	Cote All N/B	116	Ounces(OZ)	07/19/22
1729164	-	Cote All N/B	116	Ounces(OZ)	07/19/22
1729165	-	Paramount Ext. 100% Acrylic Flat W/B	608	Ounces(OZ)	07/19/22
1729171	-	Paramount Ext. 100% Acrylic Flat W/B	608	Ounces(OZ)	07/19/22
1729166	-	Paramount Ext. 100% Acrylic Flat W/B	608	Ounces(OZ)	07/19/22
1729167	-	Paramount Ext. 100% Acrylic Flat W/B	608	Ounces(OZ)	07/19/22
1729168	-	Paramount Ext. 100% Acrylic Flat W/B	608	Ounces(OZ)	07/19/22
1729169	-	Paramount Ext. 100% Acrylic Flat W/B	608	Ounces(OZ)	07/19/22
1729170	-	Paramount Ext. 100% Acrylic Flat W/B	608	Ounces(OZ)	07/19/22
V00000BD43	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	07/19/22
V00000BD44	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	07/19/22
V00000BD45	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	07/19/22
V00000BD46	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	07/19/22
V00000BD47	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	07/19/22
V00000BD48	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	07/19/22
V00000BD4A	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	07/19/22
V00000BD4B	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	07/19/22
V00000BD42	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	07/19/22
V00000BD37	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	07/19/22
V00000BD4C	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	07/19/22
V00000BD49	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	07/19/22
V00000BD36	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	07/19/22
V00000BD41	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	07/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000BD39	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	07/19/22
V00000BD35	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	07/19/22
V00000BD38	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	07/19/22
V00000BD3A	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	07/19/22
V00000BD3B	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	07/19/22
V00000BD3C	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	07/19/22
V00000BD3D	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	07/19/22
V00000BD3E	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	07/19/22
V00000BD3F	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	07/19/22
V00000BD40	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	07/19/22
1729172	-	PEEL AWAY 7	5	Gallon(GAL)	07/19/22
1729173	-	PEEL AWAY 7	5	Gallon(GAL)	07/19/22
V00000BD77	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD7D	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD82	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD81	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD80	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD7F	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD7E	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD83	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD7C	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD7B	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD7A	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD84	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD78	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD8C	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD76	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD75	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD74	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD79	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD73	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD96	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD95	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD94	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD93	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD92	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD91	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD90	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD8A	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD8F	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD85	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD8E	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD8D	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD8B	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD89	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000BD88	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD87	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD86	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD53	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD56	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD5E	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD5D	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD5C	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD5B	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD5A	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD59	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD5F	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD57	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD51	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD54	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD52	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD50	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD4E	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD4D	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD55	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD72	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD58	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD71	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD4F	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD60	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD70	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD6F	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD6E	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD6D	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD6C	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD6B	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD6A	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD63	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD68	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD67	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD66	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD65	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD64	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD69	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD61	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BD62	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	07/19/22
V00000BDA2	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	07/19/22
V00000BDA3	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	07/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000BDA4	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	07/19/22
V00000BDA5	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	07/19/22
V00000BDA8	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	07/19/22
V00000BDA7	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	07/19/22
V00000BDA1	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	07/19/22
V00000BD9A	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	07/19/22
V00000BDA6	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	07/19/22
V00000BD9F	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	07/19/22
V00000BD9E	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	07/19/22
V00000BD9D	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	07/19/22
V00000BD9B	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	07/19/22
V00000BD99	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	07/19/22
V00000BD98	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	07/19/22
V00000BD97	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	07/19/22
V00000BDA0	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	07/19/22
V00000BD9C	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	07/19/22
V00000BDB4	-	Avalon Premium 100% Acrylic Interior Flat W/B	120.5	Ounces(OZ)	07/19/22
V00000BDB5	-	Avalon Premium 100% Acrylic Interior Flat W/B	120.5	Ounces(OZ)	07/19/22
V00000BDB6	-	Avalon Premium 100% Acrylic Interior Flat W/B	120.5	Ounces(OZ)	07/19/22
V00000BDB7	-	Avalon Premium 100% Acrylic Interior Flat W/B	120.5	Ounces(OZ)	07/19/22
V00000BDB8	-	Avalon Premium 100% Acrylic Interior Flat W/B	120.5	Ounces(OZ)	07/19/22
V00000BDB9	-	Avalon Premium 100% Acrylic Interior Flat W/B	120.5	Ounces(OZ)	07/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000BDBA	-	Avalon Premium 100% Acrylic Interior Flat W/B	120.5	Ounces(OZ)	07/19/22
V00000BDBB	-	Avalon Premium 100% Acrylic Interior Flat W/B	120.5	Ounces(OZ)	07/19/22
V00000BDAF	-	Avalon Premium 100% Acrylic Interior Flat W/B	120.5	Ounces(OZ)	07/19/22
V00000BDBC	-	Avalon Premium 100% Acrylic Interior Flat W/B	120.5	Ounces(OZ)	07/19/22
V00000BDB1	-	Avalon Premium 100% Acrylic Interior Flat W/B	120.5	Ounces(OZ)	07/19/22
V00000BDB2	-	Avalon Premium 100% Acrylic Interior Flat W/B	120.5	Ounces(OZ)	07/19/22
V00000BDB3	-	Avalon Premium 100% Acrylic Interior Flat W/B	120.5	Ounces(OZ)	07/19/22
V00000BDB0	-	Avalon Premium 100% Acrylic Interior Flat W/B	120.5	Ounces(OZ)	07/19/22
V00000BDA9	-	Avalon Premium 100% Acrylic Interior Flat W/B	120.5	Ounces(OZ)	07/19/22
V00000BDAE	-	Avalon Premium 100% Acrylic Interior Flat W/B	120.5	Ounces(OZ)	07/19/22
V00000BDAD	-	Avalon Premium 100% Acrylic Interior Flat W/B	120.5	Ounces(OZ)	07/19/22
V00000BDAC	-	Avalon Premium 100% Acrylic Interior Flat W/B	120.5	Ounces(OZ)	07/19/22
V00000BDAB	-	Avalon Premium 100% Acrylic Interior Flat W/B	120.5	Ounces(OZ)	07/19/22
V00000BDAA	-	Avalon Premium 100% Acrylic Interior Flat W/B	120.5	Ounces(OZ)	07/19/22
V00000BDBD	-	Cote All 340 J.D. (Safety) Yellow	128	Ounces(OZ)	07/19/22
V00000BDF8	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE05	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE06	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE03	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE02	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE01	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE00	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDFF	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDFE	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDFD	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE04	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDFC	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDFB	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE07	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDF9	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE0E	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000BDF7	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDF6	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDF5	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDF4	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDF3	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDF2	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDF1	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDFA	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE14	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDF0	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDC8	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE1E	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE1D	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE1C	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE1B	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE1A	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE19	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE18	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE17	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE0C	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE15	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE08	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE1F	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE13	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE12	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE11	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE10	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE0F	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE0D	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE0B	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE0A	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE09	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE16	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDC7	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDD5	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDD4	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDD3	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDD2	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDD1	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDD0	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDCF	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDCE	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDCC	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDCA	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDC9	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000BDD8	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDC6	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDC5	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDC4	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDC3	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDC2	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDC1	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDC0	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDBF	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDBE	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE20	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDCD	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDE2	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDEE	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDED	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDEC	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDEB	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDEA	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDE9	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDE8	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDE7	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDE6	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDE5	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDD6	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDE3	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDD7	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDE1	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDE0	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDDF	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDDE	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDDD	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDDC	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDDB	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDDA	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDD9	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDEF	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDE4	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BDCB	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE44	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE37	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE38	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE39	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE3A	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE3B	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE3C	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000BE3D	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE3F	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE41	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE4D	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE43	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE34	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE45	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE46	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE47	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE48	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE49	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE4A	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE4B	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE4C	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE42	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE2B	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE21	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE22	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE23	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE24	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE25	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE26	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE27	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE28	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE36	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE2A	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE35	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE2C	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE2D	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE2E	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE2F	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE30	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE31	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE32	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE33	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE40	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE29	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE3E	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE59	-	SAE 15W-40 MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE4E	-	SAE 15W-40 MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE4F	-	SAE 15W-40 MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE50	-	SAE 15W-40 MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE51	-	SAE 15W-40 MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE52	-	SAE 15W-40 MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE53	-	SAE 15W-40 MOTOR OIL	1	Quarts(QT)	07/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000BE54	-	SAE 15W-40 MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE55	-	SAE 15W-40 MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE56	-	SAE 15W-40 MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE58	-	SAE 15W-40 MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE5B	-	SAE 15W-40 MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE5A	-	SAE 15W-40 MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE5C	-	SAE 15W-40 MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE5E	-	SAE 15W-40 MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE5F	-	SAE 15W-40 MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE60	-	SAE 15W-40 MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE61	-	SAE 15W-40 MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE62	-	SAE 15W-40 MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE63	-	SAE 15W-40 MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE64	-	SAE 15W-40 MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE65	-	SAE 15W-40 MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE57	-	SAE 15W-40 MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE5D	-	SAE 15W-40 MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE66	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/19/22
V00000BE67	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/19/22
1729174	-	Zerex DEX-COOL Orange OAT Formula RTU Antifreeze Coolant	1	Gallon(GAL)	07/19/22
1729178	-	Zerex DEX-COOL Orange OAT Formula RTU Antifreeze Coolant	1	Gallon(GAL)	07/19/22
1729179	-	Zerex DEX-COOL Orange OAT Formula RTU Antifreeze Coolant	1	Gallon(GAL)	07/19/22
1729176	-	Zerex DEX-COOL Orange OAT Formula RTU Antifreeze Coolant	1	Gallon(GAL)	07/19/22
1729175	-	Zerex DEX-COOL Orange OAT Formula RTU Antifreeze Coolant	1	Gallon(GAL)	07/19/22
1729177	-	Zerex DEX-COOL Orange OAT Formula RTU Antifreeze Coolant	1	Gallon(GAL)	07/19/22
V00000BEA5	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE9E	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEBD	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEA0	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEA1	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEA2	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEA4	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE9A	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEA6	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEA7	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEA8	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEA9	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000BEAA	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEA3	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE93	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE8B	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE8C	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE8D	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE8E	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE8F	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE90	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE9C	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE92	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE9B	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE94	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE95	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE96	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE97	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE98	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE99	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE91	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEB4	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEBB	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEBA	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEB9	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEB8	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEB7	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEAB	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEB5	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEC9	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEAD	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEB3	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEAE	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEAF	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEB0	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEB1	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEB6	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEC5	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEB2	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEBE	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEBF	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEC0	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEC1	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEC2	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEBC	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEC4	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BECA	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000BE8A	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEC6	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE9D	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEC7	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEC8	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEAC	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEC3	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE6C	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE76	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE75	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE74	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE73	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE72	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE71	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE77	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE6D	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE70	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE6B	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE6A	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE69	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE68	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE9F	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE89	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE6F	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE81	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE88	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE6E	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE78	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE86	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE85	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE84	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE87	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE82	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE80	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE7B	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE79	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE83	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE7A	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE7C	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE7D	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE7E	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BE7F	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEE1	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEF0	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEE0	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000BEE4	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEE5	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEE6	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEE7	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEE2	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEE3	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEE8	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEE9	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEEA	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEEB	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEEC	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEED	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEEF	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEDF	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BECD	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEF1	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEEE	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BED4	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BF0F	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BF0E	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BECB	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BECC	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEFF	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BECE	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEF2	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BED0	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BED1	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BECF	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BED3	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEDE	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BED5	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BED6	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BED7	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BED8	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BED9	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEDA	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEDB	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEDC	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEDD	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BED2	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BF09	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEFD	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEF3	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BF0D	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BF0C	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000BF0A	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BF08	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BF07	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BF06	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BF05	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BF04	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BF03	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BF02	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEF5	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BF0B	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEF4	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BF01	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEF6	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEF7	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEF8	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEF9	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEFA	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEFB	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEFC	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BEFE	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
V00000BF00	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/19/22
1457109	9004-62-0	HYDROXYETHYL CELLULOSE	100	Gram(GM)	07/19/22
1457118	77-92-9	CITRIC ACID	100	Gram(GM)	07/19/22
750615	144-55-8	SODIUM BICARBONATE (SODIUM HYDROGEN CARBONATE)	1	Kilograms(KG)	07/19/22
1726749	-	RUST-OLEUM EPOXY 9100 ACTIVATOR	1	Gallon(GAL)	07/19/22
1726750	-	RUST-OLEUM EPOXY 9100 ACTIVATOR	1	Gallon(GAL)	07/19/22
1726751	-	RUST-OLEUM EPOXY 9100 ACTIVATOR	1	Gallon(GAL)	07/19/22
1726752	-	RUST-OLEUM EPOXY 9100 ACTIVATOR	1	Gallon(GAL)	07/19/22
1689439	7664-41-7	AMMONIA ANHYDROUS	40	Pounds(LB)	07/19/22
1689440	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/19/22
1689442	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/19/22
1689441	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/19/22
1689414	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/19/22
1689410	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/19/22
1689404	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/19/22
1689405	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/19/22
1689406	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/19/22
1689407	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/19/22
1689408	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/19/22
1689403	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/19/22
1689411	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/19/22
1689413	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/19/22
1689409	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/19/22
1689412	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1689415	74-98-6	PROPANE	11	Gallon(GAL)	07/19/22
1689421	74-98-6	PROPANE	11	Gallon(GAL)	07/19/22
1689416	74-98-6	PROPANE	11	Gallon(GAL)	07/19/22
1689417	74-98-6	PROPANE	11	Gallon(GAL)	07/19/22
1689418	74-98-6	PROPANE	11	Gallon(GAL)	07/19/22
1689419	74-98-6	PROPANE	11	Gallon(GAL)	07/19/22
1689420	74-98-6	PROPANE	11	Gallon(GAL)	07/19/22
1689422	74-98-6	PROPANE	11	Gallon(GAL)	07/19/22
1727317	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/19/22
1727318	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727338	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727328	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727329	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727330	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727331	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727332	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727333	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727334	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727335	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727350	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727337	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727326	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727361	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727359	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727383	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727352	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727378	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727351	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727396	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727336	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727327	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727321	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727322	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727319	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727379	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727323	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727362	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727339	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727358	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727354	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727357	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727355	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727356	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727380	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727381	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727382	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727324	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727325	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727349	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727360	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727373	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727353	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727392	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727393	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727377	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727376	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727363	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727364	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727365	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727390	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727374	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727389	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727372	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727371	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727370	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727395	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727394	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727369	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727368	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727367	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727375	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727398	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727348	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727347	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727346	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727345	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727344	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727343	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727342	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727341	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727391	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727399	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727366	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727397	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727320	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727384	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727385	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727386	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727387	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727388	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727340	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727411	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727406	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727416	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727414	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727413	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727412	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727410	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727409	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727418	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727407	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727417	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727405	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727404	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727403	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727402	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727401	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727400	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727408	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727420	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727421	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727422	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727423	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727424	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727419	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727415	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727426	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727433	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727432	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727431	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727430	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727429	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727428	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727435	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727427	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727437	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727425	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727436	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727434	-	CONCRETE SEALER	10	Ounces(OZ)	07/19/22
1727438	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727457	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727442	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727443	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727444	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727445	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727446	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727447	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727448	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727449	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727450	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727451	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727452	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727454	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727441	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727456	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727453	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727458	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727459	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727467	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727468	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727469	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727477	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727476	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727475	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727474	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727473	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727472	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727471	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727470	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727463	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727439	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727466	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727465	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727464	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727462	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727461	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727460	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727440	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727455	-	CP606 Red Flexible Sealant	19.6	Ounces(OZ)	07/19/22
1727478	-	PSX 700A Clear Coat Resin	0.83	Gallon(GAL)	07/19/22
1729188	-	PB POWERFUL PENETRATING CATALYST	11	Ounces(OZ)	07/20/22
1729186	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/20/22
1729187	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/20/22
1729189	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/20/22
1729190	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/20/22
1729194	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/20/22
1729192	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/20/22
1729193	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/20/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1729191	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/20/22
1729195	-	Motorcraft MERCON LV ATF	1	Quarts(QT)	07/20/22
1729197	-	Motorcraft MERCON LV ATF	1	Quarts(QT)	07/20/22
1729196	-	Motorcraft MERCON LV ATF	1	Quarts(QT)	07/20/22
1729198	-	Motorcraft MERCON LV ATF	1	Quarts(QT)	07/20/22
V00000BF12	-	STIHL BAR & CHAIN LUBRICANT	1	Gallon(GAL)	07/20/22
V00000BF17	-	STIHL BAR & CHAIN LUBRICANT	1	Gallon(GAL)	07/20/22
V00000BF16	-	STIHL BAR & CHAIN LUBRICANT	1	Gallon(GAL)	07/20/22
V00000BF15	-	STIHL BAR & CHAIN LUBRICANT	1	Gallon(GAL)	07/20/22
V00000BF10	-	STIHL BAR & CHAIN LUBRICANT	1	Gallon(GAL)	07/20/22
V00000BF13	-	STIHL BAR & CHAIN LUBRICANT	1	Gallon(GAL)	07/20/22
V00000BF11	-	STIHL BAR & CHAIN LUBRICANT	1	Gallon(GAL)	07/20/22
V00000BF14	-	STIHL BAR & CHAIN LUBRICANT	1	Gallon(GAL)	07/20/22
1689423	74-86-2	ACETYLENE STABILIZED	240	Cubic Feet(CF)	07/20/22
1689428	74-86-2	ACETYLENE STABILIZED	240	Cubic Feet(CF)	07/20/22
1689427	74-86-2	ACETYLENE STABILIZED	240	Cubic Feet(CF)	07/20/22
1689426	74-86-2	ACETYLENE STABILIZED	240	Cubic Feet(CF)	07/20/22
1689425	74-86-2	ACETYLENE STABILIZED	240	Cubic Feet(CF)	07/20/22
1689424	74-86-2	ACETYLENE STABILIZED	240	Cubic Feet(CF)	07/20/22
1689437	74-86-2	ACETYLENE STABILIZED	130	Cubic Feet(CF)	07/20/22
1689430	74-86-2	ACETYLENE STABILIZED	130	Cubic Feet(CF)	07/20/22
1689431	74-86-2	ACETYLENE STABILIZED	130	Cubic Feet(CF)	07/20/22
1689432	74-86-2	ACETYLENE STABILIZED	130	Cubic Feet(CF)	07/20/22
1689433	74-86-2	ACETYLENE STABILIZED	130	Cubic Feet(CF)	07/20/22
1689435	74-86-2	ACETYLENE STABILIZED	130	Cubic Feet(CF)	07/20/22
1689436	74-86-2	ACETYLENE STABILIZED	130	Cubic Feet(CF)	07/20/22
1689438	74-86-2	ACETYLENE STABILIZED	130	Cubic Feet(CF)	07/20/22
1689434	74-86-2	ACETYLENE STABILIZED	130	Cubic Feet(CF)	07/20/22
1689429	74-86-2	ACETYLENE STABILIZED	130	Cubic Feet(CF)	07/20/22
1689257	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	07/20/22
1689263	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	07/20/22
1689270	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	07/20/22
1689269	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	07/20/22
1689268	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	07/20/22
1689267	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	07/20/22
1689266	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	07/20/22
1689264	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	07/20/22
1689262	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	07/20/22
1689261	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	07/20/22
1689260	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	07/20/22
1689259	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	07/20/22
1689258	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	07/20/22
1689265	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	07/20/22
1689271	-	AMMONIA 10% BAL ARGON	150	Cubic Feet(CF)	07/20/22
1689273	-	AMMONIA 10% BAL ARGON	150	Cubic Feet(CF)	07/20/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1689272	-	AMMONIA 10% BAL ARGON	150	Cubic Feet(CF)	07/20/22
1689274	-	100ppm Carbon Monoxide/Balance Hydrogen	150	Cubic Feet(CF)	07/20/22
1718918	-	Quikrete Portland Cement	94	Pounds(LB)	07/20/22
1718933	-	Quikrete Portland Cement	94	Pounds(LB)	07/20/22
1718934	-	Quikrete Portland Cement	94	Pounds(LB)	07/20/22
1718931	-	Quikrete Portland Cement	94	Pounds(LB)	07/20/22
1718930	-	Quikrete Portland Cement	94	Pounds(LB)	07/20/22
1718929	-	Quikrete Portland Cement	94	Pounds(LB)	07/20/22
1718928	-	Quikrete Portland Cement	94	Pounds(LB)	07/20/22
1718919	-	Quikrete Portland Cement	94	Pounds(LB)	07/20/22
1718927	-	Quikrete Portland Cement	94	Pounds(LB)	07/20/22
1718926	-	Quikrete Portland Cement	94	Pounds(LB)	07/20/22
1718925	-	Quikrete Portland Cement	94	Pounds(LB)	07/20/22
1718923	-	Quikrete Portland Cement	94	Pounds(LB)	07/20/22
1718932	-	Quikrete Portland Cement	94	Pounds(LB)	07/20/22
1718922	-	Quikrete Portland Cement	94	Pounds(LB)	07/20/22
1718921	-	Quikrete Portland Cement	94	Pounds(LB)	07/20/22
1718920	-	Quikrete Portland Cement	94	Pounds(LB)	07/20/22
1718924	-	Quikrete Portland Cement	94	Pounds(LB)	07/20/22
1689275	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/20/22
1689279	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/20/22
1689287	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/20/22
1689284	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/20/22
1689286	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/20/22
1689285	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/20/22
1689276	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/20/22
1689278	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/20/22
1689280	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/20/22
1689281	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/20/22
1689282	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/20/22
1689283	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/20/22
1689277	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	07/20/22
1689288	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689298	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689302	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689289	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689290	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689291	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689292	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689293	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689294	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689295	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689296	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689297	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1689299	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689301	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689300	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1719268	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	1	Liters(L)	07/20/22
1689304	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	07/20/22
1689306	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	07/20/22
1689307	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	07/20/22
1689308	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	07/20/22
1689309	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	07/20/22
1689310	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	07/20/22
1689311	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	07/20/22
1689312	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	07/20/22
1689313	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	07/20/22
1689314	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	07/20/22
1689315	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	07/20/22
1689316	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	07/20/22
1689317	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	07/20/22
1689305	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	07/20/22
1689318	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1689319	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1689320	-	75% ARGON/25% CARBON DIOXIDE	220	Cubic Feet(CF)	07/20/22
1741001	1822867-54-8	2-(Aminomethyl)-N1 N1-dimethylpropane-1 3-diamine hydrochloride	1	Gram(GM)	07/20/22
1689322	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	07/20/22
1689321	124-38-9	CARBON DIOXIDE GAS	220	Cubic Feet(CF)	07/20/22
1689333	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689343	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689342	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689341	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689340	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689339	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689338	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689345	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689334	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689346	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689332	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689331	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689330	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689329	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689328	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689327	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689335	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689364	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689355	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1689356	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689357	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689358	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689359	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689360	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689361	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689344	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689363	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689354	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689337	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689336	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689353	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689352	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689351	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689350	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689349	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689348	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689347	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689362	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689367	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689370	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689365	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689371	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689369	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689368	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689366	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1689372	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/20/22
1741032	27607-77-8	Trimethylsilyl trifluoromethanesulfonate 99%	50	Gram(GM)	07/20/22
1689323	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	07/20/22
1689324	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	07/20/22
1689325	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	07/20/22
1689326	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	07/20/22
1741033	17499-68-2	Zirconium(IV) trifluoroacetylacetonate	1	Gram(GM)	07/20/22
1741034	17499-68-2	Zirconium(IV) trifluoroacetylacetonate	1	Gram(GM)	07/20/22
1741035	17499-68-2	Zirconium(IV) trifluoroacetylacetonate	1	Gram(GM)	07/20/22
1741036	17499-68-2	Zirconium(IV) trifluoroacetylacetonate	1	Gram(GM)	07/20/22
1689373	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1689388	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1689394	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1689389	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1689390	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1689391	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1689392	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1689393	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1689395	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1689396	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1689397	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1689398	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1689400	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1689385	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1689401	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1689402	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1689399	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1689375	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1689387	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1689374	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1689386	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1689376	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1689377	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1689378	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1689380	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1689381	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1689382	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1689383	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1689384	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1689379	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/20/22
1727312	-	Excelsior ASD-800	2	Gallon(GAL)	07/20/22
1727315	-	Excelsior ASD-800	2	Gallon(GAL)	07/20/22
1727314	-	Excelsior ASD-800	2	Gallon(GAL)	07/20/22
1727313	-	Excelsior ASD-800	2	Gallon(GAL)	07/20/22
V00000BF1C	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/20/22
V00000BF18	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/20/22
V00000BF19	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/20/22
V00000BF1A	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/20/22
V00000BF22	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/20/22
V00000BF21	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/20/22
V00000BF20	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/20/22
V00000BF1F	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/20/22
V00000BF1D	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/20/22
V00000BF1B	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/20/22
V00000BF1E	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/20/22
1727316	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	07/20/22
V00000BF23	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	07/20/22
1741037	91-16-7	1 2-Dimethoxybenzene	100	Gram(GM)	07/20/22
1741038	1191-95-3	Cyclobutanone 99%	5	Gram(GM)	07/20/22
1741040	3317-61-1	5 5-Dimethyl-1-pyrroline N-oxide	5	Gram(GM)	07/20/22
1716220	-	3-IN-ONE MULTIPURPOSE OIL	8	Ounces(OZ)	07/20/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1741041	-	BronchiaLife Epithelial Airway Medium Complete Kit	500	Milliliter(ML)	07/20/22
1741044	-	BronchiaLife Epithelial Airway Medium Complete Kit	500	Milliliter(ML)	07/20/22
1741043	-	BronchiaLife Epithelial Airway Medium Complete Kit	500	Milliliter(ML)	07/20/22
1741042	-	BronchiaLife Epithelial Airway Medium Complete Kit	500	Milliliter(ML)	07/20/22
1716221	-	3-IN-ONE MULTIPURPOSE OIL	8	Ounces(OZ)	07/20/22
1716222	-	3-IN-ONE MULTIPURPOSE OIL	8	Ounces(OZ)	07/20/22
1716223	-	3-IN-ONE MULTIPURPOSE OIL	8	Ounces(OZ)	07/20/22
1741111	10025-69-1	TIN(II) CHLORIDE DIHYDRATE	100	Gram(GM)	07/20/22
1741112	302-01-2	Hydrazine anhydrous 98%	100	Gram(GM)	07/20/22
1741113	616-47-7	1-METHYLIMIDAZOLE	100	Milliliter(ML)	07/20/22
1741114	-	LYSIS BUFFER	160	Milliliter(ML)	07/20/22
1689443	-	15% OXYGEN BAL. NITROGEN	34	Liters(L)	07/20/22
1689444	811-97-2	AIR DUSTER	10	Ounces(OZ)	07/20/22
1689445	811-97-2	AIR DUSTER	10	Ounces(OZ)	07/20/22
1738855	7647-14-5	SODIUM CHLORIDE CERTIFIED ACS	10	Kilograms(KG)	07/20/22
1738858	7647-14-5	SODIUM CHLORIDE CERTIFIED ACS	10	Kilograms(KG)	07/20/22
1738857	7647-14-5	SODIUM CHLORIDE CERTIFIED ACS	10	Kilograms(KG)	07/20/22
1738856	7647-14-5	SODIUM CHLORIDE CERTIFIED ACS	10	Kilograms(KG)	07/20/22
1741045	7732-18-5	HBTEC Air-Liquid Interface Differentiation Medium	500	Milliliter(ML)	07/20/22
1741046	7732-18-5	HBTEC Air-Liquid Interface Differentiation Medium	500	Milliliter(ML)	07/20/22
1741048	7732-18-5	TrypKit - (contains Phosphate Buffered Saline 0.05% Trypsin/0.02% EDTA Trypsin Neutralizing Solution)	100	Milliliter(ML)	07/20/22
1741049	7732-18-5	TrypKit - (contains Phosphate Buffered Saline 0.05% Trypsin/0.02% EDTA Trypsin Neutralizing Solution)	100	Milliliter(ML)	07/20/22
1738862	7447-40-7	Potassium Chloride ACS reagent 99.0-100.5%	10	Kilograms(KG)	07/20/22
1738859	7447-40-7	Potassium Chloride ACS reagent 99.0-100.5%	10	Kilograms(KG)	07/20/22
1738860	7447-40-7	Potassium Chloride ACS reagent 99.0-100.5%	10	Kilograms(KG)	07/20/22
1738861	7447-40-7	Potassium Chloride ACS reagent 99.0-100.5%	10	Kilograms(KG)	07/20/22
1727485	-	MOBIL SHC GEAR 460	35	Pounds(LB)	07/20/22
1727486	-	O'Reilly Auto Parts Dex-Cool Compatible Extended Life Concentrate Antifreeze and Coolant	1	Gallon(GAL)	07/20/22
1727487	-	O'Reilly Auto Parts Dex-Cool Compatible Extended Life Concentrate Antifreeze and Coolant	1	Gallon(GAL)	07/20/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727488	-	O'Reilly Auto Parts Dex-Cool Compatible Extended Life Concentrate Antifreeze and Coolant	1	Gallon(GAL)	07/20/22
1727489	-	O'Reilly Auto Parts Dex-Cool Compatible Extended Life Concentrate Antifreeze and Coolant	1	Gallon(GAL)	07/20/22
V00000BF25	-	Parts Plus SAE 5W-30 SYNTHETIC BLEND PP3470 MOTOR OIL	1	Quarts(QT)	07/20/22
V00000BF2A	-	Parts Plus SAE 5W-30 SYNTHETIC BLEND PP3470 MOTOR OIL	1	Quarts(QT)	07/20/22
V00000BF29	-	Parts Plus SAE 5W-30 SYNTHETIC BLEND PP3470 MOTOR OIL	1	Quarts(QT)	07/20/22
V00000BF26	-	Parts Plus SAE 5W-30 SYNTHETIC BLEND PP3470 MOTOR OIL	1	Quarts(QT)	07/20/22
V00000BF24	-	Parts Plus SAE 5W-30 SYNTHETIC BLEND PP3470 MOTOR OIL	1	Quarts(QT)	07/20/22
V00000BF28	-	Parts Plus SAE 5W-30 SYNTHETIC BLEND PP3470 MOTOR OIL	1	Quarts(QT)	07/20/22
V00000BF27	-	Parts Plus SAE 5W-30 SYNTHETIC BLEND PP3470 MOTOR OIL	1	Quarts(QT)	07/20/22
V00000BF2B	-	PARTS PLUS HD SAE 30 PREMIUM MOTOR OIL PP3371	1	Quarts(QT)	07/20/22
1741050	67-66-3	1 2-dimyristoyl-3-trimethylammonium-propane (chloride salt)	200	Milligram(MG)	07/20/22
1741115	546-68-9	TITANIUM (IV) ISOPROPOXIDE	500	Milliliter(ML)	07/20/22
1741116	-	EpoxiCure 2 Hardener	16	Ounces(OZ)	07/20/22
1741117	-	EpoxiCure 2 Hardener	16	Ounces(OZ)	07/20/22
1741118	-	Diamond Suspension Water Based Polycrystalline All Microns	240	Milliliter(ML)	07/20/22
1741119	-	Diamond Suspension Water Based Polycrystalline All Microns	240	Milliliter(ML)	07/20/22
1741125	-	Diamond Suspension Water Based Polycrystalline All Microns	240	Milliliter(ML)	07/20/22
1741124	-	Diamond Suspension Water Based Polycrystalline All Microns	240	Milliliter(ML)	07/20/22
1741123	-	Diamond Suspension Water Based Polycrystalline All Microns	240	Milliliter(ML)	07/20/22
1741122	-	Diamond Suspension Water Based Polycrystalline All Microns	240	Milliliter(ML)	07/20/22
1741120	-	Diamond Suspension Water Based Polycrystalline All Microns	240	Milliliter(ML)	07/20/22
1741121	-	Diamond Suspension Water Based Polycrystalline All Microns	240	Milliliter(ML)	07/20/22
1741126	-	Perfluorinated resin solution containing Nafion 1100W	100	Milliliter(ML)	07/20/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1741127	546-68-9	Titanium(IV) isopropoxide 97%	100	Milliliter(ML)	07/20/22
1741128	546-68-9	Titanium(IV) isopropoxide 97%	100	Milliliter(ML)	07/20/22
1741129	13294-71-8	2-Bromo-2-butene 98% mixture of cis and trans	100	Gram(GM)	07/20/22
1741130	13294-71-8	2-Bromo-2-butene 98% mixture of cis and trans	100	Gram(GM)	07/20/22
1741131	-	Sodium phosphate 0.2M buffer solution pH 7.4	500	Milliliter(ML)	07/20/22
1718018	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718053	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718052	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718051	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718050	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718049	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718047	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718054	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718044	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718058	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718043	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718045	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718055	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718042	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718057	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718037	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718059	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718060	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1718061	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718062	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718063	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718064	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718065	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718056	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718030	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718019	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718020	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718021	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718022	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718023	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718024	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718025	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718026	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718027	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718039	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718029	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718041	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718031	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718032	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718033	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1718034	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718035	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718036	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718048	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718038	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718040	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718028	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1718046	-	TRU-BLU VIBRATION RESISTANT THREAD SEALANT	1.75	Ounces(OZ)	07/20/22
1726747	-	EPOXY 1-GL 2PK 9100 REGAL RED	1	Gallon(GAL)	07/21/22
1726748	-	EPOXY 1-GL 2PK 9100 REGAL RED	1	Gallon(GAL)	07/21/22
1741132	13822-56-5	3-Aminopropyltrimethoxysilane 97%	100	Milliliter(ML)	07/21/22
1741133	13822-56-5	3-Aminopropyltrimethoxysilane 97%	100	Milliliter(ML)	07/21/22
1741134	-	Nafion perfluorinated resin solution	25	Milliliter(ML)	07/21/22
1741135	15715-58-9	TRIETHYLAMMONIUM BICARBONATE BUFFER PH 8.5	500	Milliliter(ML)	07/21/22
1727479	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	07/21/22
1741136	15715-58-9	TRIETHYLAMMONIUM BICARBONATE BUFFER PH 8.5	500	Milliliter(ML)	07/21/22
1727480	-	INGERSOLL-RAND ULTRA COOLANT	1	Gallon(GAL)	07/21/22
1727481	-	INGERSOLL-RAND ULTRA COOLANT	1	Gallon(GAL)	07/21/22
1727482	-	SULLAIR SULLUBE	55	Gallon(GAL)	07/21/22
1727483	-	Roto-Xtend Duty Fluid	5	Gallon(GAL)	07/21/22
1727484	-	Roto-Xtend Duty Fluid	5	Gallon(GAL)	07/21/22
1727514	-	Suniso 3GS Refrigeration Oil	1	Gallon(GAL)	07/21/22
1727515	-	Suniso 3GS Refrigeration Oil	1	Gallon(GAL)	07/21/22
V00000BF40	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	07/21/22
V00000BF3F	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	07/21/22
V00000BF3E	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	07/21/22
V00000BF3D	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	07/21/22
V00000BF41	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BF42	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	07/21/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000BF43	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	07/21/22
V00000BF45	-	PARTS PLUS SAE 10W-30 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/21/22
V00000BF44	-	PARTS PLUS SAE 10W-30 SYNTHETIC MOTOR OIL	1	Quarts(QT)	07/21/22
V00000BF47	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	07/21/22
V00000BF46	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	07/21/22
1727490	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	07/21/22
1727495	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	07/21/22
1727496	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	07/21/22
1727508	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	07/21/22
1727501	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	07/21/22
1727497	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	07/21/22
1727498	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	07/21/22
1727499	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	07/21/22
1727500	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	07/21/22
1727502	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	07/21/22
1727503	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	07/21/22
1727504	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	07/21/22
1727494	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	07/21/22
1727507	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	07/21/22
1727505	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	07/21/22
1727509	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	07/21/22
1727510	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	07/21/22
1727511	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	07/21/22
1727512	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	07/21/22
1727513	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	07/21/22
1727506	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	07/21/22
1727492	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	07/21/22
1727491	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	07/21/22
1727493	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	07/21/22
V00000BF63	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF73	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF72	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF71	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF64	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF77	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF62	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF61	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF60	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF5F	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF5E	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000BF5D	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF65	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF74	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF76	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF7A	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF78	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF5C	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF80	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF51	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF7F	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF7E	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF7D	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF7C	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF7B	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF79	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF75	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF4D	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF82	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF6A	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF6B	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF6C	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF6D	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF6E	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF6F	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF70	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF48	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF49	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF4A	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF54	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF4C	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF5B	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF4E	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF4F	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF52	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF53	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF81	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF55	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF56	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF57	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF58	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF59	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF5A	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF4B	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF90	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF8F	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000BF69	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF68	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF67	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BFA7	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BFA8	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BFA9	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF9A	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF8D	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF9D	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF8C	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF91	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF92	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF93	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF94	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF95	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF96	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF97	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF98	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BFAA	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF99	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF50	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF83	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF84	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF85	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF86	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF87	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF88	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF89	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF9E	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF9C	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF8E	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF9B	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF66	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BFA0	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BFA1	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BFA2	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BFA3	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BFA4	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BFA5	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BFA6	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF8A	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF8B	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BF9F	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BFAB	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BFAD	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000BFAE	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BFAF	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BFB1	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BFB2	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BFB3	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BFAC	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BFB0	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000BFB4	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
1727516	-	Premium Blue¿ EXTREME FULL SYNTHETIC HEAVY DUTY DIESEL SAE 5W-40 ENGINE OIL VV70518	1	Gallon(GAL)	07/21/22
1727517	-	AEON 9000 SP ROTARY SCREW	5	Gallon(GAL)	07/21/22
1727519	-	AEON 9000 SP ROTARY SCREW	5	Gallon(GAL)	07/21/22
1727518	-	AEON 9000 SP ROTARY SCREW	5	Gallon(GAL)	07/21/22
1727520	-	Service Pro Premium AW Hydraulic Oil AW 32 AW 46 AW 68 AW 100	35	Pounds(LB)	07/21/22
1727521	-	Service Pro Premium AW Hydraulic Oil AW 32 AW 46 AW 68 AW 100	35	Pounds(LB)	07/21/22
V00000BFC7	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BFD3	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BFD2	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BFD1	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BFD0	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BFCE	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BFCC	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BFCB	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BFCA	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BFC8	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BFCD	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BFC9	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BFBA	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000BFBE	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BFBD	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BFBC	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BFBB	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BFB9	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BFB8	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BFB7	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BFB6	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BFB5	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BFBF	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BFC1	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BFC2	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BFC3	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BFC4	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BFC5	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BFC6	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BFCF	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BFC0	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	07/21/22
V00000BFF9	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFFD	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFFC	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFFB	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFDC	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFFA	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFFE	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFD9	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFF8	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000BFD8	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFFF	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000C000	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000C003	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000C007	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000C001	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFD7	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000C002	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFF7	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000C005	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFED	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000C004	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFE2	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFEC	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFE3	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFE4	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFE5	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFE6	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFE7	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFE8	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFE9	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFEA	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFDB	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFEF	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFEB	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFF6	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000C008	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFEE	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000C009	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFF0	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFF1	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFF2	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFF3	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFF4	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFF5	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFDA	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000C011	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFD4	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFD5	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000C016	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000C015	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000C006	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000C012	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000C014	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000C00A	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000BFE0	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000C013	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFDF	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000C010	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFDD	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000C00F	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000C00B	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000C00C	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000C00D	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000C00E	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFDE	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFD6	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000BFE1	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/21/22
V00000C023	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000C018	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000C017	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000C01B	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000C020	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000C01F	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000C01C	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000C01E	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000C021	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000C01D	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000C01A	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000C019	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000C022	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
V00000C024	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/21/22
1727522	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	07/21/22
1727524	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	07/21/22
1727523	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	07/21/22
1750617	-	Super Silicone Sealant Black	10.3	Ounces(OZ)	07/21/22
1750618	-	Super Silicone Sealant Black	10.3	Ounces(OZ)	07/21/22
1750619	-	Super Silicone Sealant Black	10.3	Ounces(OZ)	07/21/22
1715551	-	ANTI-SEIZE AND LUBRICATING COMPOUND (NEVER-SEEZ)	4	Ounces(OZ)	07/21/22
1715552	-	ANTI-SEIZE AND LUBRICATING COMPOUND (NEVER-SEEZ)	4	Ounces(OZ)	07/21/22
1715559	-	ANTI-SEIZE AND LUBRICATING COMPOUND (NEVER-SEEZ)	4	Ounces(OZ)	07/21/22
1715558	-	ANTI-SEIZE AND LUBRICATING COMPOUND (NEVER-SEEZ)	4	Ounces(OZ)	07/21/22
1715556	-	ANTI-SEIZE AND LUBRICATING COMPOUND (NEVER-SEEZ)	4	Ounces(OZ)	07/21/22
1715553	-	ANTI-SEIZE AND LUBRICATING COMPOUND (NEVER-SEEZ)	4	Ounces(OZ)	07/21/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1715560	-	ANTI-SEIZE AND LUBRICATING COMPOUND (NEVER-SEEZ)	4	Ounces(OZ)	07/21/22
1715557	-	ANTI-SEIZE AND LUBRICATING COMPOUND (NEVER-SEEZ)	4	Ounces(OZ)	07/21/22
1715554	-	ANTI-SEIZE AND LUBRICATING COMPOUND (NEVER-SEEZ)	4	Ounces(OZ)	07/21/22
1715555	-	ANTI-SEIZE AND LUBRICATING COMPOUND (NEVER-SEEZ)	4	Ounces(OZ)	07/21/22
1740655	10378-47-9	Ceric Ammonium Sulfate 0.100 Normal in 1 Normal Sulfuric Acid	2.5	Liters(L)	07/21/22
1740748	-	Cytotoxicity Detection Kit (LDH)	46	Milliliter(ML)	07/21/22
1740751	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	1	Liters(L)	07/21/22
1740752	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	1	Liters(L)	07/21/22
1740954	7647-01-0	Hydrochloric Acid Optima	500	Milliliter(ML)	07/21/22
1740955	7647-01-0	Hydrochloric Acid Optima	500	Milliliter(ML)	07/21/22
1740956	7647-01-0	Hydrochloric Acid Optima	500	Milliliter(ML)	07/21/22
1740958	7647-01-0	Hydrochloric Acid Optima	500	Milliliter(ML)	07/21/22
1740957	7647-01-0	Hydrochloric Acid Optima	500	Milliliter(ML)	07/21/22
1740959	7722-84-1	HYDROGEN PEROXIDE 30%	4	Liters(L)	07/21/22
1740966	7722-84-1	HYDROGEN PEROXIDE 30%	4	Liters(L)	07/21/22
1740965	7722-84-1	HYDROGEN PEROXIDE 30%	4	Liters(L)	07/21/22
1740964	7722-84-1	HYDROGEN PEROXIDE 30%	4	Liters(L)	07/21/22
1740963	7722-84-1	HYDROGEN PEROXIDE 30%	4	Liters(L)	07/21/22
1740962	7722-84-1	HYDROGEN PEROXIDE 30%	4	Liters(L)	07/21/22
1740961	7722-84-1	HYDROGEN PEROXIDE 30%	4	Liters(L)	07/21/22
1740960	7722-84-1	HYDROGEN PEROXIDE 30%	4	Liters(L)	07/21/22
1741138	1076-43-3	Benzene-d6 (D 99.96%)	100	Gram(GM)	07/21/22
1741139	75-65-0	tert-Butanol anhydrous 99.5%	250	Milliliter(ML)	07/21/22
1741140	1336-21-6	AMMONIUM HYDROXIDE OPTIMA	250	Milliliter(ML)	07/21/22
1741141	1336-21-6	AMMONIUM HYDROXIDE OPTIMA	250	Milliliter(ML)	07/21/22
1741142	622-97-9	4-Methylstyrene (stabilized with TBC)	500	Milliliter(ML)	07/21/22
1741143	10025-99-7	POTASSIUM TETRACHLOROPLATINATE(II)	1	Gram(GM)	07/22/22
1741144	111-88-6	1-OCTANETHIOL	25	Milliliter(ML)	07/22/22
1741145	63-91-2	L-Phenylalanine reagent grade 98%	100	Gram(GM)	07/22/22
1741146	4511-42-6	(3S)-CIS-3 6-DIMETHYL-1 4-DIOXANE-2 5-DIONE	25	Gram(GM)	07/22/22
1741147	673-06-3	D-PHENYLALANINE	5	Gram(GM)	07/22/22
1741148	75-77-4	Chlorotrimethylsilane purified by redistillation 99%	100	Milliliter(ML)	07/22/22
1741149	67-56-1	Methanol anhydrous 99.8%	1	Liters(L)	07/22/22
1741150	67-56-1	Methanol anhydrous 99.8%	1	Liters(L)	07/22/22
1741151	67-63-0	2-Propanol ACS Reagent 99.5%	500	Milliliter(ML)	07/22/22
1741152	67-63-0	2-Propanol ACS Reagent 99.5%	500	Milliliter(ML)	07/22/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1741153	67-63-0	2-Propanol ACS Reagent 99.5%	500	Milliliter(ML)	07/22/22
1741154	67-63-0	2-Propanol ACS Reagent 99.5%	500	Milliliter(ML)	07/22/22
1741155	-	MOBIL DTE 25 ULTRA	55	Gallon(GAL)	07/22/22
1741156	-	MOBIL DTE 25 ULTRA	55	Gallon(GAL)	07/22/22
1741183	333-27-7	METHYL TRIFLUOROMETHANESULFONATE	50	Gram(GM)	07/22/22
1741184	7447-41-8	LITHIUM CHLORIDE	10	Gram(GM)	07/22/22
1741185	7447-41-8	LITHIUM CHLORIDE	10	Gram(GM)	07/22/22
1757527	-	Loctite Super Glue Control Liquid	0.14	Ounces(OZ)	07/22/22
1757528	-	Loctite Super Glue Control Liquid	0.14	Ounces(OZ)	07/22/22
1757529	-	141 Black Ink	2	Ounces(OZ)	07/22/22
1757531	-	141 Black Ink	2	Ounces(OZ)	07/22/22
1757530	-	141 Black Ink	2	Ounces(OZ)	07/22/22
1757532	-	141 OWY Inks (white stamp pad ink)	2	Ounces(OZ)	07/22/22
1757533	-	141 OWY Inks (white stamp pad ink)	2	Ounces(OZ)	07/22/22
1757534	-	141 OWY Inks (white stamp pad ink)	2	Ounces(OZ)	07/22/22
1726898	-	DOWSIL 995 Silicone Structural Sealant Black	20	Ounces(OZ)	07/22/22
1726912	-	DOWSIL 995 Silicone Structural Sealant Black	20	Ounces(OZ)	07/22/22
1726900	-	DOWSIL 995 Silicone Structural Sealant Black	20	Ounces(OZ)	07/22/22
1726899	-	DOWSIL 995 Silicone Structural Sealant Black	20	Ounces(OZ)	07/22/22
1726904	-	DOWSIL 995 Silicone Structural Sealant Black	20	Ounces(OZ)	07/22/22
1726901	-	DOWSIL 995 Silicone Structural Sealant Black	20	Ounces(OZ)	07/22/22
1726902	-	DOWSIL 995 Silicone Structural Sealant Black	20	Ounces(OZ)	07/22/22
1726903	-	DOWSIL 995 Silicone Structural Sealant Black	20	Ounces(OZ)	07/22/22
1726905	-	DOWSIL 995 Silicone Structural Sealant Black	20	Ounces(OZ)	07/22/22
1726906	-	DOWSIL 995 Silicone Structural Sealant Black	20	Ounces(OZ)	07/22/22
1726907	-	DOWSIL 995 Silicone Structural Sealant Black	20	Ounces(OZ)	07/22/22
1726908	-	DOWSIL 995 Silicone Structural Sealant Black	20	Ounces(OZ)	07/22/22
1726909	-	DOWSIL 995 Silicone Structural Sealant Black	20	Ounces(OZ)	07/22/22
1726910	-	DOWSIL 995 Silicone Structural Sealant Black	20	Ounces(OZ)	07/22/22
1726911	-	DOWSIL 995 Silicone Structural Sealant Black	20	Ounces(OZ)	07/22/22
1726913	-	DOWSIL 995 Silicone Structural Sealant Black	20	Ounces(OZ)	07/22/22
1726815	-	Diamond Spray Paint Gray Primer L/F	12	Ounces(OZ)	07/22/22
1726820	-	Diamond Spray Paint Gray Primer L/F	12	Ounces(OZ)	07/22/22
1726816	-	Diamond Spray Paint Gray Primer L/F	12	Ounces(OZ)	07/22/22
1726817	-	Diamond Spray Paint Gray Primer L/F	12	Ounces(OZ)	07/22/22
1726818	-	Diamond Spray Paint Gray Primer L/F	12	Ounces(OZ)	07/22/22
1726819	-	Diamond Spray Paint Gray Primer L/F	12	Ounces(OZ)	07/22/22
1716343	7440-36-0	ANTIMONY METAL	10	Gram(GM)	07/22/22
1716344	7440-69-9	BISMUTH	10	Gram(GM)	07/22/22
1716345	7440-58-6	HAFNIUM	50	Gram(GM)	07/22/22
1716346	13494-80-9	TELLURIUM	50	Gram(GM)	07/22/22
1716347	7440-58-6	HAFNIUM	10	Gram(GM)	07/22/22
1716348	7440-44-0	CARBON RODS	5	Gram(GM)	07/22/22
1716349	7429-91-6	DYSPROSIUM	50	Gram(GM)	07/22/22
1716350	7440-65-5	YTTRIUM	20	Gram(GM)	07/22/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1716351	7440-21-3	SILICON	5	Gram(GM)	07/22/22
1662360	-	GREASE VACUUM	100	Gram(GM)	07/22/22
1716352	7429-90-5	ALUMINUM METAL	5	Gram(GM)	07/22/22
1662361	-	GREASE VACUUM	100	Gram(GM)	07/22/22
1716353	7440-66-6	Zinc metal pieces	20	Gram(GM)	07/22/22
1716354	7440-74-6	INDIUM METAL	30	Gram(GM)	07/22/22
1716355	7429-91-6	DYSPROSIUM METAL	10	Gram(GM)	07/22/22
1716356	7440-31-5	TIN METAL	10	Gram(GM)	07/22/22
1716357	7439-92-1	LEAD METAL SHOT	10	Gram(GM)	07/22/22
1716358	5/3/7440	PALLADIUM METAL	5	Gram(GM)	07/22/22
1716359	7439-94-3	LUTETIUM	10	Gram(GM)	07/22/22
1716360	6/4/7440	PLATINUM	5	Gram(GM)	07/22/22
1716361	7440-16-6	RHODIUM POWDER	5	Gram(GM)	07/22/22
1716362	7440-31-5	TIN SHOT	10	Gram(GM)	07/22/22
1716363	7440-66-6	ZINC METAL	20	Gram(GM)	07/22/22
1716364	7440-31-5	TIN METAL	2	Gram(GM)	07/22/22
1716365	7440-69-9	BISMUTH PIECES	10	Gram(GM)	07/22/22
1716366	1312-81-8	LANTHANUM OXIDE	10	Gram(GM)	07/22/22
1716367	1344-28-1	ALUMINA POWDER	10	Gram(GM)	07/22/22
1716368	7440-69-9	BISMUTH	3	Gram(GM)	07/22/22
1716369	-	SILVER SOLDER; EASY-FLO	50	Gram(GM)	07/22/22
1716370	7440-02-0	NICKEL METAL	5	Gram(GM)	07/22/22
1713671	7429-90-5	ALUMINUM METAL	1	Gram(GM)	07/22/22
1716372	7440-16-6	RHODIUM POWDER	5	Gram(GM)	07/22/22
1716373	7439-94-3	LUTETIUM METAL	5	Gram(GM)	07/22/22
1716374	7440-53-1	EUROPIUM METAL	5	Gram(GM)	07/22/22
1716375	-	Cerium mixed metal	1	Gram(GM)	07/22/22
1716376	7440-33-7	TUNGSTEN METAL	30	Gram(GM)	07/22/22
1716377	7440-56-4	GERMANIUM POWDER	10	Gram(GM)	07/22/22
1716378	7440-42-8	BORON METAL	3	Gram(GM)	07/22/22
1716379	12069-32-8	Boron Carbide Powder	10	Gram(GM)	07/22/22
1716380	-	ALADDIN #450 SOFT SILVER SOLDER	50	Gram(GM)	07/22/22
1716381	7440-19-9	SAMARIUM FOIL	3	Gram(GM)	07/22/22
1716382	7440-64-4	YTTERBIUM FOIL	5	Gram(GM)	07/22/22
1716383	7440-62-2	VANADIUM METAL	5	Gram(GM)	07/22/22
1716384	7440-62-2	VANADIUM METAL	10	Gram(GM)	07/22/22
1716385	7439-94-3	LUTETIUM METAL	10	Gram(GM)	07/22/22
1716386	7439-94-3	LUTETIUM METAL	10	Gram(GM)	07/22/22
1716387	7440-65-5	YTTRIUM METAL	5	Gram(GM)	07/22/22
1716388	7440-74-6	INDIUM METAL	10	Gram(GM)	07/22/22
1716389	7440-25-7	TANTALUM METAL	10	Gram(GM)	07/22/22
1716390	7440-65-5	YTTRIUM METAL	10	Gram(GM)	07/22/22
1716391	7440-54-2	GADOLINIUM	10	Gram(GM)	07/22/22
1716392	7440-54-2	GADOLINIUM	10	Gram(GM)	07/22/22
1716393	7440-58-6	HAFNIUM METAL	20	Gram(GM)	07/22/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1716394	7440-15-5	RHENIUM	10	Gram(GM)	07/22/22
1716395	7440-15-5	RHENIUM METAL	10	Gram(GM)	07/22/22
1716396	7440-15-5	RHENIUM METAL	10	Gram(GM)	07/22/22
1716397	7440-54-2	GADOLINIUM	20	Gram(GM)	07/22/22
1716398	7440-00-8	NEODYMIUM FOIL	5	Gram(GM)	07/22/22
1716399	7440-65-5	YTTRIUM METAL	10	Gram(GM)	07/22/22
1716400	7429-90-5	ALUMINUM METAL	5	Gram(GM)	07/22/22
1716401	7439-91-0	LANTHANUM	5	Gram(GM)	07/22/22
1716402	7439-94-3	LUTETIUM METAL	10	Gram(GM)	07/22/22
1716403	7429-91-6	DYSPROSIUM METAL	10	Gram(GM)	07/22/22
1716404	7429-91-6	DYSPROSIUM METAL	10	Gram(GM)	07/22/22
1716405	7439-98-7	MOLYBDENUM METAL	10	Gram(GM)	07/22/22
1716406	7440-58-6	HAFNIUM METAL	10	Gram(GM)	07/22/22
1716407	7439-98-7	MOLYBDENUM METAL	10	Gram(GM)	07/22/22
1716408	7440-58-6	HAFNIUM METAL	10	Gram(GM)	07/22/22
1716409	7439-98-7	MOLYBDENUM METAL	10	Gram(GM)	07/22/22
1716410	7440-33-7	TUNGSTEN METAL	10	Gram(GM)	07/22/22
1716411	3/1/7440	NIOBIUM METAL	5	Gram(GM)	07/22/22
1716412	7440-33-7	TUNGSTEN METAL	30	Gram(GM)	07/22/22
1716413	7440-67-7	ZIRCONIUM METAL	20	Gram(GM)	07/22/22
1716414	7440-25-7	TANTALUM METAL	5	Gram(GM)	07/22/22
1642835	-	MOBIL VELOCITE OIL NO. 3	5	Gallon(GAL)	07/22/22
1718902	-	DENATURED ALCOHOL	16	Ounces(OZ)	07/22/22
1718903	67-64-1	ACETONE	1	Gallon(GAL)	07/22/22
1718904	67-64-1	ACETONE	1	Gallon(GAL)	07/22/22
1718905	67-64-1	ACETONE	1	Gallon(GAL)	07/22/22
1718906	67-64-1	ACETONE	1	Gallon(GAL)	07/22/22
1716560	-	CONFLIKT	1	Gallon(GAL)	07/22/22
1716561	-	CONFLIKT	1	Gallon(GAL)	07/22/22
1716562	-	CONFLIKT	1	Gallon(GAL)	07/22/22
1716563	-	CONFLIKT	1	Gallon(GAL)	07/22/22
V00000C02E	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	07/25/22
V00000C031	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	07/25/22
V00000C032	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	07/25/22
V00000C033	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	07/25/22
V00000C034	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	07/25/22
V00000C035	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	07/25/22
V00000C02F	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	07/25/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C030	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	07/25/22
V00000C02D	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	07/25/22
1729258	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/25/22
1729259	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/25/22
1729270	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/25/22
1729280	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/25/22
1729279	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/25/22
1729278	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/25/22
1729277	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/25/22
1729276	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/25/22
1729275	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/25/22
1729274	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/25/22
1729273	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/25/22
1729281	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/25/22
1729271	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/25/22
1729269	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/25/22
1729268	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/25/22
1729261	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/25/22
1729266	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/25/22
1729265	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/25/22
1729264	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/25/22
1729263	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/25/22
1729262	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/25/22
1729260	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/25/22
1729272	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/25/22
1729267	-	BRAKE PARTS CLEANER	14	Ounces(OZ)	07/25/22
1729199	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729234	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729241	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729240	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729239	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729238	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729237	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729256	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729235	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729244	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729233	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729232	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729231	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729230	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729236	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729243	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729227	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1729245	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729246	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729247	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729248	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729249	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729250	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729251	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729252	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729253	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729254	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729255	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729242	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729214	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729200	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729201	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729202	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729203	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729204	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729205	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729206	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729207	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729208	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729209	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729210	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729211	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729229	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729213	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729228	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729215	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729216	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729217	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729218	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729219	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729220	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729221	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729222	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729223	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729224	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729225	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729226	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729257	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729212	-	BRAKE PARTS CLEANER	13	Ounces(OZ)	07/25/22
1729282	-	Valvoline Professional Series 75W-140 FULL SYNTHETIC GEAR OIL	1	Quarts(QT)	07/25/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1729283	-	Valvoline Professional Series 75W-140 FULL SYNTHETIC GEAR OIL	1	Quarts(QT)	07/25/22
1729284	-	Valvoline Professional Series 75W-140 FULL SYNTHETIC GEAR OIL	1	Quarts(QT)	07/25/22
1729285	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729323	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729309	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729310	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729311	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729312	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729313	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729314	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729315	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729316	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729317	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729318	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729308	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729322	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729304	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729324	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729325	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729326	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729327	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729328	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729329	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729330	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729320	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729297	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729286	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729287	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729288	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729289	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729290	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729291	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729292	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729293	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729294	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729306	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729296	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729307	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729298	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729299	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729300	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729301	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729302	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1729303	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729321	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729305	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729331	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729295	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729344	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729332	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729319	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729350	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729349	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729348	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729347	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729345	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729343	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729342	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729336	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729333	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729334	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729346	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729335	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729341	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729337	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729338	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729339	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1729340	-	Brakleen Brake Parts Cleaner (aerosol)	14	Ounces(OZ)	07/25/22
1741157	109-99-9	Tetrahydrofuran 99.8% for HPLC unstabilized	1	Liters(L)	07/25/22
1741158	109-99-9	Tetrahydrofuran 99.8% for HPLC unstabilized	1	Liters(L)	07/25/22
1741159	-	70% denatured ethanol solution	1	Gallon(GAL)	07/25/22
1741162	-	70% denatured ethanol solution	1	Gallon(GAL)	07/25/22
1741161	-	70% denatured ethanol solution	1	Gallon(GAL)	07/25/22
1741160	-	70% denatured ethanol solution	1	Gallon(GAL)	07/25/22
1741164	87-85-4	HEXAMETHYLBENZENE	5	Gram(GM)	07/25/22
1741165	79917-88-7	1 3-Dimethylimidazolium Chloride	5	Gram(GM)	07/25/22
1741166	333-27-7	METHYL TRIFLUOROMETHANESULFONATE 99+%	5	Gram(GM)	07/25/22
1741167	872-50-4	1-METHYL-2-PYRROLIDINONE	4	Liters(L)	07/25/22
1741170	872-50-4	1-METHYL-2-PYRROLIDINONE	4	Liters(L)	07/25/22
1741168	872-50-4	1-METHYL-2-PYRROLIDINONE	4	Liters(L)	07/25/22
1741169	872-50-4	1-METHYL-2-PYRROLIDINONE	4	Liters(L)	07/25/22
1741171	3082-64-2	(R)-(+)-alpha-Ethylbenzylamine	5	Gram(GM)	07/25/22
1741172	118712-39-3	Methyl (2S)-glycidate ee: 99% (GLC) 98%	5	Gram(GM)	07/25/22
1741173	118712-39-3	Methyl (2S)-glycidate ee: 99% (GLC) 98%	5	Gram(GM)	07/25/22
1741174	2577-40-4	PHE-PHE	1	Gram(GM)	07/25/22
1741175	-	Desiccant sachet	100	Gram(GM)	07/25/22
1741176	110-54-3	Hexane anhydrous 95%	1	Liters(L)	07/25/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1741179	110-54-3	Hexane anhydrous 95%	1	Liters(L)	07/25/22
1741177	110-54-3	Hexane anhydrous 95%	1	Liters(L)	07/25/22
1741178	110-54-3	Hexane anhydrous 95%	1	Liters(L)	07/25/22
1741181	110-54-3	Hexane anhydrous 95%	1	Liters(L)	07/25/22
1741180	110-54-3	Hexane anhydrous 95%	1	Liters(L)	07/25/22
1741186	7803-49-8	HYDROXYLAMINE 50 WT. % SOLUTION IN WATER	1	Liters(L)	07/25/22
1741188	7803-49-8	HYDROXYLAMINE 50 WT. % SOLUTION IN WATER	1	Liters(L)	07/25/22
1741187	7803-49-8	HYDROXYLAMINE 50 WT. % SOLUTION IN WATER	1	Liters(L)	07/25/22
1741189	7782-42-5	GRAPHITE POWDER	25	Gram(GM)	07/25/22
1741190	124-30-1	OCTADECYLAMINE	25	Gram(GM)	07/25/22
1717128	7647-01-0	Hydrochloric Acid 30-31%	3000	Pounds(LB)	07/25/22
1717129	7647-01-0	Hydrochloric Acid 30-31%	3000	Pounds(LB)	07/25/22
1717130	7705-08-0	FERRIC CHLORIDE 40% SOLUTION	3500	Pounds(LB)	07/25/22
1736550	112-57-2	TETRAETHYLENPENTAMINE	1	Liters(L)	07/25/22
1740749	108-88-3	Toluene ACS Reagent 99.5%	4	Liters(L)	07/25/22
1741255	75-09-2	Methylene chloride ACS	16	Liters(L)	07/25/22
1741257	75-09-2	Methylene chloride ACS	16	Liters(L)	07/25/22
1741256	75-09-2	Methylene chloride ACS	16	Liters(L)	07/25/22
1741258	75-09-2	Methylene chloride ACS	16	Liters(L)	07/25/22
1741259	75-05-8	Acetonitrile anhydrous 99.8%	4	Liters(L)	07/25/22
1741260	100-41-4	KRAYDEN SYLGUARD 184 KIT	1	Liters(L)	07/25/22
1741261	67-64-1	Acetone 99.8% Extra Dry	1	Liters(L)	07/25/22
1741262	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	07/25/22
1741265	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	07/25/22
1741264	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	07/25/22
1741263	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	07/25/22
1741270	1522-22-1	HEXAFLUOROACETYLACETONE	25	Gram(GM)	07/25/22
1740750	-	DPD Solution for Chlorine Chlorine Dioxide	500	Milliliter(ML)	07/25/22
1717004	67-63-0	2-Propanol (Certified ACS)	5	Gallon(GAL)	07/25/22
1726883	-	MasterWeld 948	10.6	Ounces(OZ)	07/25/22
1726894	-	MasterWeld 948	10.6	Ounces(OZ)	07/25/22
1726888	-	MasterWeld 948	10.6	Ounces(OZ)	07/25/22
1726897	-	MasterWeld 948	10.6	Ounces(OZ)	07/25/22
1726896	-	MasterWeld 948	10.6	Ounces(OZ)	07/25/22
1726895	-	MasterWeld 948	10.6	Ounces(OZ)	07/25/22
1726884	-	MasterWeld 948	10.6	Ounces(OZ)	07/25/22
1726890	-	MasterWeld 948	10.6	Ounces(OZ)	07/25/22
1726893	-	MasterWeld 948	10.6	Ounces(OZ)	07/25/22
1726885	-	MasterWeld 948	10.6	Ounces(OZ)	07/25/22
1726886	-	MasterWeld 948	10.6	Ounces(OZ)	07/25/22
1726887	-	MasterWeld 948	10.6	Ounces(OZ)	07/25/22
1726889	-	MasterWeld 948	10.6	Ounces(OZ)	07/25/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1726891	-	MasterWeld 948	10.6	Ounces(OZ)	07/25/22
1726892	-	MasterWeld 948	10.6	Ounces(OZ)	07/25/22
1727117	-	Repel Insect Repellent Sportsmen Max Formula 40%	6.5	Ounces(OZ)	07/25/22
1727119	-	Repel Insect Repellent Sportsmen Max Formula 40%	6.5	Ounces(OZ)	07/25/22
1727118	-	Repel Insect Repellent Sportsmen Max Formula 40%	6.5	Ounces(OZ)	07/25/22
1741051	7681-49-4	FLUORIDE STANDARD (100 PPM F)	500	Milliliter(ML)	07/25/22
1741271	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	1	Liters(L)	07/25/22
1741272	198-55-0	PERYLENE	5	Gram(GM)	07/25/22
1741273	5/1/2622	ALLYLMAGNESIUM CHLORIDE 2.0M IN TETRAHYDROFURAN	100	Milliliter(ML)	07/25/22
1741274	108-32-7	Propylene carbonate anhydrous 99.7%	2	Liters(L)	07/25/22
1741275	67-68-5	Dimethyl sulfoxide anhydrous 99.9%	2	Liters(L)	07/25/22
1741276	2687-96-9	1-DODECYL-2-PYRROLIDINONE	25	Milligram(MG)	07/25/22
1741278	2687-96-9	1-DODECYL-2-PYRROLIDINONE	25	Milligram(MG)	07/25/22
1741279	2687-96-9	1-DODECYL-2-PYRROLIDINONE	25	Milligram(MG)	07/25/22
1741277	2687-96-9	1-DODECYL-2-PYRROLIDINONE	25	Milligram(MG)	07/25/22
1741280	17261-34-6	Iminodi(methylphosphonic acid) 97%	5	Gram(GM)	07/25/22
1741281	17261-34-6	Iminodi(methylphosphonic acid) 97%	5	Gram(GM)	07/25/22
1741282	1336-21-6	Ammonium hydroxide solution ACS reagent 28.0-30.0%	500	Milliliter(ML)	07/25/22
1741283	54663-78-4	2-(Tributylstannyl)thiophene	10	Milliliter(ML)	07/25/22
1741284	7664-39-3	HYDROFLUORIC ACID OPTIMA	500	Milliliter(ML)	07/25/22
1741285	5326-47-6	2-Amino-5-iodobenzoic acid	25	Gram(GM)	07/25/22
1741287	5326-47-6	2-Amino-5-iodobenzoic acid	25	Gram(GM)	07/25/22
1741286	5326-47-6	2-Amino-5-iodobenzoic acid	25	Gram(GM)	07/25/22
1741288	112-90-3	OLEYLAMINE	1.5	Kilograms(KG)	07/25/22
1741289	64-17-5	Ethyl alcohol Pure 200 proof ACS reagent 99.5%	4	Liters(L)	07/25/22
1741290	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Gallon(GAL)	07/25/22
1741291	67-56-1	Methanol 99.8% ACS reagent	4	Liters(L)	07/25/22
1741292	67-56-1	Methanol 99.8% ACS reagent	4	Liters(L)	07/25/22
1741293	7705-08-0	IRON(III) CHLORIDE	100	Gram(GM)	07/25/22
1741294	7705-08-0	IRON(III) CHLORIDE	100	Gram(GM)	07/25/22
1741266	63148-62-9	PURE SILICONE FLUID	2	Ounces(OZ)	07/25/22
1741267	63148-62-9	PURE SILICONE FLUID	2	Ounces(OZ)	07/25/22
1741268	63148-62-9	PURE SILICONE FLUID	2	Ounces(OZ)	07/25/22
1741269	63148-62-9	PURE SILICONE FLUID	2	Ounces(OZ)	07/25/22
1741182	-	LOCTITE STYCAST AC 0305	1	Gallon(GAL)	07/25/22
1660710	-	Super Lube Multi-Purpose Synthetic Grease with Syncolon (PTFE)	3	Ounces(OZ)	07/26/22
1660709	-	TRI FLOW SUPERIOR LUBRICANT	2	Ounces(OZ)	07/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1660707	-	LOCTITE 401 INSTANT ADHESIVE PRISM	20	Gram(GM)	07/26/22
1660708	-	LOCTITE 401 INSTANT ADHESIVE PRISM	20	Ounces(OZ)	07/26/22
1750568	-	DEVCON 5-MINUTE EPOXY (resin bisphenyl and diglycidyl ether resin 60-100%; hardener propiety)	25	Milliliter(ML)	07/26/22
1750570	-	DEVCON 5-MINUTE EPOXY (resin bisphenyl and diglycidyl ether resin 60-100%; hardener propiety)	25	Milliliter(ML)	07/26/22
1750569	-	DEVCON 5-MINUTE EPOXY (resin bisphenyl and diglycidyl ether resin 60-100%; hardener propiety)	25	Milliliter(ML)	07/26/22
1750571	-	DEVCON 5-MINUTE EPOXY (resin bisphenyl and diglycidyl ether resin 60-100%; hardener propiety)	25	Milliliter(ML)	07/26/22
1750572	-	DEVCON 5-MINUTE EPOXY (resin bisphenyl and diglycidyl ether resin 60-100%; hardener propiety)	25	Milliliter(ML)	07/26/22
1750573	-	DEVCON 5-MINUTE EPOXY (resin bisphenyl and diglycidyl ether resin 60-100%; hardener propiety)	25	Milliliter(ML)	07/26/22
1750574	-	DEVCON 5-MINUTE EPOXY (resin bisphenyl and diglycidyl ether resin 60-100%; hardener propiety)	25	Milliliter(ML)	07/26/22
1750577	-	DEVCON 5-MINUTE EPOXY (resin bisphenyl and diglycidyl ether resin 60-100%; hardener propiety)	25	Milliliter(ML)	07/26/22
1750576	-	DEVCON 5-MINUTE EPOXY (resin bisphenyl and diglycidyl ether resin 60-100%; hardener propiety)	25	Milliliter(ML)	07/26/22
1750575	-	DEVCON 5-MINUTE EPOXY (resin bisphenyl and diglycidyl ether resin 60-100%; hardener propiety)	25	Milliliter(ML)	07/26/22
16600703	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1660704	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1660705	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1660706	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1689536	-	75% ARGON/25% CARBON DIOXIDE	220	Cubic Feet(CF)	07/26/22
1689537	-	75% ARGON/25% CARBON DIOXIDE	220	Cubic Feet(CF)	07/26/22
1750609	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750592	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750593	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750594	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750595	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750596	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750597	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1750614	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750613	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750612	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750610	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750589	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750608	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750607	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750606	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750605	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750604	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750603	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750602	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750601	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750600	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750599	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750611	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750582	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750579	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750578	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750591	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750598	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750590	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750581	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750583	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750584	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750585	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750586	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750587	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750588	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750580	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1689538	-	3% HYDROGEN/97% ARGON	300	Cubic Feet(CF)	07/26/22
1689541	-	3% HYDROGEN/97% ARGON	300	Cubic Feet(CF)	07/26/22
1689539	-	3% HYDROGEN/97% ARGON	300	Cubic Feet(CF)	07/26/22
1689540	-	3% HYDROGEN/97% ARGON	300	Cubic Feet(CF)	07/26/22
1715675	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1715685	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1715692	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1715694	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1715693	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1715691	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1715689	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1715688	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1715686	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1715684	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1715683	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1715682	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1715681	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1715680	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1715679	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1715678	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1715677	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1715676	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1715687	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1715690	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1689446	74-98-6	PROPANE	11	Gallon(GAL)	07/26/22
1689447	74-98-6	PROPANE	11	Gallon(GAL)	07/26/22
1689448	74-98-6	PROPANE	11	Gallon(GAL)	07/26/22
1689449	74-98-6	PROPANE	11	Gallon(GAL)	07/26/22
1689450	74-98-6	PROPANE	11	Gallon(GAL)	07/26/22
1689451	74-98-6	PROPANE	11	Gallon(GAL)	07/26/22
1689452	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/26/22
1689530	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/26/22
1689535	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/26/22
1689534	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/26/22
1689533	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/26/22
1689532	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/26/22
1689531	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/26/22
1689464	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/26/22
1689463	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/26/22
1689465	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/26/22
1689455	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/26/22
1689453	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/26/22
1689466	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/26/22
1689454	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/26/22
1689462	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/26/22
1689456	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/26/22
1689457	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/26/22
1689459	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/26/22
1689460	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/26/22
1689458	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/26/22
1689461	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/26/22
1689467	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/26/22
1689494	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/26/22
1689486	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/26/22
1689487	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/26/22
1689488	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/26/22
1689490	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/26/22
1689496	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/26/22
1689493	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/26/22
1689495	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1689489	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/26/22
1689485	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/26/22
1689492	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/26/22
1689483	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/26/22
1689482	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/26/22
1689491	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/26/22
1689484	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/26/22
1689470	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/26/22
1689473	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/26/22
1689471	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/26/22
1689469	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/26/22
1689474	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/26/22
1689475	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/26/22
1689477	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/26/22
1689478	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/26/22
1689479	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/26/22
1689480	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/26/22
1689481	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/26/22
1689476	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/26/22
1689472	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/26/22
1689468	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	07/26/22
1689497	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/26/22
1689523	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/26/22
1689516	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/26/22
1689517	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/26/22
1689518	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/26/22
1689519	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/26/22
1689520	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/26/22
1689522	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/26/22
1689524	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/26/22
1689515	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/26/22
1689510	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/26/22
1689521	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/26/22
1689514	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/26/22
1689513	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/26/22
1689512	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/26/22
1689511	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/26/22
1689501	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/26/22
1689499	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/26/22
1689502	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/26/22
1689509	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/26/22
1689498	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/26/22
1689500	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/26/22
1689505	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/26/22
1689503	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1689506	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/26/22
1689507	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/26/22
1689508	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/26/22
1689504	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	07/26/22
1689525	-	Compressed Air	220	Cubic Feet(CF)	07/26/22
1689528	-	Compressed Air	220	Cubic Feet(CF)	07/26/22
1689529	-	Compressed Air	220	Cubic Feet(CF)	07/26/22
1689526	-	Compressed Air	220	Cubic Feet(CF)	07/26/22
1689527	-	Compressed Air	220	Cubic Feet(CF)	07/26/22
1727741	-	PREMIUM HYDRAULIC FLUID AW-32	5	Gallon(GAL)	07/26/22
1727742	-	PREMIUM HYDRAULIC FLUID AW-32	5	Gallon(GAL)	07/26/22
1727743	-	PREMIUM HYDRAULIC FLUID AW-32	5	Gallon(GAL)	07/26/22
1727744	-	PREMIUM HYDRAULIC FLUID AW-32	5	Gallon(GAL)	07/26/22
1727745	-	732 MULTI-PURPOSE SEALANT	300	Milliliter(ML)	07/26/22
1727751	-	732 MULTI-PURPOSE SEALANT	300	Milliliter(ML)	07/26/22
1727756	-	732 MULTI-PURPOSE SEALANT	300	Milliliter(ML)	07/26/22
1727755	-	732 MULTI-PURPOSE SEALANT	300	Milliliter(ML)	07/26/22
1727754	-	732 MULTI-PURPOSE SEALANT	300	Milliliter(ML)	07/26/22
1727752	-	732 MULTI-PURPOSE SEALANT	300	Milliliter(ML)	07/26/22
1727750	-	732 MULTI-PURPOSE SEALANT	300	Milliliter(ML)	07/26/22
1727749	-	732 MULTI-PURPOSE SEALANT	300	Milliliter(ML)	07/26/22
1727748	-	732 MULTI-PURPOSE SEALANT	300	Milliliter(ML)	07/26/22
1727746	-	732 MULTI-PURPOSE SEALANT	300	Milliliter(ML)	07/26/22
1727747	-	732 MULTI-PURPOSE SEALANT	300	Milliliter(ML)	07/26/22
1727753	-	732 MULTI-PURPOSE SEALANT	300	Milliliter(ML)	07/26/22
V00000C041	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/26/22
V00000C048	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/26/22
V00000C047	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/26/22
V00000C046	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/26/22
V00000C045	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/26/22
V00000C044	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/26/22
V00000C042	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/26/22
V00000C043	-	ARDEX FEATHER FINISH	10	Pounds(LB)	07/26/22
V00000C049	-	HENRY 440 Cove Base Adhesive	1	Gallon(GAL)	07/26/22
V00000C04F	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/26/22
V00000C04C	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/26/22
V00000C04A	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/26/22
V00000C04B	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/26/22
V00000C04D	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/26/22
V00000C04E	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	07/26/22
1727525	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/26/22
1727543	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727542	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/26/22
1727541	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/26/22
1727540	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/26/22
1727539	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/26/22
1727538	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/26/22
1727536	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/26/22
1727546	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/26/22
1727534	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/26/22
1727532	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/26/22
1727531	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/26/22
1727526	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/26/22
1727527	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/26/22
1727528	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/26/22
1727544	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/26/22
1727529	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/26/22
1727537	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/26/22
1727530	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/26/22
1727533	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/26/22
1727548	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/26/22
1727535	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/26/22
1727547	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/26/22
1727545	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	07/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727549	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727571	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727587	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727572	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727573	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727574	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727575	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727576	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727577	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727578	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727579	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727580	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727581	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727597	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727589	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727588	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727567	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727596	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727585	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727583	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727584	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727594	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727593	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727592	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727591	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727590	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727582	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727550	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727561	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727559	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727558	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727557	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727556	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727555	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727554	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727553	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727595	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727552	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727569	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727551	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727570	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727600	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727586	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727599	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727598	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727562	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727563	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727564	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727565	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727566	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727560	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727568	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727653	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727655	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727645	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727646	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727647	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727648	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727649	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727650	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727663	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727654	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727642	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727656	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727657	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727658	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727659	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727660	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727661	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727625	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727652	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727635	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727626	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727627	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727628	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727629	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727630	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727631	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727632	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727644	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727634	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727643	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727636	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727637	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727638	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727639	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727640	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727641	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727664	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727633	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727694	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727686	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727687	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727688	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727689	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727690	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727691	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727662	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727693	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727683	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727695	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727696	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727697	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727698	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727699	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727700	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727651	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727692	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727676	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727665	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727666	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727667	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727668	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727669	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727670	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727672	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727685	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727675	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727684	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727677	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727678	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727679	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727680	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727681	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727682	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727671	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727674	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727606	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727601	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727602	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727603	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727673	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727624	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727605	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727607	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727608	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727609	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727610	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727611	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727619	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727623	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727622	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727604	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727612	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727620	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727621	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727618	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727617	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727616	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727615	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727614	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727613	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727717	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727722	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727719	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727720	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727721	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727718	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727723	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727724	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727726	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727727	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727716	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727704	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727725	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727708	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727701	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727702	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727703	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727730	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727705	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727706	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727707	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727715	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727709	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727710	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727711	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727712	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727713	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727714	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727729	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727739	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727728	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727740	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727738	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727737	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727736	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727734	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727733	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727732	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727731	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1727735	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/26/22
1437213	-	RT150S G or D Big Blu SubZero	1	Gallon(GAL)	07/26/22
1437214	-	RT150S G or D Big Blu SubZero	1	Gallon(GAL)	07/26/22
1437216	-	RT150S G or D Big Blu SubZero	1	Gallon(GAL)	07/26/22
1437215	-	RT150S G or D Big Blu SubZero	1	Gallon(GAL)	07/26/22
1738863	-	10000 ug/ml Zinc	125	Milliliter(ML)	07/26/22
1738864	-	10000 ug/ml Zinc	125	Milliliter(ML)	07/26/22
1738866	-	10000 ug/ml Zinc	125	Milliliter(ML)	07/26/22
1738867	-	10000 ug/ml Zinc	125	Milliliter(ML)	07/26/22
1738868	-	10000 ug/ml Zinc	125	Milliliter(ML)	07/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1738870	-	10000 ug/ml Zinc	125	Milliliter(ML)	07/26/22
1738865	-	10000 ug/ml Zinc	125	Milliliter(ML)	07/26/22
1738869	-	10000 ug/ml Zinc	125	Milliliter(ML)	07/26/22
1738871	-	10000 ug/ml Gallium	125	Milliliter(ML)	07/26/22
1738872	-	10000 ug/ml Gallium	125	Milliliter(ML)	07/26/22
1738873	-	10000 ug/ml Gallium	125	Milliliter(ML)	07/26/22
1738874	-	10000 ug/ml Gallium	125	Milliliter(ML)	07/26/22
1738875	-	10000 ug/ml Gallium	125	Milliliter(ML)	07/26/22
1738878	-	10000 ug/ml Gallium	125	Milliliter(ML)	07/26/22
1738877	-	10000 ug/ml Gallium	125	Milliliter(ML)	07/26/22
1738876	-	10000 ug/ml Gallium	125	Milliliter(ML)	07/26/22
1738879	7782-63-0	IRON (II) SULFATE HEPTAHYDRATE CRYSTALLINE	500	Gram(GM)	07/26/22
1741191	1317-70-0	TITANIUM OXIDE	1	Kilograms(KG)	07/26/22
1741192	7772-99-8	TIN(II) CHLORIDE	100	Gram(GM)	07/26/22
000EP68042	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/26/22
1741203	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/26/22
1741199	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/26/22
1741202	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/26/22
1741201	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/26/22
1741200	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/26/22
1741197	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/26/22
1741196	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/26/22
1741194	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/26/22
1741198	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/26/22
1741195	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/26/22
1741204	7647-01-0	HYDROCHLORIC ACID 36.5-38.0%	2.5	Liters(L)	07/26/22
1741209	7647-01-0	HYDROCHLORIC ACID 36.5-38.0%	2.5	Liters(L)	07/26/22
1741219	7647-01-0	HYDROCHLORIC ACID 36.5-38.0%	2.5	Liters(L)	07/26/22
1741220	7647-01-0	HYDROCHLORIC ACID 36.5-38.0%	2.5	Liters(L)	07/26/22
1741217	7647-01-0	HYDROCHLORIC ACID 36.5-38.0%	2.5	Liters(L)	07/26/22
1741216	7647-01-0	HYDROCHLORIC ACID 36.5-38.0%	2.5	Liters(L)	07/26/22
1741215	7647-01-0	HYDROCHLORIC ACID 36.5-38.0%	2.5	Liters(L)	07/26/22
1741214	7647-01-0	HYDROCHLORIC ACID 36.5-38.0%	2.5	Liters(L)	07/26/22
1741213	7647-01-0	HYDROCHLORIC ACID 36.5-38.0%	2.5	Liters(L)	07/26/22
1741212	7647-01-0	HYDROCHLORIC ACID 36.5-38.0%	2.5	Liters(L)	07/26/22
1741210	7647-01-0	HYDROCHLORIC ACID 36.5-38.0%	2.5	Liters(L)	07/26/22
1741208	7647-01-0	HYDROCHLORIC ACID 36.5-38.0%	2.5	Liters(L)	07/26/22
1741207	7647-01-0	HYDROCHLORIC ACID 36.5-38.0%	2.5	Liters(L)	07/26/22
1741206	7647-01-0	HYDROCHLORIC ACID 36.5-38.0%	2.5	Liters(L)	07/26/22
1741205	7647-01-0	HYDROCHLORIC ACID 36.5-38.0%	2.5	Liters(L)	07/26/22
1741221	7647-01-0	HYDROCHLORIC ACID 36.5-38.0%	2.5	Liters(L)	07/26/22
1741211	7647-01-0	HYDROCHLORIC ACID 36.5-38.0%	2.5	Liters(L)	07/26/22
1741218	7647-01-0	HYDROCHLORIC ACID 36.5-38.0%	2.5	Liters(L)	07/26/22
1741227	7647-01-0	HYDROCHLORIC ACID 36.5-38.0%	2.5	Liters(L)	07/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1741226	7647-01-0	HYDROCHLORIC ACID 36.5-38.0%	2.5	Liters(L)	07/26/22
1741225	7647-01-0	HYDROCHLORIC ACID 36.5-38.0%	2.5	Liters(L)	07/26/22
1741224	7647-01-0	HYDROCHLORIC ACID 36.5-38.0%	2.5	Liters(L)	07/26/22
1741223	7647-01-0	HYDROCHLORIC ACID 36.5-38.0%	2.5	Liters(L)	07/26/22
1741222	7647-01-0	HYDROCHLORIC ACID 36.5-38.0%	2.5	Liters(L)	07/26/22
1741228	-	ARATHANE 5753-A/B	1	Quarts(QT)	07/26/22
1741229	56374-56-2	Sodium acetate-13C2	1	Gram(GM)	07/26/22
1741230	1477512-32-5	DMAC-DPS sublimed	250	Milligram(MG)	07/26/22
1741231	13472-00-9	4-(2-Aminoethyl)aniline	1	Gram(GM)	07/26/22
1741232	104-96-1	4-(Methylthio)aniline	5	Gram(GM)	07/26/22
1741295	288-88-0	1 2 4-TRIAZOLE	25	Gram(GM)	07/26/22
1741296	7440-33-7	TUNGSTEN POWDER	0.2	Gram(GM)	07/26/22
1741297	51805-45-9	TRIS(2-CARBOXYETHYL)PHOSPHINE HYDROCHLORIDE	0.5	Gram(GM)	07/26/22
1741298	25068-38-6	DEVCON 5 Minute Epoxy Resin	25	Milliliter(ML)	07/26/22
1741306	25068-38-6	DEVCON 5 Minute Epoxy Resin	25	Milliliter(ML)	07/26/22
1741302	25068-38-6	DEVCON 5 Minute Epoxy Resin	25	Milliliter(ML)	07/26/22
1741299	25068-38-6	DEVCON 5 Minute Epoxy Resin	25	Milliliter(ML)	07/26/22
1741300	25068-38-6	DEVCON 5 Minute Epoxy Resin	25	Milliliter(ML)	07/26/22
1741301	25068-38-6	DEVCON 5 Minute Epoxy Resin	25	Milliliter(ML)	07/26/22
1741303	25068-38-6	DEVCON 5 Minute Epoxy Resin	25	Milliliter(ML)	07/26/22
1741304	25068-38-6	DEVCON 5 Minute Epoxy Resin	25	Milliliter(ML)	07/26/22
1741305	25068-38-6	DEVCON 5 Minute Epoxy Resin	25	Milliliter(ML)	07/26/22
1741307	4946-22-9	4-(Dimethylamino)benzenethiol	1	Gram(GM)	07/26/22
1741308	4731-53-7	TRI-N-OCTYLPHOSPHINE	500	Milliliter(ML)	07/26/22
1741309	120-12-7	ANTHRACENE	25	Gram(GM)	07/26/22
1741310	85-01-8	PHENANTHRENE	50	Gram(GM)	07/26/22
1741311	129-00-0	PYRENE	25	Gram(GM)	07/26/22
1660359	-	Industrial Gear Lube 680	1	Quarts(QT)	07/26/22
1660361	-	RelaTECH Gear Lube EP 220	1	Quarts(QT)	07/26/22
1660362	-	Part A for: Clear Flex 50 and 95	1	Gallon(GAL)	07/26/22
1741163	-	PA-1 Nobias Chelate Resin	1	Gram(GM)	07/26/22
1741052	865-47-4	Potassium tert-butoxide 97%	500	Gram(GM)	07/26/22
1741233	123-01-3	4-DODECYLBENZENE	25	Gram(GM)	07/26/22
1741234	7631-86-9	Dow Corning High Vacuum Grease MSDS	150	Gram(GM)	07/26/22
1741235	7631-86-9	Dow Corning High Vacuum Grease MSDS	150	Gram(GM)	07/26/22
1741236	7631-86-9	Dow Corning High Vacuum Grease MSDS	150	Gram(GM)	07/26/22
1741237	7631-86-9	Dow Corning High Vacuum Grease MSDS	150	Gram(GM)	07/26/22
1741238	7631-86-9	Dow Corning High Vacuum Grease MSDS	150	Gram(GM)	07/26/22
1741239	68855-54-9	CELITE 545	250	Gram(GM)	07/26/22
1741240	68855-54-9	CELITE 545	250	Gram(GM)	07/26/22
1741241	143-15-7	1-Bromododecane	25	Milliliter(ML)	07/26/22
1741242	63393-96-4	Trioctylmethylammonium Chloride	25	Gram(GM)	07/26/22
1741243	492-97-7	2 2'-BITHIOPHENE	25	Gram(GM)	07/26/22
1741244	6523-49-5	4-(1H-1 2 4-Triazol-1-Yl)Aniline 97%	500	Milligram(MG)	07/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1750622	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750623	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750624	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750621	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750626	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750625	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750620	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750628	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1750627	025085-99-8	EPO-TEK OM125 PartA	2	Gram(GM)	07/26/22
1741245	16651-47-1	Acetic acid-13C2	1	Gram(GM)	07/26/22
1741246	16651-47-1	Acetic acid-13C2	1	Gram(GM)	07/26/22
1741247	10277-43-7	LANTHANUM (III) NITRATE HEXHYDRATE	25	Gram(GM)	07/26/22
1741248	1305-78-8	CALCIUM OXIDE	2.5	Kilograms(KG)	07/26/22
1741249	111-40-0	Diethylenetriamine ReagentPlus 99%	2.5	Liters(L)	07/26/22
1741250	109-86-4	2-Methoxyethanol ReagentPlus 99.0%	500	Milliliter(ML)	07/26/22
1741251	109-86-4	2-Methoxyethanol ReagentPlus 99.0%	500	Milliliter(ML)	07/26/22
1660363	-	Dragon Skin 10 Part A	500	Milliliter(ML)	07/26/22
1741322	7440-65-5	YTTRIUM	5	Gram(GM)	07/26/22
1660364	-	Dragon Skin 10 Part B	500	Milliliter(ML)	07/26/22
1741323	7440-65-5	YTTRIUM	5	Gram(GM)	07/26/22
1741324	-	Cerium (III) chloride anhydrous 99.5% (REO)	250	Gram(GM)	07/26/22
1660365	-	Part B: Clear Flex 50 and 95	1	Gallon(GAL)	07/26/22
1741325	7778-18-9	DRIERITE 8 MESH	1	Pounds(LB)	07/26/22
1741326	7778-18-9	DRIERITE 8 MESH	1	Pounds(LB)	07/26/22
1689303	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	07/26/22
1727120	-	Repel Permethrin Clothing & Gear Insect Repellent	6.5	Ounces(OZ)	07/26/22
1727121	-	Repel Permethrin Clothing & Gear Insect Repellent	6.5	Ounces(OZ)	07/26/22
1727131	-	GOJO FAST Towels	1	Quarts(QT)	07/26/22
1727132	-	GOJO FAST Towels	1	Quarts(QT)	07/26/22
1441165	24304-00-5	ALUMINUM NITRIDE	50	Gram(GM)	07/26/22
1366475	754-05-2	VINYLTRIMETHYLSILANE	100	Milliliter(ML)	07/26/22
1364658	1/4/9003	POLY(ACRYLIC ACID)	5	Gram(GM)	07/26/22
173697	7/6/9005	Poly(ethylene glycol) dioleate	100	Milliliter(ML)	07/26/22
1736967	842-07-9	Sudan I	25	Gram(GM)	07/26/22
1736965	13048-33-4	1 6-HEXANEDIOL DIACRYLATE	500	Gram(GM)	07/26/22
1736966	162881-26-7	Phenylbis(2 4 6-trimethylbenzoyl)phosphine oxide	10	Gram(GM)	07/26/22
1366172	104-94-9	P-ANISIDINE	100	Gram(GM)	07/26/22
1741312	-	A205 Additive Manufacturing Powder 20 - 63um	5	Kilograms(KG)	07/26/22
1741313	-	A205 Additive Manufacturing Powder 20 - 63um	5	Kilograms(KG)	07/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1741314	-	A205 Additive Manufacturing Powder 20 - 63um	5	Kilograms(KG)	07/26/22
1741315	-	A205 Additive Manufacturing Powder 20 - 63um	5	Kilograms(KG)	07/26/22
1741316	-	A205 Additive Manufacturing Powder 20 - 63um	5	Kilograms(KG)	07/26/22
1741317	-	A205 Additive Manufacturing Powder 20 - 63um	5	Kilograms(KG)	07/26/22
1741318	-	A205 Additive Manufacturing Powder 20 - 63um	5	Kilograms(KG)	07/26/22
1741319	-	A205 Additive Manufacturing Powder 20 - 63um	5	Kilograms(KG)	07/26/22
1741321	-	A205 Additive Manufacturing Powder 20 - 63um	5	Kilograms(KG)	07/26/22
1741320	-	A205 Additive Manufacturing Powder 20 - 63um	5	Kilograms(KG)	07/26/22
1741327	29118-24-9	MS-222L Aero-Duster	10	Ounces(OZ)	07/26/22
1741328	29118-24-9	MS-222L Aero-Duster	10	Ounces(OZ)	07/26/22
1741329	29118-24-9	MS-222L Aero-Duster	10	Ounces(OZ)	07/26/22
1741330	29118-24-9	MS-222L Aero-Duster	10	Ounces(OZ)	07/26/22
1741331	29118-24-9	MS-222L Aero-Duster	10	Ounces(OZ)	07/26/22
1741332	29118-24-9	MS-222L Aero-Duster	10	Ounces(OZ)	07/26/22
1741339	-	Diamond Suspension Water Based Polycrystalline All Microns	240	Milliliter(ML)	07/26/22
1741345	-	Diamond Suspension Water Based Polycrystalline All Microns	240	Milliliter(ML)	07/26/22
1741340	-	Diamond Suspension Water Based Polycrystalline All Microns	240	Milliliter(ML)	07/26/22
1741341	-	Diamond Suspension Water Based Polycrystalline All Microns	240	Milliliter(ML)	07/26/22
1741342	-	Diamond Suspension Water Based Polycrystalline All Microns	240	Milliliter(ML)	07/26/22
1741344	-	Diamond Suspension Water Based Polycrystalline All Microns	240	Milliliter(ML)	07/26/22
1741343	-	Diamond Suspension Water Based Polycrystalline All Microns	240	Milliliter(ML)	07/26/22
1741350	13477-34-4	CALCIUM NITRATE TETRAHYDRATE	500	Gram(GM)	07/26/22
1741355	13477-34-4	CALCIUM NITRATE TETRAHYDRATE	500	Gram(GM)	07/26/22
1741354	13477-34-4	CALCIUM NITRATE TETRAHYDRATE	500	Gram(GM)	07/26/22
1741353	13477-34-4	CALCIUM NITRATE TETRAHYDRATE	500	Gram(GM)	07/26/22
1741352	13477-34-4	CALCIUM NITRATE TETRAHYDRATE	500	Gram(GM)	07/26/22
1741351	13477-34-4	CALCIUM NITRATE TETRAHYDRATE	500	Gram(GM)	07/26/22
1741356	-	DRIERITE INDICATING	5	Pounds(LB)	07/26/22
1741348	-	ALCONOX DETERGENT	4	Pounds(LB)	07/26/22
1741349	-	ALCONOX DETERGENT	4	Pounds(LB)	07/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1741347	121-44-8	TRIETHYLAMINE	1	Liters(L)	07/26/22
1741346	124-68-5	2-AMINO-2-METHYL-1-PROPANOL	500	Milliliter(ML)	07/26/22
1741338	142-84-7	Dipropylamine 99%	500	Milliliter(ML)	07/26/22
1741337	16219-75-3	5-Ethylidene-2-norbornene	500	Milliliter(ML)	07/26/22
1741336	496-11-7	Indan 95%	100	Milliliter(ML)	07/26/22
1741335	10049-21-5	SODIUM PHOSPHATE MONOBASIC MONOHYDRATE	500	Gram(GM)	07/26/22
1741333	-	Fluorescent Polymer Particles (Envy Green)	5	Milliliter(ML)	07/26/22
1741334	-	Fluorescent Polymer Particles (Envy Green)	5	Milliliter(ML)	07/26/22
1741252	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	07/27/22
1741253	133170-57-7	(S)-Benzyl 2-amino-6-((tert-butoxycarbonyl)amino)hexanoate hydrochloride 98%	25	Gram(GM)	07/27/22
1741254	127-19-5	N N-Dimethylacetamide anhydrous 99.8%	2	Liters(L)	07/27/22
1741357	110-54-3	n-Hexane 96+% Extra Dry	2.5	Liters(L)	07/27/22
1741358	110-54-3	n-Hexane 96+% Extra Dry	2.5	Liters(L)	07/27/22
1741359	10035-04-8	Calcium chloride dihydrate (Certified ACS)	3	Kilograms(KG)	07/27/22
1741360	10035-04-8	Calcium chloride dihydrate (Certified ACS)	3	Kilograms(KG)	07/27/22
1741361	10035-04-8	Calcium chloride dihydrate (Certified ACS)	3	Kilograms(KG)	07/27/22
1741363	10035-04-8	Calcium chloride dihydrate (Certified ACS)	3	Kilograms(KG)	07/27/22
1741364	10035-04-8	Calcium chloride dihydrate (Certified ACS)	3	Kilograms(KG)	07/27/22
1741365	10035-04-8	Calcium chloride dihydrate (Certified ACS)	3	Kilograms(KG)	07/27/22
1741366	10035-04-8	Calcium chloride dihydrate (Certified ACS)	3	Kilograms(KG)	07/27/22
1741362	10035-04-8	Calcium chloride dihydrate (Certified ACS)	3	Kilograms(KG)	07/27/22
1741367	1344-28-1	Aluminum oxide activated neutral Brockmann Activity I	5	Kilograms(KG)	07/27/22
1741368	-	TETRAETHYLAMMONIUM HYDROXIDE 20 WT. SOLUTION IN WATER	100	Gram(GM)	07/27/22
1741369	3109-63-5	TETRABUTYLAMMONIUM HEXAFLUOROPHOSPHATE	25	Gram(GM)	07/27/22
1741370	10196-18-6	Zinc nitrate hexahydrate reagent grade 98%	500	Gram(GM)	07/27/22
1741371	67-64-1	Acetone 99.8% Extra Dry	1	Liters(L)	07/27/22
1741372	67-64-1	Acetone 99.8% Extra Dry	1	Liters(L)	07/27/22
1741373	2052-49-5	Tetrabutylammonium hydroxide solution 40 wt. in H2O	250	Milliliter(ML)	07/27/22
1741374	35054-52-5	Calcium nitrate hydrate 99.997% trace metals basis	10	Gram(GM)	07/27/22
1741375	13569-63-6	RHENIUM(III) CHLORIDE	1	Gram(GM)	07/27/22
1741376	10196-18-6	Zinc nitrate hexahydrate reagent grade 98%	500	Gram(GM)	07/27/22
1741377	7601-90-3	PERCHLORIC ACID OPTIMA	1	Liters(L)	07/27/22
1741378	7601-90-3	PERCHLORIC ACID OPTIMA	1	Liters(L)	07/27/22
1741382	7601-90-3	PERCHLORIC ACID OPTIMA	1	Liters(L)	07/27/22
1741381	7601-90-3	PERCHLORIC ACID OPTIMA	1	Liters(L)	07/27/22
1741380	7601-90-3	PERCHLORIC ACID OPTIMA	1	Liters(L)	07/27/22
1741379	7601-90-3	PERCHLORIC ACID OPTIMA	1	Liters(L)	07/27/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1741384	-	1000 µg/mL Ruthenium	30	Milliliter(ML)	07/27/22
1741385	12007-60-2	Lithium Tetraborate 99.9% Trace Metal	1	Kilograms(KG)	07/27/22
1741387	12007-60-2	Lithium Tetraborate 99.9% Trace Metal	1	Kilograms(KG)	07/27/22
1741386	12007-60-2	Lithium Tetraborate 99.9% Trace Metal	1	Kilograms(KG)	07/27/22
1741389	10031-51-3	Erbium(III) nitrate pentahydrate 99.9% trace metals basis	100	Gram(GM)	07/27/22
1741393	10031-51-3	Erbium(III) nitrate pentahydrate 99.9% trace metals basis	100	Gram(GM)	07/27/22
1741390	10031-51-3	Erbium(III) nitrate pentahydrate 99.9% trace metals basis	100	Gram(GM)	07/27/22
1741391	10031-51-3	Erbium(III) nitrate pentahydrate 99.9% trace metals basis	100	Gram(GM)	07/27/22
1741392	10031-51-3	Erbium(III) nitrate pentahydrate 99.9% trace metals basis	100	Gram(GM)	07/27/22
1741471	12061-16-4	Erbium(III) oxide 99.9% trace metals basis	25	Gram(GM)	07/27/22
1741477	12061-16-4	Erbium(III) oxide 99.9% trace metals basis	25	Gram(GM)	07/27/22
1741478	12061-16-4	Erbium(III) oxide 99.9% trace metals basis	25	Gram(GM)	07/27/22
1741476	12061-16-4	Erbium(III) oxide 99.9% trace metals basis	25	Gram(GM)	07/27/22
1741475	12061-16-4	Erbium(III) oxide 99.9% trace metals basis	25	Gram(GM)	07/27/22
1741474	12061-16-4	Erbium(III) oxide 99.9% trace metals basis	25	Gram(GM)	07/27/22
1741473	12061-16-4	Erbium(III) oxide 99.9% trace metals basis	25	Gram(GM)	07/27/22
1741472	12061-16-4	Erbium(III) oxide 99.9% trace metals basis	25	Gram(GM)	07/27/22
1741479	13494-98-9	YTTRIUM (III) NITRATE HEXAHYDRATE	500	Gram(GM)	07/27/22
1741480	1314-36-9	YTTRIUM OXIDE 99.99%	250	Gram(GM)	07/27/22
1741394	557-34-6	ZINC ACETATE	25	Gram(GM)	07/27/22
1741396	57-48-7	D-(-)-FRUCTOSE	100	Gram(GM)	07/27/22
1741397	27964-99-4	POLY-D-LYSINE HYDROBROMIDE	5	Milligram(MG)	07/27/22
1741398	10424-65-4	Tetramethylammonium hydroxide pentahydrate 97%	5	Gram(GM)	07/27/22
1741399	-	NucBlue Fixed Cell ReadyProbes Reagent	2.5	Milliliter(ML)	07/27/22
1741395	694-53-1	Phenylsilane 97%	25	Gram(GM)	07/27/22
1741383	-	ARATHANE 5750-A/B	1	Quarts(QT)	07/27/22
1741388	18511-69-8	4 4'-Diamino-2 2'-bipyridyl	1	Gram(GM)	07/27/22
1689545	-	OXYGEN COMPRESSED GAS	56	Liters(L)	07/27/22
1727757	-	WELDWOOD CONTACT CEMENT	1	Gallon(GAL)	07/27/22
1727758	-	Ardex P 51	1	Gallon(GAL)	07/27/22
1727759	-	Ardex P 51	1	Gallon(GAL)	07/27/22
V00000C051	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	07/27/22
V00000C050	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	07/27/22
V00000C0AB	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C057	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0AE	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0AC	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C0A7	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0AA	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0A4	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0A9	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0A5	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C05E	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0A6	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0A8	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0AD	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C05B	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C09B	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C052	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C053	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C054	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C055	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C056	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C065	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C058	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C059	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C05A	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0A3	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C05C	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C05D	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C09C	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C09D	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C09E	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C09F	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0A0	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0A1	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0A2	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0AF	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C06C	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C087	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C072	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C071	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C070	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C06F	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C074	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C06D	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C075	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C06B	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C06A	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C069	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C09A	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C085	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C063	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C06E	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C07C	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C083	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C082	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C081	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C080	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C07F	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C073	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C07D	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C088	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C07B	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C07A	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C079	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C078	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C077	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C076	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C07E	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C061	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C086	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C068	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C067	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C066	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C084	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C098	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C062	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C097	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C060	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C05F	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0B4	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0B3	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0B2	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0B1	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C064	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C090	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C089	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C08A	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C08B	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C08C	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C08D	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C099	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C08F	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0B0	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C091	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C092	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C093	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C094	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C095	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C096	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C08E	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0BD	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0BB	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0C4	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0C2	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0C1	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0C0	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0C3	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0BE	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0B5	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0BC	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0BA	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0B9	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0B8	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0B7	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0B6	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0BF	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	07/27/22
V00000C0CE	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	07/27/22
V00000C0D9	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	07/27/22
V00000C0D8	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	07/27/22
V00000C0D7	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	07/27/22
V00000C0D6	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	07/27/22
V00000C0D5	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	07/27/22
V00000C0D4	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	07/27/22
V00000C0D3	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	07/27/22
V00000C0D2	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	07/27/22
V00000C0D1	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	07/27/22
V00000C0DB	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	07/27/22
V00000C0CF	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	07/27/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C0DC	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	07/27/22
V00000C0CD	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	07/27/22
V00000C0CC	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	07/27/22
V00000C0CB	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	07/27/22
V00000C0CA	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	07/27/22
V00000C0C9	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	07/27/22
V00000C0C8	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	07/27/22
V00000C0C7	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	07/27/22
V00000C0C6	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	07/27/22
V00000C0C5	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	07/27/22
V00000C0D0	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	07/27/22
V00000C0DA	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	07/27/22
V00000C0DD	-	Parts Plus SAE 5W-30 SYNTHETIC BLEND PP3470 MOTOR OIL	1	Quarts(QT)	07/27/22
V00000C0DE	-	Parts Plus SAE 5W-30 SYNTHETIC BLEND PP3470 MOTOR OIL	1	Quarts(QT)	07/27/22
V00000C0DF	-	Parts Plus SAE 5W-30 SYNTHETIC BLEND PP3470 MOTOR OIL	1	Quarts(QT)	07/27/22
V00000C0E0	-	Parts Plus SAE 5W-30 SYNTHETIC BLEND PP3470 MOTOR OIL	1	Quarts(QT)	07/27/22
V00000C0E1	-	Parts Plus SAE 5W-30 SYNTHETIC BLEND PP3470 MOTOR OIL	1	Quarts(QT)	07/27/22
V00000C0E2	-	Parts Plus SAE 5W-30 SYNTHETIC BLEND PP3470 MOTOR OIL	1	Quarts(QT)	07/27/22
V00000C0E3	-	Parts Plus SAE 5W-30 SYNTHETIC BLEND PP3470 MOTOR OIL	1	Quarts(QT)	07/27/22
V00000C0E4	-	Parts Plus SAE 5W-30 SYNTHETIC BLEND PP3470 MOTOR OIL	1	Quarts(QT)	07/27/22
V00000C0E7	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/27/22
V00000C0E6	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/27/22
V00000C0E5	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	07/27/22
1750659	-	CRYSTAL BOND 509	1	Ounces(OZ)	07/27/22
1750629	25068-38-6	30-MINUTE Z-POXY	2.5	Gram(GM)	07/27/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1750632	25068-38-6	30-MINUTE Z-POXY	2.5	Gram(GM)	07/27/22
1750652	25068-38-6	30-MINUTE Z-POXY	2.5	Gram(GM)	07/27/22
1750651	25068-38-6	30-MINUTE Z-POXY	2.5	Gram(GM)	07/27/22
1750638	25068-38-6	30-MINUTE Z-POXY	2.5	Gram(GM)	07/27/22
1750650	25068-38-6	30-MINUTE Z-POXY	2.5	Gram(GM)	07/27/22
1750649	25068-38-6	30-MINUTE Z-POXY	2.5	Gram(GM)	07/27/22
1750648	25068-38-6	30-MINUTE Z-POXY	2.5	Gram(GM)	07/27/22
1750637	25068-38-6	30-MINUTE Z-POXY	2.5	Gram(GM)	07/27/22
1750636	25068-38-6	30-MINUTE Z-POXY	2.5	Gram(GM)	07/27/22
1750635	25068-38-6	30-MINUTE Z-POXY	2.5	Gram(GM)	07/27/22
1750658	25068-38-6	30-MINUTE Z-POXY	2.5	Gram(GM)	07/27/22
1750643	25068-38-6	30-MINUTE Z-POXY	2.5	Gram(GM)	07/27/22
1750640	25068-38-6	30-MINUTE Z-POXY	2.5	Gram(GM)	07/27/22
1750641	25068-38-6	30-MINUTE Z-POXY	2.5	Gram(GM)	07/27/22
1750631	25068-38-6	30-MINUTE Z-POXY	2.5	Gram(GM)	07/27/22
1750642	25068-38-6	30-MINUTE Z-POXY	2.5	Gram(GM)	07/27/22
1750647	25068-38-6	30-MINUTE Z-POXY	2.5	Gram(GM)	07/27/22
1750646	25068-38-6	30-MINUTE Z-POXY	2.5	Gram(GM)	07/27/22
1750645	25068-38-6	30-MINUTE Z-POXY	2.5	Gram(GM)	07/27/22
1750644	25068-38-6	30-MINUTE Z-POXY	2.5	Gram(GM)	07/27/22
1750633	25068-38-6	30-MINUTE Z-POXY	2.5	Gram(GM)	07/27/22
1750634	25068-38-6	30-MINUTE Z-POXY	2.5	Gram(GM)	07/27/22
1750654	25068-38-6	30-MINUTE Z-POXY	2.5	Gram(GM)	07/27/22
1750655	25068-38-6	30-MINUTE Z-POXY	2.5	Gram(GM)	07/27/22
1750639	25068-38-6	30-MINUTE Z-POXY	2.5	Gram(GM)	07/27/22
1750630	25068-38-6	30-MINUTE Z-POXY	2.5	Gram(GM)	07/27/22
1750653	25068-38-6	30-MINUTE Z-POXY	2.5	Gram(GM)	07/27/22
1750657	25068-38-6	30-MINUTE Z-POXY	2.5	Gram(GM)	07/27/22
1750656	25068-38-6	30-MINUTE Z-POXY	2.5	Gram(GM)	07/27/22
1689542	7440-59-7	HELIUM REFRIGERATED LIQUID (CRYOGENIC LIQUID)	100	Liters(L)	07/27/22
1689543	7440-59-7	HELIUM REFRIGERATED LIQUID (CRYOGENIC LIQUID)	100	Liters(L)	07/27/22
1689544	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	07/27/22
1717855	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717890	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717891	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717889	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717896	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717888	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717887	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717892	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717893	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717895	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717897	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1717903	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717899	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717904	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717901	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717902	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717898	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717894	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717864	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717873	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717872	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717871	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717870	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717869	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717868	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717867	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717874	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717865	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717858	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717863	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717862	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717861	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717860	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717859	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717857	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717856	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717900	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717866	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717882	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717886	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717885	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717883	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717881	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717880	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717879	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717878	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717877	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717876	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717875	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1717884	025085-99-8	BLUE DYE EPOXY PT A	4	Gram(GM)	07/27/22
1719295	-	FS-One Max	10.1	Ounces(OZ)	07/27/22
1719296	-	FS-One Max	10.1	Ounces(OZ)	07/27/22
1719300	-	FS-One Max	10.1	Ounces(OZ)	07/27/22
1719299	-	FS-One Max	10.1	Ounces(OZ)	07/27/22
1719298	-	FS-One Max	10.1	Ounces(OZ)	07/27/22
1719302	-	FS-One Max	10.1	Ounces(OZ)	07/27/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1719297	-	FS-One Max	10.1	Ounces(OZ)	07/27/22
1719301	-	FS-One Max	10.1	Ounces(OZ)	07/27/22
1689546	7664-41-7	AMMONIA ANHYDROUS	0.7	Gram(GM)	07/27/22
1689548	7664-41-7	AMMONIA ANHYDROUS	0.7	Gram(GM)	07/27/22
1689547	7664-41-7	AMMONIA ANHYDROUS	0.7	Gram(GM)	07/27/22
1642787	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642815	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642804	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642805	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642806	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642807	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642808	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642809	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642814	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642811	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642812	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642790	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642813	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642803	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642810	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642795	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642822	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642816	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642788	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642789	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642791	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642792	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642794	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642802	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642796	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642797	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642798	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642799	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642800	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642801	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642793	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642826	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642832	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642833	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642834	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642817	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642829	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642830	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642827	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642825	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1642824	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642823	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642831	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642821	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642820	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642819	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642818	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1642828	-	2 CYCLE ENGINE OIL	6.4	Ounces(OZ)	07/27/22
1829498	-	Yellow Traffic L/F Regular Dry	640	Ounces(OZ)	07/28/22
1729498	-	TRAFFIC PAINT YELLOW	640	Ounces(OZ)	07/28/22
1729504	-	TRAFFIC PAINT YELLOW	640	Ounces(OZ)	07/28/22
1729499	-	TRAFFIC PAINT YELLOW	640	Ounces(OZ)	07/28/22
1729500	-	TRAFFIC PAINT YELLOW	640	Ounces(OZ)	07/28/22
1729501	-	TRAFFIC PAINT YELLOW	640	Ounces(OZ)	07/28/22
1729503	-	TRAFFIC PAINT YELLOW	640	Ounces(OZ)	07/28/22
1729505	-	TRAFFIC PAINT YELLOW	640	Ounces(OZ)	07/28/22
1729506	-	TRAFFIC PAINT YELLOW	640	Ounces(OZ)	07/28/22
1729507	-	TRAFFIC PAINT YELLOW	640	Ounces(OZ)	07/28/22
1729502	-	TRAFFIC PAINT YELLOW	640	Ounces(OZ)	07/28/22
V00000C0EA	-	PSX 700 pearl gray resin	0.8	Ounces(OZ)	07/28/22
V00000C0EB	-	PSX 700 pearl gray resin	0.8	Ounces(OZ)	07/28/22
V00000C0E9	-	PSX 700 pearl gray resin	0.8	Ounces(OZ)	07/28/22
V00000C0E8	-	PSX 700 pearl gray resin	0.8	Ounces(OZ)	07/28/22
V00000C0EC	-	PSX 700 pearl gray resin	0.8	Ounces(OZ)	07/28/22
1719303	-	FS-ONE	10.1	Ounces(OZ)	07/28/22
1719308	-	FS-ONE	10.1	Ounces(OZ)	07/28/22
1719312	-	FS-ONE	10.1	Ounces(OZ)	07/28/22
1719304	-	FS-ONE	10.1	Ounces(OZ)	07/28/22
1719305	-	FS-ONE	10.1	Ounces(OZ)	07/28/22
1719306	-	FS-ONE	10.1	Ounces(OZ)	07/28/22
1719307	-	FS-ONE	10.1	Ounces(OZ)	07/28/22
1719327	-	FS-ONE	10.1	Ounces(OZ)	07/28/22
1719314	-	FS-ONE	10.1	Ounces(OZ)	07/28/22
1719315	-	FS-ONE	10.1	Ounces(OZ)	07/28/22
1719316	-	FS-ONE	10.1	Ounces(OZ)	07/28/22
1719317	-	FS-ONE	10.1	Ounces(OZ)	07/28/22
1719318	-	FS-ONE	10.1	Ounces(OZ)	07/28/22
1719319	-	FS-ONE	10.1	Ounces(OZ)	07/28/22
1719320	-	FS-ONE	10.1	Ounces(OZ)	07/28/22
1719321	-	FS-ONE	10.1	Ounces(OZ)	07/28/22
1719322	-	FS-ONE	10.1	Ounces(OZ)	07/28/22
1719323	-	FS-ONE	10.1	Ounces(OZ)	07/28/22
1719324	-	FS-ONE	10.1	Ounces(OZ)	07/28/22
1719310	-	FS-ONE	10.1	Ounces(OZ)	07/28/22
1719326	-	FS-ONE	10.1	Ounces(OZ)	07/28/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1719329	-	FS-ONE	10.1	Ounces(OZ)	07/28/22
1719313	-	FS-ONE	10.1	Ounces(OZ)	07/28/22
1719311	-	FS-ONE	10.1	Ounces(OZ)	07/28/22
1719330	-	FS-ONE	10.1	Ounces(OZ)	07/28/22
1719328	-	FS-ONE	10.1	Ounces(OZ)	07/28/22
1719325	-	FS-ONE	10.1	Ounces(OZ)	07/28/22
1719309	-	FS-ONE	10.1	Ounces(OZ)	07/28/22
1688736	-	Compressed Air	220	Cubic Feet(CF)	07/28/22
1688735	-	Compressed Air	220	Cubic Feet(CF)	07/28/22
1688738	-	Compressed Air	220	Cubic Feet(CF)	07/28/22
1688739	-	Compressed Air	220	Cubic Feet(CF)	07/28/22
1688740	-	Compressed Air	220	Cubic Feet(CF)	07/28/22
1688737	-	Compressed Air	220	Cubic Feet(CF)	07/28/22
1729513	-	PSX 700 WHITE RESIN	0.8	Ounces(OZ)	07/28/22
1729514	-	PSX 700 WHITE RESIN	0.8	Ounces(OZ)	07/28/22
1729525	-	PSX 700 WHITE RESIN	0.8	Ounces(OZ)	07/28/22
1729526	-	PSX 700 WHITE RESIN	0.8	Ounces(OZ)	07/28/22
1729515	-	PSX 700 CURE	0.2	Ounces(OZ)	07/28/22
1729516	-	PSX 700 CURE	0.2	Ounces(OZ)	07/28/22
1729517	-	PSX 700 CURE	0.2	Ounces(OZ)	07/28/22
1729518	-	PSX 700 CURE	0.2	Ounces(OZ)	07/28/22
1729524	-	PSX 700 CURE	0.2	Ounces(OZ)	07/28/22
1729519	-	PSX 700 CURE	0.2	Ounces(OZ)	07/28/22
1729520	-	PSX 700 CURE	0.2	Ounces(OZ)	07/28/22
1729521	-	PSX 700 CURE	0.2	Ounces(OZ)	07/28/22
1729522	-	PSX 700 CURE	0.2	Ounces(OZ)	07/28/22
1729523	-	PSX 700 CURE	0.2	Ounces(OZ)	07/28/22
1729483	-	Brakleen Brake Parts Cleaner - Non-chlorinated (aerosol)	14	Ounces(OZ)	07/28/22
1729484	-	Red Waterborne Traffic L/F Fast Dry UC-5503v	640	Ounces(OZ)	07/28/22
1729491	-	Red Waterborne Traffic L/F Fast Dry UC-5503v	640	Ounces(OZ)	07/28/22
1729485	-	Red Waterborne Traffic L/F Fast Dry UC-5503v	640	Ounces(OZ)	07/28/22
1729486	-	Red Waterborne Traffic L/F Fast Dry UC-5503v	640	Ounces(OZ)	07/28/22
1729487	-	Red Waterborne Traffic L/F Fast Dry UC-5503v	640	Ounces(OZ)	07/28/22
1729488	-	Red Waterborne Traffic L/F Fast Dry UC-5503v	640	Ounces(OZ)	07/28/22
1729490	-	Red Waterborne Traffic L/F Fast Dry UC-5503v	640	Ounces(OZ)	07/28/22
1729492	-	Red Waterborne Traffic L/F Fast Dry UC-5503v	640	Ounces(OZ)	07/28/22
1729489	-	Red Waterborne Traffic L/F Fast Dry UC-5503v	640	Ounces(OZ)	07/28/22
1381557	7440-25-7	TANTALUM FOIL	10	Gram(GM)	07/28/22
1381556	7440-65-5	YTTRIUM METAL	5	Gram(GM)	07/28/22
1420439	7440-25-7	TANTALUM METAL POWDER	5	Gram(GM)	07/28/22
1420440	1344-28-1	ALUMINUM OXIDE	3	Gram(GM)	07/28/22
1420441	7440-52-0	ERBIUM METAL	20	Gram(GM)	07/28/22
1420442	7440-52-0	ERBIUM METAL	10	Gram(GM)	07/28/22
1420443	7440-25-7	TANTALUM ROD	10	Gram(GM)	07/28/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1420444	12008-21-8	Lanthanum Hexaboride	5	Gram(GM)	07/28/22
1420445	1305-62-0	CALCIUM HYDROXIDE POWDER	10	Gram(GM)	07/28/22
1420446	7440-56-4	GERMANIUM	5	Gram(GM)	07/28/22
1420448	7440-42-8	BORON POWDER	10	Gram(GM)	07/28/22
1420449	12008-21-8	Lanthanum Hexaboride	5	Gram(GM)	07/28/22
1420450	7553-56-2	IODINE	2.5	Gram(GM)	07/28/22
1420451	7440-33-7	TUNGSTEN METAL	5	Gram(GM)	07/28/22
1420452	7439-98-7	MOLYBDENUM METAL	20	Gram(GM)	07/28/22
1420453	7429-90-5	ALUMINUM METAL	5	Gram(GM)	07/28/22
1420454	7553-56-2	IODINE	2.5	Gram(GM)	07/28/22
1420455	12045-64-6	ZIRCONIUM BORIDE	10	Gram(GM)	07/28/22
1420456	7440-62-2	VANADIUM METAL	5	Gram(GM)	07/28/22
1420457	7440-25-7	TANTALUM FOIL	5	Gram(GM)	07/28/22
1420458	7440-25-7	TANTALUM FOIL	5	Gram(GM)	07/28/22
1420459	7440-65-5	YTTRIUM METAL	100	Gram(GM)	07/28/22
1420460	7440-33-7	TUNGSTEN METAL	500	Gram(GM)	07/28/22
1420461	7439-89-6	IRON ROD	10	Gram(GM)	07/28/22
1420462	7440-57-5	GOLD	3.17	Gram(GM)	07/28/22
1420463	7440-00-8	NEODYMIUM	5	Gram(GM)	07/28/22
1420464	7440-57-5	GOLD FOIL	5	Gram(GM)	07/28/22
1420465	7440-25-7	TANTALUM FOIL	20	Gram(GM)	07/28/22
1420466	7440-57-5	GOLD	10	Gram(GM)	07/28/22
1420467	7440-25-7	TANTALUM FOIL	10	Gram(GM)	07/28/22
1420468	7440-43-9	CADMIUM	5	Gram(GM)	07/28/22
1420469	7440-74-6	INDIUM SHOT	10	Gram(GM)	07/28/22
1420470	5/3/7440	PALLADIUM METAL	10	Gram(GM)	07/28/22
1420471	5/3/7440	PALLADIUM METAL	20	Gram(GM)	07/28/22
1458663	25068-38-6	Loctite Epoxy Instant Mix	25	Milliliter(ML)	07/28/22
1727300	-	Prime Guard Power Blast	1	Gallon(GAL)	07/28/22
1727305	-	Prime Guard Power Blast	1	Gallon(GAL)	07/28/22
1727301	-	Prime Guard Power Blast	1	Gallon(GAL)	07/28/22
1727302	-	Prime Guard Power Blast	1	Gallon(GAL)	07/28/22
1727304	-	Prime Guard Power Blast	1	Gallon(GAL)	07/28/22
1727303	-	Prime Guard Power Blast	1	Gallon(GAL)	07/28/22
1386325	-	HIGH VACUUM GREASE	150	Gram(GM)	07/28/22
1727230	-	KRYLON Fusion Gloss White	12	Ounces(OZ)	07/28/22
1727231	-	KRYLON Fusion Gloss White	12	Ounces(OZ)	07/28/22
1386326	811-97-2	DUST OFF	10	Ounces(OZ)	07/28/22
1386327	811-97-2	DUST OFF	10	Ounces(OZ)	07/28/22
1386328	811-97-2	DUST OFF	10	Ounces(OZ)	07/28/22
1386337	811-97-2	DUST OFF	10	Ounces(OZ)	07/28/22
1386332	811-97-2	DUST OFF	10	Ounces(OZ)	07/28/22
1386333	811-97-2	DUST OFF	10	Ounces(OZ)	07/28/22
1386334	811-97-2	DUST OFF	10	Ounces(OZ)	07/28/22
1386335	811-97-2	DUST OFF	10	Ounces(OZ)	07/28/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1386336	811-97-2	DUST OFF	10	Ounces(OZ)	07/28/22
1386381	811-97-2	DUST OFF	10	Ounces(OZ)	07/28/22
1386382	811-97-2	DUST OFF	10	Ounces(OZ)	07/28/22
1727765	-	MOBIL 1 5W-50	1	Quarts(QT)	07/28/22
1727767	-	MOBIL 1 5W-50	1	Quarts(QT)	07/28/22
1727766	-	MOBIL 1 5W-50	1	Quarts(QT)	07/28/22
V00000C0F7	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/28/22
V00000C0FF	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/28/22
V00000C0FE	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/28/22
V00000C0FD	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/28/22
V00000C0FC	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/28/22
V00000C0FB	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/28/22
V00000C0FA	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/28/22
V00000C0F8	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/28/22
V00000C0F6	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/28/22
V00000C0F5	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/28/22
V00000C102	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/28/22
V00000C100	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/28/22
V00000C101	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/28/22
V00000C0F9	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	07/28/22
1727768	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	07/28/22
1727769	-	Shine-Up Lemon Furniture Polish	1	Quarts(QT)	07/28/22
1727770	-	TSL THROAT SEAL LIQUID	4	Ounces(OZ)	07/28/22
1727771	-	RED TRAFFIC PAINT	5	Gallon(GAL)	07/28/22
1727772	-	COTE ALL WHITE BASE	1	Quarts(QT)	07/28/22
1727773	-	GROUNDED (ADJUVANT)	2.5	Gallon(GAL)	07/28/22
1727775	-	GROUNDED (ADJUVANT)	2.5	Gallon(GAL)	07/28/22
1727776	-	GROUNDED (ADJUVANT)	2.5	Gallon(GAL)	07/28/22
1727774	-	GROUNDED (ADJUVANT)	2.5	Gallon(GAL)	07/28/22
1719331	-	FS-ONE	10.1	Ounces(OZ)	08/01/22
1719332	-	FS-ONE	10.1	Ounces(OZ)	08/01/22
1719944	-	FS-ONE	10.1	Ounces(OZ)	08/01/22
1719954	-	FS-ONE	10.1	Ounces(OZ)	08/01/22
1719953	-	FS-ONE	10.1	Ounces(OZ)	08/01/22
1719952	-	FS-ONE	10.1	Ounces(OZ)	08/01/22
1719951	-	FS-ONE	10.1	Ounces(OZ)	08/01/22
1719950	-	FS-ONE	10.1	Ounces(OZ)	08/01/22
1719948	-	FS-ONE	10.1	Ounces(OZ)	08/01/22
1719947	-	FS-ONE	10.1	Ounces(OZ)	08/01/22
1719945	-	FS-ONE	10.1	Ounces(OZ)	08/01/22
1719943	-	FS-ONE	10.1	Ounces(OZ)	08/01/22
1719949	-	FS-ONE	10.1	Ounces(OZ)	08/01/22
1719946	-	FS-ONE	10.1	Ounces(OZ)	08/01/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1715893	-	2-PROPANOL	4	Liters(L)	08/01/22
V00000C10D	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	08/01/22
V00000C112	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	08/01/22
V00000C116	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	08/01/22
V00000C109	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	08/01/22
V00000C10A	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	08/01/22
V00000C10B	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	08/01/22
V00000C10C	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	08/01/22
V00000C10E	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	08/01/22
V00000C10F	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	08/01/22
V00000C111	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	08/01/22
V00000C11C	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	08/01/22
V00000C113	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	08/01/22
V00000C114	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	08/01/22
V00000C115	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	08/01/22
V00000C117	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	08/01/22
V00000C119	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	08/01/22
V00000C11A	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	08/01/22
V00000C11B	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	08/01/22
V00000C110	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	08/01/22
V00000C118	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	08/01/22
1727777	-	GACO SF2000 SEAM SEALER	5	Gallon(GAL)	08/01/22
1727778	-	GACO SF2000 SEAM SEALER	5	Gallon(GAL)	08/01/22
1727781	-	GACO SF2000 SEAM SEALER	5	Gallon(GAL)	08/01/22
1727780	-	GACO SF2000 SEAM SEALER	5	Gallon(GAL)	08/01/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727779	-	GACO SF2000 SEAM SEALER	5	Gallon(GAL)	08/01/22
1727796	-	GACO E5320 EPOXY PRIMER PART A	5	Gallon(GAL)	08/01/22
1727797	-	GACO E5320 EPOXY PRIMER PART A	5	Gallon(GAL)	08/01/22
1727798	-	GACO E5320 EPOXY PRIMER PART B	5	Gallon(GAL)	08/01/22
1727799	-	GACO E5320 EPOXY PRIMER PART B	5	Gallon(GAL)	08/01/22
1727800	-	Mule-Hide JTS 1	10	Ounces(OZ)	08/01/22
1727813	-	Mule-Hide JTS 1	10	Ounces(OZ)	08/01/22
1727811	-	Mule-Hide JTS 1	10	Ounces(OZ)	08/01/22
1727816	-	Mule-Hide JTS 1	10	Ounces(OZ)	08/01/22
1727823	-	Mule-Hide JTS 1	10	Ounces(OZ)	08/01/22
1727814	-	Mule-Hide JTS 1	10	Ounces(OZ)	08/01/22
1727815	-	Mule-Hide JTS 1	10	Ounces(OZ)	08/01/22
1727822	-	Mule-Hide JTS 1	10	Ounces(OZ)	08/01/22
1727804	-	Mule-Hide JTS 1	10	Ounces(OZ)	08/01/22
1727810	-	Mule-Hide JTS 1	10	Ounces(OZ)	08/01/22
1727812	-	Mule-Hide JTS 1	10	Ounces(OZ)	08/01/22
1727809	-	Mule-Hide JTS 1	10	Ounces(OZ)	08/01/22
1727808	-	Mule-Hide JTS 1	10	Ounces(OZ)	08/01/22
1727807	-	Mule-Hide JTS 1	10	Ounces(OZ)	08/01/22
1727805	-	Mule-Hide JTS 1	10	Ounces(OZ)	08/01/22
1727820	-	Mule-Hide JTS 1	10	Ounces(OZ)	08/01/22
1727803	-	Mule-Hide JTS 1	10	Ounces(OZ)	08/01/22
1727802	-	Mule-Hide JTS 1	10	Ounces(OZ)	08/01/22
1727801	-	Mule-Hide JTS 1	10	Ounces(OZ)	08/01/22
1727821	-	Mule-Hide JTS 1	10	Ounces(OZ)	08/01/22
1727817	-	Mule-Hide JTS 1	10	Ounces(OZ)	08/01/22
1727818	-	Mule-Hide JTS 1	10	Ounces(OZ)	08/01/22
1727819	-	Mule-Hide JTS 1	10	Ounces(OZ)	08/01/22
1727806	-	Mule-Hide JTS 1	10	Ounces(OZ)	08/01/22
V00000C129	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	08/01/22
V00000C12D	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	08/01/22
V00000C12C	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	08/01/22
V00000C12A	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	08/01/22
V00000C128	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	08/01/22
V00000C127	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	08/01/22
V00000C126	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	08/01/22
V00000C125	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	08/01/22
V00000C124	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	08/01/22
V00000C11F	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	08/01/22
V00000C12B	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	08/01/22
V00000C11D	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	08/01/22
V00000C11E	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	08/01/22
V00000C120	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	08/01/22
V00000C121	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	08/01/22
V00000C122	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	08/01/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C123	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	08/01/22
V00000C16B	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C15F	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C16C	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C164	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C169	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C16D	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C168	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C167	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C166	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C16E	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C165	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C16A	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C163	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C162	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C160	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C158	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C157	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C16F	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C179	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C15E	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C15D	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C15C	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C15A	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C161	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C17B	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C186	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C185	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C184	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C183	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C182	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C181	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C180	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C17F	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C17E	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C177	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C17C	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C170	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C17A	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C159	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C178	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C156	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C176	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C175	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C174	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C173	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C172	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C171	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C17D	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C136	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C140	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C13F	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C13E	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C13D	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C13C	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C13B	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C13A	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C139	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C141	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C137	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C133	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C135	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C134	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C155	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C132	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C15B	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C131	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C130	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C12F	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C12E	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C138	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C14F	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C154	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C153	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C152	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C151	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C150	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C14E	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C14D	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C14C	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C14B	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C144	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C143	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C14A	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C145	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C146	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C147	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C148	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C149	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22
V00000C142	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	08/01/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1660134	-	MOBILITH SHC 007 GREASE	1	Quarts(QT)	08/01/22
1660132	-	SYNTHETIC GEAR LUBRICANT	32	Ounces(OZ)	08/01/22
1660133	-	SYNTHETIC GEAR LUBRICANT	32	Ounces(OZ)	08/01/22
1660131	-	Mobilith SHC 220 Synthetic Grease	32	Ounces(OZ)	08/01/22
1740757	007697-37-2	NITRIC ACID	500	Milliliter(ML)	08/01/22
1740754	007697-37-2	NITRIC ACID	500	Milliliter(ML)	08/01/22
1740755	007697-37-2	NITRIC ACID	500	Milliliter(ML)	08/01/22
1740756	007697-37-2	NITRIC ACID	500	Milliliter(ML)	08/01/22
1660130	-	Mobilith SHC 220 Synthetic Grease	32	Ounces(OZ)	08/01/22
1689549	7440-59-7	HELIUM GAS	40	Cubic Feet(CF)	08/01/22
1740761	7647-01-0	HYDROCHLORIC ACID 36-38%	500	Milliliter(ML)	08/01/22
1740758	7647-01-0	HYDROCHLORIC ACID 36-38%	500	Milliliter(ML)	08/01/22
1740759	7647-01-0	HYDROCHLORIC ACID 36-38%	500	Milliliter(ML)	08/01/22
1740760	7647-01-0	HYDROCHLORIC ACID 36-38%	500	Milliliter(ML)	08/01/22
1741400	171058-17-6	1-Hexyl-3-methylimidazolium chloride 97.0% (HPLC)	50	Gram(GM)	08/01/22
1741401	65039-09-0	1-ETHYL-3-METHYL-1H-IMIDAZOLIUM CHLORIDE	25	Gram(GM)	08/01/22
1741402	4499-86-9	TETRAPROPYLAMMONIUM HYDROXIDE 1.0M SOLUTION IN WATER	25	Gram(GM)	08/01/22
1741403	880084-63-9	1-Ethyl-3-methylimidazolium 1 1 2 2-tetrafluoroethanesulfonate 95% (HPLC)	5	Gram(GM)	08/01/22
1741404	382150-50-7	1-Hexyl-3-methylimidazolium bis(trifluormethylsulfonyl)imide 98%	5	Gram(GM)	08/01/22
1741405	382150-50-7	1-Hexyl-3-methylimidazolium bis(trifluormethylsulfonyl)imide 98%	5	Gram(GM)	08/01/22
V00000C195	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	08/02/22
V00000C194	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	08/02/22
V00000C19C	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	08/02/22
V00000C19B	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	08/02/22
V00000C19A	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	08/02/22
V00000C199	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	08/02/22
V00000C198	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	08/02/22
V00000C187	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	08/02/22
V00000C196	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	08/02/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C189	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	08/02/22
V00000C193	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	08/02/22
V00000C188	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	08/02/22
V00000C191	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	08/02/22
V00000C190	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	08/02/22
V00000C18F	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	08/02/22
V00000C18E	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	08/02/22
V00000C18D	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	08/02/22
V00000C18C	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	08/02/22
V00000C18B	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	08/02/22
V00000C18A	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	08/02/22
V00000C197	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	08/02/22
V00000C192	-	26BR HIGH TEMP RTV RED SILICONE GASKET MAKER 3 OZ	14.1	Ounces(OZ)	08/02/22
1729493	-	Blue Waterborne Traffic L/F Fast Dry	640	Ounces(OZ)	08/02/22
1729495	-	Blue Waterborne Traffic L/F Fast Dry	640	Ounces(OZ)	08/02/22
1729494	-	Blue Waterborne Traffic L/F Fast Dry	640	Ounces(OZ)	08/02/22
1729497	-	Blue Waterborne Traffic L/F Fast Dry	640	Ounces(OZ)	08/02/22
1729496	-	Blue Waterborne Traffic L/F Fast Dry	640	Ounces(OZ)	08/02/22
1729464	-	CARLON REGULAR CLEAR PVC SOLVENT CEMENT	32	Ounces(OZ)	08/02/22
1729465	-	CARLON REGULAR CLEAR PVC SOLVENT CEMENT	32	Ounces(OZ)	08/02/22
1729473	-	CARLON REGULAR CLEAR PVC SOLVENT CEMENT	32	Ounces(OZ)	08/02/22
1729472	-	CARLON REGULAR CLEAR PVC SOLVENT CEMENT	32	Ounces(OZ)	08/02/22
1729471	-	CARLON REGULAR CLEAR PVC SOLVENT CEMENT	32	Ounces(OZ)	08/02/22
1729470	-	CARLON REGULAR CLEAR PVC SOLVENT CEMENT	32	Ounces(OZ)	08/02/22
1729469	-	CARLON REGULAR CLEAR PVC SOLVENT CEMENT	32	Ounces(OZ)	08/02/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1729468	-	CARLON REGULAR CLEAR PVC SOLVENT CEMENT	32	Ounces(OZ)	08/02/22
1729466	-	CARLON REGULAR CLEAR PVC SOLVENT CEMENT	32	Ounces(OZ)	08/02/22
1729467	-	CARLON REGULAR CLEAR PVC SOLVENT CEMENT	32	Ounces(OZ)	08/02/22
1729478	-	ANTIFREEZE & COOLANT	1	Gallon(GAL)	08/02/22
1729479	-	ANTIFREEZE & COOLANT	1	Gallon(GAL)	08/02/22
1729481	-	ANTIFREEZE & COOLANT	1	Gallon(GAL)	08/02/22
1729480	-	ANTIFREEZE & COOLANT	1	Gallon(GAL)	08/02/22
1727782	-	WHITE SOLVENTLESS SILICONE	5	Gallon(GAL)	08/02/22
1727793	-	WHITE SOLVENTLESS SILICONE	5	Gallon(GAL)	08/02/22
1727787	-	WHITE SOLVENTLESS SILICONE	5	Gallon(GAL)	08/02/22
1727783	-	WHITE SOLVENTLESS SILICONE	5	Gallon(GAL)	08/02/22
1727784	-	WHITE SOLVENTLESS SILICONE	5	Gallon(GAL)	08/02/22
1727795	-	WHITE SOLVENTLESS SILICONE	5	Gallon(GAL)	08/02/22
1727786	-	WHITE SOLVENTLESS SILICONE	5	Gallon(GAL)	08/02/22
1727788	-	WHITE SOLVENTLESS SILICONE	5	Gallon(GAL)	08/02/22
1727789	-	WHITE SOLVENTLESS SILICONE	5	Gallon(GAL)	08/02/22
1727790	-	WHITE SOLVENTLESS SILICONE	5	Gallon(GAL)	08/02/22
1727791	-	WHITE SOLVENTLESS SILICONE	5	Gallon(GAL)	08/02/22
1727792	-	WHITE SOLVENTLESS SILICONE	5	Gallon(GAL)	08/02/22
1727794	-	WHITE SOLVENTLESS SILICONE	5	Gallon(GAL)	08/02/22
1727785	-	WHITE SOLVENTLESS SILICONE	5	Gallon(GAL)	08/02/22
1741423	-	SYLGARD 184	15	Pint(PT)	08/02/22
1741436	-	SYLGARD 184	15	Pint(PT)	08/02/22
1741429	-	SYLGARD 184	15	Pint(PT)	08/02/22
1741430	-	SYLGARD 184	15	Pint(PT)	08/02/22
1741431	-	SYLGARD 184	15	Pint(PT)	08/02/22
1741432	-	SYLGARD 184	15	Pint(PT)	08/02/22
1741433	-	SYLGARD 184	15	Pint(PT)	08/02/22
1741434	-	SYLGARD 184	15	Pint(PT)	08/02/22
1741435	-	SYLGARD 184	15	Pint(PT)	08/02/22
1741428	-	SYLGARD 184	15	Pint(PT)	08/02/22
1741424	-	SYLGARD 184	15	Pint(PT)	08/02/22
1741425	-	SYLGARD 184	15	Pint(PT)	08/02/22
1741426	-	SYLGARD 184	15	Pint(PT)	08/02/22
1741427	-	SYLGARD 184	15	Pint(PT)	08/02/22
1741437	-	SYLGARD 184	15	Pint(PT)	08/02/22
1689648	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/02/22
1689668	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/02/22
1689672	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/02/22
1689663	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/02/22
1689671	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/02/22
1689670	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/02/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1689669	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/02/22
1689650	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/02/22
1689665	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/02/22
1689658	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/02/22
1689657	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/02/22
1689656	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/02/22
1689655	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/02/22
1689654	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/02/22
1689653	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/02/22
1689667	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/02/22
1689651	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/02/22
1689649	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/02/22
1689659	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/02/22
1689660	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/02/22
1689661	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/02/22
1689662	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/02/22
1689664	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/02/22
1689666	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/02/22
1689652	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/02/22
1689550	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/02/22
1689562	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/02/22
1689559	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/02/22
1689551	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/02/22
1689552	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/02/22
1689553	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/02/22
1689554	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/02/22
1689555	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/02/22
1689556	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/02/22
1689564	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/02/22
1689558	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/02/22
1689563	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/02/22
1689560	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/02/22
1689561	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/02/22
1689557	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/02/22
1689565	-	95% NITROGEN/5% HYDROGEN	220	Cubic Feet(CF)	08/02/22
1689569	-	95% NITROGEN/5% HYDROGEN	220	Cubic Feet(CF)	08/02/22
1689568	-	95% NITROGEN/5% HYDROGEN	220	Cubic Feet(CF)	08/02/22
1689567	-	95% NITROGEN/5% HYDROGEN	220	Cubic Feet(CF)	08/02/22
1689566	-	95% NITROGEN/5% HYDROGEN	220	Cubic Feet(CF)	08/02/22
1689570	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/02/22
1689573	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/02/22
1689589	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/02/22
1689571	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/02/22
1689592	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/02/22
1689572	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/02/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1689590	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/02/22
1689588	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/02/22
1689587	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/02/22
1689586	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/02/22
1689585	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/02/22
1689584	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/02/22
1689577	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/02/22
1689591	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/02/22
1689583	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/02/22
1689576	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/02/22
1689574	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/02/22
1689578	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/02/22
1689579	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/02/22
1689580	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/02/22
1689581	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/02/22
1689582	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/02/22
1689575	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/02/22
1689624	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/02/22
1689625	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/02/22
1689593	-	Compressed Air	220	Cubic Feet(CF)	08/02/22
1689594	-	Compressed Air	220	Cubic Feet(CF)	08/02/22
1689600	-	Compressed Air	220	Cubic Feet(CF)	08/02/22
1689601	-	Compressed Air	220	Cubic Feet(CF)	08/02/22
1689599	-	Compressed Air	220	Cubic Feet(CF)	08/02/22
1689598	-	Compressed Air	220	Cubic Feet(CF)	08/02/22
1689597	-	Compressed Air	220	Cubic Feet(CF)	08/02/22
1689595	-	Compressed Air	220	Cubic Feet(CF)	08/02/22
1689596	-	Compressed Air	220	Cubic Feet(CF)	08/02/22
1689602	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/02/22
1689603	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/02/22
1689604	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/02/22
1689608	-	OXYGEN COMPRESSED GAS	20	Cubic Feet(CF)	08/02/22
1689606	-	OXYGEN COMPRESSED GAS	20	Cubic Feet(CF)	08/02/22
1689607	-	OXYGEN COMPRESSED GAS	20	Cubic Feet(CF)	08/02/22
1689605	-	OXYGEN COMPRESSED GAS	20	Cubic Feet(CF)	08/02/22
1750616	56-81-5	GLYCERIN	500	Milligram(MG)	08/02/22
1689609	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/02/22
1689629	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/02/22
1689637	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/02/22
1689636	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/02/22
1689635	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/02/22
1689628	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/02/22
1689640	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/02/22
1689630	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/02/22
1689631	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/02/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1689632	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/02/22
1689634	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/02/22
1689639	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/02/22
1689641	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/02/22
1689642	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/02/22
1689643	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/02/22
1689644	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/02/22
1689645	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/02/22
1689646	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/02/22
1689633	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/02/22
1689647	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/02/22
1689638	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/02/22
1689610	124-38-9	CARBON DIOXIDE	150	Cubic Feet(CF)	08/02/22
1689611	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/02/22
1689618	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/02/22
1689612	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/02/22
1689614	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/02/22
1689615	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/02/22
1689616	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/02/22
1689613	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/02/22
1689617	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/02/22
1689619	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/02/22
1689620	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/02/22
1689621	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/02/22
1689622	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/02/22
1689623	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/02/22
1689626	-	3% HYDROGEN/BAL. ARGON	300	Cubic Feet(CF)	08/02/22
1689627	74-98-6	PROPANE	11	Gallon(GAL)	08/02/22
1741406	227617-70-1	1-Butyl-2 3-dimethylimidazolium hexafluorophosphate	5	Gram(GM)	08/02/22
1741407	-	Pro3dure GR-1 Clear	1	Kilograms(KG)	08/02/22
1741408	16219-75-3	5-Ethylidene-2-norbornene	500	Milliliter(ML)	08/02/22
1741409	12023-20-0	IRON NITRIDE	25	Gram(GM)	08/02/22
1539415	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539443	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539456	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539449	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539462	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539461	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539460	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539459	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539420	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539457	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539465	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539455	-	CURING AGENT	78	Ounces(OZ)	08/02/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1539454	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539453	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539452	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539451	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539481	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539458	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539473	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539480	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539479	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539478	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539477	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539476	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539463	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539474	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539448	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539472	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539471	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539470	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539469	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539468	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539467	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539475	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539423	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539450	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539429	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539428	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539427	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539426	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539431	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539424	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539432	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539422	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539421	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539416	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539417	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539418	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539419	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539425	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539439	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539447	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539446	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539445	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539444	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539441	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539430	-	CURING AGENT	78	Ounces(OZ)	08/02/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1539440	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539466	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539438	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539437	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539436	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539435	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539434	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539433	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539442	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539464	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539485	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539489	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539491	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539482	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539484	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539492	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539486	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539487	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539488	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539490	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1539483	-	CURING AGENT	78	Ounces(OZ)	08/02/22
1727760	-	Drydene Radias AW 68 Hydraulic	5	Gallon(GAL)	08/02/22
1727764	-	Drydene Radias AW 68 Hydraulic	5	Gallon(GAL)	08/02/22
1727762	-	Drydene Radias AW 68 Hydraulic	5	Gallon(GAL)	08/02/22
1727763	-	Drydene Radias AW 68 Hydraulic	5	Gallon(GAL)	08/02/22
1727761	-	Drydene Radias AW 68 Hydraulic	5	Gallon(GAL)	08/02/22
1741410	1313-49-1	Zinc nitride 99% (metals basis)	10	Gram(GM)	08/02/22
1741411	1313-49-1	Zinc nitride 99% (metals basis)	10	Gram(GM)	08/02/22
V00000C1A3	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	08/02/22
V00000C1A8	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	08/02/22
V00000C1A7	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	08/02/22
V00000C1A6	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	08/02/22
V00000C1A4	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	08/02/22
V00000C1A2	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	08/02/22
V00000C1A1	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	08/02/22
V00000C1A0	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	08/02/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C19F	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	08/02/22
V00000C19E	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	08/02/22
V00000C19D	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	08/02/22
V00000C1A5	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	08/02/22
1727845	-	NON-DETERGENT MOTOR OIL SAE 30	1	Quarts(QT)	08/02/22
1727846	-	NON-DETERGENT MOTOR OIL SAE 30	1	Quarts(QT)	08/02/22
1727847	-	Valvoline Professional Series 75W-140 FULL SYNTHETIC GEAR OIL	1	Quarts(QT)	08/02/22
1727849	-	Valvoline Professional Series 75W-140 FULL SYNTHETIC GEAR OIL	1	Quarts(QT)	08/02/22
1727850	-	Valvoline Professional Series 75W-140 FULL SYNTHETIC GEAR OIL	1	Quarts(QT)	08/02/22
1727848	-	Valvoline Professional Series 75W-140 FULL SYNTHETIC GEAR OIL	1	Quarts(QT)	08/02/22
1718917	-	EJ-550 SILICONE OPTICAL GREASE	450	Gram(GM)	08/02/22
V00000C1B2	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	08/02/22
V00000C1AF	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	08/02/22
V00000C1A9	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	08/02/22
V00000C1AA	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	08/02/22
V00000C1AB	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	08/02/22
V00000C1AC	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	08/02/22
V00000C1AE	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	08/02/22
V00000C1B0	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	08/02/22
V00000C1B1	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	08/02/22
V00000C1B4	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	08/02/22
V00000C1B5	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	08/02/22
V00000C1B6	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	08/02/22
V00000C1AD	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	08/02/22
V00000C1B3	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	08/02/22
1727824	-	Parts Plus DEXRON VI Automatic Transmission Fluid	1	Quarts(QT)	08/02/22
1727825	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	08/02/22
1727837	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	08/02/22
1727836	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	08/02/22
1727838	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	08/02/22
1727831	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	08/02/22
1727835	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	08/02/22
1727840	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	08/02/22
1727833	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	08/02/22
1727841	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	08/02/22
1727832	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	08/02/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727826	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	08/02/22
1727827	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	08/02/22
1727828	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	08/02/22
1727829	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	08/02/22
1727830	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	08/02/22
1727834	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	08/02/22
1727842	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	08/02/22
1727843	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	08/02/22
1727844	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	08/02/22
1727839	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	08/02/22
V00000C1B7	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	08/02/22
1741412	12168-54-6	Iron nickel oxide tech	10	Gram(GM)	08/02/22
1741413	1313-99-1	NICKEL(II) OXIDE	50	Gram(GM)	08/02/22
1741414	11113-75-0	NICKEL SULFIDE	5	Gram(GM)	08/02/22
1727858	-	High Temp Red RTV Silicone	3	Ounces(OZ)	08/02/22
1741415	7365-44-8	TES	100	Gram(GM)	08/02/22
1741416	75-09-2	Dichloromethane anhydrous 99.8% contains 40-150 ppm amylene as stabilizer	1	Liters(L)	08/02/22
1741417	75-09-2	Dichloromethane anhydrous 99.8% contains 40-150 ppm amylene as stabilizer	1	Liters(L)	08/02/22
1741418	68-12-2	N N-Dimethylformamide ACS Reagent 99.8%	4	Liters(L)	08/02/22
1741481	7783-64-4	ZIRCONIUM(IV) FLUORIDE	100	Gram(GM)	08/02/22
1727859	-	CRC BATTERY CLEANER	11	Ounces(OZ)	08/02/22
1727860	-	CRC BATTERY CLEANER	11	Ounces(OZ)	08/02/22
1727868	-	CRC BATTERY CLEANER	11	Ounces(OZ)	08/02/22
1727867	-	CRC BATTERY CLEANER	11	Ounces(OZ)	08/02/22
1727866	-	CRC BATTERY CLEANER	11	Ounces(OZ)	08/02/22
1727865	-	CRC BATTERY CLEANER	11	Ounces(OZ)	08/02/22
1727864	-	CRC BATTERY CLEANER	11	Ounces(OZ)	08/02/22
1727863	-	CRC BATTERY CLEANER	11	Ounces(OZ)	08/02/22
1727862	-	CRC BATTERY CLEANER	11	Ounces(OZ)	08/02/22
1727861	-	CRC BATTERY CLEANER	11	Ounces(OZ)	08/02/22
1727869	-	CRC BATTERY CLEANER	11	Ounces(OZ)	08/02/22
1727870	-	SYNPOWER 75W-90 SYNTHETIC GEAR OIL	1	Quarts(QT)	08/02/22
1727871	-	MOBIL 1 5W-50	1	Quarts(QT)	08/02/22
1727872	-	MOBIL 1 5W-50	1	Quarts(QT)	08/02/22
1727873	-	MOBIL 1 5W-50	1	Quarts(QT)	08/02/22
1729180	-	Summit SH-46	1	Gallon(GAL)	08/02/22
1729185	-	Summit SH-46	1	Gallon(GAL)	08/02/22
1729182	-	Summit SH-46	1	Gallon(GAL)	08/02/22
1729183	-	Summit SH-46	1	Gallon(GAL)	08/02/22
1729184	-	Summit SH-46	1	Gallon(GAL)	08/02/22
1729181	-	Summit SH-46	1	Gallon(GAL)	08/02/22
V00000C1B9	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	08/02/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C1B8	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	08/02/22
V00000C1BA	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	08/02/22
V00000C1BB	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	08/02/22
1741482	51-79-6	URETHANE	50	Gram(GM)	08/02/22
1741483	12069-32-8	BORON CARBIDE	50	Kilograms(KG)	08/02/22
1741484	12069-32-8	BORON CARBIDE	50	Kilograms(KG)	08/02/22
1741485	12069-32-8	BORON CARBIDE	50	Kilograms(KG)	08/02/22
1741486	420-37-1	TRIMETHYLOXONIUM TETRAFLUOROBORATE	10	Gram(GM)	08/02/22
1719333	-	FS-One Max	10.1	Ounces(OZ)	08/02/22
1719334	-	FS-One Max	10.1	Ounces(OZ)	08/02/22
1719335	-	FS-One Max	10.1	Ounces(OZ)	08/02/22
1719336	-	FS-One Max	10.1	Ounces(OZ)	08/02/22
1719337	-	FS-One Max	10.1	Ounces(OZ)	08/02/22
1719338	-	FS-One Max	10.1	Ounces(OZ)	08/02/22
1719339	-	FS-One Max	10.1	Ounces(OZ)	08/02/22
1719341	-	FS-One Max	10.1	Ounces(OZ)	08/02/22
1719340	-	FS-One Max	10.1	Ounces(OZ)	08/02/22
1741487	7778-54-3	CALCIUM HYPOCHLORITE	1	Kilograms(KG)	08/02/22
1741488	14808-60-7	Quartz wool fine	10	Gram(GM)	08/02/22
1741489	14808-60-7	Quartz wool fine	50	Gram(GM)	08/02/22
1727856	-	PERMATEX HYDRAULIC SEALANT	1.22	Ounces(OZ)	08/02/22
1727857	-	PERMATEX HYDRAULIC SEALANT	1.22	Ounces(OZ)	08/02/22
1727852	-	SYNTHETIC LUBRICANT FOR RECIPROCATING COMPRESSORS	1	Quarts(QT)	08/02/22
1727853	-	SYNTHETIC LUBRICANT FOR RECIPROCATING COMPRESSORS	1	Quarts(QT)	08/02/22
1727854	-	SYNTHETIC LUBRICANT FOR RECIPROCATING COMPRESSORS	1	Quarts(QT)	08/02/22
1727855	-	SYNTHETIC LUBRICANT FOR RECIPROCATING COMPRESSORS	1	Quarts(QT)	08/02/22
1719342	-	POLWAYTER FST-MINI-6BG	1.7	Ounces(OZ)	08/03/22
1719344	-	POLWAYTER FST-MINI-6BG	1.7	Ounces(OZ)	08/03/22
1719343	-	POLWAYTER FST-MINI-6BG	1.7	Ounces(OZ)	08/03/22
1719347	-	POLWAYTER FST-MINI-6BG	1.7	Ounces(OZ)	08/03/22
1719345	-	POLWAYTER FST-MINI-6BG	1.7	Ounces(OZ)	08/03/22
1719346	-	POLWAYTER FST-MINI-6BG	1.7	Ounces(OZ)	08/03/22
1660468	-	TIC D65 Dispersant	500	Milliliter(ML)	08/03/22
1660469	-	TIC D65 Dispersant	500	Milliliter(ML)	08/03/22
1660465	-	Silicate Additive D75	1	Liters(L)	08/03/22
1660464	-	LT Liquid Extender B38	1	Liters(L)	08/03/22
1660466	-	Antifoaming Agent D206	1	Liters(L)	08/03/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1660467	-	GASBBLOK Gas Migration Control Additive D620	1	Liters(L)	08/03/22
1660475	-	Mid-Range FLAC D255	1	Liters(L)	08/03/22
1660476	-	Synthetic Solid Cement Retarder D198	250	Milliliter(ML)	08/03/22
1660474	-	Expanding Cement Additive D174	250	Milliliter(ML)	08/03/22
1660470	-	Cement Class G D907	5	Gallon(GAL)	08/03/22
1660471	-	Silica Flour D66	5	Gallon(GAL)	08/03/22
1714903	7726-95-6	Bromine liquid 99.8%	50	Milliliter(ML)	08/03/22
1719348	-	POLWAYTER FST-MINI-6BG	250	Milliliter(ML)	08/03/22
1719349	-	POLWAYTER FST-MINI-6BG	1.7	Ounces(OZ)	08/03/22
1719871	-	FS-One Max	10.1	Ounces(OZ)	08/03/22
1719874	-	FS-One Max	10.1	Ounces(OZ)	08/03/22
1719881	-	FS-One Max	10.1	Ounces(OZ)	08/03/22
1719887	-	FS-One Max	10.1	Ounces(OZ)	08/03/22
1719888	-	FS-One Max	10.1	Ounces(OZ)	08/03/22
1719885	-	FS-One Max	10.1	Ounces(OZ)	08/03/22
1719889	-	FS-One Max	10.1	Ounces(OZ)	08/03/22
1719890	-	FS-One Max	10.1	Ounces(OZ)	08/03/22
1719884	-	FS-One Max	10.1	Ounces(OZ)	08/03/22
1719872	-	FS-One Max	10.1	Ounces(OZ)	08/03/22
1719882	-	FS-One Max	10.1	Ounces(OZ)	08/03/22
1719873	-	FS-One Max	10.1	Ounces(OZ)	08/03/22
1719880	-	FS-One Max	10.1	Ounces(OZ)	08/03/22
1719879	-	FS-One Max	10.1	Ounces(OZ)	08/03/22
1719878	-	FS-One Max	10.1	Ounces(OZ)	08/03/22
1719877	-	FS-One Max	10.1	Ounces(OZ)	08/03/22
1719876	-	FS-One Max	10.1	Ounces(OZ)	08/03/22
1719875	-	FS-One Max	10.1	Ounces(OZ)	08/03/22
1719886	-	FS-One Max	10.1	Ounces(OZ)	08/03/22
1719883	-	FS-One Max	10.1	Ounces(OZ)	08/03/22
1719350	-	FS-One Max	10.1	Ounces(OZ)	08/03/22
1719352	-	FS-One Max	10.1	Ounces(OZ)	08/03/22
1719351	-	FS-One Max	10.1	Ounces(OZ)	08/03/22
1689673	74-82-8	METHANE	220	Cubic Feet(CF)	08/03/22
1713146	67-63-0	Isopropyl Alcohol 99%	1	Gallon(GAL)	08/03/22
1713147	67-63-0	Isopropyl Alcohol 99%	1	Gallon(GAL)	08/03/22
1713149	67-63-0	Isopropyl Alcohol 99%	1	Gallon(GAL)	08/03/22
1713148	67-63-0	Isopropyl Alcohol 99%	1	Gallon(GAL)	08/03/22
1649139	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/03/22
1649140	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/03/22
1649149	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/03/22
1649153	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/03/22
1649151	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/03/22
1649152	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/03/22
1649141	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/03/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1649142	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/03/22
1649143	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/03/22
1649144	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/03/22
1649145	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/03/22
1649146	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/03/22
1649147	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/03/22
1649148	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/03/22
1649150	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/03/22
1740823	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740843	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740842	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740864	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740841	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740849	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740840	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740839	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740861	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740838	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740853	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740854	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740855	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740856	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740857	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740858	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740847	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740860	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740844	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740862	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740852	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740851	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740850	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740848	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740863	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740846	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740845	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740859	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740837	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740828	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740829	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740830	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740831	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740832	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740833	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740834	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740827	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1740836	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740826	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740825	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740824	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740835	1336-21-6	Ammonium Hydroxide ACS Plus	500	Milliliter(ML)	08/04/22
1740753	-	BUFFER SOLUTION PH 4.0	500	Milliliter(ML)	08/04/22
1740762	109-97-7	PYRROLE 98%	100	Milliliter(ML)	08/04/22
1740763	71-43-2	Benzene ACS Reagent 99%	500	Milliliter(ML)	08/04/22
1740764	109-66-0	Pentane reagent grade 98%	500	Milliliter(ML)	08/04/22
1740766	9002-89-5	POLYVINYL ALCOHOL	100	Gram(GM)	08/04/22
1740767	9002-89-5	POLYVINYL ALCOHOL	100	Gram(GM)	08/04/22
1740657	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	175	Milliliter(ML)	08/04/22
1740659	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	175	Milliliter(ML)	08/04/22
1740673	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	175	Milliliter(ML)	08/04/22
1740672	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	175	Milliliter(ML)	08/04/22
1740671	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	175	Milliliter(ML)	08/04/22
1740670	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	175	Milliliter(ML)	08/04/22
1740669	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	175	Milliliter(ML)	08/04/22
1740668	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	175	Milliliter(ML)	08/04/22
1740667	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	175	Milliliter(ML)	08/04/22
1740666	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	175	Milliliter(ML)	08/04/22
1740665	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	175	Milliliter(ML)	08/04/22
1740664	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	175	Milliliter(ML)	08/04/22
1740663	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	175	Milliliter(ML)	08/04/22
1740662	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	175	Milliliter(ML)	08/04/22
1740675	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	175	Milliliter(ML)	08/04/22
1740674	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	175	Milliliter(ML)	08/04/22
1740658	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	175	Milliliter(ML)	08/04/22
1740677	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	175	Milliliter(ML)	08/04/22
1740660	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	175	Milliliter(ML)	08/04/22
1740661	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	175	Milliliter(ML)	08/04/22
1740676	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	175	Milliliter(ML)	08/04/22
1740678	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	175	Milliliter(ML)	08/04/22
1740595	619-73-8	4-NITROBENZYL ALCOHOL 99%	25	Gram(GM)	08/04/22
1740596	619-73-8	4-NITROBENZYL ALCOHOL 99%	25	Gram(GM)	08/04/22
1740600	623-24-5	alpha alpha'-Dibromo-p-xylene	25	Gram(GM)	08/04/22
1740654	99-94-5	P-TOLUIC ACID	100	Gram(GM)	08/04/22
1341008	9004-57-3	ETHYL CELLULOSE	250	Gram(GM)	08/04/22
1740656	91-20-3	NAPHTHALENE	1	Kilograms(KG)	08/04/22
1740602	-	NORLAND OPTICAL ADHESIVE 61	10	Gram(GM)	08/04/22
1740603	-	NORLAND OPTICAL ADHESIVE 61	10	Gram(GM)	08/04/22
1054750	7647-14-5	SODIUM CHLORIDE CRYSTAL	568	Liters(L)	08/04/22
1714089	64-17-5	Ethyl alcohol Pure 200 proof ACS reagent 99.5%	500	Milliliter(ML)	08/04/22
1714316	1336-21-6	AMMONIUM HYDROXIDE OPTIMA	500	Milliliter(ML)	08/04/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1736995	-	K Kool-E Pink	5	Gallon(GAL)	08/04/22
1736999	-	K Kool-E Pink	5	Gallon(GAL)	08/04/22
1736996	-	K Kool-E Pink	5	Gallon(GAL)	08/04/22
1736997	-	K Kool-E Pink	5	Gallon(GAL)	08/04/22
1736998	-	K Kool-E Pink	5	Gallon(GAL)	08/04/22
1737000	-	K Kool-E Pink	5	Gallon(GAL)	08/04/22
1717131	7705-08-0	FERRIC CHLORIDE 40% SOLUTION	3500	Pounds(LB)	08/04/22
1706821	79-01-6	Trichloroethylene Electronic Grade 99.5+%	1	Liters(L)	08/04/22
1706822	79-01-6	Trichloroethylene Electronic Grade 99.5+%	1	Liters(L)	08/04/22
1740597	6669-13-2	tert-Butoxybenzene	5	Gram(GM)	08/04/22
1740598	4039-32-1	Lithium bis(trimethylsilyl)amide solution 1.0 M in THF	100	Milliliter(ML)	08/04/22
1740601	8017-16-1	Polyphosphoric acid for synthesis	500	Milliliter(ML)	08/04/22
1740765	79-09-4	Propionic acid ACS reagent 99.5+%	500	Milliliter(ML)	08/04/22
1740768	96-54-8	1-Methylpyrrole 99%	100	Milliliter(ML)	08/04/22
1740769	616-47-7	1-Methylimidazole 99%	100	Milliliter(ML)	08/04/22
1688845	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/05/22
1689674	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/05/22
1689675	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/05/22
1717132	-	NALCO 7408 CHLORINE SCAVENGER SOLUTION	55	Gallon(GAL)	08/05/22
1717133	-	PermaTreat PC-510T	511	Pounds(LB)	08/05/22
1718287	-	567 THREAD SEALANT	50	Milliliter(ML)	08/05/22
1718288	-	567 THREAD SEALANT	50	Milliliter(ML)	08/05/22
1718290	-	567 THREAD SEALANT	50	Milliliter(ML)	08/05/22
1718289	-	567 THREAD SEALANT	50	Milliliter(ML)	08/05/22
1718291	-	THREAD LOCKER 222	10	Milliliter(ML)	08/05/22
1718292	-	THREAD LOCKER 222	10	Milliliter(ML)	08/05/22
1718293	-	THREAD LOCKER 222	10	Milliliter(ML)	08/05/22
1718294	-	THREAD LOCKER 222	10	Milliliter(ML)	08/05/22
1718295	-	LOCTITE 262 THREADLOCKER	10	Milliliter(ML)	08/05/22
1718296	-	LOCTITE 262 THREADLOCKER	10	Milliliter(ML)	08/05/22
1718297	-	LOCTITE 262 THREADLOCKER	10	Milliliter(ML)	08/05/22
1718298	-	LOCTITE 262 THREADLOCKER	10	Milliliter(ML)	08/05/22
1717630	-	Chip Quik Lead Free Solder Paste Series: SMD291SNL SMD4300SNL SMDLTLFP SMD4300LTLFP	15	Gram(GM)	08/05/22
1715403	-	'M-1 Structural Sealant	2	Gallon(GAL)	08/05/22
1715402	-	'M-1 Structural Sealant	2	Gallon(GAL)	08/05/22
1740651	110802-84-1	Hydrogen hexachloroiridate(IV) hydrate	1	Gram(GM)	08/05/22
1740652	110802-84-1	Hydrogen hexachloroiridate(IV) hydrate	1	Gram(GM)	08/05/22
1459997	111-42-2	DIETHANOLAMINE	2	Liters(L)	08/08/22
1459998	111-42-2	DIETHANOLAMINE	2	Liters(L)	08/08/22
1647777	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/08/22
1647802	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1647796	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/08/22
1647801	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/08/22
1647805	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/08/22
1647800	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/08/22
1647789	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/08/22
1647799	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/08/22
1647798	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/08/22
1647797	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/08/22
1647804	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/08/22
1647795	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/08/22
1647794	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/08/22
1647793	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/08/22
1647792	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/08/22
1647790	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/08/22
1647788	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/08/22
1647787	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/08/22
1647786	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/08/22
1647785	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/08/22
1647784	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/08/22
1647783	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/08/22
1647782	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/08/22
1647781	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/08/22
1647791	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/08/22
1647803	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/08/22
1647780	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/08/22
1647779	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/08/22
1647778	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/08/22
1649290	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/08/22
1712642	1313-97-9	NEODYMIUM 146	1	Milligram(MG)	08/08/22
1712641	1313-97-9	Neodymium oxide 144	1	Milligram(MG)	08/08/22
1712717	-	Poly(3 4-ethylenedioxythiophene)-poly(styrenesulfonate) dry redispersible pellets	1	Gram(GM)	08/08/22
1712718	-	Poly(3 4-ethylenedioxythiophene)-poly(styrenesulfonate) dry redispersible pellets	1	Gram(GM)	08/08/22
1712719	-	Poly(3 4-ethylenedioxythiophene)-poly(styrenesulfonate) dry redispersible pellets	1	Gram(GM)	08/08/22
1712722	1576-35-8	p-Toluenesulfonylhydrazide	100	Gram(GM)	08/08/22
1712723	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	10	Gram(GM)	08/08/22
1712724	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	10	Gram(GM)	08/08/22
1712725	-	Loctite 242 Threadlocker Medium Strength	50	Milliliter(ML)	08/08/22
1712726	-	Loctite 242 Threadlocker Medium Strength	50	Milliliter(ML)	08/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1712727	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/08/22
1712729	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/08/22
1712728	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/08/22
1712820	7784-27-2	ALUMINUM NITRATE NONAHYDRATE	500	Gram(GM)	08/08/22
1712824	7784-27-2	ALUMINUM NITRATE NONAHYDRATE	500	Gram(GM)	08/08/22
1712821	7784-27-2	ALUMINUM NITRATE NONAHYDRATE	500	Gram(GM)	08/08/22
1712823	7784-27-2	ALUMINUM NITRATE NONAHYDRATE	500	Gram(GM)	08/08/22
1712822	7784-27-2	ALUMINUM NITRATE NONAHYDRATE	500	Gram(GM)	08/08/22
1712825	7784-27-2	ALUMINUM NITRATE NONAHYDRATE	500	Gram(GM)	08/08/22
1712730	-	1000 ug/mL Neodymium	125	Milliliter(ML)	08/08/22
1712734	2206-27-1	(METHYL SULFOXIDE)-D6 99.5 + ATOM % D	50	Gram(GM)	08/08/22
1712735	2206-27-1	(METHYL SULFOXIDE)-D6 99.5 + ATOM % D	50	Gram(GM)	08/08/22
1712817	7782-68-5	IODIC ACID	100	Gram(GM)	08/08/22
1712818	7782-68-5	IODIC ACID	100	Gram(GM)	08/08/22
1712819	67-63-0	2-Propanol 99.9% (HPLC)	1	Liters(L)	08/08/22
1712731	2175-90-8	DIPHENYLFULVENE	5	Gram(GM)	08/08/22
1712732	-	Adamantan--2--one	25	Gram(GM)	08/08/22
1712733	1314-56-3	PHOSPHORUS PENTOXIDE 98%	250	Gram(GM)	08/08/22
1712736	143-66-8	SODIUM TETRAPHENYLBORATE	5	Gram(GM)	08/08/22
1712737	7784-27-2	ALUMINUM NITRATE NONAHYDRATE	500	Gram(GM)	08/08/22
1712738	7784-27-2	ALUMINUM NITRATE NONAHYDRATE	500	Gram(GM)	08/08/22
1712816	865-47-4	POTASSIUM TERT-BUTOXIDE 1.0M SOLUTION IN TETRAHYDROFURAN	500	Gram(GM)	08/08/22
1712740	100-42-5	Styrene contains 4-tert-butylcatechol as stabilizer 99+%	1	Liters(L)	08/08/22
1741490	7439-91-0	LANTHANUM CHIPS	25	Gram(GM)	08/08/22
1741493	42448-04-4	2 7-Diphenyl-9H-carbazole	10	Gram(GM)	08/08/22
1741494	77-92-9	CITRIC ACID	2.5	Kilograms(KG)	08/08/22
1741495	366-18-7	2 2-BIPYRIDINE	25	Gram(GM)	08/08/22
1741496	13472-00-9	2-(4-Aminophenyl)ethylamine	1	Gram(GM)	08/08/22
1741497	1313-84-4	SODIUM SULFIDE NONAHYDRATE	5	Gram(GM)	08/08/22
1741498	142-82-5	Heptane Anhydrous 99%	1	Liters(L)	08/08/22
1741499	142-82-5	Heptane Anhydrous 99%	1	Liters(L)	08/08/22
1741500	110-82-7	CYCLOHEXANE	500	Milliliter(ML)	08/08/22
1741501	110-82-7	CYCLOHEXANE	500	Milliliter(ML)	08/08/22
1741502	7440-33-7	TUNGSTEN POWDER	500	Gram(GM)	08/08/22
1741503	7440-33-7	TUNGSTEN POWDER	500	Gram(GM)	08/08/22
1741504	7440-33-7	TUNGSTEN POWDER	500	Gram(GM)	08/08/22
1741505	7789-23-3	POTASSIUM FLUORIDE	2.5	Kilograms(KG)	08/08/22
1642687	-	KOPR-KOTE	12	Ounces(OZ)	08/09/22
1642688	-	KOPR-KOTE	12	Ounces(OZ)	08/09/22
1642695	-	KOPR-KOTE	12	Ounces(OZ)	08/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1642696	-	KOPR-KOTE	12	Ounces(OZ)	08/09/22
1642693	-	KOPR-KOTE	12	Ounces(OZ)	08/09/22
1642692	-	KOPR-KOTE	12	Ounces(OZ)	08/09/22
1642691	-	KOPR-KOTE	12	Ounces(OZ)	08/09/22
1642697	-	KOPR-KOTE	12	Ounces(OZ)	08/09/22
1642689	-	KOPR-KOTE	12	Ounces(OZ)	08/09/22
1642698	-	KOPR-KOTE	12	Ounces(OZ)	08/09/22
1642694	-	KOPR-KOTE	12	Ounces(OZ)	08/09/22
1642690	-	KOPR-KOTE	12	Ounces(OZ)	08/09/22
1642842	-	KOPR-KOTE	12	Ounces(OZ)	08/09/22
1642853	-	KOPR-KOTE	12	Ounces(OZ)	08/09/22
1642847	-	KOPR-KOTE	12	Ounces(OZ)	08/09/22
1642848	-	KOPR-KOTE	12	Ounces(OZ)	08/09/22
1642845	-	KOPR-KOTE	12	Ounces(OZ)	08/09/22
1642844	-	KOPR-KOTE	12	Ounces(OZ)	08/09/22
1642843	-	KOPR-KOTE	12	Ounces(OZ)	08/09/22
1642854	-	KOPR-KOTE	12	Ounces(OZ)	08/09/22
1642852	-	KOPR-KOTE	12	Ounces(OZ)	08/09/22
1642851	-	KOPR-KOTE	12	Ounces(OZ)	08/09/22
1642850	-	KOPR-KOTE	12	Ounces(OZ)	08/09/22
1642849	-	KOPR-KOTE	12	Ounces(OZ)	08/09/22
1642846	-	KOPR-KOTE	12	Ounces(OZ)	08/09/22
1437141	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	1	Pint(PT)	08/09/22
1437152	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	1	Pint(PT)	08/09/22
1437142	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	1	Pint(PT)	08/09/22
1437143	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	1	Pint(PT)	08/09/22
1437144	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	1	Pint(PT)	08/09/22
1437145	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	1	Pint(PT)	08/09/22
1437146	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	1	Pint(PT)	08/09/22
1437147	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	1	Pint(PT)	08/09/22
1437148	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	1	Pint(PT)	08/09/22
1437149	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	1	Pint(PT)	08/09/22
1437150	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	1	Pint(PT)	08/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1437151	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	1	Pint(PT)	08/09/22
1437155	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	1	Pint(PT)	08/09/22
1437154	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	1	Pint(PT)	08/09/22
1437153	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	1	Pint(PT)	08/09/22
1436919	-	RectorSeal Tru-Blu	2	Ounces(OZ)	08/09/22
1436923	-	RectorSeal Tru-Blu	2	Ounces(OZ)	08/09/22
1436924	-	RectorSeal Tru-Blu	2	Ounces(OZ)	08/09/22
1436925	-	RectorSeal Tru-Blu	2	Ounces(OZ)	08/09/22
1436926	-	RectorSeal Tru-Blu	2	Ounces(OZ)	08/09/22
1436922	-	RectorSeal Tru-Blu	2	Ounces(OZ)	08/09/22
1436928	-	RectorSeal Tru-Blu	2	Ounces(OZ)	08/09/22
1436927	-	RectorSeal Tru-Blu	2	Ounces(OZ)	08/09/22
1436933	-	RectorSeal Tru-Blu	2	Ounces(OZ)	08/09/22
1436920	-	RectorSeal Tru-Blu	2	Ounces(OZ)	08/09/22
1436938	-	RectorSeal Tru-Blu	2	Ounces(OZ)	08/09/22
1436930	-	RectorSeal Tru-Blu	2	Ounces(OZ)	08/09/22
1436929	-	RectorSeal Tru-Blu	2	Ounces(OZ)	08/09/22
1436937	-	RectorSeal Tru-Blu	2	Ounces(OZ)	08/09/22
1436931	-	RectorSeal Tru-Blu	2	Ounces(OZ)	08/09/22
1436932	-	RectorSeal Tru-Blu	2	Ounces(OZ)	08/09/22
1436936	-	RectorSeal Tru-Blu	2	Ounces(OZ)	08/09/22
1436921	-	RectorSeal Tru-Blu	2	Ounces(OZ)	08/09/22
1436935	-	RectorSeal Tru-Blu	2	Ounces(OZ)	08/09/22
1436934	-	RectorSeal Tru-Blu	2	Ounces(OZ)	08/09/22
1642925	-	Mothers Mag & Aluminum Polish	10	Ounces(OZ)	08/09/22
1642926	-	Mothers Mag & Aluminum Polish	10	Ounces(OZ)	08/09/22
1642839	-	Triadine Industrial Microbiostat	1	Gallon(GAL)	08/09/22
1642840	-	Triadine Industrial Microbiostat	1	Gallon(GAL)	08/09/22
1437207	-	SENSOR-SAFE BLUE RTV SILICONE GASKET MAKER 80022	3	Ounces(OZ)	08/09/22
1437209	-	SENSOR-SAFE BLUE RTV SILICONE GASKET MAKER 80022	3	Ounces(OZ)	08/09/22
1437208	-	SENSOR-SAFE BLUE RTV SILICONE GASKET MAKER 80022	3	Ounces(OZ)	08/09/22
1437210	-	SENSOR-SAFE BLUE RTV SILICONE GASKET MAKER 80022	3	Ounces(OZ)	08/09/22
1437212	-	SENSOR-SAFE BLUE RTV SILICONE GASKET MAKER 80022	3	Ounces(OZ)	08/09/22
1437211	-	SENSOR-SAFE BLUE RTV SILICONE GASKET MAKER 80022	3	Ounces(OZ)	08/09/22
1689882	124-38-9	CARBON DIOXIDE	50	Pounds(LB)	08/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1689883	7727-37-9	NITROGEN GAS	20	Cubic Feet(CF)	08/09/22
1689763	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689762	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689761	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689771	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689765	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689766	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689767	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689768	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689764	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689770	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689760	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689773	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689757	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689756	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689755	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689754	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689753	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689772	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689758	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689759	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689769	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689775	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689776	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689777	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689778	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689779	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689780	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689781	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689782	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689783	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689784	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689785	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689774	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/09/22
1689839	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/09/22
1689850	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/09/22
1689840	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/09/22
1689842	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/09/22
1689844	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/09/22
1689845	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/09/22
1689846	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/09/22
1689847	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/09/22
1689849	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/09/22
1689851	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/09/22
1689852	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1689853	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/09/22
1689854	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/09/22
1689855	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/09/22
1689856	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/09/22
1689841	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/09/22
1689848	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/09/22
1689843	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/09/22
1689868	74-86-2	ACETYLENE STABILIZED	10	Cubic Feet(CF)	08/09/22
1689865	74-86-2	ACETYLENE STABILIZED	10	Cubic Feet(CF)	08/09/22
1689864	74-86-2	ACETYLENE STABILIZED	10	Cubic Feet(CF)	08/09/22
1689863	74-86-2	ACETYLENE STABILIZED	10	Cubic Feet(CF)	08/09/22
1689857	74-86-2	ACETYLENE STABILIZED	10	Cubic Feet(CF)	08/09/22
1689859	74-86-2	ACETYLENE STABILIZED	10	Cubic Feet(CF)	08/09/22
1689867	74-86-2	ACETYLENE STABILIZED	10	Cubic Feet(CF)	08/09/22
1689866	74-86-2	ACETYLENE STABILIZED	10	Cubic Feet(CF)	08/09/22
1689869	74-86-2	ACETYLENE STABILIZED	10	Cubic Feet(CF)	08/09/22
1689870	74-86-2	ACETYLENE STABILIZED	10	Cubic Feet(CF)	08/09/22
1689871	74-86-2	ACETYLENE STABILIZED	130	Cubic Feet(CF)	08/09/22
1689860	74-86-2	ACETYLENE STABILIZED	10	Cubic Feet(CF)	08/09/22
1689861	74-86-2	ACETYLENE STABILIZED	10	Cubic Feet(CF)	08/09/22
1689862	74-86-2	ACETYLENE STABILIZED	10	Cubic Feet(CF)	08/09/22
1689858	74-86-2	ACETYLENE STABILIZED	10	Cubic Feet(CF)	08/09/22
1689879	74-86-2	ACETYLENE STABILIZED	130	Cubic Feet(CF)	08/09/22
1689880	74-86-2	ACETYLENE STABILIZED	130	Cubic Feet(CF)	08/09/22
1689881	74-86-2	ACETYLENE STABILIZED	130	Cubic Feet(CF)	08/09/22
1689875	74-86-2	ACETYLENE STABILIZED	130	Cubic Feet(CF)	08/09/22
1689876	74-86-2	ACETYLENE STABILIZED	130	Cubic Feet(CF)	08/09/22
1689877	74-86-2	ACETYLENE STABILIZED	130	Cubic Feet(CF)	08/09/22
1689878	74-86-2	ACETYLENE STABILIZED	130	Cubic Feet(CF)	08/09/22
1689676	-	HYDROGEN GAS	220	Cubic Feet(CF)	08/09/22
1712644	12027-38-2	Silicotungstic Acid Reagent	25	Gram(GM)	08/09/22
1712645	12027-38-2	Silicotungstic Acid Reagent	25	Gram(GM)	08/09/22
1712832	67-56-1	Methanol 99.9% (HPLC)	1	Liters(L)	08/09/22
1757547	-	Bissell Professional Deep Cleaning	52	Ounces(OZ)	08/09/22
1757556	-	Bissell Professional Deep Cleaning	52	Ounces(OZ)	08/09/22
1757558	-	Bissell Professional Deep Cleaning	52	Ounces(OZ)	08/09/22
1757557	-	Bissell Professional Deep Cleaning	52	Ounces(OZ)	08/09/22
1757550	-	Bissell Professional Deep Cleaning	52	Ounces(OZ)	08/09/22
1757555	-	Bissell Professional Deep Cleaning	52	Ounces(OZ)	08/09/22
1757554	-	Bissell Professional Deep Cleaning	52	Ounces(OZ)	08/09/22
1757549	-	Bissell Professional Deep Cleaning	52	Ounces(OZ)	08/09/22
1757553	-	Bissell Professional Deep Cleaning	52	Ounces(OZ)	08/09/22
1757548	-	Bissell Professional Deep Cleaning	52	Ounces(OZ)	08/09/22
1757552	-	Bissell Professional Deep Cleaning	52	Ounces(OZ)	08/09/22
1757551	-	Bissell Professional Deep Cleaning	52	Ounces(OZ)	08/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1757559	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	08/09/22
1757565	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	08/09/22
1757570	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	08/09/22
1757569	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	08/09/22
1757568	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	08/09/22
1757561	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	08/09/22
1757564	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	08/09/22
1757562	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	08/09/22
1757560	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	08/09/22
1757563	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	08/09/22
1757567	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	08/09/22
1757566	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	08/09/22
1757571	-	World Health Organization Hand Sanitizer Formula (Ethanol-based)	1	Gallon(GAL)	08/09/22
1757572	-	World Health Organization Hand Sanitizer Formula (Ethanol-based)	1	Gallon(GAL)	08/09/22
1712856	109-99-9	Tetrahydrofuran anhydrous 99.9% inhibitor-free	100	Milliliter(ML)	08/09/22
1712860	109-99-9	Tetrahydrofuran anhydrous 99.9% inhibitor-free	100	Milliliter(ML)	08/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1712859	109-99-9	Tetrahydrofuran anhydrous 99.9% inhibitor-free	100	Milliliter(ML)	08/09/22
1712858	109-99-9	Tetrahydrofuran anhydrous 99.9% inhibitor-free	100	Milliliter(ML)	08/09/22
1712857	109-99-9	Tetrahydrofuran anhydrous 99.9% inhibitor-free	100	Milliliter(ML)	08/09/22
1757573	-	Pledge lemon clean furniture spray	13.8	Ounces(OZ)	08/09/22
1712862	64-17-5	Ethyl Alcohol Denatured (Proprietary Solvent)	4	Liters(L)	08/09/22
1757574	67-63-0	MULTI-PURPOSE ANTI-STATIC CLEANER	6	Ounces(OZ)	08/09/22
1712863	92112-69-1	Hexanes Certified ACS	1	Liters(L)	08/09/22
1757575	-	Old English Scratch Cover - Light Wood	8	Ounces(OZ)	08/09/22
1712864	-	Acetone-d6 (D 99.9%)	10	Gram(GM)	08/09/22
1757576	-	READ RIGHT STATIC STOPPER	14	Ounces(OZ)	08/09/22
1712867	138184-36-8	POLY[2-METHOXY-5-(2-ETHYLHEXYLOXY)-1 4-PHENYLENEVINYLENE]	1	Gram(GM)	08/09/22
1757577	-	Netcare Furniture Polish	16	Ounces(OZ)	08/09/22
1633956	-	PSX 700A CLEAR COAT CURE	0.17	Gallon(GAL)	08/09/22
1633959	-	PSX 700A CLEAR COAT CURE	0.17	Gallon(GAL)	08/09/22
1633965	-	PSX 700A CLEAR COAT CURE	0.17	Gallon(GAL)	08/09/22
1633971	-	PSX 700A CLEAR COAT CURE	0.17	Gallon(GAL)	08/09/22
1633972	-	PSX 700A CLEAR COAT CURE	0.17	Gallon(GAL)	08/09/22
1633974	-	PSX 700A CLEAR COAT CURE	0.17	Gallon(GAL)	08/09/22
1633970	-	PSX 700A CLEAR COAT CURE	0.17	Gallon(GAL)	08/09/22
1633969	-	PSX 700A CLEAR COAT CURE	0.17	Gallon(GAL)	08/09/22
1633973	-	PSX 700A CLEAR COAT CURE	0.17	Gallon(GAL)	08/09/22
1712868	1336-21-6	AMMONIUM HYDROXIDE 50%	1	Liters(L)	08/09/22
1757578	-	Kensington Dust Guardian Anti-Static Spray	32	Ounces(OZ)	08/09/22
1712870	76-60-8	BROMOCRESOL GREEN	5	Gram(GM)	08/09/22
1467440	-	PEEL STOP	1	Gallon(GAL)	08/09/22
1392944	-	PEEL STOP	1	Gallon(GAL)	08/09/22
1467441	-	PEEL STOP	1	Gallon(GAL)	08/09/22
1467471	-	PEEL STOP	1	Gallon(GAL)	08/09/22
1467438	-	PEEL STOP	1	Gallon(GAL)	08/09/22
1467437	-	PEEL STOP	1	Gallon(GAL)	08/09/22
1467447	-	PEEL STOP	1	Gallon(GAL)	08/09/22
1467443	-	PEEL STOP	1	Gallon(GAL)	08/09/22
1467470	-	PEEL STOP	1	Gallon(GAL)	08/09/22
1467449	-	PEEL STOP	1	Gallon(GAL)	08/09/22
1467448	-	PEEL STOP	1	Gallon(GAL)	08/09/22
1422500	-	POLYURETHANE SEALANT	10.1	Ounces(OZ)	08/09/22
1757579	-	DISINFECTANT SPRAY	19	Ounces(OZ)	08/09/22
1629892	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	08/09/22
1629893	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	08/09/22
1629887	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	08/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1629896	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	08/09/22
1629895	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	08/09/22
1629897	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	08/09/22
1757580	-	DISINFECTANT SPRAY	19	Ounces(OZ)	08/09/22
1629869	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	08/09/22
1629873	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	08/09/22
1629871	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	08/09/22
1629870	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	08/09/22
1629872	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	08/09/22
1757581	-	DISINFECTANT SPRAY	12.5	Ounces(OZ)	08/09/22
1757582	-	OFF! DEEP WOODS INSECT REPELLENT	4	Ounces(OZ)	08/09/22
1757583	-	OFF! DEEP WOODS INSECT REPELLENT	4	Ounces(OZ)	08/09/22
1712871	1733-12-6	CRESOL RED	5	Gram(GM)	08/09/22
1757584	-	WD-40	16	Ounces(OZ)	08/09/22
1757585	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	08/09/22
1757586	-	CLOROX	32	Ounces(OZ)	08/09/22
1757587	-	BLEACH	1	Gallon(GAL)	08/09/22
1712865	-	HX-200	1	Gallon(GAL)	08/09/22
1712866	-	HX-807	1	Pint(PT)	08/09/22
1712861	78-10-4	Tetraethyl orthosilicate 99.999% trace metals basis	100	Milliliter(ML)	08/09/22
1757589	-	WINDEX GLASS CLEANER	32	Ounces(OZ)	08/09/22
1712851	9004-57-3	ETHYL CELLULOSE	250	Gram(GM)	08/09/22
1712855	1941-30-6	TETRAPROPYLAMMONIUM BROMIDE	500	Gram(GM)	08/09/22
1712850	8000-41-7	Terpineol mixture of isomers anhydrous	250	Milliliter(ML)	08/09/22
1712852	13532-18-8	Methyl 3-(Methylthio)propionate	25	Gram(GM)	08/09/22
1712853	992-21-2	Lymecycline	100	Gram(GM)	08/09/22
1741491	-	SYLGARD 184 SILICONE ELASTOMER	1.1	Kilograms(KG)	08/09/22
1741492	-	SYLGARD 184 SILICONE ELASTOMER KIT	1.1	Kilograms(KG)	08/09/22
1712854	14024-63-6	Bis(2 4-pentanedionato)zinc(II)	100	Gram(GM)	08/09/22
1712720	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/09/22
1712721	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/09/22
1701284	-	Bismuth ICP Standard 10 000 ppm Bi in 5% HNO3	100	Milliliter(ML)	08/09/22
1701291	-	Bismuth ICP Standard 10 000 ppm Bi in 5% HNO3	100	Milliliter(ML)	08/09/22
1701286	-	Bismuth ICP Standard 10 000 ppm Bi in 5% HNO3	100	Milliliter(ML)	08/09/22
1701290	-	Bismuth ICP Standard 10 000 ppm Bi in 5% HNO3	100	Milliliter(ML)	08/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1701285	-	Bismuth ICP Standard 10 000 ppm Bi in 5% HNO3	100	Milliliter(ML)	08/09/22
1701287	-	Bismuth ICP Standard 10 000 ppm Bi in 5% HNO3	100	Milliliter(ML)	08/09/22
1701288	-	Bismuth ICP Standard 10 000 ppm Bi in 5% HNO3	100	Milliliter(ML)	08/09/22
1701289	-	Bismuth ICP Standard 10 000 ppm Bi in 5% HNO3	100	Milliliter(ML)	08/09/22
1712741	71310-21-9	11-MERCAPTOUNDECANOIC ACID	500	Milligram(MG)	08/09/22
1711899	-	10 000 ug/mL Silver	125	Milliliter(ML)	08/09/22
1711900	-	10 000 ug/mL Silver	125	Milliliter(ML)	08/09/22
1711902	-	10 000 ug/mL Barium	125	Milliliter(ML)	08/09/22
1711903	-	10 000 ug/mL Barium	125	Milliliter(ML)	08/09/22
1711904	-	10 000 ug/mL Cadmium	125	Milliliter(ML)	08/09/22
1711905	-	10 000 ug/mL Cadmium	125	Milliliter(ML)	08/09/22
1711911	-	10 000 ug/mL Strontium	125	Milliliter(ML)	08/09/22
1711912	-	10 000 ug/mL Strontium	125	Milliliter(ML)	08/09/22
1711913	-	10 000 ug/mL Strontium	125	Milliliter(ML)	08/09/22
1711914	-	10 000 ug/mL Yttrium	125	Milliliter(ML)	08/09/22
1711915	-	10 000 ug/mL Yttrium	125	Milliliter(ML)	08/09/22
1711901	-	10 000 ug/mL Barium	125	Milliliter(ML)	08/09/22
1711898	-	10 000 ug/mL Silver	125	Milliliter(ML)	08/09/22
1711906	-	10 000 ug/mL Cadmium	125	Milliliter(ML)	08/09/22
1711910	-	10 000 ug/mL Molybdenum	125	Milliliter(ML)	08/09/22
1711916	-	10 000 ug/mL Yttrium	125	Milliliter(ML)	08/09/22
1729895	-	SHEETROCK Brand PLUS 3 Lightweight All Purpose Joint Compound Ready-Mixed	4.5	Gallon(GAL)	08/10/22
1729899	-	SHEETROCK Brand PLUS 3 Lightweight All Purpose Joint Compound Ready-Mixed	4.5	Gallon(GAL)	08/10/22
1729898	-	SHEETROCK Brand PLUS 3 Lightweight All Purpose Joint Compound Ready-Mixed	4.5	Gallon(GAL)	08/10/22
1729897	-	SHEETROCK Brand PLUS 3 Lightweight All Purpose Joint Compound Ready-Mixed	4.5	Gallon(GAL)	08/10/22
1729896	-	SHEETROCK Brand PLUS 3 Lightweight All Purpose Joint Compound Ready-Mixed	4.5	Gallon(GAL)	08/10/22
1757588	-	Soft Scrub Cleanser with Bleach	24	Ounces(OZ)	08/10/22
1642855	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	08/10/22
1642856	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	08/10/22
1642924	-	DOWSIL 730 FS Solvent Resistant Sealant	3.04	Ounces(OZ)	08/10/22
1689677	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/10/22
1437175	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1437180	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1437205	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1437177	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1437178	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1437206	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1437179	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1437189	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1437181	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1437182	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1437183	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1437192	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1437184	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1437185	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1437186	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1437193	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1437196	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1437199	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1437200	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1437201	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1437202	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1437203	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1437191	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1437197	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1437190	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1437195	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1437176	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1437194	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1437187	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1437188	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1437198	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1437204	-	Freezemaster Antifreeze	5	Gallon(GAL)	08/10/22
1689832	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/10/22
1689836	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/10/22
1689837	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/10/22
1689838	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/10/22
1689835	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/10/22
1689834	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/10/22
1689833	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/10/22
1689831	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/10/22
1689830	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/10/22
1689829	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/10/22
1689828	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/10/22
1689825	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/10/22
1689824	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/10/22
1689826	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/10/22
1689827	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/10/22
1689678	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689722	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689708	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1689712	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689715	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689714	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689716	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689713	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689720	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689721	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689718	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689717	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689709	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689710	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689711	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689719	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689705	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689695	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689696	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689697	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689698	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689699	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689700	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689701	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689702	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689703	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689707	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689704	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689706	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689694	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689682	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689685	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689679	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689680	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689681	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689693	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689684	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689686	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689687	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689688	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689689	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689690	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689691	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689692	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689683	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/10/22
1689786	-	Compressed Air	220	Cubic Feet(CF)	08/10/22
1689789	-	Compressed Air	220	Cubic Feet(CF)	08/10/22
1689788	-	Compressed Air	220	Cubic Feet(CF)	08/10/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1689790	-	Compressed Air	220	Cubic Feet(CF)	08/10/22
1689787	-	Compressed Air	220	Cubic Feet(CF)	08/10/22
1689723	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/10/22
1689734	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/10/22
1689744	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/10/22
1689743	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/10/22
1689742	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/10/22
1689741	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/10/22
1689740	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/10/22
1689739	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/10/22
1689738	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/10/22
1689737	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/10/22
1689746	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/10/22
1689735	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/10/22
1689747	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/10/22
1689733	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/10/22
1689732	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/10/22
1689731	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/10/22
1689730	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/10/22
1689729	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/10/22
1689728	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/10/22
1689727	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/10/22
1689726	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/10/22
1689725	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/10/22
1689736	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/10/22
1689748	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/10/22
1689749	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/10/22
1689750	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/10/22
1689751	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/10/22
1689752	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/10/22
1689745	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/10/22
1689724	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/10/22
1689791	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/10/22
1689792	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/10/22
1689793	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/10/22
1689794	2551-62-4	SULFUR HEXAFLUORIDE	115	Pounds(LB)	08/10/22
1689799	2551-62-4	SULFUR HEXAFLUORIDE	115	Pounds(LB)	08/10/22
1689806	2551-62-4	SULFUR HEXAFLUORIDE	115	Pounds(LB)	08/10/22
1689804	2551-62-4	SULFUR HEXAFLUORIDE	115	Pounds(LB)	08/10/22
1689807	2551-62-4	SULFUR HEXAFLUORIDE	115	Pounds(LB)	08/10/22
1689808	2551-62-4	SULFUR HEXAFLUORIDE	115	Pounds(LB)	08/10/22
1689795	2551-62-4	SULFUR HEXAFLUORIDE	115	Pounds(LB)	08/10/22
1689796	2551-62-4	SULFUR HEXAFLUORIDE	115	Pounds(LB)	08/10/22
1689797	2551-62-4	SULFUR HEXAFLUORIDE	115	Pounds(LB)	08/10/22
1689798	2551-62-4	SULFUR HEXAFLUORIDE	115	Pounds(LB)	08/10/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1689805	2551-62-4	SULFUR HEXAFLUORIDE	115	Pounds(LB)	08/10/22
1689800	2551-62-4	SULFUR HEXAFLUORIDE	115	Pounds(LB)	08/10/22
1689802	2551-62-4	SULFUR HEXAFLUORIDE	115	Pounds(LB)	08/10/22
1689803	2551-62-4	SULFUR HEXAFLUORIDE	115	Pounds(LB)	08/10/22
1689801	2551-62-4	SULFUR HEXAFLUORIDE	115	Pounds(LB)	08/10/22
1689809	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/10/22
1689817	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/10/22
1689810	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/10/22
1689811	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/10/22
1689812	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/10/22
1689813	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/10/22
1689814	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/10/22
1689816	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/10/22
1689818	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/10/22
1689819	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/10/22
1689820	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/10/22
1689821	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/10/22
1689822	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/10/22
1689823	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/10/22
1689815	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/10/22
1689872	74-98-6	PROPANE	11	Gallon(GAL)	08/10/22
1689873	74-98-6	PROPANE	11	Gallon(GAL)	08/10/22
1689874	74-98-6	PROPANE	11	Gallon(GAL)	08/10/22
1712742	16903-35-8	Gold(III) chloride solution	10	Gram(GM)	08/10/22
1729900	-	ULTRA GREY SILICONE GASKET MAKER	3.5	Ounces(OZ)	08/10/22
1729902	-	ULTRA GREY SILICONE GASKET MAKER	3.5	Ounces(OZ)	08/10/22
1729901	-	ULTRA GREY SILICONE GASKET MAKER	3.5	Ounces(OZ)	08/10/22
1729903	-	ULTRA GREY SILICONE GASKET MAKER	3.5	Ounces(OZ)	08/10/22
V00000C1C0	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	08/10/22
V00000C1BF	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	08/10/22
V00000C1BE	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	08/10/22
V00000C1BD	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	08/10/22
1729904	-	STA-BIL FUEL STABILIZER	8	Ounces(OZ)	08/10/22
1729905	-	STA-BIL FUEL STABILIZER	32	Ounces(OZ)	08/10/22
1729834	-	Resuflor 3561 Epoxy Resin Glaze (Part B) Standard Hardener	1	Gallon(GAL)	08/10/22
1729851	-	Resuflor 3561 Epoxy Resin Glaze (Part B) Standard Hardener	1	Gallon(GAL)	08/10/22
1729852	-	Resuflor 3561 Epoxy Resin Glaze (Part B) Standard Hardener	1	Gallon(GAL)	08/10/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1729850	-	Resuflor 3561 Epoxy Resin Glaze (Part B) Standard Hardener	1	Gallon(GAL)	08/10/22
1729855	-	Resuflor 3561 Epoxy Resin Glaze (Part B) Standard Hardener	1	Gallon(GAL)	08/10/22
1729856	-	Resuflor 3561 Epoxy Resin Glaze (Part B) Standard Hardener	1	Gallon(GAL)	08/10/22
1729846	-	Resuflor 3561 Epoxy Resin Glaze (Part B) Standard Hardener	1	Gallon(GAL)	08/10/22
1729854	-	Resuflor 3561 Epoxy Resin Glaze (Part B) Standard Hardener	1	Gallon(GAL)	08/10/22
1729841	-	Resuflor 3561 Epoxy Resin Glaze (Part B) Standard Hardener	1	Gallon(GAL)	08/10/22
1729845	-	Resuflor 3561 Epoxy Resin Glaze (Part B) Standard Hardener	1	Gallon(GAL)	08/10/22
1729844	-	Resuflor 3561 Epoxy Resin Glaze (Part B) Standard Hardener	1	Gallon(GAL)	08/10/22
1729843	-	Resuflor 3561 Epoxy Resin Glaze (Part B) Standard Hardener	1	Gallon(GAL)	08/10/22
1729853	-	Resuflor 3561 Epoxy Resin Glaze (Part B) Standard Hardener	1	Gallon(GAL)	08/10/22
1729842	-	Resuflor 3561 Epoxy Resin Glaze (Part B) Standard Hardener	1	Gallon(GAL)	08/10/22
1729849	-	Resuflor 3561 Epoxy Resin Glaze (Part B) Standard Hardener	1	Gallon(GAL)	08/10/22
1729840	-	Resuflor 3561 Epoxy Resin Glaze (Part B) Standard Hardener	1	Gallon(GAL)	08/10/22
1729839	-	Resuflor 3561 Epoxy Resin Glaze (Part B) Standard Hardener	1	Gallon(GAL)	08/10/22
1729847	-	Resuflor 3561 Epoxy Resin Glaze (Part B) Standard Hardener	1	Gallon(GAL)	08/10/22
1729837	-	Resuflor 3561 Epoxy Resin Glaze (Part B) Standard Hardener	1	Gallon(GAL)	08/10/22
1729836	-	Resuflor 3561 Epoxy Resin Glaze (Part B) Standard Hardener	1	Gallon(GAL)	08/10/22
1729835	-	Resuflor 3561 Epoxy Resin Glaze (Part B) Standard Hardener	1	Gallon(GAL)	08/10/22
1729838	-	Resuflor 3561 Epoxy Resin Glaze (Part B) Standard Hardener	1	Gallon(GAL)	08/10/22
1729848	-	Resuflor 3561 Epoxy Resin Glaze (Part B) Standard Hardener	1	Gallon(GAL)	08/10/22
1729857	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729877	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1729879	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729880	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729881	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729882	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729886	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729883	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729884	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729885	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729860	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729858	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729868	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729878	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729859	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729862	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729863	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729864	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729865	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729861	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729867	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729875	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729869	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729870	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1729871	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729872	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729873	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729874	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729866	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729889	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729888	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729887	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729876	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	5	Gallon(GAL)	08/10/22
1729890	-	XIM Primer White 400	3.8	Quarts(QT)	08/10/22
1058715	-	Fresh Gear Disinfectant	3.785	Gallon(GAL)	08/10/22
1058656	-	FK270-G	3.785	Gallon(GAL)	08/10/22
1058657	-	Fresh Gear Disinfectant	3.785	Gallon(GAL)	08/10/22
1741921	64-17-5	Ethyl Alcohol Denatured (Proprietary Solvent)	4	Liters(L)	08/10/22
1058666	-	Fresh Gear Disinfectant	3.785	Gallon(GAL)	08/10/22
1058675	-	Fresh Gear Disinfectant	3.785	Gallon(GAL)	08/10/22
1058684	-	Fresh Gear Disinfectant	3.785	Gallon(GAL)	08/10/22
1058693	-	Fresh Gear Disinfectant	3.785	Gallon(GAL)	08/10/22
1741920	64-17-5	Ethyl Alcohol Denatured (Proprietary Solvent)	4	Liters(L)	08/10/22
1741919	64-17-5	ETHYL ALCOHOL (ETHANOL) (GRAIN GRAPE ALCOHOL)(200 PROOF)	4	Liters(L)	08/10/22
1058658	-	FK270-G	3.785	Gallon(GAL)	08/10/22
1058667	-	FK270-G	3.785	Gallon(GAL)	08/10/22
1058676	-	FK270-G	3.785	Gallon(GAL)	08/10/22
1058685	-	FK270-G	3.785	Gallon(GAL)	08/10/22
1741918	64-17-5	Ethyl Alcohol Denatured (Proprietary Solvent)	4	Liters(L)	08/10/22
1058694	-	FK270-G	3.785	Gallon(GAL)	08/10/22
1729891	-	SHEETROCK LIGHTWEIGHT ALL PURPOSE JOINT COMPOUND	4.5	Gallon(GAL)	08/10/22
1729892	-	SHEETROCK LIGHTWEIGHT ALL PURPOSE JOINT COMPOUND	4.5	Gallon(GAL)	08/10/22
1729894	-	SHEETROCK LIGHTWEIGHT ALL PURPOSE JOINT COMPOUND	4.5	Gallon(GAL)	08/10/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1729893	-	SHEETROCK LIGHTWEIGHT ALL PURPOSE JOINT COMPOUND	4.5	Gallon(GAL)	08/10/22
1729754	-	Ardex P 51	4	Gallon(GAL)	08/10/22
1729757	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729765	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729766	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729764	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729763	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729762	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729767	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729760	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729776	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729759	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729761	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729777	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729788	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729787	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729786	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729785	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729784	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729782	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729780	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729774	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729778	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729768	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729781	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729775	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729773	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729772	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729771	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729770	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729769	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729779	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729783	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729758	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729797	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729808	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729805	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729804	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729803	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729802	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729801	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729800	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729789	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729798	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1729827	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729796	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729795	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729794	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729793	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729792	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729791	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729790	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729799	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729816	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729825	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729824	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729823	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729822	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729821	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729820	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729819	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729806	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729817	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729826	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729815	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729814	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729813	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729812	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729811	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729810	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729807	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729818	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729809	-	WALL TEXTURE SPRAY ON	20	Ounces(OZ)	08/10/22
1729755	-	Chemsafe Clear	5	Gallon(GAL)	08/10/22
1729756	-	Chemsafe Clear	5	Gallon(GAL)	08/10/22
1729829	-	Resuflor 3746 High Performance Epoxy (Part B) Hardener	5	Gallon(GAL)	08/10/22
1729831	-	Resuflor 3746 High Performance Epoxy (Part B) Hardener	5	Gallon(GAL)	08/10/22
1729832	-	Resuflor 3746 High Performance Epoxy (Part B) Hardener	5	Gallon(GAL)	08/10/22
1729830	-	Resuflor 3746 High Performance Epoxy (Part B) Hardener	5	Gallon(GAL)	08/10/22
1729833	-	Resuflor 3746 High Performance Epoxy (Part B) Hardener	5	Gallon(GAL)	08/10/22
1729731	-	Permacryl Int Latex Satin W/B	608	Ounces(OZ)	08/10/22
1729740	-	Permacryl Int Latex Satin W/B	608	Ounces(OZ)	08/10/22
1729739	-	Permacryl Int Latex Satin W/B	608	Ounces(OZ)	08/10/22
1729732	-	Permacryl Int Latex Satin W/B	608	Ounces(OZ)	08/10/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1729734	-	Permacryl Int Latex Satin W/B	608	Ounces(OZ)	08/10/22
1729738	-	Permacryl Int Latex Satin W/B	608	Ounces(OZ)	08/10/22
1729737	-	Permacryl Int Latex Satin W/B	608	Ounces(OZ)	08/10/22
1729736	-	Permacryl Int Latex Satin W/B	608	Ounces(OZ)	08/10/22
1729735	-	Permacryl Int Latex Satin W/B	608	Ounces(OZ)	08/10/22
1729733	-	Permacryl Int Latex Satin W/B	608	Ounces(OZ)	08/10/22
1729745	-	Vers-Acryl 222 S/G Finish Neutral Base	113	Ounces(OZ)	08/10/22
1729746	-	Vers-Acryl 222 S/G Finish Neutral Base	113	Ounces(OZ)	08/10/22
1729747	-	Vers-Acryl 222 S/G Finish Neutral Base	113	Ounces(OZ)	08/10/22
1713150	141-78-6	Ethyl acetate ACS 99.5	4	Liters(L)	08/10/22
1713157	141-78-6	Ethyl acetate ACS 99.5	4	Liters(L)	08/10/22
1713151	141-78-6	Ethyl acetate ACS 99.5	4	Liters(L)	08/10/22
1713153	141-78-6	Ethyl acetate ACS 99.5	4	Liters(L)	08/10/22
1713154	141-78-6	Ethyl acetate ACS 99.5	4	Liters(L)	08/10/22
1713155	141-78-6	Ethyl acetate ACS 99.5	4	Liters(L)	08/10/22
1713152	141-78-6	Ethyl acetate ACS 99.5	4	Liters(L)	08/10/22
1713156	141-78-6	Ethyl acetate ACS 99.5	4	Liters(L)	08/10/22
1713158	92112-69-1	Hexanes Certified ACS	4	Liters(L)	08/10/22
1713162	92112-69-1	Hexanes Certified ACS	4	Liters(L)	08/10/22
1713164	92112-69-1	Hexanes Certified ACS	4	Liters(L)	08/10/22
1713161	92112-69-1	Hexanes Certified ACS	4	Liters(L)	08/10/22
1713159	92112-69-1	Hexanes Certified ACS	4	Liters(L)	08/10/22
1713160	92112-69-1	Hexanes Certified ACS	4	Liters(L)	08/10/22
1713163	92112-69-1	Hexanes Certified ACS	4	Liters(L)	08/10/22
1713165	92112-69-1	Hexanes Certified ACS	4	Liters(L)	08/10/22
1713174	22306-37-2	BISMUTH(III) ACETATE	10	Gram(GM)	08/10/22
1729741	-	Vers-Acryl 222 S/G Finish White Base	121.6	Ounces(OZ)	08/10/22
1729744	-	Vers-Acryl 222 S/G Finish White Base	121.6	Ounces(OZ)	08/10/22
1729743	-	Vers-Acryl 222 S/G Finish White Base	121.6	Ounces(OZ)	08/10/22
1729742	-	Vers-Acryl 222 S/G Finish White Base	121.6	Ounces(OZ)	08/10/22
1713126	462-06-6	Fluorobenzene 99%	500	Gram(GM)	08/10/22
1713127	462-06-6	Fluorobenzene 99%	500	Gram(GM)	08/10/22
1713128	462-06-6	Fluorobenzene 99%	500	Gram(GM)	08/10/22
1713129	181058-08-2	1 3 5-Tris(bromomethyl)-2 4 6- triethylbenzene	5	Gram(GM)	08/10/22
1713130	181058-08-2	1 3 5-Tris(bromomethyl)-2 4 6- triethylbenzene	5	Gram(GM)	08/10/22
1713131	123-91-1	1 4-Dioxane anhydrous 99.8%	100	Milliliter(ML)	08/10/22
1713132	501-65-5	DIPHENYLACETYLENE	25	Gram(GM)	08/10/22
1713134	501-65-5	DIPHENYLACETYLENE	25	Gram(GM)	08/10/22
1713133	501-65-5	DIPHENYLACETYLENE	25	Gram(GM)	08/10/22
1713135	7782-40-3	Diamond Powder GMM 30-40	1000	Gram(GM)	08/10/22
1713140	7782-40-3	Diamond Powder GMM 30-40	1000	Gram(GM)	08/10/22
1713139	7782-40-3	Diamond Powder GMM 30-40	1000	Gram(GM)	08/10/22
1713138	7782-40-3	Diamond Powder GMM 30-40	1000	Gram(GM)	08/10/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1713137	7782-40-3	Diamond Powder GMM 30-40	1000	Gram(GM)	08/10/22
1713136	7782-40-3	Diamond Powder GMM 30-40	1000	Gram(GM)	08/10/22
1713141	24937-78-8	Poly(ethylene-co-vinyl acetate)	250	Gram(GM)	08/10/22
1713142	-	Plaster Usg#1 Pottery	50	Pounds(LB)	08/10/22
1713143	-	Plaster Usg#1 Pottery	50	Pounds(LB)	08/10/22
1713145	-	Plaster Usg#1 Pottery	50	Pounds(LB)	08/10/22
1713144	-	Plaster Usg#1 Pottery	50	Pounds(LB)	08/10/22
1711917	-	Silica Reagent Set High Range	10	Milliliter(ML)	08/10/22
1711918	-	Silica Reagent Set High Range	10	Milliliter(ML)	08/10/22
1711919	-	Silica Reagent Set High Range	10	Milliliter(ML)	08/10/22
1711921	-	Silica Reagent Set High Range	10	Milliliter(ML)	08/10/22
1711920	-	Silica Reagent Set High Range	10	Milliliter(ML)	08/10/22
1711922	-	Precision Plus Kaleidoscope Protein Standards	500	Microliter	08/10/22
1711923	-	Precision Plus Kaleidoscope Protein Standards	500	Microliter	08/10/22
1702243	-	CORROSION INHIBITOR	16	Ounces(OZ)	08/10/22
1702244	-	CORROSION INHIBITOR	16	Ounces(OZ)	08/10/22
1702245	-	CorrosionX	16	Ounces(OZ)	08/10/22
1702246	-	CorrosionX	16	Ounces(OZ)	08/10/22
1711907	-	10 000 ug/mL Scandium	125	Milliliter(ML)	08/10/22
1711908	-	10 000 ug/mL Scandium	125	Milliliter(ML)	08/10/22
1711909	-	10 000 ug/mL Scandium	125	Milliliter(ML)	08/10/22
1740157	-	10 000 ug/mL Cesium	125	Milliliter(ML)	08/10/22
1740158	-	10 000 ug/mL Cesium	125	Milliliter(ML)	08/10/22
1708883	100-39-0	Benzyl Bromide (stabilized with Propylene Oxide) 98.0+%	100	Gram(GM)	08/10/22
1713287	-	VEROCLEAR RGD810	3.6	Kilograms(KG)	08/10/22
1713289	-	VEROCLEAR RGD810	3.6	Kilograms(KG)	08/10/22
1713288	-	VEROCLEAR RGD810	3.6	Kilograms(KG)	08/10/22
1713291	73891-15-3	(-)-(18-Crown-6)-2 3 11 12-tetracarboxylic acid	100	Milligram(MG)	08/10/22
1713292	73891-15-3	(-)-(18-Crown-6)-2 3 11 12-tetracarboxylic acid	100	Milligram(MG)	08/10/22
1707109	7647-01-0	Hydrochloric Acid Optima	1	Liters(L)	08/10/22
1739908	110-54-3	HEXANES (CERTIFIED ACS)	4	Liters(L)	08/10/22
1739911	110-54-3	HEXANES (CERTIFIED ACS)	4	Liters(L)	08/10/22
1739913	110-54-3	HEXANES (CERTIFIED ACS)	4	Liters(L)	08/10/22
1739914	110-54-3	HEXANES (CERTIFIED ACS)	4	Liters(L)	08/10/22
1739909	110-54-3	HEXANES (CERTIFIED ACS)	4	Liters(L)	08/10/22
1739912	110-54-3	HEXANES (CERTIFIED ACS)	4	Liters(L)	08/10/22
1739915	110-54-3	HEXANES (CERTIFIED ACS)	4	Liters(L)	08/10/22
1739910	110-54-3	HEXANES (CERTIFIED ACS)	4	Liters(L)	08/10/22
1707108	7647-01-0	Hydrochloric Acid Optima	1	Liters(L)	08/10/22
1707107	7647-01-0	Hydrochloric Acid Optima	1	Liters(L)	08/10/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1739916	141-78-6	Ethyl Acetate (Certified ACS)	4	Liters(L)	08/10/22
1707110	7647-01-0	Hydrochloric Acid Optima	1	Liters(L)	08/10/22
1707111	7647-01-0	Hydrochloric Acid Optima	1	Liters(L)	08/10/22
1739920	141-78-6	Ethyl Acetate (Certified ACS)	4	Liters(L)	08/10/22
1739923	141-78-6	Ethyl Acetate (Certified ACS)	4	Liters(L)	08/10/22
1739917	141-78-6	Ethyl Acetate (Certified ACS)	4	Liters(L)	08/10/22
1739921	141-78-6	Ethyl Acetate (Certified ACS)	4	Liters(L)	08/10/22
1739919	141-78-6	Ethyl Acetate (Certified ACS)	4	Liters(L)	08/10/22
1739918	141-78-6	Ethyl Acetate (Certified ACS)	4	Liters(L)	08/10/22
1739922	141-78-6	Ethyl Acetate (Certified ACS)	4	Liters(L)	08/10/22
1739931	67-63-0	2-Propanol ACS Reagent 99.5%	5	Gallon(GAL)	08/10/22
1739936	67-63-0	2-Propanol ACS Reagent 99.5%	5	Gallon(GAL)	08/10/22
1739932	67-63-0	2-Propanol ACS Reagent 99.5%	5	Gallon(GAL)	08/10/22
1739933	67-63-0	2-Propanol ACS Reagent 99.5%	5	Gallon(GAL)	08/10/22
1739934	67-63-0	2-Propanol ACS Reagent 99.5%	5	Gallon(GAL)	08/10/22
1739935	67-63-0	2-Propanol ACS Reagent 99.5%	5	Gallon(GAL)	08/10/22
1740054	7647-01-0	Hydrochloric Acid Optima	1	Liters(L)	08/10/22
1740056	7647-01-0	Hydrochloric Acid Optima	1	Liters(L)	08/10/22
1740057	7647-01-0	Hydrochloric Acid Optima	1	Liters(L)	08/10/22
1740055	7647-01-0	Hydrochloric Acid Optima	1	Liters(L)	08/10/22
1740058	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	08/10/22
1740060	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	08/10/22
1740063	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	08/10/22
1740062	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	08/10/22
1740061	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	08/10/22
1740059	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	08/10/22
1740064	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	1	Liters(L)	08/10/22
1740065	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	1	Liters(L)	08/10/22
1739317	69011-20-7	AmberChrom 50WX8 50-100 Mesh (H+) Cation Exchange Resin	500	Gram(GM)	08/10/22
1740067	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	08/10/22
1740068	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	08/10/22
1740069	7664-39-3	Hydrofluoric Acid 47-51% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/10/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1740070	7664-39-3	Hydrofluoric Acid 47-51% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/10/22
1740071	7664-39-3	Hydrofluoric Acid 47-51% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/10/22
1740072	7664-39-3	Hydrofluoric Acid 47-51% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/10/22
1740152	67-63-0	Isopropanol Optima LC/MS Grade	4	Liters(L)	08/10/22
1740153	67-63-0	Isopropanol Optima LC/MS Grade	4	Liters(L)	08/10/22
1740154	67-63-0	Isopropanol Optima LC/MS Grade	4	Liters(L)	08/10/22
1740155	67-63-0	Isopropanol Optima LC/MS Grade	4	Liters(L)	08/10/22
1701470	-	Eichrom Sr Resin Eichrom Sr Resin Cartridge	100	Gram(GM)	08/10/22
1740159	-	10 000 ug/mL Cesium	125	Milliliter(ML)	08/10/22
1740160	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/10/22
1740161	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/10/22
1740162	7647-01-0	Hydrochloric Acid Optima	500	Milliliter(ML)	08/10/22
1740163	69011-20-7	DOWEX 50W-X8 CATION EXCHANGE RESIN HYDROGEN FORM	500	Gram(GM)	08/10/22
1740165	69011-20-7	DOWEX 50W-X8 CATION EXCHANGE RESIN HYDROGEN FORM	500	Gram(GM)	08/10/22
1740166	69011-20-7	DOWEX 50W-X8 CATION EXCHANGE RESIN HYDROGEN FORM	500	Gram(GM)	08/10/22
1740164	69011-20-7	DOWEX 50W-X8 CATION EXCHANGE RESIN HYDROGEN FORM	500	Gram(GM)	08/10/22
1740167	144-62-7	Oxalic acid purified grade 99.999% trace metals basis	1	Kilograms(KG)	08/10/22
1740168	144-62-7	Oxalic acid purified grade 99.999% trace metals basis	1	Kilograms(KG)	08/10/22
1713315	12027-38-2	Silicotungstic Acid Reagent	25	Gram(GM)	08/10/22
1713314	12027-38-2	Silicotungstic Acid Reagent	25	Gram(GM)	08/10/22
1713317	12027-38-2	Silicotungstic Acid Reagent	25	Gram(GM)	08/10/22
1713316	12027-38-2	Silicotungstic Acid Reagent	25	Gram(GM)	08/10/22
1729748	-	Permacryl Int Latex Satin W/B	603	Ounces(OZ)	08/11/22
1729752	-	Permacryl Int Latex Satin W/B	603	Ounces(OZ)	08/11/22
1729749	-	Permacryl Int Latex Satin W/B	603	Ounces(OZ)	08/11/22
1729751	-	Permacryl Int Latex Satin W/B	603	Ounces(OZ)	08/11/22
1729750	-	Permacryl Int Latex Satin W/B	603	Ounces(OZ)	08/11/22
1729753	-	Permacryl Int Latex Satin W/B	603	Ounces(OZ)	08/11/22
1740169	-	POTATO DEXTROSE AGAR	500	Gram(GM)	08/11/22
1740170	-	POTATO DEXTROSE AGAR	500	Gram(GM)	08/11/22
1740171	7803-68-1	TELLURIC ACID	100	Gram(GM)	08/11/22
1740174	7803-68-1	TELLURIC ACID	100	Gram(GM)	08/11/22
1740172	7803-68-1	TELLURIC ACID	100	Gram(GM)	08/11/22
1740173	7803-68-1	TELLURIC ACID	100	Gram(GM)	08/11/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1740324	-	HYDROBROMIC ACID OPTIMA	2	Liters(L)	08/11/22
1740326	-	HYDROBROMIC ACID OPTIMA	2	Liters(L)	08/11/22
1740325	-	HYDROBROMIC ACID OPTIMA	2	Liters(L)	08/11/22
1320470	7664-38-2	PHOSPHORIC ACID 85%	2	Liters(L)	08/11/22
1320472	7664-38-2	PHOSPHORIC ACID 85%	2	Liters(L)	08/11/22
1320471	7664-38-2	PHOSPHORIC ACID 85%	2	Liters(L)	08/11/22
1320473	7664-38-2	PHOSPHORIC ACID 85%	2	Liters(L)	08/11/22
1320474	7664-38-2	PHOSPHORIC ACID 85%	2	Liters(L)	08/11/22
1740327	-	High Temp Resin	1	Liters(L)	08/11/22
1740330	-	High Temp Resin	1	Liters(L)	08/11/22
1740329	-	High Temp Resin	1	Liters(L)	08/11/22
1740328	-	High Temp Resin	1	Liters(L)	08/11/22
1740323	-	Reinforced Clostridial Medium	500	Gram(GM)	08/11/22
1740322	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	08/11/22
1740319	-	MELTING POINT STANDARDS	5	Gram(GM)	08/11/22
1740320	42448-04-4	2 7-Diphenyl-9H-carbazole	5	Gram(GM)	08/11/22
1740321	9/9/7775	SODIUM CHLORATE	500	Gram(GM)	08/11/22
1739924	109-99-9	Tetrahydrofuran anhydrous 99.8+% stab. with 0.025% BHT	1	Liters(L)	08/11/22
1739925	-	LAEMMLI SAMPLE BUFFER	10	Milliliter(ML)	08/11/22
1739927	52-90-4	L-CYSTEINE	2.5	Gram(GM)	08/11/22
1739929	7440-31-5	TIN SHOT	500	Gram(GM)	08/11/22
1739930	7440-31-5	TIN SHOT	500	Gram(GM)	08/11/22
1739928	50890-67-0	4 5-Diazafluoren-9-one	25	Gram(GM)	08/11/22
1739947	67-68-5	Qubit dsDNA BR Assay Kit	56	Milliliter(ML)	08/11/22
1739948	-	Microtox Reconstitution Solution	50	Milliliter(ML)	08/11/22
1437135	-	Hercules Staput	14	Ounces(OZ)	08/11/22
1437136	-	Hercules Staput	14	Ounces(OZ)	08/11/22
1437133	-	Oatey All Purpose Clear Cement	14	Ounces(OZ)	08/11/22
1437134	-	Oatey All Purpose Clear Cement	14	Ounces(OZ)	08/11/22
1437131	-	Oatey Clear Primer	14	Ounces(OZ)	08/11/22
1437132	-	Oatey Clear Primer	14	Ounces(OZ)	08/11/22
1739926	112-60-7	tetraethylene glycol	1	Liters(L)	08/11/22
1740156	56525-79-2	3 6-Diphenyl-9H-carbazole	5	Gram(GM)	08/11/22
1740147	97-94-9	Triethylborane min 99.8%	100	Gram(GM)	08/11/22
1740148	109-66-0	n-Pentane 99+% extra pure anhydrous	4	Liters(L)	08/11/22
1740151	109-66-0	n-Pentane 99+% extra pure anhydrous	4	Liters(L)	08/11/22
1740150	109-66-0	n-Pentane 99+% extra pure anhydrous	4	Liters(L)	08/11/22
1740149	109-66-0	n-Pentane 99+% extra pure anhydrous	4	Liters(L)	08/11/22
1713294	106627-54-7	SULFO-NHS	500	Milligram(MG)	08/11/22
1713295	92136-39-5	N-Boc-Propargylamine	25	Gram(GM)	08/11/22
1713296	-	White Lithium Grease (aerosol)	10	Ounces(OZ)	08/11/22
1713297	-	White Lithium Grease (aerosol)	10	Ounces(OZ)	08/11/22
1713299	69011-17-2	AG MP-1M Anion Exchange Resin	500	Gram(GM)	08/11/22
1713300	69011-17-2	AG MP-1M Anion Exchange Resin	500	Gram(GM)	08/11/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1713308	78-10-4	Tetraethoxysilane 99+ %	250	Milliliter(ML)	08/11/22
1713309	78-10-4	Tetraethoxysilane 99+ %	250	Milliliter(ML)	08/11/22
1713304	7727-21-1	POTASSIUM PERSULFATE	100	Gram(GM)	08/11/22
1713290	13472-33-8	SODIUM PERRHENATE 99.9	5	Gram(GM)	08/11/22
1713402	-	10X TRIS/GLYCINE/SDS BUFFER	1	Liters(L)	08/11/22
1713404	-	10X TRIS/GLYCINE/SDS BUFFER	1	Liters(L)	08/11/22
1713403	-	10X TRIS/GLYCINE/SDS BUFFER	1	Liters(L)	08/11/22
1713415	-	Indicator solution Amtax 0.2 -12 mg/L and 0.2-30 mg/L	1	Liters(L)	08/11/22
1713418	-	Indicator solution Amtax 0.2 -12 mg/L and 0.2-30 mg/L	1	Liters(L)	08/11/22
1713419	-	Indicator solution Amtax 0.2 -12 mg/L and 0.2-30 mg/L	1	Liters(L)	08/11/22
1713417	-	Indicator solution Amtax 0.2 -12 mg/L and 0.2-30 mg/L	1	Liters(L)	08/11/22
1713416	-	Indicator solution Amtax 0.2 -12 mg/L and 0.2-30 mg/L	1	Liters(L)	08/11/22
1713420	-	Indicator solution Amtax 0.2 -12 mg/L and 0.2-30 mg/L	1	Liters(L)	08/11/22
1713412	175923-07-6	Tris(N N-bis(trimethylsilyl)amide) lanthanum(III)	5	Gram(GM)	08/11/22
1713414	175923-07-6	Tris(N N-bis(trimethylsilyl)amide) lanthanum(III)	5	Gram(GM)	08/11/22
1713413	175923-07-6	Tris(N N-bis(trimethylsilyl)amide) lanthanum(III)	5	Gram(GM)	08/11/22
1713405	-	Diamond Powder GMM	1000	Gram(GM)	08/11/22
1713406	-	Diamond Powder GMM	1000	Gram(GM)	08/11/22
1713407	252237-39-1	(3 3 4 4 5 5 6 6 7 7 8 8 9 9 10 10 11 11 12 1 2 12-Heneicosafluorododecyl)phosphonic acid	250	Milligram(MG)	08/11/22
1713408	252237-39-1	(3 3 4 4 5 5 6 6 7 7 8 8 9 9 10 10 11 11 12 1 2 12-Heneicosafluorododecyl)phosphonic acid	250	Milligram(MG)	08/11/22
1713409	7440-55-3	GALLIUM 99.9999%	10	Gram(GM)	08/11/22
1713410	127-07-1	HYDROXYUREA	1	Gram(GM)	08/11/22
1713411	4472-41-7	N N-Dimethylformamide-d7 99.5% (Isotopic)	10	Gram(GM)	08/11/22
1713401	-	Momentive clear one-part RTV12 potting & encapsulating compound	5	Gallon(GAL)	08/11/22
1713396	13472-33-8	SODIUM PERRHENATE 99.9	5	Gram(GM)	08/11/22
1713397	230-17-1	BENZO[C]CINNOLINE	1	Gram(GM)	08/11/22
1713398	1914-99-4	CHLOROPHOSPHONAZO III	1	Gram(GM)	08/11/22
1713399	13759-92-7	EUROPIUM (III) CHLORIDE HEXAHYDRATE	5	Gram(GM)	08/11/22
1713400	9005-38-3	ALGINIC ACID SODIUM SALT	250	Gram(GM)	08/11/22
1713393	-	SPINDLE LUBRICANT	5	Liters(L)	08/11/22
1713394	-	SPINDLE LUBRICANT	5	Liters(L)	08/11/22
1713395	-	SPINDLE LUBRICANT	5	Liters(L)	08/11/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1713391	1826-67-1	Vinylmagnesium bromide solution 1.0 M in THF	100	Milliliter(ML)	08/11/22
1713331	107-83-5	HEXANE MIXTURE OF ISOMERS	200	Liters(L)	08/11/22
1689884	74-98-6	PROPANE	50	Pounds(LB)	08/11/22
1689895	-	10ppm Nitrogen Dioxide/Balance Air	34	Liters(L)	08/11/22
1689892	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/11/22
1689986	74-98-6	PROPANE	11	Gallon(GAL)	08/11/22
1689890	-	HYDROGEN GAS	220	Cubic Feet(CF)	08/11/22
1689889	-	HYDROGEN GAS	220	Cubic Feet(CF)	08/11/22
1689888	-	HYDROGEN GAS	220	Cubic Feet(CF)	08/11/22
1689887	-	HYDROGEN GAS	220	Cubic Feet(CF)	08/11/22
1689891	-	25% Carbon Dioxide 75% Argon	220	Cubic Feet(CF)	08/11/22
1689885	7440-59-7	HELIUM REFRIGERATED LIQUID (CRYOGENIC LIQUID)	100	Liters(L)	08/11/22
1713293	27360-07-2	Poly(vinyl butyral-co-vinyl alcohol-co-vinyl acetate)	250	Gram(GM)	08/11/22
1713298	109-66-0	Pentane anhydrous 99+%	2	Liters(L)	08/11/22
1437252	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437255	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437262	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437257	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437258	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437259	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437260	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437263	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437261	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437256	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437271	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437281	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437280	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437279	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437278	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437277	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437276	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437275	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437274	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437282	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437272	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437287	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437270	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437269	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437268	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437267	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437266	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437265	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1437273	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437295	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437305	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437304	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437303	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437302	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437301	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437300	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437299	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437298	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437285	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437296	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437283	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437294	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437293	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437292	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437291	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437289	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437288	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437286	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437284	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437297	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437290	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437313	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437318	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437317	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437316	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437314	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437312	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437311	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437310	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437309	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437308	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437307	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1437315	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	08/11/22
1713301	96-49-1	Ethylene carbonate anhydrous 99%	1	Liters(L)	08/12/22
1713302	301-10-0	Tin(II) 2-ethylhexanoate 95%	100	Gram(GM)	08/12/22
1713303	13031-32-8	Nitromethane-d3 for NMR 99 atom % D	25	Milliliter(ML)	08/12/22
1713318	-	Microtox Acute Toxicity Reagent	100	Milliliter(ML)	08/12/22
1713305	20208-23-5	Hexane-1 6-diammonium iodide	50	Gram(GM)	08/12/22
1713306	593-51-1	Methylammonium chloride	5	Gram(GM)	08/12/22
1713307	593-51-1	Methylammonium chloride	5	Gram(GM)	08/12/22
1713332	-	EBONOL C	110	Pounds(LB)	08/12/22
1713392	-	Dymax OP-4-20641 UV Optical Adhesive	30	Milliliter(ML)	08/12/22
1741065	-	TBE-Urea Polyacrylamide	45	Microliter	08/12/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1741072	-	TBE-Urea Polyacrylamide	45	Microliter	08/12/22
1741073	-	TBE-Urea Polyacrylamide	45	Microliter	08/12/22
1741071	-	TBE-Urea Polyacrylamide	45	Microliter	08/12/22
1741070	-	TBE-Urea Polyacrylamide	45	Microliter	08/12/22
1741069	-	TBE-Urea Polyacrylamide	45	Microliter	08/12/22
1741067	-	TBE-Urea Polyacrylamide	45	Microliter	08/12/22
1741066	-	TBE-Urea Polyacrylamide	45	Microliter	08/12/22
1741068	-	TBE-Urea Polyacrylamide	45	Microliter	08/12/22
1741074	-	TBE-Urea Polyacrylamide	45	Microliter	08/12/22
1741721	144-55-8	SODIUM BICARBONATE	3	Kilograms(KG)	08/12/22
1741728	144-55-8	SODIUM BICARBONATE	3	Kilograms(KG)	08/12/22
1741723	144-55-8	SODIUM BICARBONATE	3	Kilograms(KG)	08/12/22
1741722	144-55-8	SODIUM BICARBONATE	3	Kilograms(KG)	08/12/22
1741725	144-55-8	SODIUM BICARBONATE	3	Kilograms(KG)	08/12/22
1741729	144-55-8	SODIUM BICARBONATE	3	Kilograms(KG)	08/12/22
1741727	144-55-8	SODIUM BICARBONATE	3	Kilograms(KG)	08/12/22
1741726	144-55-8	SODIUM BICARBONATE	3	Kilograms(KG)	08/12/22
1741724	144-55-8	SODIUM BICARBONATE	3	Kilograms(KG)	08/12/22
1741737	7647-01-0	Hydrogen chloride solution 2.0 M in diethyl ether	100	Milliliter(ML)	08/12/22
1741738	7647-01-0	Hydrogen chloride solution 2.0 M in diethyl ether	100	Milliliter(ML)	08/12/22
1741739	110-54-3	Hexane anhydrous 95%	1	Liters(L)	08/12/22
1741741	110-54-3	Hexane anhydrous 95%	1	Liters(L)	08/12/22
1741746	110-54-3	Hexane anhydrous 95%	1	Liters(L)	08/12/22
1741744	110-54-3	Hexane anhydrous 95%	1	Liters(L)	08/12/22
1741740	110-54-3	Hexane anhydrous 95%	1	Liters(L)	08/12/22
1741743	110-54-3	Hexane anhydrous 95%	1	Liters(L)	08/12/22
1741742	110-54-3	Hexane anhydrous 95%	1	Liters(L)	08/12/22
1741745	110-54-3	Hexane anhydrous 95%	1	Liters(L)	08/12/22
1741747	17831-71-9	Tetra(ethylene glycol) diacrylate	250	Milliliter(ML)	08/15/22
1741748	122-99-6	2-PHENOXYETHANOL	250	Milliliter(ML)	08/15/22
1741749	75980-60-8	Diphenyl(2 4 6-trimethylbenzoyl)phosphine oxide	10	Gram(GM)	08/15/22
1741750	947-19-3	1-HYDROXYCYCLOHEXYL PHENYL KETONE	50	Gram(GM)	08/15/22
1741752	10034-96-5	MANGANESE(II) SULFATE MONOHYDRATE	100	Gram(GM)	08/15/22
1741753	7440-66-6	ZINC METAL DUST	100	Gram(GM)	08/15/22
1741754	7758-99-8	COPPER(II) SULFATE PENTAHYDRATE	100	Gram(GM)	08/15/22
1741755	20734-58-1	PROTON SPONGE	10	Gram(GM)	08/15/22
1058720	-	FK270-G	3.785	Gallon(GAL)	08/15/22
1058683	-	Fresh Gear Disinfectant	3.785	Gallon(GAL)	08/15/22
1058721	-	FK270-G	3.785	Gallon(GAL)	08/15/22
1058722	-	FK270-G	3.785	Gallon(GAL)	08/15/22
1712869	64-19-7	Acetic acid glacial ACS reagent 99.7+%	1	Liters(L)	08/15/22
1740095	10028-22-5	FERRIC SULFATE 50%	55	Gallon(GAL)	08/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1740096	10028-22-5	FERRIC SULFATE 50%	55	Gallon(GAL)	08/15/22
1740599	2926-27-4	Potassium(I) trifluoromethanesulfonate 99.5%	1000	Gram(GM)	08/15/22
1741756	12054-85-2	Ammonium molybdate tetrahydrate	100	Gram(GM)	08/15/22
1741757	7440-23-5	SODIUM	100	Gram(GM)	08/15/22
1741758	1633-83-6	1 4-Butanesultone 99%	25	Gram(GM)	08/15/22
1741778	75-09-2	Dichloromethane suitable for HPLC 99.9+% contains 40-150 ppm amylene as stabilizer	4	Liters(L)	08/15/22
1741779	75-09-2	Dichloromethane suitable for HPLC 99.9+% contains 40-150 ppm amylene as stabilizer	4	Liters(L)	08/15/22
1741780	-	ULTRALANE THINNER	1	Quarts(QT)	08/15/22
1325161	-	1000 µg/mL Ruthenium	125	Milliliter(ML)	08/15/22
1326031	7439-98-7	MOLYBDENUM METAL	10	Milligram(MG)	08/15/22
1326030	7439-98-7	MOLYBDENUM METAL	10	Milligram(MG)	08/15/22
1729906	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729912	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729920	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729949	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729919	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729918	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729917	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729916	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729915	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729948	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729913	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729922	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729911	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729910	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729909	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1729908	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729907	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729952	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729950	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729951	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729914	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729935	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729941	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729940	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729939	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729938	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729937	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729943	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729944	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729945	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729946	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729921	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729942	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729936	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729934	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729933	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729932	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1729931	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729930	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729929	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729928	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729927	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729926	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729925	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729924	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729923	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729947	-	OFF! Deep Woods Insect Repellent Towelettes	0.123	Ounces(OZ)	08/16/22
1729953	-	WHITE INVERTED MARKING PA	17	Ounces(OZ)	08/16/22
1729958	-	WHITE INVERTED MARKING PA	17	Ounces(OZ)	08/16/22
1729954	-	WHITE INVERTED MARKING PA	17	Ounces(OZ)	08/16/22
1729955	-	WHITE INVERTED MARKING PA	17	Ounces(OZ)	08/16/22
1729957	-	WHITE INVERTED MARKING PA	17	Ounces(OZ)	08/16/22
1729959	-	WHITE INVERTED MARKING PA	17	Ounces(OZ)	08/16/22
1729956	-	WHITE INVERTED MARKING PA	17	Ounces(OZ)	08/16/22
1729960	-	BUTANE GAS	14.1	Ounces(OZ)	08/16/22
1729961	-	OFF! Deep Woods Insect Repellent Towelettes	0.03	Ounces(OZ)	08/16/22
1741461	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	08/16/22
1741458	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	08/16/22
1741453	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	08/16/22
1741447	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	08/16/22
1741459	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	08/16/22
1741457	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	08/16/22
1741456	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	08/16/22
1741455	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	08/16/22
1741454	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	08/16/22
1741451	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	08/16/22
1741450	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	08/16/22
1741449	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	08/16/22
1741448	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	08/16/22
1741460	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	08/16/22
1741452	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	08/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1741462	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	08/16/22
1741465	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	08/16/22
1741463	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	08/16/22
1741466	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	08/16/22
1741464	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	08/16/22
1741543	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741560	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741544	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741545	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741559	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741547	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741558	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741557	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741556	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741548	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741549	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741550	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741551	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741554	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741552	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741553	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741546	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741555	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741588	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741577	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741581	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741582	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741583	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741584	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741585	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741580	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741587	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741579	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741589	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741590	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741591	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741592	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741593	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741594	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741595	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741586	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741571	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741562	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741563	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741564	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1741565	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741566	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741567	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741568	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741570	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741561	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741572	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741573	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741574	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741575	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741576	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741578	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741569	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	25	Milliliter(ML)	08/16/22
1741527	-	Nitric Acid Fuming (Certified ACS)	400	Milliliter(ML)	08/16/22
1741529	52583-42-3	FUMING NITRIC ACID	400	Milliliter(ML)	08/16/22
1741528	52583-42-3	FUMING NITRIC ACID	400	Milliliter(ML)	08/16/22
1741531	52583-42-3	FUMING NITRIC ACID	400	Milliliter(ML)	08/16/22
1741530	52583-42-3	FUMING NITRIC ACID	400	Milliliter(ML)	08/16/22
1741532	52583-42-3	FUMING NITRIC ACID	400	Milliliter(ML)	08/16/22
1741536	52583-42-3	FUMING NITRIC ACID	400	Milliliter(ML)	08/16/22
1741535	52583-42-3	FUMING NITRIC ACID	400	Milliliter(ML)	08/16/22
1741534	52583-42-3	FUMING NITRIC ACID	400	Milliliter(ML)	08/16/22
1741533	52583-42-3	FUMING NITRIC ACID	400	Milliliter(ML)	08/16/22
1741506	-	Nitric Acid Fuming (Certified ACS)	400	Milliliter(ML)	08/16/22
1741507	-	Nitric Acid Fuming (Certified ACS)	400	Milliliter(ML)	08/16/22
1741508	-	Nitric Acid Fuming (Certified ACS)	400	Milliliter(ML)	08/16/22
1741509	-	Nitric Acid Fuming (Certified ACS)	400	Milliliter(ML)	08/16/22
1741510	-	Nitric Acid Fuming (Certified ACS)	400	Milliliter(ML)	08/16/22
1741511	-	Nitric Acid Fuming (Certified ACS)	400	Milliliter(ML)	08/16/22
V00000C1D4	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	08/16/22
V00000C1D3	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	08/16/22
V00000C1DC	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	08/16/22
V00000C1D2	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	08/16/22
V00000C1DF	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	08/16/22
V00000C1D5	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	08/16/22
V00000C1D1	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	08/16/22
V00000C1D6	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	08/16/22
V00000C1E0	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	08/16/22
V00000C1E1	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	08/16/22
V00000C1E7	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	08/16/22
V00000C1E2	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	08/16/22
V00000C1E3	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	08/16/22
V00000C1E4	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	08/16/22
V00000C1E5	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	08/16/22
V00000C1DE	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	08/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C1E6	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	08/16/22
V00000C1E8	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	08/16/22
V00000C1D7	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	08/16/22
V00000C1D8	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	08/16/22
V00000C1D9	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	08/16/22
V00000C1DA	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	08/16/22
V00000C1DB	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	08/16/22
V00000C1DD	-	Parts Plus SAE 5W-20 SYNTHETIC MOTOR OIL	1	Quarts(QT)	08/16/22
V00000C218	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C21E	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C229	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C219	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C21A	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C21B	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C21C	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C21D	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C217	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C22B	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C238	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C237	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C236	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C235	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C234	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C233	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C232	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C231	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C230	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C22F	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C22E	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C227	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C22C	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C21F	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C22A	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C20E	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C228	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C216	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C226	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C225	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C224	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C223	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C222	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C221	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C220	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C22D	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C1F2	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C1FC	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C1FB	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C1FA	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C1F9	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C1F8	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C1F7	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C1F6	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C1F5	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C210	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C1F3	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C1FF	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C1F1	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C1EF	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C1ED	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C1EC	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C1EB	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C1EA	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C1E9	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C1EE	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C1F4	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C208	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C214	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C213	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C212	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C211	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C20F	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C20D	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C20C	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C20B	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C1FD	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C209	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C1FE	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C207	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C206	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C205	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C204	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C203	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C202	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C201	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C200	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C215	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C20A	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C1F0	-	Premium Blue DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/16/22
V00000C23C	-	Parts Plus ATF - Dexron-III/Mercon	1	Quarts(QT)	08/16/22
V00000C239	-	Parts Plus ATF - Dexron-III/Mercon	1	Quarts(QT)	08/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C23B	-	Parts Plus ATF - Dexron-III/Mercon	1	Quarts(QT)	08/16/22
V00000C23D	-	Parts Plus ATF - Dexron-III/Mercon	1	Quarts(QT)	08/16/22
V00000C23E	-	Parts Plus ATF - Dexron-III/Mercon	1	Quarts(QT)	08/16/22
V00000C23F	-	Parts Plus ATF - Dexron-III/Mercon	1	Quarts(QT)	08/16/22
V00000C240	-	Parts Plus ATF - Dexron-III/Mercon	1	Quarts(QT)	08/16/22
V00000C241	-	Parts Plus ATF - Dexron-III/Mercon	1	Quarts(QT)	08/16/22
V00000C242	-	Parts Plus ATF - Dexron-III/Mercon	1	Quarts(QT)	08/16/22
V00000C243	-	Parts Plus ATF - Dexron-III/Mercon	1	Quarts(QT)	08/16/22
V00000C244	-	Parts Plus ATF - Dexron-III/Mercon	1	Quarts(QT)	08/16/22
V00000C245	-	Parts Plus ATF - Dexron-III/Mercon	1	Quarts(QT)	08/16/22
V00000C24D	-	Parts Plus ATF - Dexron-III/Mercon	1	Quarts(QT)	08/16/22
V00000C250	-	Parts Plus ATF - Dexron-III/Mercon	1	Quarts(QT)	08/16/22
V00000C24F	-	Parts Plus ATF - Dexron-III/Mercon	1	Quarts(QT)	08/16/22
V00000C246	-	Parts Plus ATF - Dexron-III/Mercon	1	Quarts(QT)	08/16/22
V00000C24E	-	Parts Plus ATF - Dexron-III/Mercon	1	Quarts(QT)	08/16/22
V00000C24C	-	Parts Plus ATF - Dexron-III/Mercon	1	Quarts(QT)	08/16/22
V00000C24B	-	Parts Plus ATF - Dexron-III/Mercon	1	Quarts(QT)	08/16/22
V00000C24A	-	Parts Plus ATF - Dexron-III/Mercon	1	Quarts(QT)	08/16/22
V00000C249	-	Parts Plus ATF - Dexron-III/Mercon	1	Quarts(QT)	08/16/22
V00000C248	-	Parts Plus ATF - Dexron-III/Mercon	1	Quarts(QT)	08/16/22
V00000C247	-	Parts Plus ATF - Dexron-III/Mercon	1	Quarts(QT)	08/16/22
V00000C23A	-	Parts Plus ATF - Dexron-III/Mercon	1	Quarts(QT)	08/16/22
1550023	-	Mult-E-Prime 500RI	1	Gallon(GAL)	08/16/22
1741053	64-18-6	Formic Acid 99% Optima LC/MS	50	Milliliter(ML)	08/16/22
1741054	64-18-6	Formic Acid 99% Optima LC/MS	50	Milliliter(ML)	08/16/22
1741419	67-56-1	Methanol 99.8% ACS reagent	4	Liters(L)	08/16/22
1741420	67-56-1	Methanol 99.8% ACS reagent	4	Liters(L)	08/16/22
1741421	67-56-1	Methanol 99.8% ACS reagent	4	Liters(L)	08/16/22
1741422	67-56-1	Methanol 99.8% ACS reagent	4	Liters(L)	08/16/22
1741438	7783-64-4	ZIRCONIUM(IV) FLUORIDE	100	Gram(GM)	08/16/22
1741439	14808-60-7	Quartz rod fused	50	Gram(GM)	08/16/22
1741443	14808-60-7	Quartz rod fused	50	Gram(GM)	08/16/22
1741444	14808-60-7	Quartz rod fused	50	Gram(GM)	08/16/22
1741442	14808-60-7	Quartz rod fused	50	Gram(GM)	08/16/22
1741441	14808-60-7	Quartz rod fused	50	Gram(GM)	08/16/22
1741440	14808-60-7	Quartz rod fused	50	Gram(GM)	08/16/22
1741445	12607-70-4	BASIC NICKEL CARBONATE	250	Gram(GM)	08/16/22
1741446	2206-27-1	Dimethyl sulfoxide-d6 99.9 atom % D	50	Gram(GM)	08/16/22
1741512	-	ZIRCONIUM SLUG	1.25	Kilograms(KG)	08/16/22
1741513	420-04-2	CYANAMIDE	25	Gram(GM)	08/16/22
1741514	57-11-4	STEARIC ACID	1	Kilograms(KG)	08/16/22
1741515	-	Chlorine Standard 100 ppm as Cl2	1	Liters(L)	08/16/22
1741516	87-90-1	TRICHLOROISOCYANURIC ACID	50	Gram(GM)	08/16/22
1741517	56525-79-2	3 6-Diphenyl-9H-carbazole	5	Gram(GM)	08/16/22
1741518	56525-79-2	3 6-Diphenyl-9H-carbazole	5	Gram(GM)	08/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1741781	1344-28-1	ALUMINUM OXIDE	50	Gram(GM)	08/16/22
1741783	109-86-4	2-Methoxyethanol ReagentPlus 99.0%	500	Milliliter(ML)	08/16/22
1741784	1313-84-4	SODIUM SULFIDE NONAHYDRATE	5	Gram(GM)	08/16/22
1741785	288-05-1	Selenophene 97%	5	Gram(GM)	08/16/22
1741782	128-69-8	3 4 9 10-PERYLENETETRACARBOXY DIANHYDRIDE	50	Gram(GM)	08/16/22
1741521	-	Mold Max 60 silicone	2.3	Pounds(LB)	08/16/22
1741523	-	Mold Max 60 silicone	2.3	Pounds(LB)	08/16/22
1741522	-	Mold Max 60 silicone	2.3	Pounds(LB)	08/16/22
1741524	-	MOLD MAX 40 SILICONE RUBBER COMPOUND PART A	2.2	Pounds(LB)	08/16/22
1741525	-	MOLD MAX 40 SILICONE RUBBER COMPOUND PART A	2.2	Pounds(LB)	08/16/22
1741526	-	MOLD MAX 40 SILICONE RUBBER COMPOUND PART A	2.2	Pounds(LB)	08/16/22
1741537	7631-99-4	SODIUM NITRATE	2.5	Kilograms(KG)	08/16/22
1741539	142-82-5	Heptane Anhydrous 99%	2	Liters(L)	08/16/22
1741540	142-82-5	Heptane Anhydrous 99%	2	Liters(L)	08/16/22
1741541	1310-73-2	Sodium hydroxide 50 wt% solution in water	1	Liters(L)	08/16/22
1741542	1310-73-2	Sodium hydroxide 50 wt% solution in water	1	Liters(L)	08/16/22
1741520	14996-61-3	IRIDIUM(III) CHLORIDE HYDRATE	5	Gram(GM)	08/16/22
1741519	-	STL CORP. SAF-T-EZE ANTI-SEIZE COMPOUND	4	Ounces(OZ)	08/16/22
1741615	-	Nochar N960 Acid Bond	40	Pounds(LB)	08/16/22
1741620	-	Nochar N960 Acid Bond	40	Pounds(LB)	08/16/22
1741628	-	Nochar N960 Acid Bond	40	Pounds(LB)	08/16/22
1741627	-	Nochar N960 Acid Bond	40	Pounds(LB)	08/16/22
1741629	-	Nochar N960 Acid Bond	40	Pounds(LB)	08/16/22
1741626	-	Nochar N960 Acid Bond	40	Pounds(LB)	08/16/22
1741625	-	Nochar N960 Acid Bond	40	Pounds(LB)	08/16/22
1741624	-	Nochar N960 Acid Bond	40	Pounds(LB)	08/16/22
1741623	-	Nochar N960 Acid Bond	40	Pounds(LB)	08/16/22
1741630	-	Nochar N960 Acid Bond	40	Pounds(LB)	08/16/22
1741621	-	Nochar N960 Acid Bond	40	Pounds(LB)	08/16/22
1741635	-	Nochar N960 Acid Bond	40	Pounds(LB)	08/16/22
1741619	-	Nochar N960 Acid Bond	40	Pounds(LB)	08/16/22
1741618	-	Nochar N960 Acid Bond	40	Pounds(LB)	08/16/22
1741617	-	Nochar N960 Acid Bond	40	Pounds(LB)	08/16/22
1741616	-	Nochar N960 Acid Bond	40	Pounds(LB)	08/16/22
1741622	-	Nochar N960 Acid Bond	40	Pounds(LB)	08/16/22
1741640	-	Nochar N960 Acid Bond	40	Pounds(LB)	08/16/22
1741631	-	Nochar N960 Acid Bond	40	Pounds(LB)	08/16/22
1741636	-	Nochar N960 Acid Bond	40	Pounds(LB)	08/16/22
1741637	-	Nochar N960 Acid Bond	40	Pounds(LB)	08/16/22
1741633	-	Nochar N960 Acid Bond	40	Pounds(LB)	08/16/22
1741639	-	Nochar N960 Acid Bond	40	Pounds(LB)	08/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1741641	-	Nochar N960 Acid Bond	40	Pounds(LB)	08/16/22
1741642	-	Nochar N960 Acid Bond	40	Pounds(LB)	08/16/22
1741643	-	Nochar N960 Acid Bond	40	Pounds(LB)	08/16/22
1741644	-	Nochar N960 Acid Bond	40	Pounds(LB)	08/16/22
1741634	-	Nochar N960 Acid Bond	40	Pounds(LB)	08/16/22
1741632	-	Nochar N960 Acid Bond	40	Pounds(LB)	08/16/22
1741638	-	Nochar N960 Acid Bond	40	Pounds(LB)	08/16/22
1741646	-	PUMP OIL VACUUM	4	Liters(L)	08/16/22
1741651	-	PUMP OIL VACUUM	4	Liters(L)	08/16/22
1741647	-	PUMP OIL VACUUM	4	Liters(L)	08/16/22
1741648	-	PUMP OIL VACUUM	4	Liters(L)	08/16/22
1741650	-	PUMP OIL VACUUM	4	Liters(L)	08/16/22
1741652	-	PUMP OIL VACUUM	4	Liters(L)	08/16/22
1741653	-	PUMP OIL VACUUM	4	Liters(L)	08/16/22
1741654	-	PUMP OIL VACUUM	4	Liters(L)	08/16/22
1741655	-	PUMP OIL VACUUM	4	Liters(L)	08/16/22
1741656	-	PUMP OIL VACUUM	4	Liters(L)	08/16/22
1741657	-	PUMP OIL VACUUM	4	Liters(L)	08/16/22
1741658	-	PUMP OIL VACUUM	4	Liters(L)	08/16/22
1741659	-	PUMP OIL VACUUM	4	Liters(L)	08/16/22
1741660	-	PUMP OIL VACUUM	4	Liters(L)	08/16/22
1741661	-	PUMP OIL VACUUM	4	Liters(L)	08/16/22
1741649	-	PUMP OIL VACUUM	4	Liters(L)	08/16/22
1741662	75-05-8	Acetonitrile Optima LC/MS Grade	4	Liters(L)	08/16/22
1741664	75-05-8	Acetonitrile Optima LC/MS Grade	4	Liters(L)	08/16/22
1741665	75-05-8	Acetonitrile Optima LC/MS Grade	4	Liters(L)	08/16/22
1741663	75-05-8	Acetonitrile Optima LC/MS Grade	4	Liters(L)	08/16/22
1741645	-	Air Tool Lubricant	4	Ounces(OZ)	08/16/22
1741666	67-56-1	Methanol (Optima LC/MS)	4	Liters(L)	08/16/22
1741667	67-56-1	Methanol (Optima LC/MS)	4	Liters(L)	08/16/22
1741668	67-56-1	Methanol (Optima LC/MS)	4	Liters(L)	08/16/22
1741669	67-56-1	Methanol (Optima LC/MS)	4	Liters(L)	08/16/22
1741735	65757-10-0	H-Phe-Phe-Phe-Phe-Phe-OH	250	Milligram(MG)	08/16/22
1741736	65757-10-0	H-Phe-Phe-Phe-Phe-Phe-OH	250	Milligram(MG)	08/16/22
1741671	13472-45-2	SODIUM TUNGSTATE	25	Gram(GM)	08/16/22
1741672	13472-45-2	SODIUM TUNGSTATE	25	Gram(GM)	08/16/22
1741677	13472-45-2	SODIUM TUNGSTATE	25	Gram(GM)	08/16/22
1741675	13472-45-2	SODIUM TUNGSTATE	25	Gram(GM)	08/16/22
1741674	13472-45-2	SODIUM TUNGSTATE	25	Gram(GM)	08/16/22
1741678	13472-45-2	SODIUM TUNGSTATE	25	Gram(GM)	08/16/22
1741673	13472-45-2	SODIUM TUNGSTATE	25	Gram(GM)	08/16/22
1741676	13472-45-2	SODIUM TUNGSTATE	25	Gram(GM)	08/16/22
1741733	2/9/2667	H-Phe-Phe-Phe-Phe-OH	250	Milligram(MG)	08/16/22
1741734	2/9/2667	H-Phe-Phe-Phe-Phe-OH	250	Milligram(MG)	08/16/22
1741730	2862-51-3	Cyclo(-Phe-Phe)	1	Gram(GM)	08/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1741680	10101-63-0	Lead(II) iodide 99% trace metals basis	5	Gram(GM)	08/16/22
1741681	10101-63-0	Lead(II) iodide 99% trace metals basis	5	Gram(GM)	08/16/22
1741683	10101-63-0	Lead(II) iodide 99% trace metals basis	5	Gram(GM)	08/16/22
1741682	10101-63-0	Lead(II) iodide 99% trace metals basis	5	Gram(GM)	08/16/22
1741731	58607-69-5	H-D-Phe-D-Phe-OH	1	Gram(GM)	08/16/22
1741732	2578-81-6	H-Phe-Phe-Phe-OH	1	Gram(GM)	08/16/22
1741679	-	PURELINK RNA MINI KIT	50	Milliliter(ML)	08/16/22
1741670	9003-39-8	POLYVINYLPYRROLIDONE	100	Gram(GM)	08/16/22
1738880	7664-38-2	Phosphoric acid ACS reagent 85+ wt. % in H2O	2.5	Liters(L)	08/16/22
1741055	-	FULLCURE 705	3.5	Kilograms(KG)	08/16/22
1741056	-	FULLCURE 705	3.5	Kilograms(KG)	08/16/22
1741751	162881-26-7	Phenylbis(2 4 6-trimethylbenzoyl)phosphine oxide 97%	10	Gram(GM)	08/16/22
1741467	123-91-1	1 4-Dioxane anhydrous 99.8%	100	Milliliter(ML)	08/16/22
1741468	123-91-1	1 4-Dioxane anhydrous 99.8%	100	Milliliter(ML)	08/16/22
1741469	108-87-2	METHYLCYCLOHEXANE	1	Liters(L)	08/16/22
1741470	108-87-2	METHYLCYCLOHEXANE	1	Liters(L)	08/16/22
1741597	60-29-7	Diethyl ether 99% ACS Reagent anhydrous	1	Liters(L)	08/16/22
1690074	7647-01-0	HYDROGEN CHLORIDE ANHYDROUS	40	Cubic Feet(CF)	08/16/22
1741598	24729-96-2	CLINDAMYCIN PHOSPHATE	1	Gram(GM)	08/16/22
1741599	60-29-7	Diethyl ether contains 1 ppm BHT as inhibitor anhydrous 99.7%	1	Liters(L)	08/16/22
1741601	60-29-7	Diethyl ether contains 1 ppm BHT as inhibitor anhydrous 99.7%	1	Liters(L)	08/16/22
1741600	60-29-7	Diethyl ether contains 1 ppm BHT as inhibitor anhydrous 99.7%	1	Liters(L)	08/16/22
1741602	60-29-7	Diethyl ether contains 1 ppm BHT as inhibitor anhydrous 99.7%	1	Liters(L)	08/16/22
1741603	2037-26-5	Toluene-d8 99.6 atom % D	5	Gram(GM)	08/16/22
1741605	2037-26-5	Toluene-d8 99.6 atom % D	5	Gram(GM)	08/16/22
1741606	2037-26-5	Toluene-d8 99.6 atom % D	5	Gram(GM)	08/16/22
1741604	2037-26-5	Toluene-d8 99.6 atom % D	5	Gram(GM)	08/16/22
1741058	288-05-1	Selenophene 99%	10	Gram(GM)	08/16/22
1741057	-	Cy5-CTP	100	NMOL	08/16/22
1727881	-	CD 1201 Neutra-Force Heavy Duty Degreaser	1	Gallon(GAL)	08/16/22
1727882	-	CD 1201 Neutra-Force Heavy Duty Degreaser	1	Gallon(GAL)	08/16/22
1727883	-	Diamond Spray Paint Gloss White	12	Ounces(OZ)	08/16/22
1727884	-	Diamond Spray Paint Gloss White	12	Ounces(OZ)	08/16/22
1727885	-	Diamond Spray Paint Gloss White	12	Ounces(OZ)	08/16/22
1727886	-	Zinsser Spray B-I-N	13	Ounces(OZ)	08/16/22
1727890	-	Zinsser Spray B-I-N	13	Ounces(OZ)	08/16/22
1727900	-	Zinsser Spray B-I-N	13	Ounces(OZ)	08/16/22
1727887	-	Zinsser Spray B-I-N	13	Ounces(OZ)	08/16/22
1727889	-	Zinsser Spray B-I-N	13	Ounces(OZ)	08/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727891	-	Zinsser Spray B-I-N	13	Ounces(OZ)	08/16/22
1727892	-	Zinsser Spray B-I-N	13	Ounces(OZ)	08/16/22
1727893	-	Zinsser Spray B-I-N	13	Ounces(OZ)	08/16/22
1727894	-	Zinsser Spray B-I-N	13	Ounces(OZ)	08/16/22
1727895	-	Zinsser Spray B-I-N	13	Ounces(OZ)	08/16/22
1727896	-	Zinsser Spray B-I-N	13	Ounces(OZ)	08/16/22
1727897	-	Zinsser Spray B-I-N	13	Ounces(OZ)	08/16/22
1727898	-	Zinsser Spray B-I-N	13	Ounces(OZ)	08/16/22
1727899	-	Zinsser Spray B-I-N	13	Ounces(OZ)	08/16/22
1727888	-	Zinsser Spray B-I-N	13	Ounces(OZ)	08/16/22
1727901	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	08/16/22
1727902	-	PSX 700 CURE	0.2	Gallon(GAL)	08/16/22
1727903	-	PSX 700 CURE	0.2	Gallon(GAL)	08/16/22
1727904	-	PSX 700A CLEAR COAT CURE	0.17	Gallon(GAL)	08/16/22
1727905	-	PSX 700 CURE US	1	Gallon(GAL)	08/16/22
1727906	-	PSX 700A Clear Coat Resin	0.833	Ounces(OZ)	08/16/22
1727907	-	PSX 700A Clear Coat Resin	0.833	Ounces(OZ)	08/16/22
1727908	-	PSX 700A Clear Coat Resin	0.833	Ounces(OZ)	08/16/22
1741060	-	SYLGARD 184 SILICONE ELASTOMER KIT	16	Ounces(OZ)	08/16/22
1741061	-	OBJET VEROBLUE RGD840	3.6	Kilograms(KG)	08/16/22
1741075	7647-01-0	Hydrochloric acid ACS Reagent 37%	2.5	Liters(L)	08/16/22
1741076	7647-01-0	Hydrochloric acid ACS Reagent 37%	2.5	Liters(L)	08/16/22
1741786	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741808	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741834	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741810	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741809	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741835	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741794	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741787	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741788	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741789	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741790	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741791	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741799	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741793	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741800	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741795	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741796	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741797	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741807	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741798	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741811	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741792	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741821	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1741833	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741832	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741831	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741830	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741806	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741805	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741804	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741803	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741826	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741825	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741824	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741827	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741822	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741812	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741813	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741814	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741815	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741829	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741823	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741828	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741820	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741801	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741816	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741817	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741802	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741818	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741819	25085-99-8	EPO-TEK 301	4	Gram(GM)	08/16/22
1741836	105-09-9	1 4-BENZENEDIMETHANETHIOL	5	Gram(GM)	08/16/22
1741837	67-63-0	ISOPROPYL ALCOHOL	4	Liters(L)	08/16/22
1741911	1120-71-4	1 3-PROPANESULTONE	50	Gram(GM)	08/16/22
1741909	629-03-8	1 6-Dibromohexane 97%	500	Gram(GM)	08/16/22
1727912	-	Rust-Oleum Industrial Choice M1800 System Precision Line Inverted Marking Paint Spray - Fluorescent Red-Orange	17	Ounces(OZ)	08/16/22
1741910	-	Sodium phosphate 0.2M buffer solution pH 7.2	500	Milliliter(ML)	08/16/22
1741059	14836-60-3	Mercury (I) nitrate dihydrate	250	Gram(GM)	08/16/22
1741908	86-73-7	FLUORENE	100	Gram(GM)	08/16/22
1741907	13465-10-6	INDIUM (I) CHLORIDE ANHYDROUS	5	Gram(GM)	08/16/22
1741905	-	Molecular sieves 3A	5000	Gram(GM)	08/16/22
1741906	-	Molecular sieves 3A	5000	Gram(GM)	08/16/22
1741904	578-46-1	5-Methyl-2-nitroaniline	5	Gram(GM)	08/16/22
1689893	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/17/22
1689943	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/17/22
1689958	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/17/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1689940	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/17/22
1689941	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/17/22
1689942	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/17/22
1689959	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/17/22
1689960	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/17/22
1689957	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/17/22
1689962	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/17/22
1689944	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/17/22
1689937	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/17/22
1689961	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/17/22
1689950	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/17/22
1689938	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/17/22
1689946	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/17/22
1689947	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/17/22
1689948	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/17/22
1689945	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/17/22
1689949	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/17/22
1689956	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/17/22
1689951	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/17/22
1689952	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/17/22
1689953	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/17/22
1689939	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/17/22
1689954	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/17/22
1689955	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/17/22
1689894	7440-59-7	HELIUM REFRIGERATED LIQUID (CRYOGENIC LIQUID)	100	Liters(L)	08/17/22
1690035	7440-59-7	HELIUM GAS	100	Liters(L)	08/17/22
1690023	7440-59-7	HELIUM GAS	100	Liters(L)	08/17/22
1690025	7440-59-7	HELIUM GAS	100	Liters(L)	08/17/22
1690026	7440-59-7	HELIUM GAS	100	Liters(L)	08/17/22
1690021	7440-59-7	HELIUM GAS	100	Liters(L)	08/17/22
1690022	7440-59-7	HELIUM GAS	100	Liters(L)	08/17/22
1690024	7440-59-7	HELIUM GAS	100	Liters(L)	08/17/22
1690027	7440-59-7	HELIUM GAS	100	Liters(L)	08/17/22
1690028	7440-59-7	HELIUM GAS	100	Liters(L)	08/17/22
1690029	7440-59-7	HELIUM GAS	100	Liters(L)	08/17/22
1690030	7440-59-7	HELIUM GAS	100	Liters(L)	08/17/22
1690031	7440-59-7	HELIUM GAS	100	Liters(L)	08/17/22
1690032	7440-59-7	HELIUM GAS	100	Liters(L)	08/17/22
1690034	7440-59-7	HELIUM GAS	100	Liters(L)	08/17/22
1690033	7440-59-7	HELIUM GAS	100	Liters(L)	08/17/22
1690011	7440-59-7	HELIUM GAS	100	Liters(L)	08/17/22
1690015	7440-59-7	HELIUM GAS	100	Liters(L)	08/17/22
1690020	7440-59-7	HELIUM GAS	100	Liters(L)	08/17/22
1690019	7440-59-7	HELIUM GAS	100	Liters(L)	08/17/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1690018	7440-59-7	HELIUM GAS	100	Liters(L)	08/17/22
1690017	7440-59-7	HELIUM GAS	100	Liters(L)	08/17/22
1690016	7440-59-7	HELIUM GAS	100	Liters(L)	08/17/22
1690012	7440-59-7	HELIUM GAS	100	Liters(L)	08/17/22
1690010	7440-59-7	HELIUM GAS	100	Liters(L)	08/17/22
1690009	7440-59-7	HELIUM GAS	100	Liters(L)	08/17/22
1690008	7440-59-7	HELIUM GAS	100	Liters(L)	08/17/22
1690007	7440-59-7	HELIUM GAS	100	Liters(L)	08/17/22
1690006	7440-59-7	HELIUM GAS	100	Liters(L)	08/17/22
1690014	7440-59-7	HELIUM GAS	100	Liters(L)	08/17/22
1690013	7440-59-7	HELIUM GAS	100	Liters(L)	08/17/22
1689897	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689910	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689909	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689908	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689903	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689904	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689906	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689907	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689901	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689900	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689899	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689898	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689905	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689902	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689931	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689922	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689924	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689925	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689926	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689927	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689928	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689930	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689921	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689932	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689933	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689934	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689929	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689919	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689918	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689917	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689916	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689915	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689914	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689913	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1689912	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689911	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689923	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1689920	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/17/22
1727909	-	Urethane Catalyst FSC45090	32	Ounces(OZ)	08/17/22
1727910	-	PAINT THINNER	32	Ounces(OZ)	08/17/22
1727911	-	PAINT THINNER	32	Ounces(OZ)	08/17/22
1727914	-	Rust-Oleum Industrial Choice M1800 System Precision Line Inverted Marking Paint Spray - Fluorescent Red-Orange	17	Ounces(OZ)	08/17/22
1727915	-	Rust-Oleum Industrial Choice M1800 System Precision Line Inverted Marking Paint Spray - Fluorescent Red-Orange	17	Ounces(OZ)	08/17/22
1727916	-	Rust-Oleum Industrial Choice M1800 System Precision Line Inverted Marking Paint Spray - Fluorescent Red-Orange	17	Ounces(OZ)	08/17/22
1727917	-	Rust-Oleum Industrial Choice M1800 System Precision Line Inverted Marking Paint Spray - Fluorescent Red-Orange	17	Ounces(OZ)	08/17/22
1727918	-	Rust-Oleum Industrial Choice M1800 System Precision Line Inverted Marking Paint Spray - Fluorescent Red-Orange	17	Ounces(OZ)	08/17/22
1727919	-	Rust-Oleum Industrial Choice M1800 System Precision Line Inverted Marking Paint Spray - Fluorescent Red-Orange	17	Ounces(OZ)	08/17/22
1727920	-	Rust-Oleum Industrial Choice M1800 System Precision Line Inverted Marking Paint Spray - Fluorescent Red-Orange	17	Ounces(OZ)	08/17/22
1727913	-	Rust-Oleum Industrial Choice M1800 System Precision Line Inverted Marking Paint Spray - Fluorescent Red-Orange	17	Ounces(OZ)	08/17/22
1727921	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727922	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727923	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727925	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727926	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727927	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727924	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727928	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727960	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727947	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727948	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727949	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727950	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727951	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727952	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727953	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727954	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727955	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727946	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727959	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727956	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727961	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727962	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727963	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727957	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727929	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727930	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727931	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727932	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727933	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727934	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727945	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727935	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727936	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727937	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727938	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727939	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727940	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727941	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727942	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727943	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727944	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727958	-	OFF! Deep Woods Insect Repellent Towelettes	1.476	Ounces(OZ)	08/17/22
1727964	-	TEMPO ULTRA WP INSECTICIDE	14.8	Ounces(OZ)	08/17/22
1727965	-	Safe Shield	16	Ounces(OZ)	08/17/22
1727966	-	Safe Shield	16	Ounces(OZ)	08/17/22
1727967	-	CRITTER OUT RODENT REPELLENT Rodent repellent product	40	Ounces(OZ)	08/17/22
1741903	-	Asiga PlasCLEAR V2	1	Liters(L)	08/17/22
1727968	-	CRITTER OUT RODENT REPELLENT Rodent repellent product	1	Gallon(GAL)	08/17/22
1727969	-	PT WASP FREEZE II	17.5	Ounces(OZ)	08/17/22
1727980	-	PT WASP FREEZE II	17.5	Ounces(OZ)	08/17/22
1727991	-	PT WASP FREEZE II	17.5	Ounces(OZ)	08/17/22
1727990	-	PT WASP FREEZE II	17.5	Ounces(OZ)	08/17/22
1727989	-	PT WASP FREEZE II	17.5	Ounces(OZ)	08/17/22
1727988	-	PT WASP FREEZE II	17.5	Ounces(OZ)	08/17/22
1727987	-	PT WASP FREEZE II	17.5	Ounces(OZ)	08/17/22
1727986	-	PT WASP FREEZE II	17.5	Ounces(OZ)	08/17/22
1727985	-	PT WASP FREEZE II	17.5	Ounces(OZ)	08/17/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1727984	-	PT WASP FREEZE II	17.5	Ounces(OZ)	08/17/22
1727983	-	PT WASP FREEZE II	17.5	Ounces(OZ)	08/17/22
1727970	-	PT WASP FREEZE II	17.5	Ounces(OZ)	08/17/22
1727981	-	PT WASP FREEZE II	17.5	Ounces(OZ)	08/17/22
1727979	-	PT WASP FREEZE II	17.5	Ounces(OZ)	08/17/22
1727978	-	PT WASP FREEZE II	17.5	Ounces(OZ)	08/17/22
1727977	-	PT WASP FREEZE II	17.5	Ounces(OZ)	08/17/22
1727976	-	PT WASP FREEZE II	17.5	Ounces(OZ)	08/17/22
1727974	-	PT WASP FREEZE II	17.5	Ounces(OZ)	08/17/22
1727975	-	PT WASP FREEZE II	17.5	Ounces(OZ)	08/17/22
1727972	-	PT WASP FREEZE II	17.5	Ounces(OZ)	08/17/22
1727971	-	PT WASP FREEZE II	17.5	Ounces(OZ)	08/17/22
1727992	-	PT WASP FREEZE II	17.5	Ounces(OZ)	08/17/22
1727982	-	PT WASP FREEZE II	17.5	Ounces(OZ)	08/17/22
1727973	-	PT WASP FREEZE II	17.5	Ounces(OZ)	08/17/22
1727993	-	Gloss Urethane FSC45004	1	Gallon(GAL)	08/17/22
1729974	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) SOLIDIFIER	0.667	Kilograms(KG)	08/17/22
1729975	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) SOLIDIFIER	0.667	Kilograms(KG)	08/17/22
1729978	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) SOLIDIFIER	0.667	Kilograms(KG)	08/17/22
1729984	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) SOLIDIFIER	0.667	Kilograms(KG)	08/17/22
1729979	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) SOLIDIFIER	0.667	Kilograms(KG)	08/17/22
1729980	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) SOLIDIFIER	0.667	Kilograms(KG)	08/17/22
1729981	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) SOLIDIFIER	0.667	Kilograms(KG)	08/17/22
1729983	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) SOLIDIFIER	0.667	Kilograms(KG)	08/17/22
1729988	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) SOLIDIFIER	0.667	Kilograms(KG)	08/17/22
1729985	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) SOLIDIFIER	0.667	Kilograms(KG)	08/17/22
1729986	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) SOLIDIFIER	0.667	Kilograms(KG)	08/17/22
1729987	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) SOLIDIFIER	0.667	Kilograms(KG)	08/17/22
1729989	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) SOLIDIFIER	0.667	Kilograms(KG)	08/17/22
1729991	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) SOLIDIFIER	0.667	Kilograms(KG)	08/17/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1729992	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) SOLIDIFIER	0.667	Kilograms(KG)	08/17/22
1729982	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) SOLIDIFIER	0.667	Kilograms(KG)	08/17/22
1729990	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) SOLIDIFIER	0.667	Kilograms(KG)	08/17/22
1729993	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) BASE	1	Kilograms(KG)	08/17/22
1741062	-	Mini-PROTEAN TGX Gels 4-15% 4-20%	30	Microliter	08/17/22
1729997	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) BASE	1	Kilograms(KG)	08/17/22
1730007	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) BASE	1	Kilograms(KG)	08/17/22
1730006	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) BASE	1	Kilograms(KG)	08/17/22
1730005	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) BASE	1	Kilograms(KG)	08/17/22
1730004	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) BASE	1	Kilograms(KG)	08/17/22
1730003	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) BASE	1	Kilograms(KG)	08/17/22
1730002	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) BASE	1	Kilograms(KG)	08/17/22
1730001	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) BASE	1	Kilograms(KG)	08/17/22
1730000	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) BASE	1	Kilograms(KG)	08/17/22
1729998	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) BASE	1	Kilograms(KG)	08/17/22
1729996	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) BASE	1	Kilograms(KG)	08/17/22
1729995	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) BASE	1	Kilograms(KG)	08/17/22
1729994	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) BASE	1	Kilograms(KG)	08/17/22
1729999	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) BASE	1	Kilograms(KG)	08/17/22
1741077	-	DUO SEAL VACUUM PUML OIL	1	Gallon(GAL)	08/17/22
1741082	-	DUO SEAL VACUUM PUML OIL	1	Gallon(GAL)	08/17/22
1741078	-	DUO SEAL VACUUM PUML OIL	1	Gallon(GAL)	08/17/22
1741084	-	DUO SEAL VACUUM PUML OIL	1	Gallon(GAL)	08/17/22
1741079	-	DUO SEAL VACUUM PUML OIL	1	Gallon(GAL)	08/17/22
1741081	-	DUO SEAL VACUUM PUML OIL	1	Gallon(GAL)	08/17/22
1741083	-	DUO SEAL VACUUM PUML OIL	1	Gallon(GAL)	08/17/22
1741088	-	DUO SEAL VACUUM PUML OIL	1	Gallon(GAL)	08/17/22
1741087	-	DUO SEAL VACUUM PUML OIL	1	Gallon(GAL)	08/17/22
1741086	-	DUO SEAL VACUUM PUML OIL	1	Gallon(GAL)	08/17/22
1741085	-	DUO SEAL VACUUM PUML OIL	1	Gallon(GAL)	08/17/22
1741080	-	DUO SEAL VACUUM PUML OIL	1	Gallon(GAL)	08/17/22
1730008	-	BELZONA 4301 (MAGMA CR1 HI-BUILD) SOLIDIFIER	0.763	Kilograms(KG)	08/17/22
1689935	-	75% ARGON/25% CARBON DIOXIDE	220	Cubic Feet(CF)	08/17/22
1727995	-	VANTAGE PLUS SEMI-GLOSS	3.4	Liters(L)	08/17/22
1727996	-	XIM Primer White 400	1	Gallon(GAL)	08/17/22
1727997	-	STARTEX PAINT THINNER	1	Gallon(GAL)	08/17/22
1727998	-	Startex Denatured Alcohol	1	Gallon(GAL)	08/17/22
1727999	-	Startex Denatured Alcohol	1	Gallon(GAL)	08/17/22
1690080	-	Oxygen Nitrogen	34	Liters(L)	08/17/22
1690081	-	Oxygen Nitrogen	34	Liters(L)	08/17/22
1689936	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/17/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1690047	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/17/22
1690048	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/17/22
1690049	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/17/22
1690050	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/17/22
1690051	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/17/22
1690053	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/17/22
1690055	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/17/22
1690057	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/17/22
1690043	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/17/22
1690056	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/17/22
1690037	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/17/22
1690064	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/17/22
1690063	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/17/22
1690062	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/17/22
1690061	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/17/22
1690060	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/17/22
1690059	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/17/22
1690045	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/17/22
1690036	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/17/22
1690046	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/17/22
1690038	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/17/22
1690039	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/17/22
1690040	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/17/22
1690041	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/17/22
1690042	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/17/22
1690054	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/17/22
1690044	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/17/22
1690058	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/17/22
1690052	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/17/22
1689963	-	Ethylene Argon	220	Cubic Feet(CF)	08/17/22
1689964	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/17/22
1689971	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/17/22
1689978	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/17/22
1689977	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/17/22
1689976	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/17/22
1689975	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/17/22
1689974	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/17/22
1689972	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/17/22
1689970	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/17/22
1689969	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/17/22
1689968	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/17/22
1689967	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/17/22
1689966	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/17/22
1689965	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/17/22
1689973	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/17/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1690005	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/17/22
1689979	74-98-6	PROPANE	11	Gallon(GAL)	08/17/22
1689982	74-98-6	PROPANE	11	Gallon(GAL)	08/17/22
1689985	74-98-6	PROPANE	11	Gallon(GAL)	08/17/22
1689980	74-98-6	PROPANE	11	Gallon(GAL)	08/17/22
1689981	74-98-6	PROPANE	11	Gallon(GAL)	08/17/22
1689983	74-98-6	PROPANE	11	Gallon(GAL)	08/17/22
1689984	74-98-6	PROPANE	11	Gallon(GAL)	08/17/22
1689987	74-98-6	PROPANE	11	Gallon(GAL)	08/17/22
1689988	74-98-6	PROPANE	11	Gallon(GAL)	08/17/22
1689989	74-98-6	PROPANE	11	Gallon(GAL)	08/17/22
1689990	74-98-6	PROPANE	11	Gallon(GAL)	08/17/22
1689991	-	Compressed Air	220	Cubic Feet(CF)	08/17/22
1689993	-	Compressed Air	220	Cubic Feet(CF)	08/17/22
1690001	-	Compressed Air	220	Cubic Feet(CF)	08/17/22
1690000	-	Compressed Air	220	Cubic Feet(CF)	08/17/22
1689999	-	Compressed Air	220	Cubic Feet(CF)	08/17/22
1689998	-	Compressed Air	220	Cubic Feet(CF)	08/17/22
1689997	-	Compressed Air	220	Cubic Feet(CF)	08/17/22
1689996	-	Compressed Air	220	Cubic Feet(CF)	08/17/22
1689994	-	Compressed Air	220	Cubic Feet(CF)	08/17/22
1689992	-	Compressed Air	220	Cubic Feet(CF)	08/17/22
1689995	-	Compressed Air	220	Cubic Feet(CF)	08/17/22
1690002	124-38-9	CARBON DIOXIDE	50	Pounds(LB)	08/17/22
1690004	124-38-9	CARBON DIOXIDE	50	Pounds(LB)	08/17/22
1690003	124-38-9	CARBON DIOXIDE	50	Pounds(LB)	08/17/22
1728001	-	STARTEX PAINT THINNER	1	Gallon(GAL)	08/17/22
1728003	-	STARTEX PAINT THINNER	1	Gallon(GAL)	08/17/22
1728006	-	STARTEX PAINT THINNER	1	Gallon(GAL)	08/17/22
1728005	-	STARTEX PAINT THINNER	1	Gallon(GAL)	08/17/22
1728002	-	Startex Xylene	1	Gallon(GAL)	08/17/22
1728004	-	Startex Lacquer Thinner	5	Gallon(GAL)	08/17/22
1728007	-	KRYLON Fusion Gloss Black	12	Ounces(OZ)	08/17/22
1728013	-	KRYLON Fusion Gloss Black	12	Ounces(OZ)	08/17/22
1728009	-	KRYLON Fusion Gloss Black	12	Ounces(OZ)	08/17/22
1728011	-	KRYLON Fusion Gloss Black	12	Ounces(OZ)	08/17/22
1728012	-	KRYLON Fusion Gloss Black	12	Ounces(OZ)	08/17/22
1728010	-	KRYLON Fusion Gloss Black	12	Ounces(OZ)	08/17/22
1728008	-	KRYLON Fusion Gloss Black	12	Ounces(OZ)	08/17/22
1728014	-	CHEMSAFE CLEAR (CARB Compliant)	5	Gallon(GAL)	08/17/22
1728022	-	CHEMSAFE CLEAR (CARB Compliant)	5	Gallon(GAL)	08/17/22
1728016	-	CHEMSAFE CLEAR (CARB Compliant)	5	Gallon(GAL)	08/17/22
1728023	-	CHEMSAFE CLEAR (CARB Compliant)	5	Gallon(GAL)	08/17/22
1728024	-	CHEMSAFE CLEAR (CARB Compliant)	5	Gallon(GAL)	08/17/22
1728025	-	CHEMSAFE CLEAR (CARB Compliant)	5	Gallon(GAL)	08/17/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1728026	-	CHEMSAFE CLEAR (CARB Compliant)	5	Gallon(GAL)	08/17/22
1728027	-	CHEMSAFE CLEAR (CARB Compliant)	5	Gallon(GAL)	08/17/22
1728028	-	CHEMSAFE CLEAR (CARB Compliant)	5	Gallon(GAL)	08/17/22
1728015	-	CHEMSAFE CLEAR (CARB Compliant)	5	Gallon(GAL)	08/17/22
1728018	-	CHEMSAFE CLEAR (CARB Compliant)	5	Gallon(GAL)	08/17/22
1728020	-	CHEMSAFE CLEAR (CARB Compliant)	5	Gallon(GAL)	08/17/22
1728029	-	CHEMSAFE CLEAR (CARB Compliant)	5	Gallon(GAL)	08/17/22
1728030	-	CHEMSAFE CLEAR (CARB Compliant)	5	Gallon(GAL)	08/17/22
1728031	-	CHEMSAFE CLEAR (CARB Compliant)	5	Gallon(GAL)	08/17/22
1728032	-	CHEMSAFE CLEAR (CARB Compliant)	5	Gallon(GAL)	08/17/22
1728019	-	CHEMSAFE CLEAR (CARB Compliant)	5	Gallon(GAL)	08/17/22
1728021	-	CHEMSAFE CLEAR (CARB Compliant)	5	Gallon(GAL)	08/17/22
1728017	-	CHEMSAFE CLEAR (CARB Compliant)	5	Gallon(GAL)	08/17/22
V00000C288	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C287	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C289	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C286	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C285	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C284	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C29F	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C283	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C2A0	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C282	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C281	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C280	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C27F	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C27C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C27D	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C28A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C296	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C27B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C27A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C279	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C27E	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C295	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C29D	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C29E	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C29C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C278	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C269	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C29B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C29A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C299	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C294	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C297	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C28B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C293	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C292	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C291	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C290	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C28F	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C28E	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C28D	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C28C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C298	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C258	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C26B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C260	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C25F	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C25E	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C25D	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C25C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C25B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C262	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C259	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C263	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C257	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C256	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C255	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C254	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C253	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C252	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C277	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C25A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C26D	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C276	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C275	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C274	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C273	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C272	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C271	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C270	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C261	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C26E	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C251	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C26C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C26A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C268	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C267	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C266	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C265	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C264	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
V00000C26F	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	08/17/22
1718420	-	ENERPAC PREMIUM HYDRAULIC OIL	1	Gallon(GAL)	08/17/22
1718419	-	ENERPAC PREMIUM HYDRAULIC OIL	1	Gallon(GAL)	08/17/22
1690065	-	Hydrogen Argon	300	Cubic Feet(CF)	08/17/22
1690066	74-82-8	METHANE	220	Cubic Feet(CF)	08/17/22
1690067	74-82-8	METHANE	220	Cubic Feet(CF)	08/17/22
1690069	74-82-8	METHANE	220	Cubic Feet(CF)	08/17/22
1690068	74-82-8	METHANE	220	Cubic Feet(CF)	08/17/22
1690070	74-82-8	METHANE	220	Cubic Feet(CF)	08/17/22
1690071	7664-41-7	Ammonia Anhydrous	220	Cubic Feet(CF)	08/17/22
1690072	7664-39-3	hydrogen fluoride Anhydrous	40	Cubic Feet(CF)	08/17/22
1690075	74-85-1	ETHYLENE	40	Cubic Feet(CF)	08/17/22
1690076	7664-41-7	AMMONIA ANHYDROUS	0.7	Gram(GM)	08/17/22
1690078	7664-41-7	AMMONIA ANHYDROUS	0.7	Gram(GM)	08/17/22
1690077	7664-41-7	AMMONIA ANHYDROUS	0.7	Gram(GM)	08/17/22
1690079	7664-41-7	AMMONIA ANHYDROUS	0.7	Gram(GM)	08/17/22
1690073	-	6% Hydrogen 94% Argon	220	Cubic Feet(CF)	08/17/22
1728033	-	Ardex P 51	4	Gallon(GAL)	08/17/22
1728036	-	Ardex P 51	4	Gallon(GAL)	08/17/22
1728041	-	Ardex P 51	4	Gallon(GAL)	08/17/22
1728042	-	Ardex P 51	4	Gallon(GAL)	08/17/22
1728037	-	Ardex P 51	4	Gallon(GAL)	08/17/22
1728040	-	Ardex P 51	4	Gallon(GAL)	08/17/22
1728038	-	Ardex P 51	4	Gallon(GAL)	08/17/22
1728039	-	Ardex P 51	4	Gallon(GAL)	08/17/22
1728034	-	Ardex P 51	4	Gallon(GAL)	08/17/22
1728035	-	Ardex P 51	4	Gallon(GAL)	08/17/22
1728043	-	Finium DTM-AT S/G Acrylic W/B	5	Gallon(GAL)	08/17/22
1728048	-	Finium DTM-AT S/G Acrylic W/B	5	Gallon(GAL)	08/17/22
1728044	-	Finium DTM-AT S/G Acrylic W/B	5	Gallon(GAL)	08/17/22
1728045	-	Finium DTM-AT S/G Acrylic W/B	5	Gallon(GAL)	08/17/22
1728047	-	Finium DTM-AT S/G Acrylic W/B	5	Gallon(GAL)	08/17/22
1728046	-	Finium DTM-AT S/G Acrylic W/B	5	Gallon(GAL)	08/17/22
1728049	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	08/17/22
1728050	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	08/17/22
1728054	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	08/17/22
1728055	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	08/17/22
1728056	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	08/17/22
1728057	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	08/17/22
1728058	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	08/17/22
1728059	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	08/17/22
1728053	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	08/17/22
1728052	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	08/17/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1728060	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	08/17/22
1728051	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	08/17/22
1728061	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	08/17/22
1728068	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	08/17/22
1728071	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	08/17/22
1728070	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	08/17/22
1728062	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	08/17/22
1728063	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	08/17/22
1728064	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	08/17/22
1728065	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	08/17/22
1728067	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	08/17/22
1728069	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	08/17/22
1728072	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	08/17/22
1728077	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	08/17/22
1728066	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	08/17/22
1728078	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	08/17/22
1728076	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	08/17/22
1728075	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	08/17/22
1728074	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	08/17/22
1728073	-	888-0018 COLORTREND TITANIUM WHITE KX	32	Ounces(OZ)	08/17/22
1728079	-	808-1045 COLORTREND F RED OXIDE	32	Ounces(OZ)	08/17/22
1728085	-	808-1045 COLORTREND F RED OXIDE	32	Ounces(OZ)	08/17/22
1728080	-	808-1045 COLORTREND F RED OXIDE	32	Ounces(OZ)	08/17/22
1728083	-	808-1045 COLORTREND F RED OXIDE	32	Ounces(OZ)	08/17/22
1728081	-	808-1045 COLORTREND F RED OXIDE	32	Ounces(OZ)	08/17/22
1728086	-	808-1045 COLORTREND F RED OXIDE	32	Ounces(OZ)	08/17/22
1728084	-	808-1045 COLORTREND F RED OXIDE	32	Ounces(OZ)	08/17/22
1728087	-	808-1045 COLORTREND F RED OXIDE	32	Ounces(OZ)	08/17/22
1728088	-	808-1045 COLORTREND F RED OXIDE	32	Ounces(OZ)	08/17/22
1728089	-	808-1045 COLORTREND F RED OXIDE	32	Ounces(OZ)	08/17/22
1728090	-	808-1045 COLORTREND F RED OXIDE	32	Ounces(OZ)	08/17/22
1728082	-	808-1045 COLORTREND F RED OXIDE	32	Ounces(OZ)	08/17/22
1728091	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	08/17/22
1728096	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	08/17/22
1728102	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	08/17/22
1728093	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	08/17/22
1728095	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	08/17/22
1728092	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	08/17/22
1728097	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	08/17/22
1728098	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	08/17/22
1728099	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	08/17/22
1728100	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	08/17/22
1728101	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	08/17/22
1728094	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	08/17/22
1728103	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	08/17/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1728104	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	08/17/22
1728112	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	08/17/22
1728113	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	08/17/22
1728114	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	08/17/22
1728108	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	08/17/22
1728105	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	08/17/22
1728111	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	08/17/22
1728106	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	08/17/22
1728107	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	08/17/22
1728110	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	08/17/22
1728109	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	08/17/22
1728115	-	Finium DTM-AT S/G Acrylic N/B	5	Gallon(GAL)	08/17/22
1728116	-	Finium DTM-AT S/G Acrylic N/B	3.4	Liters(L)	08/17/22
1728117	-	Finium DTM-AT S/G Acrylic W/B	3.6	Liters(L)	08/17/22
1728120	-	Finium DTM-AT S/G Acrylic W/B	3.6	Liters(L)	08/17/22
1728118	-	Finium DTM-AT S/G Acrylic W/B	3.6	Liters(L)	08/17/22
1728119	-	Finium DTM-AT S/G Acrylic W/B	3.6	Liters(L)	08/17/22
1728121	-	Vers-Acryl 222 S/G Finish Deep Base	3.5	Liters(L)	08/17/22
1728122	-	Vers-Acryl 222 S/G Finish Deep Base	3.5	Liters(L)	08/17/22
1728125	-	Finium DTM-AT S/G Acrylic W/B	1	Gallon(GAL)	08/17/22
1728126	-	Finium DTM-AT S/G Acrylic W/B	1	Gallon(GAL)	08/17/22
1728146	-	Finium DTM-AT S/G Acrylic W/B	1	Gallon(GAL)	08/17/22
1728152	-	Finium DTM-AT S/G Acrylic W/B	1	Gallon(GAL)	08/17/22
1728151	-	Finium DTM-AT S/G Acrylic W/B	1	Gallon(GAL)	08/17/22
1728153	-	Finium DTM-AT S/G Acrylic W/B	1	Gallon(GAL)	08/17/22
1728154	-	Finium DTM-AT S/G Acrylic W/B	1	Gallon(GAL)	08/17/22
1728157	-	Finium DTM-AT S/G Acrylic W/B	1	Gallon(GAL)	08/17/22
1728158	-	Finium DTM-AT S/G Acrylic W/B	1	Gallon(GAL)	08/17/22
1728170	-	Finium DTM-AT S/G Acrylic W/B	1	Gallon(GAL)	08/17/22
1728171	-	Finium DTM-AT S/G Acrylic W/B	1	Gallon(GAL)	08/17/22
1728173	-	Finium DTM-AT S/G Acrylic W/B	1	Gallon(GAL)	08/17/22
1728172	-	Finium DTM-AT S/G Acrylic W/B	1	Gallon(GAL)	08/17/22
1728127	-	Finium DTM-AT S/G Acrylic D/B	3.5	Liters(L)	08/17/22
1728132	-	Finium DTM-AT S/G Acrylic D/B	3.5	Liters(L)	08/17/22
1728131	-	Finium DTM-AT S/G Acrylic D/B	3.5	Liters(L)	08/17/22
1728130	-	Finium DTM-AT S/G Acrylic D/B	3.5	Liters(L)	08/17/22
1728129	-	Finium DTM-AT S/G Acrylic D/B	3.5	Liters(L)	08/17/22
1728128	-	Finium DTM-AT S/G Acrylic D/B	3.5	Liters(L)	08/17/22
1728150	-	Finium DTM-AT S/G Acrylic D/B	3.5	Liters(L)	08/17/22
1728147	-	Finium DTM-AT S/G Acrylic D/B	3.5	Liters(L)	08/17/22
1728149	-	Finium DTM-AT S/G Acrylic D/B	3.5	Liters(L)	08/17/22
1728148	-	Finium DTM-AT S/G Acrylic D/B	3.5	Liters(L)	08/17/22
1728155	-	Finium DTM-AT S/G Acrylic D/B	3.5	Liters(L)	08/17/22
1728156	-	Finium DTM-AT S/G Acrylic D/B	3.5	Liters(L)	08/17/22
1728177	-	Finium DTM-AT S/G Acrylic D/B	3.5	Liters(L)	08/17/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1728174	-	Finium DTM-AT S/G Acrylic D/B	3.5	Liters(L)	08/17/22
1728176	-	Finium DTM-AT S/G Acrylic D/B	3.5	Liters(L)	08/17/22
1728175	-	Finium DTM-AT S/G Acrylic D/B	3.5	Liters(L)	08/17/22
1728133	-	Vers-Acryl 222 S/G Finish White Base	3.6	Liters(L)	08/17/22
1728134	-	Vers-Acryl 222 S/G Finish White Base	3.6	Liters(L)	08/17/22
1728135	-	Vers-Acryl 222 S/G Finish Safety Yellow	1	Gallon(GAL)	08/17/22
1728136	-	Vers-Acryl 222 S/G Finish Safety Yellow	1	Gallon(GAL)	08/17/22
1728137	-	Finium DTM-AT S/G Acrylic N/B	5	Gallon(GAL)	08/17/22
1728138	-	Vers-Acryl 222 S/G Finish Deep Base	3.5	Liters(L)	08/17/22
1728139	-	Vers-Acryl 222 S/G Finish Deep Base	3.5	Liters(L)	08/17/22
1728142	-	Vers-Acryl 222 S/G Finish White Base	3.6	Liters(L)	08/17/22
1728143	-	Vers-Acryl 222 S/G Finish White Base	3.6	Liters(L)	08/17/22
1741607	107-46-0	HEXAMETHYLDISILOXANE 98%	500	Milliliter(ML)	08/17/22
1741608	107-46-0	HEXAMETHYLDISILOXANE 98%	500	Milliliter(ML)	08/17/22
1741609	53-58-0	1 3-CHLOROBENZOIC ACID	100	Gram(GM)	08/17/22
1741610	865-47-4	POTASSIUM TERT-BUTOXIDE	100	Gram(GM)	08/17/22
1741611	108-88-3	Toluene anhydrous 99.8%	1	Liters(L)	08/17/22
1741614	108-88-3	Toluene anhydrous 99.8%	1	Liters(L)	08/17/22
1741613	108-88-3	Toluene anhydrous 99.8%	1	Liters(L)	08/17/22
1741612	108-88-3	Toluene anhydrous 99.8%	1	Liters(L)	08/17/22
1730117	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	08/18/22
1730122	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	08/18/22
1730124	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	08/18/22
1730126	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	08/18/22
1730125	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	08/18/22
1730128	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	08/18/22
1730118	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	08/18/22
1730119	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	08/18/22
1730120	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	08/18/22
1730121	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	08/18/22
1730127	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	08/18/22
1730123	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	08/18/22
1730129	-	Diamond Spray Paint Gray Primer L/F	12	Ounces(OZ)	08/18/22
1730140	-	Diamond Spray Paint Gray Primer L/F	12	Ounces(OZ)	08/18/22
1730152	-	Diamond Spray Paint Gray Primer L/F	12	Ounces(OZ)	08/18/22
1730151	-	Diamond Spray Paint Gray Primer L/F	12	Ounces(OZ)	08/18/22
1730150	-	Diamond Spray Paint Gray Primer L/F	12	Ounces(OZ)	08/18/22
1730149	-	Diamond Spray Paint Gray Primer L/F	12	Ounces(OZ)	08/18/22
1730148	-	Diamond Spray Paint Gray Primer L/F	12	Ounces(OZ)	08/18/22
1730147	-	Diamond Spray Paint Gray Primer L/F	12	Ounces(OZ)	08/18/22
1730146	-	Diamond Spray Paint Gray Primer L/F	12	Ounces(OZ)	08/18/22
1730145	-	Diamond Spray Paint Gray Primer L/F	12	Ounces(OZ)	08/18/22
1730144	-	Diamond Spray Paint Gray Primer L/F	12	Ounces(OZ)	08/18/22
1730143	-	Diamond Spray Paint Gray Primer L/F	12	Ounces(OZ)	08/18/22
1730141	-	Diamond Spray Paint Gray Primer L/F	12	Ounces(OZ)	08/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1730139	-	Diamond Spray Paint Gray Primer L/F	12	Ounces(OZ)	08/18/22
1730131	-	Diamond Spray Paint Gray Primer L/F	12	Ounces(OZ)	08/18/22
1730137	-	Diamond Spray Paint Gray Primer L/F	12	Ounces(OZ)	08/18/22
1730136	-	Diamond Spray Paint Gray Primer L/F	12	Ounces(OZ)	08/18/22
1730135	-	Diamond Spray Paint Gray Primer L/F	12	Ounces(OZ)	08/18/22
1730134	-	Diamond Spray Paint Gray Primer L/F	12	Ounces(OZ)	08/18/22
1730133	-	Diamond Spray Paint Gray Primer L/F	12	Ounces(OZ)	08/18/22
1730132	-	Diamond Spray Paint Gray Primer L/F	12	Ounces(OZ)	08/18/22
1730138	-	Diamond Spray Paint Gray Primer L/F	12	Ounces(OZ)	08/18/22
1730142	-	Diamond Spray Paint Gray Primer L/F	12	Ounces(OZ)	08/18/22
1730130	-	Diamond Spray Paint Gray Primer L/F	12	Ounces(OZ)	08/18/22
1730153	-	Cote All Flat Black	128	Ounces(OZ)	08/18/22
1730154	-	Cote All Flat Black	128	Ounces(OZ)	08/18/22
1730155	-	Valvoline Professional Series SAE 75W-90 FULL SYNTHETIC GEAR OIL	1	Quarts(QT)	08/18/22
1730160	-	Valvoline Professional Series SAE 75W-90 FULL SYNTHETIC GEAR OIL	1	Quarts(QT)	08/18/22
1730166	-	Valvoline Professional Series SAE 75W-90 FULL SYNTHETIC GEAR OIL	1	Quarts(QT)	08/18/22
1730165	-	Valvoline Professional Series SAE 75W-90 FULL SYNTHETIC GEAR OIL	1	Quarts(QT)	08/18/22
1730161	-	Valvoline Professional Series SAE 75W-90 FULL SYNTHETIC GEAR OIL	1	Quarts(QT)	08/18/22
1730159	-	Valvoline Professional Series SAE 75W-90 FULL SYNTHETIC GEAR OIL	1	Quarts(QT)	08/18/22
1730162	-	Valvoline Professional Series SAE 75W-90 FULL SYNTHETIC GEAR OIL	1	Quarts(QT)	08/18/22
1730163	-	Valvoline Professional Series SAE 75W-90 FULL SYNTHETIC GEAR OIL	1	Quarts(QT)	08/18/22
1730157	-	Valvoline Professional Series SAE 75W-90 FULL SYNTHETIC GEAR OIL	1	Quarts(QT)	08/18/22
1730156	-	Valvoline Professional Series SAE 75W-90 FULL SYNTHETIC GEAR OIL	1	Quarts(QT)	08/18/22
1730158	-	Valvoline Professional Series SAE 75W-90 FULL SYNTHETIC GEAR OIL	1	Quarts(QT)	08/18/22
1730164	-	Valvoline Professional Series SAE 75W-90 FULL SYNTHETIC GEAR OIL	1	Quarts(QT)	08/18/22
1728178	-	PSX 700A Clear Coat Resin	0.83	Gallon(GAL)	08/18/22
1728182	-	PSX 700A Clear Coat Resin	0.83	Gallon(GAL)	08/18/22
1728183	-	PSX 700A Clear Coat Resin	0.83	Gallon(GAL)	08/18/22
1728179	-	PSX 700A Clear Coat Resin	0.83	Gallon(GAL)	08/18/22
1728180	-	PSX 700A Clear Coat Resin	0.83	Gallon(GAL)	08/18/22
1728181	-	PSX 700A Clear Coat Resin	0.83	Gallon(GAL)	08/18/22
1720053	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720079	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1720075	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720076	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720085	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720077	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720078	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720074	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720080	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720081	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720082	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720073	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720084	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720066	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720086	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720087	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720083	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720063	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720061	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720054	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720055	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720056	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720057	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720058	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720068	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720062	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720072	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720064	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720065	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720067	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720069	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720070	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720071	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720060	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
1720059	-	GREAT STUFF FOAM SEALANT	12	Ounces(OZ)	08/18/22
V00000C2BA	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/18/22
V00000C2C0	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/18/22
V00000C2BF	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/18/22
V00000C2BE	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/18/22
V00000C2BD	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/18/22
V00000C2BB	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/18/22
V00000C2B9	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/18/22
V00000C2AF	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/18/22
V00000C2AD	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/18/22
V00000C2BC	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/18/22
V00000C2AE	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/18/22
V00000C2B8	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C2B0	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/18/22
V00000C2B1	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/18/22
V00000C2B2	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/18/22
V00000C2B3	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/18/22
V00000C2B4	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/18/22
V00000C2B5	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/18/22
V00000C2B6	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/18/22
V00000C2B7	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/18/22
V00000C2CF	-	100% Silicone Rubber Sealant Clear	9.8	Ounces(OZ)	08/18/22
V00000C2D8	-	100% Silicone Rubber Sealant Clear	9.8	Ounces(OZ)	08/18/22
V00000C2D7	-	100% Silicone Rubber Sealant Clear	9.8	Ounces(OZ)	08/18/22
V00000C2D6	-	100% Silicone Rubber Sealant Clear	9.8	Ounces(OZ)	08/18/22
V00000C2D5	-	100% Silicone Rubber Sealant Clear	9.8	Ounces(OZ)	08/18/22
V00000C2D4	-	100% Silicone Rubber Sealant Clear	9.8	Ounces(OZ)	08/18/22
V00000C2D3	-	100% Silicone Rubber Sealant Clear	9.8	Ounces(OZ)	08/18/22
V00000C2D1	-	100% Silicone Rubber Sealant Clear	9.8	Ounces(OZ)	08/18/22
V00000C2D0	-	100% Silicone Rubber Sealant Clear	9.8	Ounces(OZ)	08/18/22
V00000C2C6	-	100% Silicone Rubber Sealant Clear	9.8	Ounces(OZ)	08/18/22
V00000C2CE	-	100% Silicone Rubber Sealant Clear	9.8	Ounces(OZ)	08/18/22
V00000C2D2	-	100% Silicone Rubber Sealant Clear	9.8	Ounces(OZ)	08/18/22
V00000C2C5	-	100% Silicone Rubber Sealant Clear	9.8	Ounces(OZ)	08/18/22
V00000C2C3	-	100% Silicone Rubber Sealant Clear	9.8	Ounces(OZ)	08/18/22
V00000C2C7	-	100% Silicone Rubber Sealant Clear	9.8	Ounces(OZ)	08/18/22
V00000C2C8	-	100% Silicone Rubber Sealant Clear	9.8	Ounces(OZ)	08/18/22
V00000C2C9	-	100% Silicone Rubber Sealant Clear	9.8	Ounces(OZ)	08/18/22
V00000C2CA	-	100% Silicone Rubber Sealant Clear	9.8	Ounces(OZ)	08/18/22
V00000C2CB	-	100% Silicone Rubber Sealant Clear	9.8	Ounces(OZ)	08/18/22
V00000C2C2	-	100% Silicone Rubber Sealant Clear	9.8	Ounces(OZ)	08/18/22
V00000C2CC	-	100% Silicone Rubber Sealant Clear	9.8	Ounces(OZ)	08/18/22
V00000C2C1	-	100% Silicone Rubber Sealant Clear	9.8	Ounces(OZ)	08/18/22
V00000C2CD	-	100% Silicone Rubber Sealant Clear	9.8	Ounces(OZ)	08/18/22
V00000C2C4	-	100% Silicone Rubber Sealant Clear	9.8	Ounces(OZ)	08/18/22
V00000C2E9	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/18/22
V00000C2E4	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/18/22
V00000C2EA	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/18/22
V00000C2E8	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/18/22
V00000C2E7	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/18/22
V00000C2E6	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/18/22
V00000C2E5	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/18/22
V00000C2DA	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/18/22
V00000C2DC	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/18/22
V00000C2E3	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/18/22
V00000C2DB	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/18/22
V00000C2DD	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/18/22
V00000C2D9	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C2DE	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/18/22
V00000C2DF	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/18/22
V00000C2E0	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/18/22
V00000C2E1	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/18/22
V00000C2E2	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/18/22
V00000C322	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C321	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C342	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C333	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C334	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C33E	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C33F	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C340	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C341	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C332	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C343	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C34E	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C345	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C346	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C347	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C348	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C349	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C34A	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C34B	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C34C	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C34D	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C331	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C325	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C344	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C326	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C302	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C320	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C32F	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C32E	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C32D	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C32C	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C32B	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C32A	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C329	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C323	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C327	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C330	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C324	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C33D	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C33C	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C33B	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C33A	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C339	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C338	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C337	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C336	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C335	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C328	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C2F7	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C306	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C305	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C303	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C301	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C300	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C2FF	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C2FE	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C2FD	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C2FB	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C2F9	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C2F8	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C307	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C304	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C2FC	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C2F6	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C2F5	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C2F4	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C2F3	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C2F2	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C2F1	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C2F0	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C2EF	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C2EE	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C2ED	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C2EC	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C2EB	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C31F	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C31E	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C314	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C316	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C317	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C318	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C2FA	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C319	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C308	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C31A	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C312	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C31B	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C31C	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C315	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C31D	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C30E	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C309	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C30A	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C30B	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C30C	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C30D	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C313	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C30F	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C310	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C311	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
1728184	-	JOHNSEN'S PREMIUM DOT 3 BRAKE FLUID 1 GALLON	32	Ounces(OZ)	08/18/22
V00000C38E	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C39E	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C38D	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C39F	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3A1	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3A2	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3A0	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C395	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C390	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C38F	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3AB	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3A3	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C391	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C392	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C39A	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C394	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C39D	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C396	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C397	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C398	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C399	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C39B	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C39C	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C393	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C356	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C350	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C34F	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C38C	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C366	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3B2	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3B1	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3B0	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3AF	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3AE	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3AA	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3AC	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C355	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3A9	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3A8	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3A7	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3A6	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3A5	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C351	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C352	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C353	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C354	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3A4	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3AD	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C364	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C372	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C371	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C370	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C36F	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C36E	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C36D	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C36C	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C36B	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C36A	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C369	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C368	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C365	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C363	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C362	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C360	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C35F	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C35E	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C35D	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C35C	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C35B	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C35A	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C359	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C358	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C357	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C367	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C383	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C361	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C38B	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C38A	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C389	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C388	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C387	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C386	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C384	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C382	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C381	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C380	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C37F	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C375	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C373	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C385	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C374	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C37E	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C376	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C377	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C378	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C379	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C37A	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C37B	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C37C	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C37D	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3EF	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3FA	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3F9	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3F8	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3F7	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3F6	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3F4	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3F2	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3EE	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3F0	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3FB	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3EC	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3ED	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3C4	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3F1	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3CB	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3D0	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3EB	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C3C5	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3C7	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3C8	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3C6	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3CA	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3FC	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3CC	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C401	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C400	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3FF	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3FE	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3FD	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3C9	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3DC	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3CD	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3CE	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3CF	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3F5	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3D1	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3C3	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3D3	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3D4	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3D5	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3D6	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3D7	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3D8	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3D9	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3D2	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3E2	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3E9	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3E8	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3E7	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3E6	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3E5	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3DA	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3E3	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3DB	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3E1	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3E0	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3DF	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3DE	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3DD	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3EA	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3E4	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3BC	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C40F	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C410	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C411	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C412	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C413	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C415	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C416	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3F3	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3BF	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C40E	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3BD	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C414	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3BB	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3BA	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3B9	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3B8	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3B7	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3B6	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3B5	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3B4	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3B3	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3BE	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C405	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3C1	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3C2	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C406	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C402	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C403	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C3C0	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C404	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C407	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C408	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C409	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C40A	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C40B	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C40C	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C40D	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C448	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C42C	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C44A	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C447	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C446	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C42F	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C44E	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C42D	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C460	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C464	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C438	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C449	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C430	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C42E	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C44C	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C461	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C44D	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C45F	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C45E	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C45D	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C45C	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C44B	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C463	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C462	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C451	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C45A	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C459	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C43D	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C43C	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C458	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C43B	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C457	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C456	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C455	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C454	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C436	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C452	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C431	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C450	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C44F	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C43A	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C439	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C429	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C437	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C435	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C434	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C433	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C432	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C453	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C42A	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C421	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C422	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C46D	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C46E	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C423	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C46F	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C479	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C471	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C41E	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C473	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C474	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C475	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C476	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C477	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C478	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C42B	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C417	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C46A	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C469	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C468	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C467	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C46C	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C466	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C420	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C45B	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C41F	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C418	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C419	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C41A	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C41B	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C41C	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C41D	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C472	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C465	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C46B	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C424	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C470	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C426	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C428	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C445	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C444	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C443	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C442	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C441	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C440	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C43F	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C43E	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
V00000C425	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C427	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/18/22
1728144	-	Vers-Acryl 222 S/G Finish Safety Yellow	1	Gallon(GAL)	08/18/22
1728145	-	Vers-Acryl 222 S/G Finish Safety Yellow	1	Gallon(GAL)	08/18/22
1728159	-	Finium DTM-AT S/G Acrylic N/B	16.9	Liters(L)	08/18/22
1728160	-	Finium DTM-AT S/G Acrylic N/B	16.9	Liters(L)	08/18/22
1728161	-	Avalon Premium 100% Acrylic Interior Satin W/B	18	Liters(L)	08/18/22
1728162	-	Avalon Premium 100% Acrylic Interior Satin W/B	18	Liters(L)	08/18/22
1728163	-	Avalon Premium 100% Acrylic Interior Satin W/B	18	Liters(L)	08/18/22
1728164	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	08/18/22
1728165	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	08/18/22
1728166	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	08/18/22
1728167	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	08/18/22
1728168	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	08/18/22
1728169	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	08/18/22
1728185	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728224	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728211	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728212	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728213	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728214	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728204	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728232	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728230	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728228	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728227	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728215	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728225	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728217	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1728223	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728222	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728221	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728220	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728219	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728210	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728218	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728229	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728216	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728226	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728194	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728209	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728231	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728201	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728202	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728200	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728203	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728199	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728198	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728197	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728195	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728193	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1728187	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728208	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728207	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728206	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728196	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728186	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728192	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728188	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728189	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728190	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728191	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728205	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	08/18/22
1728233	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/18/22
1730088	-	WEST R-630	573	Pounds(LB)	08/18/22
1728238	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/18/22
1728237	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/18/22
1728234	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/18/22
1728239	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/18/22
1728235	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/18/22
1728236	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/18/22
1730091	-	WEST R-630	573	Pounds(LB)	08/18/22
1730090	-	WEST R-630	573	Pounds(LB)	08/18/22
1730099	-	WEST R-630	573	Pounds(LB)	08/18/22
1730098	-	WEST R-630	573	Pounds(LB)	08/18/22
1730097	-	WEST R-630	573	Pounds(LB)	08/18/22
1730095	-	WEST R-630	573	Pounds(LB)	08/18/22
1730094	-	WEST R-630	573	Pounds(LB)	08/18/22
1730093	-	WEST R-630	573	Pounds(LB)	08/18/22
1730092	-	WEST R-630	573	Pounds(LB)	08/18/22
1730096	-	WEST R-630	573	Pounds(LB)	08/18/22
1730089	-	WEST R-630	573	Pounds(LB)	08/18/22
1728240	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	08/18/22
1728241	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1728275	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728266	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728267	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728268	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728269	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728265	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728271	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728274	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728276	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728248	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728273	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728254	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728272	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728242	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728243	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728244	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728245	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728246	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728247	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728249	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728251	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728250	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728253	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728264	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728255	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728256	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728257	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728258	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728259	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728260	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728261	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728262	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728263	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728252	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1728270	-	SPRAYWAY GLASS CLEANER	19	Ounces(OZ)	08/18/22
1642859	-	KROIL	10	Ounces(OZ)	08/18/22
1642861	25068-38-6	DEVCON 5 Minute Epoxy Resin	25	Milliliter(ML)	08/18/22
1642863	25068-38-6	DEVCON 5 Minute Epoxy Resin	25	Milliliter(ML)	08/18/22
1642862	25068-38-6	DEVCON 5 Minute Epoxy Resin	25	Milliliter(ML)	08/18/22
1718907	67-64-1	Acetone Laboratory Reagent 99.5%	4	Liters(L)	08/18/22
1741684	57-13-6	UREA REAGENT ACS	100	Gram(GM)	08/18/22
1728000	-	PRO 1-GL 2PK FLAT RUSTY METAL PRIMER	1	Gallon(GAL)	08/18/22
1741685	-	Polytetrafluoroethylene preparation	100	Milliliter(ML)	08/18/22
1741686	605-65-2	DANSYL CHLORIDE	25	Gram(GM)	08/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1741687	144-55-8	SODIUM BICARBONATE (SODIUM HYDROGEN CARBONATE)	3	Kilograms(KG)	08/18/22
1741691	144-55-8	SODIUM BICARBONATE (SODIUM HYDROGEN CARBONATE)	3	Kilograms(KG)	08/18/22
1741689	144-55-8	SODIUM BICARBONATE (SODIUM HYDROGEN CARBONATE)	3	Kilograms(KG)	08/18/22
1741690	144-55-8	SODIUM BICARBONATE (SODIUM HYDROGEN CARBONATE)	3	Kilograms(KG)	08/18/22
1741693	144-55-8	SODIUM BICARBONATE (SODIUM HYDROGEN CARBONATE)	3	Kilograms(KG)	08/18/22
1741694	144-55-8	SODIUM BICARBONATE (SODIUM HYDROGEN CARBONATE)	3	Kilograms(KG)	08/18/22
1741695	144-55-8	SODIUM BICARBONATE (SODIUM HYDROGEN CARBONATE)	3	Kilograms(KG)	08/18/22
1741688	144-55-8	SODIUM BICARBONATE (SODIUM HYDROGEN CARBONATE)	3	Kilograms(KG)	08/18/22
1741692	144-55-8	SODIUM BICARBONATE (SODIUM HYDROGEN CARBONATE)	3	Kilograms(KG)	08/18/22
1741696	110-71-4	1 2-Dimethoxyethane anhydrous 99.5% inhibitor-free	1	Liters(L)	08/18/22
1741697	110-71-4	1 2-Dimethoxyethane anhydrous 99.5% inhibitor-free	1	Liters(L)	08/18/22
1741698	110-71-4	1 2-Dimethoxyethane anhydrous 99.5% inhibitor-free	1	Liters(L)	08/18/22
1741699	50-00-0	FORMALDEHYDE 16% METHANOL FREE	1	Milliliter(ML)	08/18/22
1741700	50-00-0	FORMALDEHYDE 16% METHANOL FREE	1	Milliliter(ML)	08/18/22
1741701	9003-27-4	POLYISOBUTYLENE	100	Gram(GM)	08/18/22
1741703	9003-27-4	POLYISOBUTYLENE	100	Gram(GM)	08/18/22
1741704	9003-27-4	POLYISOBUTYLENE	100	Gram(GM)	08/18/22
1741702	9003-27-4	POLYISOBUTYLENE	100	Gram(GM)	08/18/22
1728278	-	Amerlock Sealer HRD	1	Gallon(GAL)	08/18/22
1728280	-	Amerlock Sealer HRD	1	Gallon(GAL)	08/18/22
1741854	-	Diamond Suspension Water Based Polycrystalline All Microns	16	Ounces(OZ)	08/18/22
1728279	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	08/18/22
1728281	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	08/18/22
1741859	-	Diamond Suspension Water Based Polycrystalline All Microns	16	Ounces(OZ)	08/18/22
1741867	-	Diamond Suspension Water Based Polycrystalline All Microns	16	Ounces(OZ)	08/18/22
1741855	-	Diamond Suspension Water Based Polycrystalline All Microns	16	Ounces(OZ)	08/18/22
1741856	-	Diamond Suspension Water Based Polycrystalline All Microns	16	Ounces(OZ)	08/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1741857	-	Diamond Suspension Water Based Polycrystalline All Microns	16	Ounces(OZ)	08/18/22
1741858	-	Diamond Suspension Water Based Polycrystalline All Microns	16	Ounces(OZ)	08/18/22
1741860	-	Diamond Suspension Water Based Polycrystalline All Microns	16	Ounces(OZ)	08/18/22
1741861	-	Diamond Suspension Water Based Polycrystalline All Microns	16	Ounces(OZ)	08/18/22
1741862	-	Diamond Suspension Water Based Polycrystalline All Microns	16	Ounces(OZ)	08/18/22
1741863	-	Diamond Suspension Water Based Polycrystalline All Microns	16	Ounces(OZ)	08/18/22
1741864	-	Diamond Suspension Water Based Polycrystalline All Microns	16	Ounces(OZ)	08/18/22
1741866	-	Diamond Suspension Water Based Polycrystalline All Microns	16	Ounces(OZ)	08/18/22
1741868	-	Diamond Suspension Water Based Polycrystalline All Microns	16	Ounces(OZ)	08/18/22
1741869	-	Diamond Suspension Water Based Polycrystalline All Microns	16	Ounces(OZ)	08/18/22
1741865	-	Diamond Suspension Water Based Polycrystalline All Microns	16	Ounces(OZ)	08/18/22
1728282	-	Ardex P 51	1	Gallon(GAL)	08/18/22
1728286	-	Ardex P 51	1	Gallon(GAL)	08/18/22
1728283	-	Ardex P 51	1	Gallon(GAL)	08/18/22
1728284	-	Ardex P 51	1	Gallon(GAL)	08/18/22
1728287	-	Ardex P 51	1	Gallon(GAL)	08/18/22
1728285	-	Ardex P 51	1	Gallon(GAL)	08/18/22
1741870	-	Diamond Suspension Water Based Polycrystalline 1 Micron	16	Ounces(OZ)	08/18/22
1741884	-	Diamond Suspension Water Based Polycrystalline 1 Micron	16	Ounces(OZ)	08/18/22
1741871	-	Diamond Suspension Water Based Polycrystalline 1 Micron	16	Ounces(OZ)	08/18/22
1741881	-	Diamond Suspension Water Based Polycrystalline 1 Micron	16	Ounces(OZ)	08/18/22
1741880	-	Diamond Suspension Water Based Polycrystalline 1 Micron	16	Ounces(OZ)	08/18/22
1741879	-	Diamond Suspension Water Based Polycrystalline 1 Micron	16	Ounces(OZ)	08/18/22
1741878	-	Diamond Suspension Water Based Polycrystalline 1 Micron	16	Ounces(OZ)	08/18/22
1741877	-	Diamond Suspension Water Based Polycrystalline 1 Micron	16	Ounces(OZ)	08/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1741876	-	Diamond Suspension Water Based Polycrystalline 1 Micron	16	Ounces(OZ)	08/18/22
1741875	-	Diamond Suspension Water Based Polycrystalline 1 Micron	16	Ounces(OZ)	08/18/22
1741874	-	Diamond Suspension Water Based Polycrystalline 1 Micron	16	Ounces(OZ)	08/18/22
1741873	-	Diamond Suspension Water Based Polycrystalline 1 Micron	16	Ounces(OZ)	08/18/22
1741883	-	Diamond Suspension Water Based Polycrystalline 1 Micron	16	Ounces(OZ)	08/18/22
1741872	-	Diamond Suspension Water Based Polycrystalline 1 Micron	16	Ounces(OZ)	08/18/22
1741882	-	Diamond Suspension Water Based Polycrystalline 1 Micron	16	Ounces(OZ)	08/18/22
1741885	-	Diamond Suspension Water Based Polycrystalline 3 Micron	16	Ounces(OZ)	08/18/22
1741895	-	Diamond Suspension Water Based Polycrystalline 3 Micron	16	Ounces(OZ)	08/18/22
1741887	-	Diamond Suspension Water Based Polycrystalline 3 Micron	16	Ounces(OZ)	08/18/22
1741888	-	Diamond Suspension Water Based Polycrystalline 3 Micron	16	Ounces(OZ)	08/18/22
1741889	-	Diamond Suspension Water Based Polycrystalline 3 Micron	16	Ounces(OZ)	08/18/22
1741890	-	Diamond Suspension Water Based Polycrystalline 3 Micron	16	Ounces(OZ)	08/18/22
1741891	-	Diamond Suspension Water Based Polycrystalline 3 Micron	16	Ounces(OZ)	08/18/22
1741892	-	Diamond Suspension Water Based Polycrystalline 3 Micron	16	Ounces(OZ)	08/18/22
1741893	-	Diamond Suspension Water Based Polycrystalline 3 Micron	16	Ounces(OZ)	08/18/22
1741894	-	Diamond Suspension Water Based Polycrystalline 3 Micron	16	Ounces(OZ)	08/18/22
1741899	-	Diamond Suspension Water Based Polycrystalline 3 Micron	16	Ounces(OZ)	08/18/22
1741896	-	Diamond Suspension Water Based Polycrystalline 3 Micron	16	Ounces(OZ)	08/18/22
1741898	-	Diamond Suspension Water Based Polycrystalline 3 Micron	16	Ounces(OZ)	08/18/22
1741886	-	Diamond Suspension Water Based Polycrystalline 3 Micron	16	Ounces(OZ)	08/18/22
1741897	-	Diamond Suspension Water Based Polycrystalline 3 Micron	16	Ounces(OZ)	08/18/22
1715935	-	RUBBER CEMENT	4	Ounces(OZ)	08/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1741975	-	Diamond Suspension Water Based Polycrystalline 6 Micron	16	Ounces(OZ)	08/18/22
1741996	-	Diamond Suspension Water Based Polycrystalline 6 Micron	16	Ounces(OZ)	08/18/22
1741997	-	Diamond Suspension Water Based Polycrystalline 6 Micron	16	Ounces(OZ)	08/18/22
1741981	-	Diamond Suspension Water Based Polycrystalline 6 Micron	16	Ounces(OZ)	08/18/22
1741982	-	Diamond Suspension Water Based Polycrystalline 6 Micron	16	Ounces(OZ)	08/18/22
1741976	-	Diamond Suspension Water Based Polycrystalline 6 Micron	16	Ounces(OZ)	08/18/22
1741980	-	Diamond Suspension Water Based Polycrystalline 6 Micron	16	Ounces(OZ)	08/18/22
1741978	-	Diamond Suspension Water Based Polycrystalline 6 Micron	16	Ounces(OZ)	08/18/22
1741979	-	Diamond Suspension Water Based Polycrystalline 6 Micron	16	Ounces(OZ)	08/18/22
1741992	-	Diamond Suspension Water Based Polycrystalline 6 Micron	16	Ounces(OZ)	08/18/22
1741993	-	Diamond Suspension Water Based Polycrystalline 6 Micron	16	Ounces(OZ)	08/18/22
1741994	-	Diamond Suspension Water Based Polycrystalline 6 Micron	16	Ounces(OZ)	08/18/22
1741983	-	Diamond Suspension Water Based Polycrystalline 6 Micron	16	Ounces(OZ)	08/18/22
1741995	-	Diamond Suspension Water Based Polycrystalline 6 Micron	16	Ounces(OZ)	08/18/22
1741977	-	Diamond Suspension Water Based Polycrystalline 6 Micron	16	Ounces(OZ)	08/18/22
1741990	-	Diamond Suspension Water Based Polycrystalline 6 Micron	16	Ounces(OZ)	08/18/22
1741985	-	Diamond Suspension Water Based Polycrystalline 6 Micron	16	Ounces(OZ)	08/18/22
1741986	-	Diamond Suspension Water Based Polycrystalline 6 Micron	16	Ounces(OZ)	08/18/22
1741987	-	Diamond Suspension Water Based Polycrystalline 6 Micron	16	Ounces(OZ)	08/18/22
1741989	-	Diamond Suspension Water Based Polycrystalline 6 Micron	16	Ounces(OZ)	08/18/22
1741991	-	Diamond Suspension Water Based Polycrystalline 6 Micron	16	Ounces(OZ)	08/18/22
1741984	-	Diamond Suspension Water Based Polycrystalline 6 Micron	16	Ounces(OZ)	08/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1741988	-	Diamond Suspension Water Based Polycrystalline 6 Micron	16	Ounces(OZ)	08/18/22
1715942	-	RUBBER CEMENT	4	Ounces(OZ)	08/18/22
1715944	-	RUBBER CEMENT	4	Ounces(OZ)	08/18/22
1715936	-	RUBBER CEMENT	4	Ounces(OZ)	08/18/22
1715937	-	RUBBER CEMENT	4	Ounces(OZ)	08/18/22
1715938	-	RUBBER CEMENT	4	Ounces(OZ)	08/18/22
1715943	-	RUBBER CEMENT	4	Ounces(OZ)	08/18/22
1715941	-	RUBBER CEMENT	4	Ounces(OZ)	08/18/22
1715940	-	RUBBER CEMENT	4	Ounces(OZ)	08/18/22
1715939	-	RUBBER CEMENT	4	Ounces(OZ)	08/18/22
1741844	-	Aluminum Tray/Shelf	16	Kilograms(KG)	08/18/22
1741849	-	Aluminum Tray/Shelf	16	Kilograms(KG)	08/18/22
1741845	-	Aluminum Tray/Shelf	16	Kilograms(KG)	08/18/22
1741848	-	Aluminum Tray/Shelf	16	Kilograms(KG)	08/18/22
1741846	-	Aluminum Tray/Shelf	16	Kilograms(KG)	08/18/22
1741847	-	Aluminum Tray/Shelf	16	Kilograms(KG)	08/18/22
1741851	-	Aluminum Tray/Shelf	16	Kilograms(KG)	08/18/22
1741852	-	Aluminum Tray/Shelf	16	Kilograms(KG)	08/18/22
1741850	-	Aluminum Tray/Shelf	16	Kilograms(KG)	08/18/22
1741853	-	Aluminum Tray/Shelf	16	Kilograms(KG)	08/18/22
1720105	7782-39-0	DEUTERIUM	150	Cubic Feet(CF)	08/18/22
1720096	7439-94-3	LUTETIUM	20	Gram(GM)	08/18/22
V00000C47A	-	Cote All 340 J.D. (Safety) Yellow	1	Gallon(GAL)	08/18/22
V00000C47B	-	Cote All 340 J.D. (Safety) Yellow	1	Gallon(GAL)	08/18/22
1728294	-	Ridgid Nu-Clear Thread Cutting Oil	1	Gallon(GAL)	08/18/22
1728299	-	Ridgid Nu-Clear Thread Cutting Oil	1	Gallon(GAL)	08/18/22
1728297	-	Ridgid Nu-Clear Thread Cutting Oil	1	Gallon(GAL)	08/18/22
1728296	-	Ridgid Nu-Clear Thread Cutting Oil	1	Gallon(GAL)	08/18/22
1728298	-	Ridgid Nu-Clear Thread Cutting Oil	1	Gallon(GAL)	08/18/22
1728295	-	Ridgid Nu-Clear Thread Cutting Oil	1	Gallon(GAL)	08/18/22
1728300	-	Ardex P 51	4	Gallon(GAL)	08/18/22
V00000C47C	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/18/22
V00000C47D	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/18/22
V00000C487	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/18/22
V00000C485	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/18/22
V00000C482	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/18/22
V00000C481	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C480	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/18/22
V00000C47F	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/18/22
V00000C47E	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/18/22
V00000C486	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/18/22
V00000C483	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/18/22
V00000C484	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/18/22
1728288	-	PSX 700 WHITE RESIN	0.8	Gallon(GAL)	08/18/22
1728289	-	PSX 700 WHITE RESIN	0.8	Gallon(GAL)	08/18/22
1728290	-	PSX 700 WHITE RESIN	0.8	Gallon(GAL)	08/18/22
1728291	-	PSX 700 CURE	0.2	Gallon(GAL)	08/18/22
1728293	-	PSX 700 CURE	0.2	Gallon(GAL)	08/18/22
1728292	-	PSX 700 CURE	0.2	Gallon(GAL)	08/18/22
V00000C489	-	COTE ALL WHITE BASE	3.7	Liters(L)	08/18/22
V00000C488	-	COTE ALL WHITE BASE	3.7	Liters(L)	08/18/22
1730100	-	Resuflor 3561 Epoxy Resin Glaze (Part B) Standard Hardener	4	Gallon(GAL)	08/18/22
1730103	-	Resuflor 3561 Epoxy Resin Glaze (Part B) Standard Hardener	4	Gallon(GAL)	08/18/22
1730102	-	Resuflor 3561 Epoxy Resin Glaze (Part B) Standard Hardener	4	Gallon(GAL)	08/18/22
1730101	-	Resuflor 3561 Epoxy Resin Glaze (Part B) Standard Hardener	4	Gallon(GAL)	08/18/22
1730104	-	Resuflor 3561 Epoxy Resin Glaze (Part B) Standard Hardener	4	Gallon(GAL)	08/18/22
1730105	-	Resuflor 3746 High Performance Epoxy (Part B) Hardener	1	Gallon(GAL)	08/18/22
1730109	-	Resuflor 3746 High Performance Epoxy (Part B) Hardener	1	Gallon(GAL)	08/18/22
1730108	-	Resuflor 3746 High Performance Epoxy (Part B) Hardener	1	Gallon(GAL)	08/18/22
1730106	-	Resuflor 3746 High Performance Epoxy (Part B) Hardener	1	Gallon(GAL)	08/18/22
1730110	-	Resuflor 3746 High Performance Epoxy (Part B) Hardener	1	Gallon(GAL)	08/18/22
1730107	-	Resuflor 3746 High Performance Epoxy (Part B) Hardener	1	Gallon(GAL)	08/18/22
1730111	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	1	Gallon(GAL)	08/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1730116	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	1	Gallon(GAL)	08/18/22
1730113	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	1	Gallon(GAL)	08/18/22
1730114	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	1	Gallon(GAL)	08/18/22
1730112	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	1	Gallon(GAL)	08/18/22
1730115	-	Resuflor 3746 High Performance Epoxy (Part A) Clear	1	Gallon(GAL)	08/18/22
1741838	9085-42-1	ANION EXCHANGE RESIN AG 1-X4 CHLORIDE FORM	500	Gram(GM)	08/18/22
1741839	-	ANALYTICAL GRADE ANION EXCHANGE RESIN (AG 1-X8 CHLORIDE)	500	Gram(GM)	08/18/22
1741841	5326-47-6	2-Amino-5-iodobenzoic acid	25	Gram(GM)	08/18/22
1741840	4246-51-9	1 13-Diamino-4 7 10-trioxatridecane	100	Milliliter(ML)	08/18/22
1741843	868-77-9	2-HYDROXYETHYL METHACRYLATE	100	Milliliter(ML)	08/18/22
1741842	3789-59-1	(S)-(-)-a-Ethylbenzylamine	5	Gram(GM)	08/18/22
1741916	79917-89-8	1-Methyl-3-propylimidazolium chloride	25	Gram(GM)	08/18/22
1741912	7647-14-5	PBS 10X SOLUTION	1	Liters(L)	08/18/22
1741914	7647-14-5	PBS 10X SOLUTION	1	Liters(L)	08/18/22
1741913	7647-14-5	PBS 10X SOLUTION	1	Liters(L)	08/18/22
1741915	-	QUALITY CONTROL STANDARD 23	125	Milliliter(ML)	08/18/22
1729527	-	Summit SHV-32	1	Gallon(GAL)	08/18/22
1729549	-	Summit SHV-32	1	Gallon(GAL)	08/18/22
1729535	-	Summit SHV-32	1	Gallon(GAL)	08/18/22
1729534	-	Summit SHV-32	1	Gallon(GAL)	08/18/22
1729537	-	Summit SHV-32	1	Gallon(GAL)	08/18/22
1729553	-	Summit SHV-32	1	Gallon(GAL)	08/18/22
1729538	-	Summit SHV-32	1	Gallon(GAL)	08/18/22
1729552	-	Summit SHV-32	1	Gallon(GAL)	08/18/22
1729547	-	Summit SHV-32	1	Gallon(GAL)	08/18/22
1729546	-	Summit SHV-32	1	Gallon(GAL)	08/18/22
1729545	-	Summit SHV-32	1	Gallon(GAL)	08/18/22
1729551	-	Summit SHV-32	1	Gallon(GAL)	08/18/22
1729539	-	Summit SHV-32	1	Gallon(GAL)	08/18/22
1729536	-	Summit SHV-32	1	Gallon(GAL)	08/18/22
1729548	-	Summit SHV-32	1	Gallon(GAL)	08/18/22
1729528	-	Summit SHV-32	1	Gallon(GAL)	08/18/22
1729550	-	Summit SHV-32	1	Gallon(GAL)	08/18/22
1729542	-	Summit SHV-32	1	Gallon(GAL)	08/18/22
1729543	-	Summit SHV-32	1	Gallon(GAL)	08/18/22
1729544	-	Summit SHV-32	1	Gallon(GAL)	08/18/22
1729541	-	Summit SHV-32	1	Gallon(GAL)	08/18/22
1729540	-	Summit SHV-32	1	Gallon(GAL)	08/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1729529	-	Summit SHV-32	1	Gallon(GAL)	08/18/22
1729530	-	Summit SHV-32	1	Gallon(GAL)	08/18/22
1729531	-	Summit SHV-32	1	Gallon(GAL)	08/18/22
1729532	-	Summit SHV-32	1	Gallon(GAL)	08/18/22
1729533	-	Summit SHV-32	1	Gallon(GAL)	08/18/22
1741917	3153-26-2	Vanadyl(IV) acetylacetonate	50	Gram(GM)	08/18/22
1741998	-	Silicon Carbide Abrasive Paper	0.1	Cubic Feet(CF)	08/18/22
1742006	-	Silicon Carbide Abrasive Paper	0.1	Cubic Feet(CF)	08/18/22
1741999	-	Silicon Carbide Abrasive Paper	0.1	Cubic Feet(CF)	08/18/22
1742000	-	Silicon Carbide Abrasive Paper	0.1	Cubic Feet(CF)	08/18/22
1742001	-	Silicon Carbide Abrasive Paper	0.1	Cubic Feet(CF)	08/18/22
1742002	-	Silicon Carbide Abrasive Paper	0.1	Cubic Feet(CF)	08/18/22
1742003	-	Silicon Carbide Abrasive Paper	0.1	Cubic Feet(CF)	08/18/22
1742005	-	Silicon Carbide Abrasive Paper	0.1	Cubic Feet(CF)	08/18/22
1742004	-	Silicon Carbide Abrasive Paper	0.1	Cubic Feet(CF)	08/18/22
1690082	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/18/22
1690083	-	95% NITROGEN/5% HYDROGEN	220	Cubic Feet(CF)	08/18/22
1690084	-	95% NITROGEN/5% HYDROGEN	220	Cubic Feet(CF)	08/18/22
1690085	-	Compressed Air	220	Cubic Feet(CF)	08/18/22
1741705	103-89-9	p-Acetotoluidide 99%	100	Gram(GM)	08/18/22
1690086	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/18/22
1741706	1112-67-0	TETRABUTYLAMMONIUM CHLORIDE	100	Gram(GM)	08/18/22
1741707	110-54-3	HEXANE HPLC	100	Milliliter(ML)	08/18/22
1741708	110-54-3	HEXANE HPLC	1	Liters(L)	08/18/22
1741709	108-88-3	Toluene HPLC	100	Milliliter(ML)	08/18/22
1741710	108-88-3	Toluene HPLC	1	Liters(L)	08/18/22
1741711	4856-95-5	Borane morpholine complex	5	Gram(GM)	08/18/22
1741712	14965-49-2	Methylammonium iodide 99% anhydrous	10	Gram(GM)	08/18/22
1741713	14965-49-2	Methylammonium iodide 99% anhydrous	10	Gram(GM)	08/18/22
1741714	14965-49-2	Methylammonium iodide 99% anhydrous	10	Gram(GM)	08/18/22
1741715	14965-49-2	Methylammonium iodide 99% anhydrous	10	Gram(GM)	08/18/22
1741716	-	Formamidinium iodide	10	Gram(GM)	08/18/22
1741717	-	Formamidinium iodide	10	Gram(GM)	08/18/22
1741718	-	Formamidinium iodide	10	Gram(GM)	08/18/22
1741719	-	Formamidinium iodide	10	Gram(GM)	08/18/22
1741720	12069-32-8	Boron Carbide Powder	1	Kilograms(KG)	08/18/22
1741759	109-66-0	Pentane anhydrous 99+%	1	Liters(L)	08/18/22
1742047	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	08/18/22
1741766	109-66-0	Pentane anhydrous 99+%	1	Liters(L)	08/18/22
1741765	109-66-0	Pentane anhydrous 99+%	1	Liters(L)	08/18/22
1741764	109-66-0	Pentane anhydrous 99+%	1	Liters(L)	08/18/22
1741763	109-66-0	Pentane anhydrous 99+%	1	Liters(L)	08/18/22
1741762	109-66-0	Pentane anhydrous 99+%	1	Liters(L)	08/18/22
1741761	109-66-0	Pentane anhydrous 99+%	1	Liters(L)	08/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1741760	109-66-0	Pentane anhydrous 99+%	1	Liters(L)	08/18/22
1742061	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	08/18/22
1742064	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	08/18/22
1742062	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	08/18/22
1742052	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	08/18/22
1742060	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	08/18/22
1742059	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	08/18/22
1742053	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	08/18/22
1742058	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	08/18/22
1742054	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	08/18/22
1742055	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	08/18/22
1742056	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	08/18/22
1742048	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	08/18/22
1742049	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	08/18/22
1742050	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	08/18/22
1742051	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	08/18/22
1742057	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	08/18/22
1742063	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	08/18/22
1741767	109-99-9	Tetrahydrofuran anhydrous 99.9% inhibitor-free	1	Liters(L)	08/18/22
1741768	109-99-9	Tetrahydrofuran anhydrous 99.9% inhibitor-free	1	Liters(L)	08/18/22
1741769	109-99-9	Tetrahydrofuran anhydrous 99.9% inhibitor-free	1	Liters(L)	08/18/22
1741770	109-99-9	Tetrahydrofuran anhydrous 99.9% inhibitor-free	1	Liters(L)	08/18/22
1742066	64697-40-1	1-Methyl-3-octylimidazolium chloride	50	Gram(GM)	08/18/22
1742067	593-85-1	GUANIDINE CARBONATE	1	Kilograms(KG)	08/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1742068	79-10-7	Acrylic acid (stabilised with hydroquinone monomethyl ether) for synthesis	100	Milliliter(ML)	08/18/22
1742069	79-10-7	Acrylic acid (stabilised with hydroquinone monomethyl ether) for synthesis	100	Milliliter(ML)	08/18/22
1742065	5381-99-7	2-CHLORO-4H-1 3 2-BENZODIOXAPHOSPHORIN-4-ONE	5	Gram(GM)	08/18/22
1741962	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	1	Liters(L)	08/18/22
1741963	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	1	Liters(L)	08/18/22
1741771	1665-00-5	Dichloromethane-d2 99.9 atom D	5	Gram(GM)	08/18/22
1741774	1665-00-5	Dichloromethane-d2 99.9 atom D	5	Gram(GM)	08/18/22
1741775	1665-00-5	Dichloromethane-d2 99.9 atom D	5	Gram(GM)	08/18/22
1741772	1665-00-5	Dichloromethane-d2 99.9 atom D	5	Gram(GM)	08/18/22
1741773	1665-00-5	Dichloromethane-d2 99.9 atom D	5	Gram(GM)	08/18/22
1741776	76-83-5	Triphenylmethyl Chloride 98%	25	Gram(GM)	08/18/22
1741777	76-83-5	Triphenylmethyl Chloride 98%	25	Gram(GM)	08/18/22
1741966	144-62-7	Oxalic Acid 98%	1	Kilograms(KG)	08/18/22
1741964	-	Formalin solution neutral buffered 10%	4	Liters(L)	08/18/22
1741965	-	Formalin solution neutral buffered 10%	4	Liters(L)	08/18/22
1741967	10024-93-8	Neodymium(III) chloride anhydrous (99.9% Nd) (REO)	10	Gram(GM)	08/18/22
1741968	10361-82-7	Samarium(III) chloride anhydrous (99.9%-Sm) (REO)	25	Gram(GM)	08/18/22
1741969	126857-69-0	Lutetium(III) trifluoromethanesulfonate min. 98% (Lutetium triflate)	2	Gram(GM)	08/18/22
1741089	25182-84-7	3-nitropropan-1-ol	10	Gram(GM)	08/18/22
1741090	25182-84-7	3-nitropropan-1-ol	10	Gram(GM)	08/18/22
1741957	1310-58-3	POTASSIUM HYDROXIDE PELLETS	100	Gram(GM)	08/18/22
1741958	1310-58-3	POTASSIUM HYDROXIDE PELLETS	100	Gram(GM)	08/18/22
1741959	1310-58-3	POTASSIUM HYDROXIDE PELLETS	100	Gram(GM)	08/18/22
1741960	1310-73-2	SODIUM HYDROXIDE PELLETS	100	Gram(GM)	08/18/22
1741961	1310-73-2	SODIUM HYDROXIDE PELLETS	100	Gram(GM)	08/18/22
1741972	110802-84-1	Hydrogen hexachloroiridate(IV) hydrate	1	Gram(GM)	08/18/22
1741973	110802-84-1	Hydrogen hexachloroiridate(IV) hydrate	1	Gram(GM)	08/18/22
1741974	383-63-1	ETHYL TRIFLUOROACETATE 99%	25	Gram(GM)	08/18/22
1741971	67-63-0	Isopropyl Alcohol Biotechnology Grade	4	Liters(L)	08/18/22
1742012	-	Methocel A15 LV	500	Gram(GM)	08/18/22
1742013	-	Methocel A15 LV	500	Gram(GM)	08/18/22
1742014	-	Methocel A15 LV	500	Gram(GM)	08/18/22
1742015	814-68-6	Acryloyl chloride 97% contains approx. 400 ppm phenothiazine as stabilizer	100	Gram(GM)	08/18/22
1741954	62-55-5	THIOACETAMIDE	100	Gram(GM)	08/18/22
1741956	50-99-7	DEXTROSE ANHYDROUS	1	Kilograms(KG)	08/18/22
1741064	-	Phenol: chloroform isoamyl alcohol	100	Milliliter(ML)	08/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1741091	7726-95-6	Bromine liquid 99.99+% (metals basis)	50	Milliliter(ML)	08/18/22
1741092	7726-95-6	Bromine liquid 99.99+% (metals basis)	50	Milliliter(ML)	08/18/22
1741970	1345-13-7	Cerium (III) Oxide	50	Gram(GM)	08/18/22
1741096	-	SDS SOLUTION 10%	100	Milliliter(ML)	08/18/22
1741953	667-27-6	Ethyl bromodifluoroacetate 98%	5	Gram(GM)	08/18/22
1741955	2650-53-5	Hexyltrimethylammonium bromide 98+%	25	Gram(GM)	08/18/22
1741063	-	SNAP-Cell 505	50	NMOL	08/19/22
1741922	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	08/19/22
1741937	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	08/19/22
1741936	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	08/19/22
1741939	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	08/19/22
1741930	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	08/19/22
1741938	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	08/19/22
1741926	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	08/19/22
1741923	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	08/19/22
1741932	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	08/19/22
1741925	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	08/19/22
1741935	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	08/19/22
1741927	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	08/19/22
1741928	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	08/19/22
1741929	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	08/19/22
1741931	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	08/19/22
1741933	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	08/19/22
1741934	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	08/19/22
1741924	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	08/19/22
1741940	111-77-3	DIETHYLENE GLYCOL MONOMETHYL ETHER	1	Liters(L)	08/19/22
1741941	112-88-9	1-OCTADECENE	1	Liters(L)	08/19/22
1741942	-	1000 µg/mL Aluminum	125	Milliliter(ML)	08/19/22
1741943	7439-98-7	1 ug/mL Molybdenum	125	Milliliter(ML)	08/19/22
1741944	-	1000 ug/mL Tin	125	Milliliter(ML)	08/19/22
1741945	-	1 ug/mL Zinc	125	Milliliter(ML)	08/19/22
1741946	-	10 ug/mL Cadmium	125	Milliliter(ML)	08/19/22
1741947	-	DUO SEAL PUMP OIL	1	Gallon(GAL)	08/19/22
1741950	-	DUO SEAL PUMP OIL	1	Gallon(GAL)	08/19/22
1741948	-	DUO SEAL PUMP OIL	1	Gallon(GAL)	08/19/22
1741949	-	DUO SEAL PUMP OIL	1	Gallon(GAL)	08/19/22
1741951	-	SU-8 3050	500	Milliliter(ML)	08/19/22
1741952	-	SU-8 2015	500	Milliliter(ML)	08/19/22
1742007	4731-53-7	Tri-n-octylphosphine min. 97% TOP	500	Gram(GM)	08/19/22
1742008	93951-93-0	2-PICOLINE (D7 98%)	1	Gram(GM)	08/19/22
1742009	7758-29-4	Sodium triphosphate pentabasic	100	Gram(GM)	08/19/22
1742010	7758-29-4	Sodium triphosphate pentabasic	100	Gram(GM)	08/19/22
1742011	1313-84-4	SODIUM SULFIDE NONAHYDRATE	50	Gram(GM)	08/19/22
1649623	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1717134	-	NALCO 7408 CHLORINE SCAVENGER SOLUTION	55	Gallon(GAL)	08/19/22
1718916	-	NALCO 8735	639	Pounds(LB)	08/19/22
1719281	-	TRI-ACT 1820 SOLUTION	450	Pounds(LB)	08/19/22
1719282	-	PermaTreat PC-510T	511	Pounds(LB)	08/19/22
1742037	108-88-3	Toluene anhydrous 99.8%	1	Liters(L)	08/19/22
1742042	108-88-3	Toluene anhydrous 99.8%	1	Liters(L)	08/19/22
1742038	108-88-3	Toluene anhydrous 99.8%	1	Liters(L)	08/19/22
1742039	108-88-3	Toluene anhydrous 99.8%	1	Liters(L)	08/19/22
1742041	108-88-3	Toluene anhydrous 99.8%	1	Liters(L)	08/19/22
1742043	108-88-3	Toluene anhydrous 99.8%	1	Liters(L)	08/19/22
1742040	108-88-3	Toluene anhydrous 99.8%	1	Liters(L)	08/19/22
1742044	-	(3-ACRYLOXYPROPYL)TRIMETHOXYSILANE	25	Gram(GM)	08/19/22
1742045	7681-52-9	SODIUM HYPOCHLORITE SOLUTION REAGENT	250	Milliliter(ML)	08/19/22
1742046	624-38-4	1 4-DIIODOBENZENE	10	Gram(GM)	08/19/22
1742106	67-56-1	Methanol anhydrous 99.8%	100	Milliliter(ML)	08/19/22
1742107	67-56-1	Methanol anhydrous 99.8%	100	Milliliter(ML)	08/19/22
1648929	-	H2SO4 PRESERVATION KIT FOR 250 ML CONTAINER	100	Milliliter(ML)	08/19/22
1648930	-	H2SO4 PRESERVATION KIT FOR 250 ML CONTAINER	100	Milliliter(ML)	08/19/22
1742108	10101-41-4	CALCIUM SULFATE DIHYDRATE	1	Kilograms(KG)	08/19/22
1742109	10101-41-4	CALCIUM SULFATE DIHYDRATE	1	Kilograms(KG)	08/19/22
1648931	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	08/19/22
1742110	7647-01-0	HYDROCHLORIC ACID 35-37%	500	Milliliter(ML)	08/19/22
1742112	7647-01-0	HYDROCHLORIC ACID 35-37%	500	Milliliter(ML)	08/19/22
1742113	7647-01-0	HYDROCHLORIC ACID 35-37%	500	Milliliter(ML)	08/19/22
1742114	7647-01-0	HYDROCHLORIC ACID 35-37%	500	Milliliter(ML)	08/19/22
1742115	7647-01-0	HYDROCHLORIC ACID 35-37%	500	Milliliter(ML)	08/19/22
1742111	7647-01-0	HYDROCHLORIC ACID 35-37%	500	Milliliter(ML)	08/19/22
1648932	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	08/19/22
1648934	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	08/19/22
1648933	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	08/19/22
1742203	-	ETHANOL 200 PROOF	16	Ounces(OZ)	08/19/22
1714912	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	1	Liters(L)	08/19/22
1714904	7664-39-3	HYDROFLUORIC ACID REAGENT ACS	500	Milliliter(ML)	08/19/22
1721167	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721203	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721183	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721182	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1721184	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721185	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721186	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721187	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721188	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721202	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721214	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721213	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721212	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721211	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721210	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721209	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721208	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721207	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721206	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721205	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721201	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721172	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721189	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721200	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721199	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721198	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721197	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721196	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721195	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721194	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721193	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721192	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721191	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721190	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721204	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721181	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721168	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721169	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721170	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721171	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721173	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721175	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721176	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721177	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721178	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721179	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721174	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1721180	-	EcoWorks Cleaning Agent	500	Gram(GM)	08/19/22
1742218	-	ETHANOL 200 PROOF	16	Ounces(OZ)	08/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1742212	-	ETHANOL 200 PROOF	16	Ounces(OZ)	08/19/22
1742224	-	ETHANOL 200 PROOF	16	Ounces(OZ)	08/19/22
1742223	-	ETHANOL 200 PROOF	16	Ounces(OZ)	08/19/22
1742222	-	ETHANOL 200 PROOF	16	Ounces(OZ)	08/19/22
1742221	-	ETHANOL 200 PROOF	16	Ounces(OZ)	08/19/22
1742219	-	ETHANOL 200 PROOF	16	Ounces(OZ)	08/19/22
1742217	-	ETHANOL 200 PROOF	16	Ounces(OZ)	08/19/22
1742216	-	ETHANOL 200 PROOF	16	Ounces(OZ)	08/19/22
1742215	-	ETHANOL 200 PROOF	16	Ounces(OZ)	08/19/22
1742225	-	ETHANOL 200 PROOF	16	Ounces(OZ)	08/19/22
1742213	-	ETHANOL 200 PROOF	16	Ounces(OZ)	08/19/22
1742207	-	ETHANOL 200 PROOF	16	Ounces(OZ)	08/19/22
1742211	-	ETHANOL 200 PROOF	16	Ounces(OZ)	08/19/22
1742210	-	ETHANOL 200 PROOF	16	Ounces(OZ)	08/19/22
1742209	-	ETHANOL 200 PROOF	16	Ounces(OZ)	08/19/22
1742208	-	ETHANOL 200 PROOF	16	Ounces(OZ)	08/19/22
1742206	-	ETHANOL 200 PROOF	16	Ounces(OZ)	08/19/22
1742220	-	ETHANOL 200 PROOF	16	Ounces(OZ)	08/19/22
1742205	-	ETHANOL 200 PROOF	16	Ounces(OZ)	08/19/22
1742204	-	ETHANOL 200 PROOF	16	Ounces(OZ)	08/19/22
1742214	-	ETHANOL 200 PROOF	16	Ounces(OZ)	08/19/22
1742226	-	ETHANOL 200 PROOF	16	Ounces(OZ)	08/19/22
1742227	1336-21-6	AMMONIUM HYDROXIDE OPTIMA	250	Milliliter(ML)	08/19/22
1742228	1336-21-6	AMMONIUM HYDROXIDE OPTIMA	250	Milliliter(ML)	08/19/22
1742229	1336-21-6	AMMONIUM HYDROXIDE OPTIMA	250	Milliliter(ML)	08/19/22
1742116	120-82-1	1 2 4-TRICHLOROBENZENE	4	Liters(L)	08/19/22
1742117	68-12-2	N N-Dimethylformamide anhydrous amine free 99.9%	4	Liters(L)	08/19/22
1742118	92-52-4	BIPHENYL	25	Gram(GM)	08/19/22
000EP73021	620-08-0	4-METHOXYPYRIDINE	5	Milliliter(ML)	08/19/22
1742120	3796-24-5	4-TRIFLUOROMETHYLPYRIDINE	1	Gram(GM)	08/19/22
1742121	1317-37-9	IRON (II) SULFIDE	10	Gram(GM)	08/19/22
1742191	-	KRYTOX VACUUM PUMP OIL	500	Gram(GM)	08/19/22
1742192	-	KRYTOX VACUUM PUMP OIL	500	Gram(GM)	08/19/22
1742193	-	KRYTOX VACUUM PUMP OIL	500	Gram(GM)	08/19/22
1742194	-	DESICCANT	5	Pounds(LB)	08/19/22
1742195	288-47-1	THIAZOLE	5	Gram(GM)	08/19/22
1742196	111-92-2	DIBUTYLAMINE	100	Milliliter(ML)	08/19/22
1742197	71-36-3	1-Butanol 99%	1000	Milliliter(ML)	08/19/22
1742198	77-09-8	PHENOLPHTHALEIN	50	Gram(GM)	08/19/22
1742199	76-60-8	BROMOCRESOL GREEN	1	Gram(GM)	08/19/22
1742200	7440-18-8	Ruthenium pellet	5	Gram(GM)	08/19/22
1742202	7440-18-8	Ruthenium pellet	5	Gram(GM)	08/19/22
1742201	7440-18-8	Ruthenium pellet	5	Gram(GM)	08/19/22
1738881	67-64-1	Acetone HPLC	4	Liters(L)	08/22/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1738883	67-64-1	Acetone HPLC	4	Liters(L)	08/22/22
1738886	67-64-1	Acetone HPLC	4	Liters(L)	08/22/22
1738894	67-64-1	Acetone HPLC	4	Liters(L)	08/22/22
1738892	67-64-1	Acetone HPLC	4	Liters(L)	08/22/22
1738891	67-64-1	Acetone HPLC	4	Liters(L)	08/22/22
1738882	67-64-1	Acetone HPLC	4	Liters(L)	08/22/22
1738890	67-64-1	Acetone HPLC	4	Liters(L)	08/22/22
1738893	67-64-1	Acetone HPLC	4	Liters(L)	08/22/22
1738887	67-64-1	Acetone HPLC	4	Liters(L)	08/22/22
1738895	67-64-1	Acetone HPLC	4	Liters(L)	08/22/22
1738885	67-64-1	Acetone HPLC	4	Liters(L)	08/22/22
1738889	67-64-1	Acetone HPLC	4	Liters(L)	08/22/22
1738884	67-64-1	Acetone HPLC	4	Liters(L)	08/22/22
1738888	67-64-1	Acetone HPLC	4	Liters(L)	08/22/22
1742016	626-35-7	ETHYL NITROACETATE	25	Gram(GM)	08/22/22
1742017	700-16-3	Pentafluoropyridine 99+%	25	Gram(GM)	08/22/22
1742028	-	Fisherbrand 19 Mechanical Pump Oil	4	Liters(L)	08/22/22
1742029	-	Fisherbrand 19 Mechanical Pump Oil	4	Liters(L)	08/22/22
1742030	-	Fisherbrand 19 Mechanical Pump Oil	4	Liters(L)	08/22/22
1742031	-	Fisherbrand 19 Mechanical Pump Oil	4	Liters(L)	08/22/22
1742032	7601-90-3	PERCHLORIC ACID OPTIMA	1	Liters(L)	08/22/22
1742033	7601-90-3	PERCHLORIC ACID OPTIMA	1	Liters(L)	08/22/22
1742102	112-90-3	OLEYLAMINE 70%	500	Gram(GM)	08/22/22
1742103	112-90-3	OLEYLAMINE 70%	500	Gram(GM)	08/22/22
1742104	112-90-3	OLEYLAMINE 70%	500	Gram(GM)	08/22/22
1742105	112-90-3	OLEYLAMINE 70%	500	Gram(GM)	08/22/22
1742097	1076-43-3	BENZENE-D6	100	Gram(GM)	08/22/22
1742100	1076-43-3	BENZENE-D6	100	Gram(GM)	08/22/22
1742099	1076-43-3	BENZENE-D6	100	Gram(GM)	08/22/22
1742098	1076-43-3	BENZENE-D6	100	Gram(GM)	08/22/22
1742091	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Gram(GM)	08/22/22
1742094	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Gram(GM)	08/22/22
1742095	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Gram(GM)	08/22/22
1742096	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Gram(GM)	08/22/22
1742093	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Gram(GM)	08/22/22
1742092	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Gram(GM)	08/22/22
1729569	-	WEST C-358	514	Pounds(LB)	08/22/22
1729570	-	WEST C-358	514	Pounds(LB)	08/22/22
1729576	-	WEST C-358	514	Pounds(LB)	08/22/22
1729575	-	WEST C-358	514	Pounds(LB)	08/22/22
1729574	-	WEST C-358	514	Pounds(LB)	08/22/22
1729573	-	WEST C-358	514	Pounds(LB)	08/22/22
1729571	-	WEST C-358	514	Pounds(LB)	08/22/22
1729577	-	WEST C-358	514	Pounds(LB)	08/22/22
1729572	-	WEST C-358	514	Pounds(LB)	08/22/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1631278	-	Benjamin Moore Ultra Spec HP D.T.M. Acrylic Semi-Gloss Enamel	1	Gallon(GAL)	08/22/22
1631280	-	Benjamin Moore Ultra Spec HP D.T.M. Acrylic Semi-Gloss Enamel	1	Gallon(GAL)	08/22/22
1631281	-	Benjamin Moore Ultra Spec HP D.T.M. Acrylic Semi-Gloss Enamel	1	Gallon(GAL)	08/22/22
1635456	-	Benjamin Moore Ultra Spec HP D.T.M. Acrylic Semi-Gloss Enamel	1	Gallon(GAL)	08/22/22
1635455	-	Benjamin Moore Ultra Spec HP D.T.M. Acrylic Semi-Gloss Enamel	1	Gallon(GAL)	08/22/22
1635458	-	Benjamin Moore Ultra Spec HP D.T.M. Acrylic Semi-Gloss Enamel	1	Gallon(GAL)	08/22/22
1729711	-	WEST C-358	514	Pounds(LB)	08/22/22
1729712	-	WEST C-358	514	Pounds(LB)	08/22/22
1729713	-	WEST C-358	514	Pounds(LB)	08/22/22
1729714	-	WEST C-358	514	Pounds(LB)	08/22/22
1729715	-	WEST C-358	514	Pounds(LB)	08/22/22
1727994	-	Old Masters Polyurethane Semi-Gloss	1	Gallon(GAL)	08/22/22
1728123	-	Vers-Acryl 222 S/G Finish Black	1	Gallon(GAL)	08/22/22
1728124	-	Vers-Acryl 222 S/G Finish Black	1	Gallon(GAL)	08/22/22
1728140	-	Vers-Acryl 222 S/G Finish Black	1	Gallon(GAL)	08/22/22
1728141	-	Vers-Acryl 222 S/G Finish Black	1	Gallon(GAL)	08/22/22
1728301	-	LENOX Band-Ade	5	Gallon(GAL)	08/22/22
1728303	-	LENOX Band-Ade	5	Gallon(GAL)	08/22/22
1728302	-	LENOX Band-Ade	5	Gallon(GAL)	08/22/22
1728304	-	LENOX Band-Ade	5	Gallon(GAL)	08/22/22
1729554	-	QUIN-CIP COMPRESSOR OIL S	1	Gallon(GAL)	08/22/22
1729558	-	QUIN-CIP COMPRESSOR OIL S	1	Gallon(GAL)	08/22/22
1729555	-	QUIN-CIP COMPRESSOR OIL S	1	Gallon(GAL)	08/22/22
1729557	-	QUIN-CIP COMPRESSOR OIL S	1	Gallon(GAL)	08/22/22
1729565	-	QUIN-CIP COMPRESSOR OIL S	1	Gallon(GAL)	08/22/22
1729559	-	QUIN-CIP COMPRESSOR OIL S	1	Gallon(GAL)	08/22/22
1729560	-	QUIN-CIP COMPRESSOR OIL S	1	Gallon(GAL)	08/22/22
1729561	-	QUIN-CIP COMPRESSOR OIL S	1	Gallon(GAL)	08/22/22
1729562	-	QUIN-CIP COMPRESSOR OIL S	1	Gallon(GAL)	08/22/22
1729563	-	QUIN-CIP COMPRESSOR OIL S	1	Gallon(GAL)	08/22/22
1729564	-	QUIN-CIP COMPRESSOR OIL S	1	Gallon(GAL)	08/22/22
1729568	-	QUIN-CIP COMPRESSOR OIL S	1	Gallon(GAL)	08/22/22
1729567	-	QUIN-CIP COMPRESSOR OIL S	1	Gallon(GAL)	08/22/22
1729566	-	QUIN-CIP COMPRESSOR OIL S	1	Gallon(GAL)	08/22/22
1729556	-	QUIN-CIP COMPRESSOR OIL S	1	Gallon(GAL)	08/22/22
1729578	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729598	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729641	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729652	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1729651	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729650	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729649	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729648	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729647	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729646	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729645	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729644	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729596	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729642	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729655	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729640	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729639	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729638	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729637	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729636	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729635	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729634	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729633	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729632	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729631	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729643	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729665	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729679	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729678	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729677	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729676	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729675	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729673	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729671	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729670	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729669	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729668	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729653	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729666	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729654	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729664	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729663	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729662	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729661	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729660	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729659	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729658	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729657	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729656	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1729628	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729667	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729590	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729630	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729602	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729601	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729600	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729599	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729672	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729597	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729595	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729594	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729593	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729604	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729591	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729605	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729589	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729588	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729587	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729586	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729585	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729584	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729583	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729582	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729581	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729580	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729592	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729616	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729579	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729627	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729626	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729625	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729624	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729623	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729622	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729621	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729620	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729619	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729603	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729617	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729629	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729615	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729614	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729613	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729612	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1729611	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729610	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729609	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729608	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729607	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729606	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729618	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729674	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729682	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729693	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729704	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729703	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729702	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729701	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729699	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729697	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729696	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729705	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729694	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729700	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729690	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729692	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729691	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729684	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729683	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729695	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729685	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729707	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729708	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729709	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729698	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729706	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729686	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729687	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729710	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729689	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729688	-	BROMICIDE TABLETS	50	Pounds(LB)	08/22/22
1729680	-	WEST-R-630	573	Pounds(LB)	08/22/22
1729681	-	WEST-R-630	573	Pounds(LB)	08/22/22
1728305	-	AW HYDRAULIC OIL 46	5	Gallon(GAL)	08/22/22
1728306	-	AW HYDRAULIC OIL 46	5	Gallon(GAL)	08/22/22
1729716	-	R-630	573	Pounds(LB)	08/22/22
1729718	-	R-630	573	Pounds(LB)	08/22/22
1729719	-	R-630	573	Pounds(LB)	08/22/22
1729717	-	R-630	573	Pounds(LB)	08/22/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1728307	-	CHEMSAFE CLEAR (CARB Compliant)	4.75	Gallon(GAL)	08/22/22
1728308	-	CHEMSAFE CLEAR (CARB Compliant)	4.75	Gallon(GAL)	08/22/22
1729720	-	ANTIFREEZE & COOLANT	1	Gallon(GAL)	08/22/22
1728309	-	Diamond Spray Paint Aluminum	12	Ounces(OZ)	08/22/22
1728317	-	Diamond Spray Paint Aluminum	12	Ounces(OZ)	08/22/22
1728311	-	Diamond Spray Paint Aluminum	12	Ounces(OZ)	08/22/22
1728312	-	Diamond Spray Paint Aluminum	12	Ounces(OZ)	08/22/22
1728313	-	Diamond Spray Paint Aluminum	12	Ounces(OZ)	08/22/22
1728314	-	Diamond Spray Paint Aluminum	12	Ounces(OZ)	08/22/22
1728319	-	Diamond Spray Paint Aluminum	12	Ounces(OZ)	08/22/22
1728316	-	Diamond Spray Paint Aluminum	12	Ounces(OZ)	08/22/22
1728318	-	Diamond Spray Paint Aluminum	12	Ounces(OZ)	08/22/22
1728310	-	Diamond Spray Paint Aluminum	12	Ounces(OZ)	08/22/22
1728315	-	Diamond Spray Paint Aluminum	12	Ounces(OZ)	08/22/22
1728320	-	Diamond Spray Paint Aluminum	12	Ounces(OZ)	08/22/22
1728341	-	Diamond Spray Paint Aluminum	12	Ounces(OZ)	08/22/22
1728321	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	08/22/22
1728322	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	08/22/22
1728326	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	08/22/22
1728324	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	08/22/22
1728323	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	08/22/22
1728325	-	Diamond Spray Paint Red Primer	12	Ounces(OZ)	08/22/22
V00000C48B	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/22/22
V00000C48C	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/22/22
V00000C48D	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/22/22
V00000C48E	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/22/22
V00000C48F	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/22/22
V00000C490	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/22/22
V00000C491	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/22/22
V00000C48A	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/22/22
1728327	-	SHEETROCK LIGHTWEIGHT ALL PURPOSE JOINT COMPOUND	5	Gallon(GAL)	08/22/22
1728328	-	SHEETROCK LIGHTWEIGHT ALL PURPOSE JOINT COMPOUND	5	Gallon(GAL)	08/22/22
1728329	-	SHEETROCK Brand PLUS 3 Lightweight All Purpose Joint Compound Ready-Mixed	4.5	Gallon(GAL)	08/22/22
1729721	-	CC FIX	5	Gallon(GAL)	08/22/22
1729730	-	CC FIX	5	Gallon(GAL)	08/22/22
1729722	-	CC FIX	5	Gallon(GAL)	08/22/22
1729723	-	CC FIX	5	Gallon(GAL)	08/22/22
1729724	-	CC FIX	5	Gallon(GAL)	08/22/22
1729725	-	CC FIX	5	Gallon(GAL)	08/22/22
1729726	-	CC FIX	5	Gallon(GAL)	08/22/22
1729727	-	CC FIX	5	Gallon(GAL)	08/22/22
1729728	-	CC FIX	5	Gallon(GAL)	08/22/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1729729	-	CC FIX	5	Gallon(GAL)	08/22/22
1737998	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	250	Gram(GM)	08/22/22
1728330	-	EnduraZinc 703 Brite Cold Galvanizing Primer Finish	1	Gallon(GAL)	08/22/22
1728332	-	EnduraZinc 703 Brite Cold Galvanizing Primer Finish	1	Gallon(GAL)	08/22/22
1728331	-	EnduraZinc 703 Brite Cold Galvanizing Primer Finish	1	Gallon(GAL)	08/22/22
1728333	-	EnduraZinc 703 Brite Cold Galvanizing Primer Finish	1	Gallon(GAL)	08/22/22
V00000C492	-	Avalon Premium 100% Acrylic Interior Satin W/B	3.6	Liters(L)	08/22/22
V00000C496	-	Avalon Premium 100% Acrylic Interior Satin W/B	3.6	Liters(L)	08/22/22
V00000C495	-	Avalon Premium 100% Acrylic Interior Satin W/B	3.6	Liters(L)	08/22/22
V00000C493	-	Avalon Premium 100% Acrylic Interior Satin W/B	3.6	Liters(L)	08/22/22
V00000C497	-	Avalon Premium 100% Acrylic Interior Satin W/B	3.6	Liters(L)	08/22/22
V00000C494	-	Avalon Premium 100% Acrylic Interior Satin W/B	3.6	Liters(L)	08/22/22
V00000C49B	-	Avalon Premium 100% Acrylic Interior Satin W/B	3.6	Liters(L)	08/22/22
V00000C49A	-	Avalon Premium 100% Acrylic Interior Satin W/B	3.6	Liters(L)	08/22/22
V00000C498	-	Avalon Premium 100% Acrylic Interior Satin W/B	3.6	Liters(L)	08/22/22
V00000C499	-	Avalon Premium 100% Acrylic Interior Satin W/B	3.6	Liters(L)	08/22/22
V00000C49D	-	Cote All Gloss Jet Black	1	Gallon(GAL)	08/22/22
V00000C49E	-	Cote All Gloss Jet Black	1	Gallon(GAL)	08/22/22
V00000C49C	-	Cote All Gloss Jet Black	1	Gallon(GAL)	08/22/22
V00000C49F	-	Avalon Premium 100% Acrylic Interior Satin W/B	3.6	Liters(L)	08/22/22
V00000C4A0	-	Avalon Premium 100% Acrylic Interior Satin W/B	3.6	Liters(L)	08/22/22
1728363	-	Vers-Acryl 222 S/G Finish Neutral Base	3.4	Liters(L)	08/22/22
1728365	-	Vers-Acryl 222 S/G Finish Neutral Base	3.4	Liters(L)	08/22/22
1728364	-	Vers-Acryl 222 S/G Finish Neutral Base	3.4	Liters(L)	08/22/22
V00000C4A1	-	Avalon Premium 100% Acrylic Interior Satin M/B	3.6	Liters(L)	08/22/22
V00000C4A3	-	Avalon Premium 100% Acrylic Interior Satin M/B	3.6	Liters(L)	08/22/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C4A2	-	Avalon Premium 100% Acrylic Interior Satin M/B	3.6	Liters(L)	08/22/22
1728334	-	Cote All Aluminum	1	Gallon(GAL)	08/22/22
1728335	-	Cote All Aluminum	1	Gallon(GAL)	08/22/22
1728336	-	Cote All Aluminum	1	Gallon(GAL)	08/22/22
1728337	-	Avalon Premium 100% Acrylic Interior Satin W/B	5	Gallon(GAL)	08/22/22
1728340	-	Avalon Premium 100% Acrylic Interior Satin W/B	5	Gallon(GAL)	08/22/22
1728339	-	Avalon Premium 100% Acrylic Interior Satin W/B	5	Gallon(GAL)	08/22/22
1728338	-	Avalon Premium 100% Acrylic Interior Satin W/B	5	Gallon(GAL)	08/22/22
1728353	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	08/22/22
1728356	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	08/22/22
1728357	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	08/22/22
1728358	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	08/22/22
1728359	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	08/22/22
1728360	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	08/22/22
1728361	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	08/22/22
1728362	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	08/22/22
1728354	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	08/22/22
1728355	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	08/22/22
V00000C4A4	-	Cote All Universal White Primer L/F R/I	1	Gallon(GAL)	08/22/22
1741097	106627-54-7	Sulfo-NHS (N-hydroxysulfosuccinimide)	100	Milligram(MG)	08/22/22
1741098	25952-53-8	1-ETHYL-3-(3-DIMETHYLAMINOPROPYL) CARBODIIMIDE HYDROCHLORIDE	1	Gram(GM)	08/22/22
1741106	7790-98-9	AMMONIUM PERCHLORATE	1	Kilograms(KG)	08/22/22
1741107	7790-98-9	AMMONIUM PERCHLORATE	1	Kilograms(KG)	08/22/22
1741108	7790-98-9	AMMONIUM PERCHLORATE	1	Kilograms(KG)	08/22/22
1741109	7790-98-9	AMMONIUM PERCHLORATE	1	Kilograms(KG)	08/22/22
1741110	7790-98-9	AMMONIUM PERCHLORATE	1	Kilograms(KG)	08/22/22
1728366	-	Vers-Acryl 222 S/G Finish Neutral Base	3.4	Liters(L)	08/22/22
1728369	-	Vers-Acryl 222 S/G Finish Neutral Base	3.4	Liters(L)	08/22/22
1728368	-	Vers-Acryl 222 S/G Finish Neutral Base	3.4	Liters(L)	08/22/22
1728367	-	Vers-Acryl 222 S/G Finish Neutral Base	3.4	Liters(L)	08/22/22
V00000C4A6	-	Avalon Premium 100% Acrylic Interior Satin W/B	3.6	Liters(L)	08/22/22
V00000C4A5	-	Avalon Premium 100% Acrylic Interior Satin W/B	3.6	Liters(L)	08/22/22
V00000C4A7	-	Avalon Premium 100% Acrylic Interior Satin W/B	3.6	Liters(L)	08/22/22
1728370	-	TITEBOND ACOUSTICAL CEILING TILE ADHESIVE	4	Gallon(GAL)	08/22/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1728371	-	TITEBOND ACOUSTICAL CEILING TILE ADHESIVE	4	Gallon(GAL)	08/22/22
1728372	-	TITEBOND ACOUSTICAL CEILING TILE ADHESIVE	4	Gallon(GAL)	08/22/22
1728373	-	TITEBOND ACOUSTICAL CEILING TILE ADHESIVE	4	Gallon(GAL)	08/22/22
1728374	-	TITEBOND ACOUSTICAL CEILING TILE ADHESIVE	4	Gallon(GAL)	08/22/22
1728375	-	TITEBOND ACOUSTICAL CEILING TILE ADHESIVE	4	Gallon(GAL)	08/22/22
1728376	-	ACOUSTICAL CELING TILE ADHESIVE	4	Gallon(GAL)	08/22/22
1728377	-	ACOUSTICAL CELING TILE ADHESIVE	4	Gallon(GAL)	08/22/22
V00000C4B9	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/22/22
V00000C4B6	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/22/22
V00000C4BB	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/22/22
V00000C4BA	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/22/22
V00000C4B4	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/22/22
V00000C4A8	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/22/22
V00000C4A9	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/22/22
V00000C4AA	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/22/22
V00000C4AB	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/22/22
V00000C4AC	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/22/22
V00000C4AD	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/22/22
V00000C4AE	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/22/22
V00000C4AF	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/22/22
V00000C4B0	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/22/22
V00000C4B1	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/22/22
V00000C4B2	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/22/22
V00000C4B8	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/22/22
V00000C4B3	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/22/22
V00000C4B7	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/22/22
V00000C4B5	-	CONCRETE BONDING ADHESIVE	1	Gallon(GAL)	08/22/22
1728378	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/22/22
1728383	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/22/22
1728388	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/22/22
1728381	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/22/22
1728380	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/22/22
1728379	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/22/22
1728384	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/22/22
1728385	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/22/22
1728387	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/22/22
1728382	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/22/22
1728389	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/22/22
1728391	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/22/22
1728392	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/22/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1728390	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/22/22
1728386	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/22/22
V00000C4BF	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/22/22
V00000C4BC	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/22/22
V00000C4BE	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/22/22
V00000C4C0	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/22/22
V00000C4C1	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/22/22
V00000C4C2	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/22/22
V00000C4C3	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/22/22
V00000C4BD	-	ARDEX FEATHER FINISH	10	Pounds(LB)	08/22/22
1742122	12027-06-4	AMMONIUM IODIDE	25	Gram(GM)	08/22/22
1742123	7783-85-9	AMMONIUM IRON (II) SULFATE HYDRATE	25	Gram(GM)	08/22/22
1742124	-	ISOPROPANOL 70%	4	Liters(L)	08/22/22
1742127	-	ISOPROPANOL 70%	4	Liters(L)	08/22/22
1742126	-	ISOPROPANOL 70%	4	Liters(L)	08/22/22
1742125	-	ISOPROPANOL 70%	4	Liters(L)	08/22/22
1718914	-	2-ISOPROPANOL	1	Gallon(GAL)	08/22/22
1718915	-	2-ISOPROPANOL	1	Gallon(GAL)	08/22/22
1714975	7697-37-2	NITRIC ACID 69%-70% INACTIVE	2.5	Liters(L)	08/22/22
1714976	7697-37-2	NITRIC ACID 69%-70% INACTIVE	2.5	Liters(L)	08/22/22
1714977	7697-37-2	NITRIC ACID 69%-70% INACTIVE	2.5	Liters(L)	08/22/22
1714980	7697-37-2	NITRIC ACID 69%-70% INACTIVE	2.5	Liters(L)	08/22/22
1714978	7697-37-2	NITRIC ACID 69%-70% INACTIVE	2.5	Liters(L)	08/22/22
1714979	7697-37-2	NITRIC ACID 69%-70% INACTIVE	2.5	Liters(L)	08/22/22
1720114	7440-43-9	CADMIUM METAL	50	Gram(GM)	08/22/22
1720123	7440-62-2	VANADIUM METAL	10	Gram(GM)	08/22/22
1423142	-	CONCRETE REPAIR	50	Pounds(LB)	08/22/22
1423159	-	CONCRETE REPAIR	50	Pounds(LB)	08/22/22
1423152	-	CONCRETE REPAIR	50	Pounds(LB)	08/22/22
1423144	-	CONCRETE REPAIR	50	Pounds(LB)	08/22/22
1423145	-	CONCRETE REPAIR	50	Pounds(LB)	08/22/22
1423146	-	CONCRETE REPAIR	50	Pounds(LB)	08/22/22
1423147	-	CONCRETE REPAIR	50	Pounds(LB)	08/22/22
1423148	-	CONCRETE REPAIR	50	Pounds(LB)	08/22/22
1423149	-	CONCRETE REPAIR	50	Pounds(LB)	08/22/22
1423150	-	CONCRETE REPAIR	50	Pounds(LB)	08/22/22
1423158	-	CONCRETE REPAIR	50	Pounds(LB)	08/22/22
1423151	-	CONCRETE REPAIR	50	Pounds(LB)	08/22/22
1423153	-	CONCRETE REPAIR	50	Pounds(LB)	08/22/22
1423154	-	CONCRETE REPAIR	50	Pounds(LB)	08/22/22
1423143	-	CONCRETE REPAIR	50	Pounds(LB)	08/22/22
1423155	-	CONCRETE REPAIR	50	Pounds(LB)	08/22/22
1423156	-	CONCRETE REPAIR	50	Pounds(LB)	08/22/22
1423157	-	CONCRETE REPAIR	50	Pounds(LB)	08/22/22
1728277	-	Compressible Fluid	1	Gallon(GAL)	08/23/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1714986	7697-37-2	NITRIC ACID 69%-70% INACTIVE	2.5	Liters(L)	08/23/22
1714982	7697-37-2	NITRIC ACID 69%-70% INACTIVE	2.5	Liters(L)	08/23/22
1714981	7697-37-2	NITRIC ACID 69%-70% INACTIVE	2.5	Liters(L)	08/23/22
1714985	7697-37-2	NITRIC ACID 69%-70% INACTIVE	2.5	Liters(L)	08/23/22
1714983	7697-37-2	NITRIC ACID 69%-70% INACTIVE	2.5	Liters(L)	08/23/22
1714984	7697-37-2	NITRIC ACID 69%-70% INACTIVE	2.5	Liters(L)	08/23/22
1727874	Multi	The Right Stuff	7	Ounces(OZ)	08/23/22
1727876	Multi	The Right Stuff	7	Ounces(OZ)	08/23/22
1727875	Multi	The Right Stuff	7	Ounces(OZ)	08/23/22
1727877	Multi	The Right Stuff	7	Ounces(OZ)	08/23/22
1727878	-	Pyroil Non-Chlorinated Brake Parts Cleaner PY4003	13	Ounces(OZ)	08/23/22
1727879	-	Pyroil Non-Chlorinated Brake Parts Cleaner PY4003	13	Ounces(OZ)	08/23/22
1727880	-	Pyroil Non-Chlorinated Brake Parts Cleaner PY4003	13	Ounces(OZ)	08/23/22
V00000C4C8	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	08/23/22
V00000C4C7	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	08/23/22
V00000C4C4	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	08/23/22
V00000C4C9	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	08/23/22
V00000C4CD	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	08/23/22
V00000C4CA	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	08/23/22
V00000C4C6	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	08/23/22
V00000C4CB	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	08/23/22
V00000C4CC	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	08/23/22
V00000C4C5	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	08/23/22
1742035	10039-56-2	SODIUM HYPOPHOSPHITE MONOHYDRATE	100	Gram(GM)	08/23/22
1742036	10039-56-2	SODIUM HYPOPHOSPHITE MONOHYDRATE	100	Gram(GM)	08/23/22
1742070	-	1N SODIUM HYDROXIDE SOLUTION	1	Liters(L)	08/23/22
1742071	-	1N SODIUM HYDROXIDE SOLUTION	1	Liters(L)	08/23/22
1742072	-	1N SODIUM HYDROXIDE SOLUTION	1	Liters(L)	08/23/22
1742073	7647-01-0	HYDROCHLORIC ACID (HCL HYDROGEN CHLORIDE) 1N	1	Liters(L)	08/23/22
1742074	7647-01-0	HYDROCHLORIC ACID (HCL HYDROGEN CHLORIDE) 1N	1	Liters(L)	08/23/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1742128	-	P400SC Waterworks Cleaning Solution	1	Liters(L)	08/23/22
1742129	-	P400SC Waterworks Cleaning Solution	1	Liters(L)	08/23/22
1742139	-	P400SC Waterworks Cleaning Solution	1	Liters(L)	08/23/22
1742138	-	P400SC Waterworks Cleaning Solution	1	Liters(L)	08/23/22
1742137	-	P400SC Waterworks Cleaning Solution	1	Liters(L)	08/23/22
1742136	-	P400SC Waterworks Cleaning Solution	1	Liters(L)	08/23/22
1742135	-	P400SC Waterworks Cleaning Solution	1	Liters(L)	08/23/22
1742134	-	P400SC Waterworks Cleaning Solution	1	Liters(L)	08/23/22
1742133	-	P400SC Waterworks Cleaning Solution	1	Liters(L)	08/23/22
1742132	-	P400SC Waterworks Cleaning Solution	1	Liters(L)	08/23/22
1742130	-	P400SC Waterworks Cleaning Solution	1	Liters(L)	08/23/22
1742131	-	P400SC Waterworks Cleaning Solution	1	Liters(L)	08/23/22
1742077	67-64-1	Acetone Reagent ACS Grade	2.5	Liters(L)	08/23/22
1742083	67-56-1	Methanol (Optima LC/MS)	4	Liters(L)	08/23/22
1742086	67-56-1	Methanol (Optima LC/MS)	4	Liters(L)	08/23/22
1742085	67-56-1	Methanol (Optima LC/MS)	4	Liters(L)	08/23/22
1742084	67-56-1	Methanol (Optima LC/MS)	4	Liters(L)	08/23/22
1742087	16940-66-2	SODIUM BORHYDRIDE	25	Gram(GM)	08/23/22
1742088	108-88-3	Toluene anhydrous 99.8%	1	Liters(L)	08/23/22
1742140	-	BlueSeal	1	Gallon(GAL)	08/23/22
1742142	-	BlueSeal	1	Gallon(GAL)	08/23/22
1742143	-	BlueSeal	1	Gallon(GAL)	08/23/22
1742141	-	BlueSeal	1	Gallon(GAL)	08/23/22
1742101	865-49-6	Chloroform-D 99.96 atom % D	10	Milliliter(ML)	08/23/22
1742089	16940-66-2	SODIUM BOROHYDRIDE	25	Gram(GM)	08/23/22
1742034	7778-54-3	CALCIUM HYPOCHLORITE	250	Gram(GM)	08/23/22
1742144	68002-97-1	Signature (Odor Blocker)	1	Quarts(QT)	08/23/22
1742149	68002-97-1	Signature (Odor Blocker)	1	Quarts(QT)	08/23/22
1742148	68002-97-1	Signature (Odor Blocker)	1	Quarts(QT)	08/23/22
1742147	68002-97-1	Signature (Odor Blocker)	1	Quarts(QT)	08/23/22
1742146	68002-97-1	Signature (Odor Blocker)	1	Quarts(QT)	08/23/22
1742145	68002-97-1	Signature (Odor Blocker)	1	Quarts(QT)	08/23/22
1742079	8042-47-5	MINERAL OIL	1	Liters(L)	08/23/22
1742150	-	EverPrime	1	Gallon(GAL)	08/23/22
1742155	-	EverPrime	1	Gallon(GAL)	08/23/22
1742152	-	EverPrime	1	Gallon(GAL)	08/23/22
1742153	-	EverPrime	1	Gallon(GAL)	08/23/22
1742151	-	EverPrime	1	Gallon(GAL)	08/23/22
1742154	-	EverPrime	1	Gallon(GAL)	08/23/22
1742078	-	TRIZOL REAGENT	200	Milliliter(ML)	08/23/22
1742156	-	Clear Resin	1	Liters(L)	08/23/22
1742157	-	Clear Resin	1	Liters(L)	08/23/22
1742161	-	Clear Resin	1	Liters(L)	08/23/22
1742160	-	Clear Resin	1	Liters(L)	08/23/22
1742158	-	Clear Resin	1	Liters(L)	08/23/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1742159	-	Clear Resin	1	Liters(L)	08/23/22
1742081	7439-91-0	LANTHANUM CHIPS	1	Gallon(GAL)	08/23/22
1742162	50-81-7	L-ASCORBIC ACID	100	Gram(GM)	08/23/22
1742163	25038-59-9	POLYETHYLENE TEREPHTHALATE	250	Gram(GM)	08/23/22
1742082	1730-25-2	ALLYLMAGNESIUM BROMIDE 1M SOLN IN ETHER	100	Milliliter(ML)	08/23/22
1742164	9003-53-6	POLYSTYRENE 280 000	25	Gram(GM)	08/23/22
1742165	9002-86-2	POLY(VINYL CHLORIDE)	25	Gram(GM)	08/23/22
1742080	-	Meso-Erythritol 99%	25	Gram(GM)	08/23/22
1742166	-	ALCONOX DETERGENT	4	Pounds(LB)	08/23/22
1742170	-	ALCONOX DETERGENT	4	Pounds(LB)	08/23/22
1742169	-	ALCONOX DETERGENT	4	Pounds(LB)	08/23/22
1742168	-	ALCONOX DETERGENT	4	Pounds(LB)	08/23/22
1742167	-	ALCONOX DETERGENT	4	Pounds(LB)	08/23/22
1058659	67-63-0	ISOPROPYL ALCOHOL	4	Liters(L)	08/23/22
1058661	67-63-0	ISOPROPYL ALCOHOL	4	Liters(L)	08/23/22
1058662	67-63-0	ISOPROPYL ALCOHOL	4	Liters(L)	08/23/22
1058660	67-63-0	ISOPROPYL ALCOHOL	4	Liters(L)	08/23/22
1690087	75-45-6	CHLORODIFLUOROMETHANE	30	Cubic Feet(CF)	08/23/22
1690088	75-45-6	CHLORODIFLUOROMETHANE	30	Cubic Feet(CF)	08/23/22
1690089	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	08/23/22
1690095	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	08/23/22
1690093	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	08/23/22
1690092	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	08/23/22
1690096	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	08/23/22
1690091	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	08/23/22
1690090	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	08/23/22
1690094	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	08/23/22
1690097	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	08/23/22
1690098	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	08/23/22
1690141	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	08/23/22
1690142	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	08/23/22
1690143	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	08/23/22
1690140	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	08/23/22
1690144	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	08/23/22
1690145	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	08/23/22
1690099	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690101	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690102	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690100	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690192	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690188	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690194	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690202	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690201	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1690200	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690199	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690198	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690197	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690196	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690195	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690193	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690191	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690204	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690189	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690205	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690187	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690176	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690177	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690178	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690179	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690180	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690181	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690182	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690183	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690184	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690185	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690186	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690190	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690218	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690211	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690212	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690213	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690214	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690215	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690216	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690203	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690217	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690210	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690209	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690208	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690219	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690220	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690207	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690206	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690222	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690223	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690227	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690221	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690228	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1690226	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690229	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690230	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690231	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690232	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690233	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690234	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690235	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690225	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690224	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/23/22
1690103	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/23/22
1690110	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/23/22
1690104	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/23/22
1690105	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/23/22
1690106	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/23/22
1690107	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/23/22
1690109	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/23/22
1690111	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/23/22
1690112	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/23/22
1690113	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/23/22
1690114	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/23/22
1690115	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/23/22
1690116	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/23/22
1690117	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/23/22
1690108	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/23/22
1690131	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/23/22
1690139	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/23/22
1690137	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/23/22
1690134	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/23/22
1690133	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/23/22
1690132	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/23/22
1690135	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/23/22
1690136	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/23/22
1690138	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/23/22
1690237	7727-37-9	NITROGEN GAS	40	Cubic Feet(CF)	08/23/22
1690123	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/23/22
1690127	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/23/22
1690126	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/23/22
1690125	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/23/22
1690124	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/23/22
1690119	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/23/22
1690122	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/23/22
1690121	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/23/22
1690128	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/23/22
1690118	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/23/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1690120	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/23/22
1690129	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/23/22
1690130	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/23/22
1690146	-	Compressed Air	220	Cubic Feet(CF)	08/23/22
1690147	-	Compressed Air	220	Cubic Feet(CF)	08/23/22
1690148	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/23/22
1690149	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/23/22
1690150	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/23/22
1690151	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/23/22
1690172	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/23/22
1690162	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/23/22
1690173	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/23/22
1690170	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/23/22
1690169	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/23/22
1690167	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/23/22
1690168	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/23/22
1690171	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/23/22
1690155	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/23/22
1690174	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/23/22
1690175	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/23/22
1690152	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/23/22
1690164	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/23/22
1690154	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/23/22
1690166	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/23/22
1690156	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/23/22
1690157	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/23/22
1690161	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/23/22
1690153	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/23/22
1690163	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/23/22
1690160	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/23/22
1690159	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/23/22
1690158	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/23/22
1690165	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/23/22
1690238	7440-37-1	ARGON GAS	40	Cubic Feet(CF)	08/23/22
1690239	74-98-6	PROPANE	11	Gallon(GAL)	08/23/22
1690247	74-98-6	PROPANE	11	Gallon(GAL)	08/23/22
1690241	74-98-6	PROPANE	11	Gallon(GAL)	08/23/22
1690242	74-98-6	PROPANE	11	Gallon(GAL)	08/23/22
1690243	74-98-6	PROPANE	11	Gallon(GAL)	08/23/22
1690244	74-98-6	PROPANE	11	Gallon(GAL)	08/23/22
1690245	74-98-6	PROPANE	11	Gallon(GAL)	08/23/22
1690246	74-98-6	PROPANE	11	Gallon(GAL)	08/23/22
1690240	74-98-6	PROPANE	11	Gallon(GAL)	08/23/22
1742171	67-63-0	2-Propanol Laboratory Reagent 99.5%	1	Liters(L)	08/23/22
1742173	7783-20-2	AMMONIUM SULFATE	5	Kilograms(KG)	08/23/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1741093	7440-55-3	GALLIUM INGOT	150	Milliliter(ML)	08/23/22
1741094	7440-55-3	GALLIUM INGOT	150	Milliliter(ML)	08/23/22
1741095	94442-22-5	Trimethyl(methylcyclopentadienyl)platinum(IV)	50	Milligram(MG)	08/23/22
1642864	-	Synergy 735	55	Gallon(GAL)	08/23/22
1642893	-	AERO KROIL	10	Ounces(OZ)	08/23/22
1642896	-	AERO KROIL	10	Ounces(OZ)	08/23/22
1642904	-	AERO KROIL	10	Ounces(OZ)	08/23/22
1642894	-	AERO KROIL	10	Ounces(OZ)	08/23/22
1642895	-	AERO KROIL	10	Ounces(OZ)	08/23/22
1642909	-	AERO KROIL	10	Ounces(OZ)	08/23/22
1642897	-	AERO KROIL	10	Ounces(OZ)	08/23/22
1642902	-	AERO KROIL	10	Ounces(OZ)	08/23/22
1642907	-	AERO KROIL	10	Ounces(OZ)	08/23/22
1642906	-	AERO KROIL	10	Ounces(OZ)	08/23/22
1642908	-	AERO KROIL	10	Ounces(OZ)	08/23/22
1642910	-	AERO KROIL	10	Ounces(OZ)	08/23/22
1642911	-	AERO KROIL	10	Ounces(OZ)	08/23/22
1642912	-	AERO KROIL	10	Ounces(OZ)	08/23/22
1642913	-	AERO KROIL	10	Ounces(OZ)	08/23/22
1642914	-	AERO KROIL	10	Ounces(OZ)	08/23/22
1642905	-	AERO KROIL	10	Ounces(OZ)	08/23/22
1642915	-	AERO KROIL	10	Ounces(OZ)	08/23/22
1642903	-	AERO KROIL	10	Ounces(OZ)	08/23/22
1642916	-	AERO KROIL	10	Ounces(OZ)	08/23/22
1642898	-	AERO KROIL	10	Ounces(OZ)	08/23/22
1642899	-	AERO KROIL	10	Ounces(OZ)	08/23/22
1642900	-	AERO KROIL	10	Ounces(OZ)	08/23/22
1642901	-	AERO KROIL	10	Ounces(OZ)	08/23/22
1742075	629-82-3	Dioctyl ether 99%	100	Gram(GM)	08/23/22
1742076	629-82-3	Dioctyl ether 99%	100	Gram(GM)	08/23/22
1742090	7648-30-8	Ethyl iododifluoroacetate 98%	25	Gram(GM)	08/23/22
1716306	-	Lucas White Lithium Grease NLGI #2	8	Ounces(OZ)	08/23/22
1690236	-	Deterium 1000 ppm balance argon	40	Cubic Feet(CF)	08/23/22
1742018	-	N-lactoyl-phenylalanine (Lac-Phe)	50	Milligram(MG)	08/23/22
1742024	-	N-lactoyl-phenylalanine (Lac-Phe)	50	Milligram(MG)	08/23/22
1742019	-	N-lactoyl-phenylalanine (Lac-Phe)	50	Milligram(MG)	08/23/22
1742020	-	N-lactoyl-phenylalanine (Lac-Phe)	50	Milligram(MG)	08/23/22
1742021	-	N-lactoyl-phenylalanine (Lac-Phe)	50	Milligram(MG)	08/23/22
1742023	-	N-lactoyl-phenylalanine (Lac-Phe)	50	Milligram(MG)	08/23/22
1742025	-	N-lactoyl-phenylalanine (Lac-Phe)	50	Milligram(MG)	08/23/22
1742026	-	N-lactoyl-phenylalanine (Lac-Phe)	50	Milligram(MG)	08/23/22
1742027	-	N-lactoyl-phenylalanine (Lac-Phe)	50	Milligram(MG)	08/23/22
1742022	-	N-lactoyl-phenylalanine (Lac-Phe)	50	Milligram(MG)	08/23/22
1435755	-	DPD FREE CHLORINE REAGENT	10	Milliliter(ML)	08/23/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1435756	-	DPD FREE CHLORINE REAGENT	10	Milliliter(ML)	08/23/22
1435760	-	DPD FREE CHLORINE REAGENT	10	Milliliter(ML)	08/23/22
1435759	-	DPD FREE CHLORINE REAGENT	10	Milliliter(ML)	08/23/22
1435757	-	DPD FREE CHLORINE REAGENT	10	Milliliter(ML)	08/23/22
1435758	-	DPD FREE CHLORINE REAGENT	10	Milliliter(ML)	08/23/22
1706636	141-78-6	Ethyl acetate 99%	2.5	Liters(L)	08/23/22
1590952	1336-21-6	AMMONIUM HYDROXIDE SOLUTION 30%	500	Milliliter(ML)	08/23/22
1757591	-	GLOSS PROTECTIVE ENAMEL	12	Ounces(OZ)	08/23/22
1757592	-	LUBRIMATIC WHITE LITHIUM GREASE (11350 - 11354 - 11355 - 11356 - 11357 - 11358 - 11359 - 11360 - 11395 - 11484 - 11487)	14	Ounces(OZ)	08/23/22
1757590	-	ACRYLIC LATEX CAULK PLUS SILICONE	300	Milliliter(ML)	08/23/22
1614650	57583-56-9	HYPOPHOSPHOROUS ACID 50 WT. % SOLUTION IN WATER	500	Gram(GM)	08/23/22
1524658	-	AG 1-8X RESIN	500	Gram(GM)	08/23/22
1642891	25852-47-5	POLYETHYLENE GLYCOL DIMETHACRYLATE	50	Milliliter(ML)	08/23/22
1642892	25852-47-5	POLYETHYLENE GLYCOL DIMETHACRYLATE	50	Milliliter(ML)	08/23/22
1742230	7790-98-9	AMMONIUM PERCHLORATE	1	Kilograms(KG)	08/23/22
1742231	109-99-9	TETRAHYDROFURAN ANHYDROUS 99.9%	1	Liters(L)	08/23/22
1742233	109-99-9	TETRAHYDROFURAN ANHYDROUS 99.9%	1	Liters(L)	08/23/22
1742234	109-99-9	TETRAHYDROFURAN ANHYDROUS 99.9%	1	Liters(L)	08/23/22
1742235	109-99-9	TETRAHYDROFURAN ANHYDROUS 99.9%	1	Liters(L)	08/23/22
1742236	109-99-9	TETRAHYDROFURAN ANHYDROUS 99.9%	1	Liters(L)	08/23/22
1742237	109-99-9	TETRAHYDROFURAN ANHYDROUS 99.9%	1	Liters(L)	08/23/22
1742238	109-99-9	TETRAHYDROFURAN ANHYDROUS 99.9%	1	Liters(L)	08/23/22
1742239	109-99-9	TETRAHYDROFURAN ANHYDROUS 99.9%	1	Liters(L)	08/23/22
1742240	109-99-9	TETRAHYDROFURAN ANHYDROUS 99.9%	1	Liters(L)	08/23/22
1742241	109-99-9	TETRAHYDROFURAN ANHYDROUS 99.9%	1	Liters(L)	08/23/22
1742242	109-99-9	TETRAHYDROFURAN ANHYDROUS 99.9%	1	Liters(L)	08/23/22
1742232	109-99-9	TETRAHYDROFURAN ANHYDROUS 99.9%	1	Liters(L)	08/23/22
1458766	-	Krytox GPL-29X Series	1	Ounces(OZ)	08/23/22
1458768	-	KRYTOX FLUORINATED GREASE	7.5	Milliliter(ML)	08/23/22
1458767	-	KRYTOX FLUORINATED GREASE	2	Ounces(OZ)	08/23/22
1435734	-	Staput plumbers putty	14	Ounces(OZ)	08/23/22
1436915	-	VICTAULIC LUBRICANT	1	Quarts(QT)	08/23/22
1436916	-	VICTAULIC LUBRICANT	1	Quarts(QT)	08/23/22
1436917	-	VICTAULIC LUBRICANT	1	Quarts(QT)	08/23/22
1436918	-	VICTAULIC LUBRICANT	1	Quarts(QT)	08/23/22
1437156	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	9.5	Ounces(OZ)	08/23/22
1437163	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	9.5	Ounces(OZ)	08/23/22
1437167	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	9.5	Ounces(OZ)	08/23/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1437166	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	9.5	Ounces(OZ)	08/23/22
1437164	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	9.5	Ounces(OZ)	08/23/22
1437157	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	9.5	Ounces(OZ)	08/23/22
1437161	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	9.5	Ounces(OZ)	08/23/22
1437160	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	9.5	Ounces(OZ)	08/23/22
1437159	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	9.5	Ounces(OZ)	08/23/22
1437158	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	9.5	Ounces(OZ)	08/23/22
1437162	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	9.5	Ounces(OZ)	08/23/22
1437165	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	9.5	Ounces(OZ)	08/23/22
1730196	-	XIM Primer White 400	3.81	Quarts(QT)	08/24/22
1730203	-	XIM Primer White 400	3.81	Quarts(QT)	08/24/22
1730202	-	XIM Primer White 400	3.81	Quarts(QT)	08/24/22
1730201	-	XIM Primer White 400	3.81	Quarts(QT)	08/24/22
1730200	-	XIM Primer White 400	3.81	Quarts(QT)	08/24/22
1730199	-	XIM Primer White 400	3.81	Quarts(QT)	08/24/22
1730197	-	XIM Primer White 400	3.81	Quarts(QT)	08/24/22
1730204	-	XIM Primer White 400	3.81	Quarts(QT)	08/24/22
1730215	-	XIM Primer White 400	3.81	Quarts(QT)	08/24/22
1730198	-	XIM Primer White 400	3.81	Quarts(QT)	08/24/22
1730205	-	XIM Primer White 400	3.81	Quarts(QT)	08/24/22
1730206	-	XIM Primer White 400	3.81	Quarts(QT)	08/24/22
1730207	-	XIM Primer White 400	3.81	Quarts(QT)	08/24/22
1730208	-	XIM Primer White 400	3.81	Quarts(QT)	08/24/22
1730209	-	XIM Primer White 400	3.81	Quarts(QT)	08/24/22
1730211	-	XIM Primer White 400	3.81	Quarts(QT)	08/24/22
1730210	-	XIM Primer White 400	3.81	Quarts(QT)	08/24/22
1730214	-	XIM Primer White 400	3.81	Quarts(QT)	08/24/22
1730213	-	XIM Primer White 400	3.81	Quarts(QT)	08/24/22
1730212	-	XIM Primer White 400	3.81	Quarts(QT)	08/24/22
1730172	-	WEST C-358	514	Pounds(LB)	08/24/22
1730182	-	WEST C-358	514	Pounds(LB)	08/24/22
1730195	-	WEST C-358	514	Pounds(LB)	08/24/22
1730173	-	WEST C-358	514	Pounds(LB)	08/24/22
1730174	-	WEST C-358	514	Pounds(LB)	08/24/22
1730175	-	WEST C-358	514	Pounds(LB)	08/24/22
1730176	-	WEST C-358	514	Pounds(LB)	08/24/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1730177	-	WEST C-358	514	Pounds(LB)	08/24/22
1730178	-	WEST C-358	514	Pounds(LB)	08/24/22
1730179	-	WEST C-358	514	Pounds(LB)	08/24/22
1730181	-	WEST C-358	514	Pounds(LB)	08/24/22
1730183	-	WEST C-358	514	Pounds(LB)	08/24/22
1730190	-	WEST C-358	514	Pounds(LB)	08/24/22
1730194	-	WEST C-358	514	Pounds(LB)	08/24/22
1730193	-	WEST C-358	514	Pounds(LB)	08/24/22
1730180	-	WEST C-358	514	Pounds(LB)	08/24/22
1730191	-	WEST C-358	514	Pounds(LB)	08/24/22
1730184	-	WEST C-358	514	Pounds(LB)	08/24/22
1730189	-	WEST C-358	514	Pounds(LB)	08/24/22
1730188	-	WEST C-358	514	Pounds(LB)	08/24/22
1730187	-	WEST C-358	514	Pounds(LB)	08/24/22
1730186	-	WEST C-358	514	Pounds(LB)	08/24/22
1730185	-	WEST C-358	514	Pounds(LB)	08/24/22
1730192	-	WEST C-358	514	Pounds(LB)	08/24/22
V00000C51C	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4F5	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4E9	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4EA	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4EB	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4EC	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4ED	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4EE	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4EF	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4F0	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4F1	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4F2	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C501	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4F4	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C4E6	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4F6	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4F7	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4F8	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4F9	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4FA	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4FB	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4FC	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4FD	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4FE	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4FF	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C51E	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4F3	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4DB	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4CE	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4CF	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4D0	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4D1	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4D2	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4D3	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4D4	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4D5	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C4D6	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4D7	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4D8	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4E8	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4DA	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4E7	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4DC	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4DD	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4DE	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4DF	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4E0	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4E1	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4E2	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4E3	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4E4	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4E5	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C502	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C4D9	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C527	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C51A	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C51B	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C51F	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C500	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C521	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C522	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C523	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C524	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C519	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C526	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C51D	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C528	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C529	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C52A	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C52B	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C52C	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C52D	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C52E	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C52F	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C530	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C525	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C50B	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C503	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C504	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C505	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C506	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C507	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C508	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C509	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C520	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C50A	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C518	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C50C	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C50D	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C515	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C516	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C50E	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C514	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C513	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C512	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C511	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C510	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C50F	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
V00000C517	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	08/24/22
1730231	-	STARTING FLUID	10.7	Ounces(OZ)	08/24/22
1730237	-	STARTING FLUID	10.7	Ounces(OZ)	08/24/22
1730232	-	STARTING FLUID	10.7	Ounces(OZ)	08/24/22
1730233	-	STARTING FLUID	10.7	Ounces(OZ)	08/24/22
1730235	-	STARTING FLUID	10.7	Ounces(OZ)	08/24/22
1730236	-	STARTING FLUID	10.7	Ounces(OZ)	08/24/22
1730239	-	STARTING FLUID	10.7	Ounces(OZ)	08/24/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1730240	-	STARTING FLUID	10.7	Ounces(OZ)	08/24/22
1730241	-	STARTING FLUID	10.7	Ounces(OZ)	08/24/22
1730242	-	STARTING FLUID	10.7	Ounces(OZ)	08/24/22
1730238	-	STARTING FLUID	10.7	Ounces(OZ)	08/24/22
1730234	-	STARTING FLUID	10.7	Ounces(OZ)	08/24/22
1719279	-	M-BOND 200 KIT	1	Ounces(OZ)	08/24/22
1719280	-	M-BOND 200 KIT	1	Ounces(OZ)	08/24/22
1728411	-	THREADLOCKER RED HIGH TEMP	10	Milliliter(ML)	08/24/22
1728417	-	THREADLOCKER RED HIGH TEMP	10	Milliliter(ML)	08/24/22
1728415	-	THREADLOCKER RED HIGH TEMP	10	Milliliter(ML)	08/24/22
1728414	-	THREADLOCKER RED HIGH TEMP	10	Milliliter(ML)	08/24/22
1728419	-	THREADLOCKER RED HIGH TEMP	10	Milliliter(ML)	08/24/22
1728412	-	THREADLOCKER RED HIGH TEMP	10	Milliliter(ML)	08/24/22
1728418	-	THREADLOCKER RED HIGH TEMP	10	Milliliter(ML)	08/24/22
1728413	-	THREADLOCKER RED HIGH TEMP	10	Milliliter(ML)	08/24/22
1728421	-	THREADLOCKER RED HIGH TEMP	10	Milliliter(ML)	08/24/22
1728422	-	THREADLOCKER RED HIGH TEMP	10	Milliliter(ML)	08/24/22
1728416	-	THREADLOCKER RED HIGH TEMP	10	Milliliter(ML)	08/24/22
1728420	-	THREADLOCKER RED HIGH TEMP	10	Milliliter(ML)	08/24/22
V00000C538	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	08/24/22
V00000C531	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	08/24/22
V00000C532	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	08/24/22
V00000C533	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	08/24/22
V00000C534	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	08/24/22
V00000C535	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	08/24/22
V00000C536	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	08/24/22
V00000C537	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	08/24/22
1730243	-	Permaflex Elastomeric W/B	608	Ounces(OZ)	08/24/22
1730251	-	Permaflex Elastomeric W/B	608	Ounces(OZ)	08/24/22
1730244	-	Permaflex Elastomeric W/B	608	Ounces(OZ)	08/24/22
1730245	-	Permaflex Elastomeric W/B	608	Ounces(OZ)	08/24/22
1730246	-	Permaflex Elastomeric W/B	608	Ounces(OZ)	08/24/22
1730247	-	Permaflex Elastomeric W/B	608	Ounces(OZ)	08/24/22
1730248	-	Permaflex Elastomeric W/B	608	Ounces(OZ)	08/24/22
1730249	-	Permaflex Elastomeric W/B	608	Ounces(OZ)	08/24/22
1730250	-	Permaflex Elastomeric W/B	608	Ounces(OZ)	08/24/22
1728393	-	O¿REILLY AW 32 HYDRAULIC OIL	5	Gallon(GAL)	08/24/22
1728394	-	O¿REILLY AW 32 HYDRAULIC OIL	5	Gallon(GAL)	08/24/22
1730252	-	Permaflex Elastomeric W/B	608	Ounces(OZ)	08/24/22
1730253	-	Permaflex Elastomeric W/B	608	Ounces(OZ)	08/24/22
1730254	-	Permaflex Elastomeric W/B	608	Ounces(OZ)	08/24/22
1728395	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	08/24/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1728396	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	08/24/22
1728397	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	08/24/22
1728398	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	08/24/22
1728400	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	08/24/22
1728401	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	08/24/22
1728402	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	08/24/22
1728403	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	08/24/22
1728410	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	08/24/22
1728409	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	08/24/22
1728405	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	08/24/22
1728408	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	08/24/22
1728407	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	08/24/22
1728399	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	08/24/22
1728404	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	08/24/22
1728406	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	08/24/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1742243	-	PTFE Fluoroplastic Dispersion DISP 30	250	Milliliter(ML)	08/24/22
V00000C53D	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	08/24/22
V00000C53A	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	08/24/22
V00000C53B	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	08/24/22
V00000C53C	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	08/24/22
V00000C539	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	08/24/22
1730255	-	WHITE TRAFFIC PAINT	18	Ounces(OZ)	08/24/22
1742244	-	Rigid 10K Resin	1	Liters(L)	08/24/22
1730259	-	WHITE TRAFFIC PAINT	18	Ounces(OZ)	08/24/22
1730256	-	WHITE TRAFFIC PAINT	18	Ounces(OZ)	08/24/22
1730258	-	WHITE TRAFFIC PAINT	18	Ounces(OZ)	08/24/22
1730260	-	WHITE TRAFFIC PAINT	18	Ounces(OZ)	08/24/22
1730261	-	WHITE TRAFFIC PAINT	18	Ounces(OZ)	08/24/22
1730262	-	WHITE TRAFFIC PAINT	18	Ounces(OZ)	08/24/22
1730263	-	WHITE TRAFFIC PAINT	18	Ounces(OZ)	08/24/22
1730264	-	WHITE TRAFFIC PAINT	18	Ounces(OZ)	08/24/22
1730257	-	WHITE TRAFFIC PAINT	18	Ounces(OZ)	08/24/22
1728423	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	08/24/22
1728424	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	08/24/22
1728425	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	08/24/22
1728426	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	08/24/22
1742245	-	Metalon® HPS-108AE1 Silver Nanoflake ink	100	Gram(GM)	08/24/22
1728427	-	PSX 700A Clear Coat Resin	0.83	Gallon(GAL)	08/24/22
1728430	-	PSX 700A Clear Coat Resin	0.83	Gallon(GAL)	08/24/22
1728428	-	PSX 700A Clear Coat Resin	0.83	Gallon(GAL)	08/24/22
1728429	-	PSX 700A Clear Coat Resin	0.83	Gallon(GAL)	08/24/22
1742246	60-29-7	Diethyl ether contains 1 ppm BHT as inhibitor anhydrous 99.7%	1	Liters(L)	08/24/22
1728431	-	PSX 700 CURE	0.2	Gallon(GAL)	08/24/22
1742249	60-29-7	Diethyl ether contains 1 ppm BHT as inhibitor anhydrous 99.7%	1	Liters(L)	08/24/22
1742247	60-29-7	Diethyl ether contains 1 ppm BHT as inhibitor anhydrous 99.7%	1	Liters(L)	08/24/22
1742250	60-29-7	Diethyl ether contains 1 ppm BHT as inhibitor anhydrous 99.7%	1	Liters(L)	08/24/22
1742248	60-29-7	Diethyl ether contains 1 ppm BHT as inhibitor anhydrous 99.7%	1	Liters(L)	08/24/22
1742251	60-29-7	Diethyl ether contains 1 ppm BHT as inhibitor anhydrous 99.7%	1	Liters(L)	08/24/22
1728448	-	PSX 700 CURE	0.2	Gallon(GAL)	08/24/22
1728441	-	PSX 700 CURE	0.2	Gallon(GAL)	08/24/22
1728450	-	PSX 700 CURE	0.2	Gallon(GAL)	08/24/22
1728449	-	PSX 700 CURE	0.2	Gallon(GAL)	08/24/22
1728435	-	PSX 700 CURE	0.2	Gallon(GAL)	08/24/22
1728433	-	PSX 700 CURE	0.2	Gallon(GAL)	08/24/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1728443	-	PSX 700 CURE	0.2	Gallon(GAL)	08/24/22
1728434	-	PSX 700 CURE	0.2	Gallon(GAL)	08/24/22
1728447	-	PSX 700 CURE	0.2	Gallon(GAL)	08/24/22
1728436	-	PSX 700 CURE	0.2	Gallon(GAL)	08/24/22
1728437	-	PSX 700 CURE	0.2	Gallon(GAL)	08/24/22
1728439	-	PSX 700 CURE	0.2	Gallon(GAL)	08/24/22
1728440	-	PSX 700 CURE	0.2	Gallon(GAL)	08/24/22
1728442	-	PSX 700 CURE	0.2	Gallon(GAL)	08/24/22
1728444	-	PSX 700 CURE	0.2	Gallon(GAL)	08/24/22
1728445	-	PSX 700 CURE	0.2	Gallon(GAL)	08/24/22
1728446	-	PSX 700 CURE	0.2	Gallon(GAL)	08/24/22
1728438	-	PSX 700 CURE	0.2	Gallon(GAL)	08/24/22
1728432	-	PSX 700 CURE	0.2	Gallon(GAL)	08/24/22
1730265	-	Black Stripe Extra	18	Ounces(OZ)	08/24/22
1730271	-	Black Stripe Extra	18	Ounces(OZ)	08/24/22
1730270	-	Black Stripe Extra	18	Ounces(OZ)	08/24/22
1730269	-	Black Stripe Extra	18	Ounces(OZ)	08/24/22
1730274	-	Black Stripe Extra	18	Ounces(OZ)	08/24/22
1730275	-	Black Stripe Extra	18	Ounces(OZ)	08/24/22
1730272	-	Black Stripe Extra	18	Ounces(OZ)	08/24/22
1730273	-	Black Stripe Extra	18	Ounces(OZ)	08/24/22
1730268	-	Black Stripe Extra	18	Ounces(OZ)	08/24/22
1730276	-	Black Stripe Extra	18	Ounces(OZ)	08/24/22
1730266	-	Black Stripe Extra	18	Ounces(OZ)	08/24/22
1730267	-	Black Stripe Extra	18	Ounces(OZ)	08/24/22
1742252	2037-26-5	TOLUENE-D8	10	Milliliter(ML)	08/24/22
1725196	-	Vers-Acryl 222 S/G Finish Safety Red	128	Ounces(OZ)	08/24/22
1737980	67-56-1	Methanol LC-MS Grade	4	Liters(L)	08/24/22
1737983	67-56-1	Methanol LC-MS Grade	4	Liters(L)	08/24/22
1737982	67-56-1	Methanol LC-MS Grade	4	Liters(L)	08/24/22
1737981	67-56-1	Methanol LC-MS Grade	4	Liters(L)	08/24/22
1737988	7783-20-2	AMMONIUM SULFATE	25	Gram(GM)	08/24/22
1737989	10034-76-1	CALCIUM SULFATE HEMIHYDRATE	25	Gram(GM)	08/24/22
1737990	-	ULTIMA GOLD	5	Liters(L)	08/24/22
1737992	-	ULTIMA GOLD	5	Liters(L)	08/24/22
1737996	-	ULTIMA GOLD	5	Liters(L)	08/24/22
1737995	-	ULTIMA GOLD	5	Liters(L)	08/24/22
1737994	-	ULTIMA GOLD	5	Liters(L)	08/24/22
1737991	-	ULTIMA GOLD	5	Liters(L)	08/24/22
1737993	-	ULTIMA GOLD	5	Liters(L)	08/24/22
1737997	-	ULTIMA GOLD	5	Liters(L)	08/24/22
1742253	51560-21-5	1 4-Diiodo2 5dimethoxybenzene	5	Gram(GM)	08/24/22
1742254	69011-20-7	AmberChrom 50WX8 100-200 Mesh (H+) Cation Exchange Resin	100	Gram(GM)	08/24/22
1729976	-	Belzona 1983 (Superwrap II) Solidifier	0.89	Liters(L)	08/24/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1729977	-	Belzona 1983 (Superwrap II) Solidifier	0.89	Liters(L)	08/24/22
1742255	32222-06-3	1alpha 25-Dihydroxyvitamin D3	10	MicroGram(UGM	08/24/22
1742256	32222-06-3	1alpha 25-Dihydroxyvitamin D3	10	MicroGram(UGM	08/24/22
1742257	1076-43-3	Benzene-d6 (D 99.96%)	100	Gram(GM)	08/24/22
1742263	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/24/22
1742278	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/24/22
1742266	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/24/22
1742279	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/24/22
1742280	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/24/22
1742281	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/24/22
1742282	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/24/22
1742276	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/24/22
1742271	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/24/22
1742272	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/24/22
1742273	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/24/22
1742264	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/24/22
1742275	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/24/22
1742265	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/24/22
1742277	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/24/22
1742269	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/24/22
1742268	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/24/22
1742267	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/24/22
1742270	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/24/22
1742274	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	08/24/22
1741099	4800-94-6	CARBENICILLIN DISODIUM SALT	5	Gram(GM)	08/24/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1741100	4800-94-6	CARBENICILLIN DISODIUM SALT	5	Gram(GM)	08/24/22
1742258	7601-89-0	SODIUM PERCHLORATE	500	Gram(GM)	08/24/22
1742259	1336-21-6	AMMONIUM HYDROXIDE OPTIMA	250	Milliliter(ML)	08/24/22
1742260	1336-21-6	AMMONIUM HYDROXIDE OPTIMA	250	Milliliter(ML)	08/24/22
1649626	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649625	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649624	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649664	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649659	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649655	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649656	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649657	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649658	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649654	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649660	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649661	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649663	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649629	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649665	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649666	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649668	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649670	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649671	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649672	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649662	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649640	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649652	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649651	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649650	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649649	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649648	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649647	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649646	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649645	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649644	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649643	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649627	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649641	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649628	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649639	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649638	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649637	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649636	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649635	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649634	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1649633	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649632	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649631	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649630	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649669	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649642	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649667	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1649653	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	08/24/22
1742261	-	D-Gluconic acid 50% aqueous solution	500	Milliliter(ML)	08/24/22
1742283	-	INLAND 45	1	Liters(L)	08/24/22
1742284	64742-65-0	SOLVENT REFINED PARAFFINIC OIL	1	Liters(L)	08/24/22
1742343	7601-90-3	PERCHLORIC ACID 70%	100	Milliliter(ML)	08/24/22
1742344	-	ZEOCIN	500	Milligram(MG)	08/24/22
1742512	141-78-6	Ethyl acetate HPLC Plus for HPLC GC and residue analysis 99.9%	4	Liters(L)	08/24/22
1742513	141-78-6	Ethyl acetate HPLC Plus for HPLC GC and residue analysis 99.9%	4	Liters(L)	08/24/22
1742511	141-78-6	Ethyl acetate HPLC Plus for HPLC GC and residue analysis 99.9%	4	Liters(L)	08/24/22
1742514	141-78-6	Ethyl acetate HPLC Plus for HPLC GC and residue analysis 99.9%	4	Liters(L)	08/24/22
1742407	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742442	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742413	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742438	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742412	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742411	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742440	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742410	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742417	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742414	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742415	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742443	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742444	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742445	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742416	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742446	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742447	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742448	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742449	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742450	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742441	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742426	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742435	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742436	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1742437	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742429	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742439	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742409	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742430	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742433	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742431	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742434	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742432	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742427	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742422	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742408	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742418	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742419	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742420	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742428	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742421	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742425	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742423	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742424	67-64-1	Acetone HPLC	4	Liters(L)	08/24/22
1742451	7790-98-9	AMMONIUM PERCHLORATE	1	Kilograms(KG)	08/24/22
1742452	7790-98-9	AMMONIUM PERCHLORATE	1	Kilograms(KG)	08/24/22
1742453	7790-98-9	AMMONIUM PERCHLORATE	1	Kilograms(KG)	08/24/22
1742454	123-31-9	HYDROQUINONE	100	Gram(GM)	08/24/22
1742455	13494-80-9	Tellurium powder -30 mesh 99.997% trace metals basis	25	Gram(GM)	08/24/22
1642890	25852-47-5	POLYETHYLENE GLYCOL DIMETHACRYLATE	50	Milliliter(ML)	08/25/22
1642889	25852-47-5	POLYETHYLENE GLYCOL DIMETHACRYLATE	50	Milliliter(ML)	08/25/22
1721314	-	Nikal	8	Ounces(OZ)	08/25/22
1423076	-	PSX 700 CURE	0.2	Gallon(GAL)	08/25/22
1423077	-	PSX 700 CURE	0.2	Gallon(GAL)	08/25/22
1423078	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	08/25/22
1423079	-	PSX 700 WHITE RESIN	0.8	Gallon(GAL)	08/25/22
1662943	-	Devcon 1-Minute Epoxy Gel Amber	50	Milliliter(ML)	08/25/22
1662950	-	Devcon 1-Minute Epoxy Gel Amber	50	Milliliter(ML)	08/25/22
1662946	-	Devcon 1-Minute Epoxy Gel Amber	50	Milliliter(ML)	08/25/22
1662945	-	Devcon 1-Minute Epoxy Gel Amber	50	Milliliter(ML)	08/25/22
1662944	-	Devcon 1-Minute Epoxy Gel Amber	50	Milliliter(ML)	08/25/22
1662948	-	Devcon 1-Minute Epoxy Gel Amber	50	Milliliter(ML)	08/25/22
1662949	-	Devcon 1-Minute Epoxy Gel Amber	50	Milliliter(ML)	08/25/22
1662947	-	Devcon 1-Minute Epoxy Gel Amber	50	Milliliter(ML)	08/25/22
1662952	-	Devcon 1-Minute Epoxy Gel Amber	50	Milliliter(ML)	08/25/22
1662951	-	Devcon 1-Minute Epoxy Gel Amber	50	Milliliter(ML)	08/25/22
1738006	109-66-0	Pentane anhydrous 99+%	2	Liters(L)	08/25/22
1738008	109-66-0	Pentane anhydrous 99+%	2	Liters(L)	08/25/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1738007	109-66-0	Pentane anhydrous 99+%	2	Liters(L)	08/25/22
1738009	109-66-0	Pentane anhydrous 99+%	2	Liters(L)	08/25/22
1738011	-	PETN SOLUTION	1	Milliliter(ML)	08/25/22
1738013	-	PETN SOLUTION	1	Milliliter(ML)	08/25/22
1738012	-	PETN SOLUTION	1	Milliliter(ML)	08/25/22
1738014	-	PETN SOLUTION	1	Milliliter(ML)	08/25/22
1741102	207683-19-0	SODIUM HYDROSULFIDE HYDRATE	25	Gram(GM)	08/25/22
1741103	207683-19-0	SODIUM HYDROSULFIDE HYDRATE	25	Gram(GM)	08/25/22
1741104	1313-84-4	SODIUM SULFIDE NONAHYDRATE	25	Gram(GM)	08/25/22
1741105	1313-84-4	SODIUM SULFIDE NONAHYDRATE	25	Gram(GM)	08/25/22
1738001	63148-62-9	Silicone oil for oil baths	500	Gram(GM)	08/25/22
1738002	63148-62-9	Silicone oil for oil baths	500	Gram(GM)	08/25/22
1738003	16219-75-3	5-Ethylidene-2-norbornene	500	Gram(GM)	08/25/22
1738004	16219-75-3	5-Ethylidene-2-norbornene	500	Gram(GM)	08/25/22
1742175	109-99-9	Tetrahydrofuran UV HPLC Grade 99.7+% min unstabilized	1	Liters(L)	08/25/22
1742178	109-99-9	Tetrahydrofuran UV HPLC Grade 99.7+% min unstabilized	1	Liters(L)	08/25/22
1742177	109-99-9	Tetrahydrofuran UV HPLC Grade 99.7+% min unstabilized	1	Liters(L)	08/25/22
1742176	109-99-9	Tetrahydrofuran UV HPLC Grade 99.7+% min unstabilized	1	Liters(L)	08/25/22
1742182	67-56-1	Methanol (Laboratory Grade)	4	Liters(L)	08/25/22
1742184	67-56-1	Methanol (Laboratory Grade)	4	Liters(L)	08/25/22
1742185	67-56-1	Methanol (Laboratory Grade)	4	Liters(L)	08/25/22
1742183	67-56-1	Methanol (Laboratory Grade)	4	Liters(L)	08/25/22
1742188	10060-10-3	CERIUM(IV)FLUORIDE	5	Gram(GM)	08/25/22
1742189	10060-10-3	CERIUM(IV)FLUORIDE	5	Gram(GM)	08/25/22
1742190	10060-10-3	CERIUM(IV)FLUORIDE	5	Gram(GM)	08/25/22
1742337	1310-73-2	Sodium hydroxide 50 wt% solution in water	1	Liters(L)	08/25/22
1742338	1310-73-2	Sodium hydroxide 50 wt% solution in water	1	Liters(L)	08/25/22
1742339	7601-89-0	SODIUM PERCHLORATE	2.5	Kilograms(KG)	08/25/22
1742340	7601-89-0	SODIUM PERCHLORATE	2.5	Kilograms(KG)	08/25/22
1742341	7601-89-0	SODIUM PERCHLORATE	2.5	Kilograms(KG)	08/25/22
1742342	865-49-6	CHLOROFORM-D (D 99.8%)	50	Gram(GM)	08/25/22
1737999	67-56-1	Methanol anhydrous 99.8%	1	Liters(L)	08/25/22
1738005	7647-01-0	Hydrochloric acid ACS Reagent 37%	2.5	Liters(L)	08/25/22
1742186	25232-41-1	POLY(4-VINYLPYRIDINE)	25	Gram(GM)	08/25/22
1742187	620-45-1	2 6-DICHLOROINDOPHENOL SODIUM SALT	10	Gram(GM)	08/25/22
1742335	57-50-1	SUCROSE	1	Kilograms(KG)	08/25/22
1742336	9005-84-9	STARCH SOLUBLE	1	Kilograms(KG)	08/25/22
1742172	7783-20-2	AMMONIUM SULFATE	1	Kilograms(KG)	08/25/22
1742174	7447-41-8	LITHIUM CHLORIDE	1	Kilograms(KG)	08/25/22
1738000	4097-89-6	Tris(2-aminoethyl)amine 96%	10	Milliliter(ML)	08/25/22
1738010	112-55-0	1-Dodecanethiol 98+%	100	Milliliter(ML)	08/25/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1741101	78646-17-0	Salicylic acid-d4	1	Milliliter(ML)	08/25/22
1742180	7440-31-5	TIN SHOT	2	Kilograms(KG)	08/25/22
1742181	7440-31-5	TIN SHOT	2	Kilograms(KG)	08/25/22
1742179	7429-90-5	ALUMINUM SHOT	1	Kilograms(KG)	08/25/22
1718066	-	FS-One Max	300	Milliliter(ML)	08/26/22
1718067	-	FS-One Max	300	Milliliter(ML)	08/26/22
1718068	-	FS-One Max	300	Milliliter(ML)	08/26/22
1718070	-	FS-One Max	300	Milliliter(ML)	08/26/22
1718069	-	FS-One Max	300	Milliliter(ML)	08/26/22
1715404	-	FS-One Max	300	Milliliter(ML)	08/26/22
1742479	9/9/7775	SODIUM CHLORATE	1	Kilograms(KG)	08/26/22
1742483	9/9/7775	SODIUM CHLORATE	1	Kilograms(KG)	08/26/22
1742497	9/9/7775	SODIUM CHLORATE	1	Kilograms(KG)	08/26/22
1742496	9/9/7775	SODIUM CHLORATE	1	Kilograms(KG)	08/26/22
1742495	9/9/7775	SODIUM CHLORATE	1	Kilograms(KG)	08/26/22
1742494	9/9/7775	SODIUM CHLORATE	1	Kilograms(KG)	08/26/22
1742493	9/9/7775	SODIUM CHLORATE	1	Kilograms(KG)	08/26/22
1742492	9/9/7775	SODIUM CHLORATE	1	Kilograms(KG)	08/26/22
1742480	9/9/7775	SODIUM CHLORATE	1	Kilograms(KG)	08/26/22
1742482	9/9/7775	SODIUM CHLORATE	1	Kilograms(KG)	08/26/22
1742484	9/9/7775	SODIUM CHLORATE	1	Kilograms(KG)	08/26/22
1742485	9/9/7775	SODIUM CHLORATE	1	Kilograms(KG)	08/26/22
1742486	9/9/7775	SODIUM CHLORATE	1	Kilograms(KG)	08/26/22
1742487	9/9/7775	SODIUM CHLORATE	1	Kilograms(KG)	08/26/22
1742488	9/9/7775	SODIUM CHLORATE	1	Kilograms(KG)	08/26/22
1742489	9/9/7775	SODIUM CHLORATE	1	Kilograms(KG)	08/26/22
1742481	9/9/7775	SODIUM CHLORATE	1	Kilograms(KG)	08/26/22
1742490	9/9/7775	SODIUM CHLORATE	1	Kilograms(KG)	08/26/22
1742498	9/9/7775	SODIUM CHLORATE	1	Kilograms(KG)	08/26/22
1742491	9/9/7775	SODIUM CHLORATE	1	Kilograms(KG)	08/26/22
1742473	107-21-1	Ethylene Glycol Reagent Plus 99%	1	Liters(L)	08/26/22
1742474	107-21-1	Ethylene Glycol Reagent Plus 99%	1	Liters(L)	08/26/22
1742475	107-21-1	Ethylene Glycol Reagent Plus 99%	1	Liters(L)	08/26/22
1742476	90076-65-6	LITHIUM BIS(TRIFLUOROMETHANESULPHONYL)IMIDE	1	Kilograms(KG)	08/26/22
1742477	90076-65-6	LITHIUM BIS(TRIFLUOROMETHANESULPHONYL)IMIDE	1	Kilograms(KG)	08/26/22
1742465	67-64-1	Acetone (Certified ACS)	4	Liters(L)	08/26/22
1742466	67-64-1	Acetone (Certified ACS)	4	Liters(L)	08/26/22
1742467	67-64-1	Acetone (Certified ACS)	4	Liters(L)	08/26/22
1742468	67-64-1	Acetone (Certified ACS)	4	Liters(L)	08/26/22
1742469	3094-87-9	IRON(II) ACETATE	10	Gram(GM)	08/26/22
1742470	3094-87-9	IRON(II) ACETATE	10	Gram(GM)	08/26/22
1742471	-	KRYLON GRAY PRIMER	12	Ounces(OZ)	08/26/22
1742472	-	KRYLON COLORmaxx Gloss Black	12	Ounces(OZ)	08/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1742358	7/3/7791	SODIUM PERCHLORATE MONOHYDRATE	5000	Gram(GM)	08/26/22
1742359	7/3/7791	SODIUM PERCHLORATE MONOHYDRATE	5000	Gram(GM)	08/26/22
1742360	7/3/7791	SODIUM PERCHLORATE MONOHYDRATE	5000	Gram(GM)	08/26/22
1690248	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	08/26/22
1690249	-	10ppm Nitrogen Dioxide/Balance Air	34	Liters(L)	08/26/22
1690250	-	10ppm Nitrogen Dioxide/Balance Air	34	Liters(L)	08/26/22
1690251	7440-59-7	HELIUM REFRIGERATED LIQUID (CRYOGENIC LIQUID)	100	Liters(L)	08/26/22
1690252	7440-37-1	ARGON GAS	40	Cubic Feet(CF)	08/26/22
1742346	811-97-2	DUSTER ES1017	10	Ounces(OZ)	08/29/22
1742347	811-97-2	DUSTER ES1017	10	Ounces(OZ)	08/29/22
1742345	56643-85-7	4-(1h-imidazol-1-ylmethyl)aniline	1	Gram(GM)	08/29/22
1742463	-	BIO-SYNXTRA 80W90 LS GEAR OIL GL-5	1	Gallon(GAL)	08/29/22
1742464	-	BIO-SYNXTRA 80W90 LS GEAR OIL GL-5	1	Gallon(GAL)	08/29/22
1742462	72-18-4	L-Valine reagent grade 98% (HPLC)	25	Gram(GM)	08/29/22
1742461	328-42-7	Oxaloacetic acid	5	Gram(GM)	08/29/22
1742460	-	Certified Molecular Biology Agarose	125	Gram(GM)	08/29/22
1742362	174501-64-5	1-Butyl-3-methylimidazolium hexafluorophosphate	100	Gram(GM)	08/29/22
1719955	-	HIT-RE 500 V3 - KIT	330	Milliliter(ML)	08/29/22
1719956	-	HIT-RE 500 V3 - KIT	330	Milliliter(ML)	08/29/22
1742361	50-70-4	D-SORBITOL (D-GLUCITOL)	1	Kilograms(KG)	08/29/22
1742499	10043-11-5	Cubic Boron Nitride (CBN)	50	Gram(GM)	08/29/22
1742500	10043-11-5	Cubic Boron Nitride (CBN)	50	Gram(GM)	08/29/22
1742501	10043-11-5	Cubic Boron Nitride (CBN)	50	Gram(GM)	08/29/22
1742503	10043-11-5	Cubic Boron Nitride (CBN)	50	Gram(GM)	08/29/22
1742502	10043-11-5	Cubic Boron Nitride (CBN)	50	Gram(GM)	08/29/22
1742504	10043-11-5	Cubic Boron Nitride (CBN)	50	Gram(GM)	08/29/22
1742363	9005-25-8	STARCH	250	Gram(GM)	08/29/22
1742364	7/3/7791	SODIUM PERCHLORATE MONOHYDRATE	5000	Gram(GM)	08/29/22
1742456	7647-01-0	HYDROCHLORIC ACID (HCL HYDROGEN CHLORIDE) 1N	1	Liters(L)	08/29/22
1742459	1310-73-2	SODIUM HYDROXIDE 0.5 N	1	Liters(L)	08/29/22
1742457	110-86-1	Pyridine anhydrous	1	Liters(L)	08/29/22
1742458	110-86-1	Pyridine anhydrous	1	Liters(L)	08/29/22
1740627	67-66-3	Chloroform contains amylenes as stabilizer ACS reagent 99.8%	4	Liters(L)	08/29/22
1740636	67-66-3	Chloroform contains amylenes as stabilizer ACS reagent 99.8%	4	Liters(L)	08/29/22
1740637	67-66-3	Chloroform contains amylenes as stabilizer ACS reagent 99.8%	4	Liters(L)	08/29/22
1740635	67-66-3	Chloroform contains amylenes as stabilizer ACS reagent 99.8%	4	Liters(L)	08/29/22
1740634	67-66-3	Chloroform contains amylenes as stabilizer ACS reagent 99.8%	4	Liters(L)	08/29/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1740633	67-66-3	Chloroform contains amylenes as stabilizer ACS reagent 99.8%	4	Liters(L)	08/29/22
1740632	67-66-3	Chloroform contains amylenes as stabilizer ACS reagent 99.8%	4	Liters(L)	08/29/22
1740631	67-66-3	Chloroform contains amylenes as stabilizer ACS reagent 99.8%	4	Liters(L)	08/29/22
1740630	67-66-3	Chloroform contains amylenes as stabilizer ACS reagent 99.8%	4	Liters(L)	08/29/22
1740629	67-66-3	Chloroform contains amylenes as stabilizer ACS reagent 99.8%	4	Liters(L)	08/29/22
1740628	67-66-3	Chloroform contains amylenes as stabilizer ACS reagent 99.8%	4	Liters(L)	08/29/22
1740638	67-66-3	Chloroform contains amylenes as stabilizer ACS reagent 99.8%	4	Liters(L)	08/29/22
1742552	64-17-5	Decon's Ethanol 200 Proof	1	Pint(PT)	08/29/22
1742573	64-17-5	Decon's Ethanol 200 Proof	1	Pint(PT)	08/29/22
1742570	64-17-5	Decon's Ethanol 200 Proof	1	Pint(PT)	08/29/22
1742553	64-17-5	Decon's Ethanol 200 Proof	1	Pint(PT)	08/29/22
1742563	64-17-5	Decon's Ethanol 200 Proof	1	Pint(PT)	08/29/22
1742556	64-17-5	Decon's Ethanol 200 Proof	1	Pint(PT)	08/29/22
1742560	64-17-5	Decon's Ethanol 200 Proof	1	Pint(PT)	08/29/22
1742562	64-17-5	Decon's Ethanol 200 Proof	1	Pint(PT)	08/29/22
1742564	64-17-5	Decon's Ethanol 200 Proof	1	Pint(PT)	08/29/22
1742568	64-17-5	Decon's Ethanol 200 Proof	1	Pint(PT)	08/29/22
1742567	64-17-5	Decon's Ethanol 200 Proof	1	Pint(PT)	08/29/22
1742569	64-17-5	Decon's Ethanol 200 Proof	1	Pint(PT)	08/29/22
1742572	64-17-5	Decon's Ethanol 200 Proof	1	Pint(PT)	08/29/22
1742571	64-17-5	Decon's Ethanol 200 Proof	1	Pint(PT)	08/29/22
1742574	64-17-5	Decon's Ethanol 200 Proof	1	Pint(PT)	08/29/22
1742559	64-17-5	Decon's Ethanol 200 Proof	1	Pint(PT)	08/29/22
1742565	64-17-5	Decon's Ethanol 200 Proof	1	Pint(PT)	08/29/22
1742558	64-17-5	Decon's Ethanol 200 Proof	1	Pint(PT)	08/29/22
1742557	64-17-5	Decon's Ethanol 200 Proof	1	Pint(PT)	08/29/22
1742561	64-17-5	Decon's Ethanol 200 Proof	1	Pint(PT)	08/29/22
1742554	64-17-5	Decon's Ethanol 200 Proof	1	Pint(PT)	08/29/22
1742555	64-17-5	Decon's Ethanol 200 Proof	1	Pint(PT)	08/29/22
1742566	64-17-5	Decon's Ethanol 200 Proof	1	Pint(PT)	08/29/22
1742575	7782-40-3	Diamond Powder GMM 30-40	1	Gram(GM)	08/29/22
1742578	7782-40-3	Diamond Powder GMM 30-40	1	Gram(GM)	08/29/22
1742580	7782-40-3	Diamond Powder GMM 30-40	1	Gram(GM)	08/29/22
1742577	7782-40-3	Diamond Powder GMM 30-40	1	Gram(GM)	08/29/22
1742576	7782-40-3	Diamond Powder GMM 30-40	1	Gram(GM)	08/29/22
1742579	7782-40-3	Diamond Powder GMM 30-40	1	Gram(GM)	08/29/22
1730277	-	PSX 700 CURE	0.2	Gallon(GAL)	08/29/22
1730281	-	PSX 700 CURE	0.2	Gallon(GAL)	08/29/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1730280	-	PSX 700 CURE	0.2	Gallon(GAL)	08/29/22
1730279	-	PSX 700 CURE	0.2	Gallon(GAL)	08/29/22
1730278	-	PSX 700 CURE	0.2	Gallon(GAL)	08/29/22
1730282	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	08/29/22
1730283	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	08/29/22
1730287	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	08/29/22
1730286	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	08/29/22
1730285	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	08/29/22
1730284	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	08/29/22
1730289	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	08/29/22
1730292	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	08/29/22
1730291	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	08/29/22
1730290	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	08/29/22
1730288	-	ANTI-SLIP FLOOR COATING	0.55	Gallon(GAL)	08/29/22
1728451	-	PSX 700 WHITE RESIN	0.8	Gallon(GAL)	08/29/22
1728452	-	PSX 700 WHITE RESIN	0.8	Gallon(GAL)	08/29/22
V00000C542	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	08/29/22
V00000C540	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	08/29/22
V00000C53F	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	08/29/22
V00000C541	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	08/29/22
V00000C543	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	08/29/22
V00000C53E	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	08/29/22
1728453	-	PSX 700 Black Resin	0.8	Gallon(GAL)	08/29/22
1728454	-	PSX 700 SAFETY YELLOW 1979 RESIN	0.8	Gallon(GAL)	08/29/22
1728455	-	Vers-Acryl 222 S/G Finish Safety Red	1	Gallon(GAL)	08/29/22
1728457	-	Vers-Acryl 222 S/G Finish Safety Red	1	Gallon(GAL)	08/29/22
1728456	-	Vers-Acryl 222 S/G Finish Safety Red	1	Gallon(GAL)	08/29/22
1728458	-	Vers-Acryl 222 S/G Finish Safety Red	1	Gallon(GAL)	08/29/22
1728459	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22
1728485	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22
1728488	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22
1728486	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22
1728487	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22
1728484	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22
1728489	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22
1728478	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22
1728461	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22
1728460	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22
1728471	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22
1728472	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22
1728473	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22
1728474	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22
1728463	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22
1728464	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22
1728462	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1728476	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22
1728477	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22
1728483	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22
1728479	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22
1728465	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22
1728466	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22
1728467	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22
1728468	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22
1728469	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22
1728480	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22
1728481	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22
1728482	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22
1728470	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22
1728475	-	BROMICIDE TABLETS	50	Pounds(LB)	08/29/22
1728490	-	SUMP BUDDY WT ANTIMICROBIAL TIME RELEASE	11	Pounds(LB)	08/29/22
1728491	-	SUMP BUDDY WT ANTIMICROBIAL TIME RELEASE	11	Pounds(LB)	08/29/22
1728492	-	SUMP BUDDY WT ANTIMICROBIAL TIME RELEASE	11	Pounds(LB)	08/29/22
1728493	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22
1728499	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22
1728508	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22
1728507	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22
1728506	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22
1728505	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22
1728504	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22
1728503	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1728502	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22
1728510	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22
1728500	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22
1728509	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22
1728498	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22
1728497	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22
1728496	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22
1728495	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22
1728494	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22
1728501	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22
1728519	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22
1728524	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22
1728523	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22
1728522	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22
1728520	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1728511	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22
1728518	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22
1728517	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22
1728512	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22
1728521	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22
1728515	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22
1728514	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22
1728513	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22
1728516	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	08/29/22
1719957	-	HIT-RE 500 V3	11.1	Ounces(OZ)	08/29/22
1719958	-	HIT-RE 500 V3	11.1	Ounces(OZ)	08/29/22
1719959	-	HIT-RE 500 V3	11.1	Ounces(OZ)	08/29/22
1719960	-	HIT-RE 500 V3	11.1	Ounces(OZ)	08/29/22
1730293	-	FLOOD FLOETRAL LATEX PAINT CONDITIONER	1	Gallon(GAL)	08/30/22
1730298	-	PSX 700A Clear Coat Resin	0.83	Gallon(GAL)	08/30/22
1742581	144-48-9	IODOACETAMIDE	56	Milligram(MG)	08/30/22
1742582	144-48-9	IODOACETAMIDE	56	Milligram(MG)	08/30/22
1742583	144-48-9	IODOACETAMIDE	56	Milligram(MG)	08/30/22
1742584	2206-27-1	Dimethyl sulfoxide-d6 99.9 atom % D	5	Gram(GM)	08/30/22
1742290	-	ADHESIVE FLASHCURE	1	Ounces(OZ)	08/30/22
1742292	-	ADHESIVE FLASHCURE	1	Ounces(OZ)	08/30/22
1742291	-	ADHESIVE FLASHCURE	1	Ounces(OZ)	08/30/22
1742365	123-39-7	N-METHYLFORMAMIDE	1	Liters(L)	08/30/22
1742366	19244-98-5	Guanidinium bromide	10	Gram(GM)	08/30/22
1742367	-	NEOPRENE HIGH PERFORMANCE CONTACT ADHESIVE 1357	5	Ounces(OZ)	08/30/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1742368	-	A205 Additive Manufacturing Powder 20 - 63um	1	Kilograms(KG)	08/30/22
1742370	-	A205 Additive Manufacturing Powder 20 - 63um	1	Kilograms(KG)	08/30/22
1742381	-	A205 Additive Manufacturing Powder 20 - 63um	1	Kilograms(KG)	08/30/22
1742380	-	A205 Additive Manufacturing Powder 20 - 63um	1	Kilograms(KG)	08/30/22
1742379	-	A205 Additive Manufacturing Powder 20 - 63um	1	Kilograms(KG)	08/30/22
1742378	-	A205 Additive Manufacturing Powder 20 - 63um	1	Kilograms(KG)	08/30/22
1742377	-	A205 Additive Manufacturing Powder 20 - 63um	1	Kilograms(KG)	08/30/22
1742376	-	A205 Additive Manufacturing Powder 20 - 63um	1	Kilograms(KG)	08/30/22
1742374	-	A205 Additive Manufacturing Powder 20 - 63um	1	Kilograms(KG)	08/30/22
1742382	-	A205 Additive Manufacturing Powder 20 - 63um	1	Kilograms(KG)	08/30/22
1742371	-	A205 Additive Manufacturing Powder 20 - 63um	1	Kilograms(KG)	08/30/22
1742375	-	A205 Additive Manufacturing Powder 20 - 63um	1	Kilograms(KG)	08/30/22
1742369	-	A205 Additive Manufacturing Powder 20 - 63um	1	Kilograms(KG)	08/30/22
1742372	-	A205 Additive Manufacturing Powder 20 - 63um	1	Kilograms(KG)	08/30/22
1742373	-	A205 Additive Manufacturing Powder 20 - 63um	1	Kilograms(KG)	08/30/22
1742383	98892-75-2	1-BUTYL-2 3-DIMETHYLIMIDAZOLIUM CHLORIDE	50	Gram(GM)	08/30/22
1742384	9002-93-1	TRIRON X-100	100	Milliliter(ML)	08/30/22
1742527	-	Antimony (III) Chloride	5	Gram(GM)	08/30/22
1742528	-	Antimony (III) Chloride	5	Gram(GM)	08/30/22
1742529	10025-82-8	INDIUM(III) CHLORIDE	5	Gram(GM)	08/30/22
1742530	10025-82-8	INDIUM(III) CHLORIDE	5	Gram(GM)	08/30/22
1742551	64-17-5	Decon's Ethanol 200 Proof	1	Pint(PT)	08/30/22
1742404	79-20-9	Methyl acetate anhydrous 99.5%	1	Liters(L)	08/30/22
1742405	79-20-9	Methyl acetate anhydrous 99.5%	1	Liters(L)	08/30/22
1742526	10031-22-8	Lead(II) bromide	5	Gram(GM)	08/30/22
1742385	14933-09-6	CelLytic B Cell Lysis Reagent	50	Milliliter(ML)	08/30/22
1741047	-	Kester Solder Paste EP256 No-Clean	35	Gram(GM)	08/30/22
1742398	24597-12-4	GALLIUM(II) CHLORIDE	5	Gram(GM)	08/30/22
1742399	38183-12-9	FLUORESCAMINE	100	Milligram(MG)	08/30/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1742386	-	NORLAND OPTICAL ADHESIVE 61	10	Milliliter(ML)	08/30/22
1742387	-	NORLAND OPTICAL ADHESIVE 61	10	Milliliter(ML)	08/30/22
1742400	68-12-2	N N-Dimethylformamide anhydrous 99.8%	1	Liters(L)	08/30/22
1328704	-	PORCH AND FLOOR COATING ANTI SKID	1	Gallon(GAL)	08/30/22
1476945	-	Krud Kutter Cleaner Degreaser	1	Gallon(GAL)	08/30/22
1730294	-	PAINT ON SCREEN	1	Gallon(GAL)	08/30/22
1730295	-	PAINT ON SCREEN	1	Gallon(GAL)	08/30/22
1730297	-	PAINT ON SCREEN	1	Gallon(GAL)	08/30/22
1730296	-	PAINT ON SCREEN	1	Gallon(GAL)	08/30/22
1554306	-	ULTRA SURFACE ACRYLIC URETHANE PART B	1	Gallon(GAL)	08/30/22
1634064	8001-26-1	LINSEED OIL	1	Gallon(GAL)	08/30/22
1566178	-	Startex Xylene	1	Gallon(GAL)	08/30/22
1742388	71-36-3	1-Butanol Anhydrous 99.8%	100	Milliliter(ML)	08/30/22
1742389	7446-70-0	Aluminum chloride reagent plus 99%	100	Gram(GM)	08/30/22
1729474	-	Durango Exterior Acrylic Latex Flat White Base	569	Ounces(OZ)	08/30/22
1729475	-	Durango Exterior Acrylic Latex Flat White Base	569	Ounces(OZ)	08/30/22
1729476	-	Durango Exterior Acrylic Latex Flat White Base	569	Ounces(OZ)	08/30/22
1729477	-	Durango Exterior Acrylic Latex Flat White Base	569	Ounces(OZ)	08/30/22
1729482	Multi	The Right Stuff	7.5	Ounces(OZ)	08/30/22
1728530	-	Amerlock Sealer HRD	1	Gallon(GAL)	08/30/22
1728533	-	Amerlock Sealer HRD	1	Gallon(GAL)	08/30/22
1728536	-	Amerlock Sealer HRD	1	Gallon(GAL)	08/30/22
1728531	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	08/30/22
1728532	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	08/30/22
1728534	-	PAINT HARDENER	5	Gallon(GAL)	08/30/22
1728535	-	Avalon Premium 100% Acrylic Interior Satin W/B	5	Gallon(GAL)	08/30/22
1728525	-	Avalon Premium 100% Acrylic Interior Satin W/B	5	Gallon(GAL)	08/30/22
1728526	-	Avalon Premium 100% Acrylic Interior Satin W/B	5	Gallon(GAL)	08/30/22
V00000C564	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	08/30/22
V00000C55D	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	08/30/22
V00000C567	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	08/30/22
V00000C55E	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	08/30/22
V00000C55F	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	08/30/22
V00000C566	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	08/30/22
V00000C569	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	08/30/22
V00000C55A	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	08/30/22
V00000C55B	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	08/30/22
V00000C563	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	08/30/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C568	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	08/30/22
V00000C552	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	08/30/22
V00000C55C	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	08/30/22
V00000C562	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	08/30/22
V00000C560	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	08/30/22
V00000C561	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	08/30/22
V00000C565	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	08/30/22
V00000C554	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	08/30/22
V00000C555	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	08/30/22
V00000C556	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	08/30/22
V00000C557	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	08/30/22
V00000C559	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	08/30/22
V00000C553	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	08/30/22
V00000C558	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	08/30/22
1728527	-	Finium DTM-AT S/G Acrylic N/B	3.4	Liters(L)	08/30/22
1728528	-	Finium DTM-AT S/G Acrylic W/B	3.6	Liters(L)	08/30/22
1728529	-	Finium DTM-AT S/G Acrylic W/B	3.6	Liters(L)	08/30/22
1728537	-	Avalon Premium 100% Acrylic Interior Flat W/B	18	Liters(L)	08/30/22
1728538	-	PERMACRYL EXTERIOR SEMI-GLOSS NEUTRAL BASE	3.4	Liters(L)	08/30/22
1728539	-	Homax Wall Texture Pro Grade- Orange Peel	25	Ounces(OZ)	08/30/22
1728540	-	Homax Wall Texture Pro Grade- Orange Peel	25	Ounces(OZ)	08/30/22
1728541	-	Homax Wall Texture Pro Grade- Orange Peel	25	Ounces(OZ)	08/30/22
1728542	-	Homax Wall Texture Pro Grade- Orange Peel	25	Ounces(OZ)	08/30/22
1728543	-	GREAT STUFF FOAM SEALANT	24	Ounces(OZ)	08/30/22
1728544	-	PURE GUM SPIRITS OF TURPENTINE	1	Gallon(GAL)	08/30/22
1728546	-	PURE GUM SPIRITS OF TURPENTINE	1	Gallon(GAL)	08/30/22
1728545	-	PURE GUM SPIRITS OF TURPENTINE	1	Gallon(GAL)	08/30/22
1728547	8001-26-1	LINSEED OIL	1	Gallon(GAL)	08/30/22
1728550	8001-26-1	LINSEED OIL	1	Gallon(GAL)	08/30/22
1728549	8001-26-1	LINSEED OIL	1	Gallon(GAL)	08/30/22
1728548	8001-26-1	LINSEED OIL	1	Gallon(GAL)	08/30/22
1728551	-	MATCH UP PAINT	12	Ounces(OZ)	08/30/22
1728552	-	MATCH UP PAINT	12	Ounces(OZ)	08/30/22
1728553	-	MATCH UP PAINT	12	Ounces(OZ)	08/30/22
1728554	-	Diamond Spray Paint Red Primer	12.8	Ounces(OZ)	08/30/22
1742390	14488-45-0	n-Propylammonium Iodide	25	Gram(GM)	08/30/22
1742391	14488-45-0	n-Propylammonium Iodide	25	Gram(GM)	08/30/22
1742392	60734-63-6	n-Octylammonium iodide	50	Gram(GM)	08/30/22
1742393	60734-63-6	n-Octylammonium iodide	50	Gram(GM)	08/30/22
1742394	54285-91-5	n-Hexylammonium iodide	50	Gram(GM)	08/30/22
1742395	54285-91-5	n-Hexylammonium iodide	50	Gram(GM)	08/30/22
1690442	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/30/22
1690450	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/30/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1690443	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/30/22
1690456	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/30/22
1690455	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/30/22
1690454	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/30/22
1690453	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/30/22
1690451	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/30/22
1690449	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/30/22
1690448	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/30/22
1690447	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/30/22
1690446	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/30/22
1690445	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/30/22
1690444	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/30/22
1690452	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/30/22
1742401	1308-96-9	EUROPIUM OXIDE 99.99%	25	Gram(GM)	08/30/22
1742396	287-92-3	Cyclopentane reagent grade 98%	500	Milliliter(ML)	08/30/22
1742397	96-37-7	Methylcyclopentane 97%	500	Milliliter(ML)	08/30/22
1742402	102767-28-2	Levetiracetam	50	Milligram(MG)	08/30/22
1742403	50-00-0	Formaldehyde solution for molecular biology 36.5-38% in H2O	500	Milliliter(ML)	08/30/22
1742478	-	RBS-35 CONCENTRATE	5	Kilograms(KG)	08/30/22
1742505	955-83-9	2 5-Diphenylfuran 98%	1	Gram(GM)	08/30/22
1742506	10294-41-4	CERIUM(III) NITRATE HEXAHYDRATE	1	Kilograms(KG)	08/30/22
1742507	10294-41-4	CERIUM(III) NITRATE HEXAHYDRATE	1	Kilograms(KG)	08/30/22
1742508	-	AMMONIUM ACETATE 7.5 M SOLUTION	250	Milliliter(ML)	08/30/22
1721325	64-19-7	Acetic acid glacial ACS reagent 99.7+%	100	Milliliter(ML)	08/30/22
1742509	-	LOCTITE LB 8009 HEAVY DUTY ANTI-SEIZE	255	Gram(GM)	08/30/22
1721326	64-19-7	Acetic acid glacial ACS reagent 99.7+%	100	Milliliter(ML)	08/30/22
1742510	7772-98-7	SODIUM THIOSULFATE	1	Kilograms(KG)	08/30/22
1721321	64-19-7	Acetic acid glacial ACS reagent 99.7+%	100	Milliliter(ML)	08/30/22
1721322	64-19-7	Acetic acid glacial ACS reagent 99.7+%	100	Milliliter(ML)	08/30/22
1721317	64-19-7	Acetic acid glacial ACS reagent 99.7+%	100	Milliliter(ML)	08/30/22
1721323	64-19-7	Acetic acid glacial ACS reagent 99.7+%	100	Milliliter(ML)	08/30/22
1721324	64-19-7	Acetic acid glacial ACS reagent 99.7+%	100	Milliliter(ML)	08/30/22
1721318	64-19-7	Acetic acid glacial ACS reagent 99.7+%	100	Milliliter(ML)	08/30/22
1721316	64-19-7	Acetic acid glacial ACS reagent 99.7+%	100	Milliliter(ML)	08/30/22
1721315	64-19-7	Acetic acid glacial ACS reagent 99.7+%	100	Milliliter(ML)	08/30/22
1721319	64-19-7	Acetic acid glacial ACS reagent 99.7+%	100	Milliliter(ML)	08/30/22
1721320	64-19-7	Acetic acid glacial ACS reagent 99.7+%	100	Milliliter(ML)	08/30/22
1742515	142-82-5	Heptane Anhydrous 99%	2	Liters(L)	08/30/22
1742516	142-82-5	Heptane Anhydrous 99%	2	Liters(L)	08/30/22
1742517	142-82-5	Heptane Anhydrous 99%	2	Liters(L)	08/30/22
1742518	142-82-5	Heptane Anhydrous 99%	2	Liters(L)	08/30/22
1742519	1592-23-0	CALCIUM STEARATE	1	Kilograms(KG)	08/30/22
1742520	1310-73-2	SODIUM HYDROXIDE	1	Kilograms(KG)	08/30/22
1742521	14044-65-6	BORANE-TETRAHYDROFURAN COMPLEX	100	Milliliter(ML)	08/30/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1742522	7447-41-8	LITHIUM CHLORIDE	500	Gram(GM)	08/30/22
1742523	1600-27-7	MERCURIC ACETATE	50	Gram(GM)	08/30/22
1742524	7487-94-7	MERCURY (II) CHLORIDE	100	Gram(GM)	08/30/22
1742525	7440-22-4	Silver conductive adhesive paste	1	Gram(GM)	08/30/22
0Requested	80-05-7	BISPHENOL A (4 4'-ISOPROPYLIDENEDIPHENOL)	2	Gallon(GAL)	08/30/22
1Requested	14808-60-7	QUARTZ	2	Gallon(GAL)	08/30/22
1730326	-	DAP ALL PURPOSE ADHESIVE	10.1	Ounces(OZ)	08/31/22
1730330	-	DAP ALL PURPOSE ADHESIVE	10.1	Ounces(OZ)	08/31/22
1730327	-	DAP ALL PURPOSE ADHESIVE	10.1	Ounces(OZ)	08/31/22
1730329	-	DAP ALL PURPOSE ADHESIVE	10.1	Ounces(OZ)	08/31/22
1730328	-	DAP ALL PURPOSE ADHESIVE	10.1	Ounces(OZ)	08/31/22
1730331	-	BOSS 535 Polyurethane	300	Milliliter(ML)	08/31/22
1730335	-	BOSS 535 Polyurethane	300	Milliliter(ML)	08/31/22
1730332	-	BOSS 535 Polyurethane	300	Milliliter(ML)	08/31/22
1730333	-	BOSS 535 Polyurethane	300	Milliliter(ML)	08/31/22
1730334	-	BOSS 535 Polyurethane	300	Milliliter(ML)	08/31/22
1730336	-	COTE ALL WHITE BASE	619.5	Ounces(OZ)	08/31/22
1730337	-	DO IT BEST PREMIUM ENAMEL SEMI-GLOSS BLACK	12	Ounces(OZ)	08/31/22
1730342	-	DO IT BEST PREMIUM ENAMEL SEMI-GLOSS BLACK	12	Ounces(OZ)	08/31/22
1730338	-	DO IT BEST PREMIUM ENAMEL SEMI-GLOSS BLACK	12	Ounces(OZ)	08/31/22
1730339	-	DO IT BEST PREMIUM ENAMEL SEMI-GLOSS BLACK	12	Ounces(OZ)	08/31/22
1730341	-	DO IT BEST PREMIUM ENAMEL SEMI-GLOSS BLACK	12	Ounces(OZ)	08/31/22
1730343	-	DO IT BEST PREMIUM ENAMEL SEMI-GLOSS BLACK	12	Ounces(OZ)	08/31/22
1730344	-	DO IT BEST PREMIUM ENAMEL SEMI-GLOSS BLACK	12	Ounces(OZ)	08/31/22
1730345	-	DO IT BEST PREMIUM ENAMEL SEMI-GLOSS BLACK	12	Ounces(OZ)	08/31/22
1730346	-	DO IT BEST PREMIUM ENAMEL SEMI-GLOSS BLACK	12	Ounces(OZ)	08/31/22
1730347	-	DO IT BEST PREMIUM ENAMEL SEMI-GLOSS BLACK	12	Ounces(OZ)	08/31/22
1730348	-	DO IT BEST PREMIUM ENAMEL SEMI-GLOSS BLACK	12	Ounces(OZ)	08/31/22
1730349	-	DO IT BEST PREMIUM ENAMEL SEMI-GLOSS BLACK	12	Ounces(OZ)	08/31/22
1730350	-	DO IT BEST PREMIUM ENAMEL SEMI-GLOSS BLACK	12	Ounces(OZ)	08/31/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1730351	-	DO IT BEST PREMIUM ENAMEL SEMI-GLOSS BLACK	12	Ounces(OZ)	08/31/22
1730352	-	DO IT BEST PREMIUM ENAMEL SEMI-GLOSS BLACK	12	Ounces(OZ)	08/31/22
1730340	-	DO IT BEST PREMIUM ENAMEL SEMI-GLOSS BLACK	12	Ounces(OZ)	08/31/22
1730358	-	DO IT BEST PREMIUM ENAMEL SEMI-GLOSS BLACK	12	Ounces(OZ)	08/31/22
1730356	-	DO IT BEST PREMIUM ENAMEL SEMI-GLOSS BLACK	12	Ounces(OZ)	08/31/22
1730359	-	DO IT BEST PREMIUM ENAMEL SEMI-GLOSS BLACK	12	Ounces(OZ)	08/31/22
1730357	-	DO IT BEST PREMIUM ENAMEL SEMI-GLOSS BLACK	12	Ounces(OZ)	08/31/22
1730360	-	DO IT BEST PREMIUM ENAMEL SEMI-GLOSS BLACK	12	Ounces(OZ)	08/31/22
1730353	-	DO IT BEST PREMIUM ENAMEL SEMI-GLOSS BLACK	12	Ounces(OZ)	08/31/22
1730354	-	DO IT BEST PREMIUM ENAMEL SEMI-GLOSS BLACK	12	Ounces(OZ)	08/31/22
1730355	-	DO IT BEST PREMIUM ENAMEL SEMI-GLOSS BLACK	12	Ounces(OZ)	08/31/22
1423524	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	08/31/22
1423525	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	08/31/22
1715405	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	08/31/22
1715406	-	FS-ONE MAX Firestop intumescent sealant	10.1	Ounces(OZ)	08/31/22
1690433	-	CARBON MONOXIDE IN NITROGEN	3.64	Cubic Feet(CF)	08/31/22
1690434	-	CARBON MONOXIDE IN NITROGEN	3.64	Cubic Feet(CF)	08/31/22
1690435	630-08-0	CARBON MONOXIDE	40	Cubic Feet(CF)	08/31/22
1690436	630-08-0	CARBON MONOXIDE	40	Cubic Feet(CF)	08/31/22
1690437	630-08-0	CARBON MONOXIDE	40	Cubic Feet(CF)	08/31/22
1690438	74-85-1	ETHYLENE	40	Cubic Feet(CF)	08/31/22
1690439	74-85-1	ETHYLENE	40	Cubic Feet(CF)	08/31/22
1690440	7664-41-7	AMMONIA ANHYDROUS	40	Cubic Feet(CF)	08/31/22
1690441	7664-41-7	AMMONIA ANHYDROUS	40	Cubic Feet(CF)	08/31/22
1690253	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690255	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690254	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690276	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690275	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690288	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690277	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690278	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690279	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690280	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1690281	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690282	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690283	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690284	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690285	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690274	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690287	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690259	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690289	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690286	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690261	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690269	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690268	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690267	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690266	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690265	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690264	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690257	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690262	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690273	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690260	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690258	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690290	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690256	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690271	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690272	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690263	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690270	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690291	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690296	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690295	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690293	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690294	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690292	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	08/31/22
1690297	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690307	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690314	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690313	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690312	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690315	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690308	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690302	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690306	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690305	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690304	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1690303	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690310	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690318	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690317	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690309	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690319	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690320	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690321	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690322	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690323	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690324	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690325	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690326	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690316	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690298	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690299	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690300	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690301	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690311	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690344	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690350	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690349	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690355	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690347	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690351	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690345	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690348	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690343	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690342	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690346	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690352	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690356	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690353	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690354	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	08/31/22
1690327	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/31/22
1690329	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/31/22
1690328	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/31/22
1690341	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/31/22
1690330	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/31/22
1690340	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/31/22
1690331	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/31/22
1690332	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/31/22
1690333	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/31/22
1690336	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/31/22
1690337	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/31/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1690338	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/31/22
1690335	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/31/22
1690334	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/31/22
1690339	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	08/31/22
1690357	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/31/22
1690367	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/31/22
1690365	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/31/22
1690368	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/31/22
1690369	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/31/22
1690371	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/31/22
1690373	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/31/22
1690364	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/31/22
1690374	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/31/22
1690370	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/31/22
1690358	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/31/22
1690376	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/31/22
1690362	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/31/22
1690361	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/31/22
1690360	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/31/22
1690375	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/31/22
1690359	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/31/22
1690366	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/31/22
1690363	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/31/22
1690372	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/31/22
1690399	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/31/22
1690400	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/31/22
1690398	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	08/31/22
1690377	-	6% Hydrogen 94% Argon	220	Cubic Feet(CF)	08/31/22
1642865	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/31/22
1642883	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/31/22
1642873	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/31/22
1642874	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/31/22
1642875	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/31/22
1642876	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/31/22
1642877	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/31/22
1642878	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/31/22
1642879	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/31/22
1642880	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/31/22
1642871	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/31/22
1642882	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/31/22
1642870	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/31/22
1642884	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/31/22
1642885	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/31/22
1642886	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/31/22
1642887	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/31/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1642888	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/31/22
1642881	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/31/22
1642869	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/31/22
1642868	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/31/22
1642867	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/31/22
1642866	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/31/22
1642872	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	08/31/22
1742643	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	4	Gallon(GAL)	08/31/22
1742658	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	4	Gallon(GAL)	08/31/22
1742657	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	4	Gallon(GAL)	08/31/22
1742656	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	4	Gallon(GAL)	08/31/22
1742655	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	4	Gallon(GAL)	08/31/22
1742654	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	4	Gallon(GAL)	08/31/22
1742653	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	4	Gallon(GAL)	08/31/22
1742645	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	4	Gallon(GAL)	08/31/22
1742651	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	4	Gallon(GAL)	08/31/22
1742646	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	4	Gallon(GAL)	08/31/22
1742647	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	4	Gallon(GAL)	08/31/22
1742648	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	4	Gallon(GAL)	08/31/22
1742649	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	4	Gallon(GAL)	08/31/22
1742650	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	4	Gallon(GAL)	08/31/22
1742652	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	4	Gallon(GAL)	08/31/22
1742644	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	4	Gallon(GAL)	08/31/22
1690392	-	Compressed Air	220	Cubic Feet(CF)	08/31/22
1690395	-	Compressed Air	220	Cubic Feet(CF)	08/31/22
1690394	-	Compressed Air	220	Cubic Feet(CF)	08/31/22
1690393	-	Compressed Air	220	Cubic Feet(CF)	08/31/22
1690396	-	Compressed Air	220	Cubic Feet(CF)	08/31/22
1690397	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/31/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1690414	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/31/22
1690411	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/31/22
1690413	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/31/22
1690412	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/31/22
1690410	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/31/22
1690415	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	08/31/22
1690401	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	08/31/22
1690402	74-98-6	PROPANE	11	Gallon(GAL)	08/31/22
1690405	74-98-6	PROPANE	11	Gallon(GAL)	08/31/22
1690406	74-98-6	PROPANE	11	Gallon(GAL)	08/31/22
1690404	74-98-6	PROPANE	11	Gallon(GAL)	08/31/22
1690407	74-98-6	PROPANE	11	Gallon(GAL)	08/31/22
1690403	74-98-6	PROPANE	11	Gallon(GAL)	08/31/22
1690408	74-98-6	PROPANE	100	Pounds(LB)	08/31/22
1690409	74-98-6	PROPANE	100	Pounds(LB)	08/31/22
1742600	7784-27-2	ALUMINUM NITRATE NONAHYDRATE	500	Gram(GM)	08/31/22
1742602	7784-27-2	ALUMINUM NITRATE NONAHYDRATE	500	Gram(GM)	08/31/22
1742603	7784-27-2	ALUMINUM NITRATE NONAHYDRATE	500	Gram(GM)	08/31/22
1742604	7784-27-2	ALUMINUM NITRATE NONAHYDRATE	500	Gram(GM)	08/31/22
1742605	7784-27-2	ALUMINUM NITRATE NONAHYDRATE	500	Gram(GM)	08/31/22
1742601	7784-27-2	ALUMINUM NITRATE NONAHYDRATE	500	Gram(GM)	08/31/22
1742606	1309-48-4	MAGNESIUM OXIDE	100	Gram(GM)	08/31/22
1742595	98892-75-2	1-BUTYL-2 3-DIMETHYLIMIDAZOLIUM CHLORIDE	50	Gram(GM)	08/31/22
1742596	98892-75-2	1-BUTYL-2 3-DIMETHYLIMIDAZOLIUM CHLORIDE	50	Gram(GM)	08/31/22
1742599	1303-86-2	BORIC ANHYDRIDE	100	Gram(GM)	08/31/22
1690416	-	Oxygen 10%/Bal. Helium	220	Cubic Feet(CF)	08/31/22
1690417	-	Oxygen 10%/Bal. Helium	220	Cubic Feet(CF)	08/31/22
1690418	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/31/22
1742532	108-95-2	PHENOL	100	Gram(GM)	08/31/22
1690427	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/31/22
1690420	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/31/22
1690422	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/31/22
1690424	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/31/22
1690426	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/31/22
1690421	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/31/22
1690428	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/31/22
1690429	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/31/22
1690430	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/31/22
1690431	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/31/22
1690432	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/31/22
1690425	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/31/22
1690423	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/31/22
1690419	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	08/31/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1742533	108-95-2	PHENOL	100	Gram(GM)	08/31/22
1690457	-	Sulfer Hexafluoride	220	Cubic Feet(CF)	08/31/22
1742593	-	TEVA RESIN	100	Gram(GM)	08/31/22
1742594	-	TEVA RESIN	100	Gram(GM)	08/31/22
1742535	-	DOW CORNING SYLGARD 184 SILICON ELASTOMER KIT	0.5	Kilograms(KG)	08/31/22
1742585	67-63-0	2-Propanol anhydrous 99.5%	1	Liters(L)	08/31/22
1742590	67-63-0	2-Propanol anhydrous 99.5%	1	Liters(L)	08/31/22
1742586	67-63-0	2-Propanol anhydrous 99.5%	1	Liters(L)	08/31/22
1742587	67-63-0	2-Propanol anhydrous 99.5%	1	Liters(L)	08/31/22
1742588	67-63-0	2-Propanol anhydrous 99.5%	1	Liters(L)	08/31/22
1742589	67-63-0	2-Propanol anhydrous 99.5%	1	Liters(L)	08/31/22
1541035	-	Avalon Premium 100% Acrylic Interior Semi-Gloss D/B	117	Ounces(OZ)	08/31/22
1541021	-	Avalon Premium 100% Acrylic Interior Semi-Gloss M/B	120	Ounces(OZ)	08/31/22
1541020	-	Avalon Premium 100% Acrylic Interior Semi-Gloss M/B	120	Ounces(OZ)	08/31/22
1541094	-	SureFlo Acrylic Gloss Enamel N/B	113	Ounces(OZ)	08/31/22
1541095	-	SureFlo Acrylic Gloss Enamel N/B	113	Ounces(OZ)	08/31/22
1541096	-	SureFlo Acrylic Gloss Enamel N/B	113	Ounces(OZ)	08/31/22
1541091	-	SureFlo Acrylic Gloss Enamel N/B	113	Ounces(OZ)	08/31/22
1541092	-	SureFlo Acrylic Gloss Enamel N/B	113	Ounces(OZ)	08/31/22
1541043	-	Avalon Premium 100% Acrylic Interior Eggshell Neutral Base	113	Ounces(OZ)	08/31/22
1541044	-	Avalon Premium 100% Acrylic Interior Eggshell Neutral Base	113	Ounces(OZ)	08/31/22
1541019	-	Avalon Premium 100% Acrylic Interior Semi-Gloss M/B	120	Ounces(OZ)	08/31/22
1541023	-	Avalon Premium 100% Acrylic Interior Flat M/B	120	Ounces(OZ)	08/31/22
1454121	-	Permacryl Int Latex Flat W/B	121	Ounces(OZ)	08/31/22
1541093	-	Permacryl Int Latex Flat W/B	121	Ounces(OZ)	08/31/22
1728607	-	SIKAFLEX	10.1	Ounces(OZ)	08/31/22
1728609	-	SIKAFLEX	10.1	Ounces(OZ)	08/31/22
1728608	-	SIKAFLEX	10.1	Ounces(OZ)	08/31/22
1728610	-	ALEX PLUS	10.1	Ounces(OZ)	08/31/22
1728611	-	808-2551 COLORTREND AXX ORGANIC YELLOW	32	Ounces(OZ)	08/31/22
1728612	-	808-2551 COLORTREND AXX ORGANIC YELLOW	32	Ounces(OZ)	08/31/22
1728613	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	08/31/22
1728614	-	808-1810 COLORTREND C YELLOW OXIDE	32	Ounces(OZ)	08/31/22
1728555	-	COTE ALL DEEP BASE	1	Gallon(GAL)	08/31/22
1728556	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/31/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1728561	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/31/22
1728568	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/31/22
1728569	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/31/22
1728570	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/31/22
1728566	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/31/22
1728565	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/31/22
1728564	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/31/22
1728562	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/31/22
1728567	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/31/22
1728560	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/31/22
1728559	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/31/22
1728558	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/31/22
1728557	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/31/22
1728563	-	SBS FLASHING CEMENT MATRIX 202	4.75	Gallon(GAL)	08/31/22
1728571	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728591	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728599	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728588	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728590	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728592	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728593	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728572	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728595	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728589	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728587	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728598	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728594	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728600	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728601	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728602	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728603	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728604	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728605	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728606	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728597	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728576	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728596	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728586	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728573	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728575	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728577	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728578	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728584	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728574	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728585	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1728579	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728583	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728582	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728581	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728580	-	Dynaflex 230 - All Colors	10.1	Ounces(OZ)	08/31/22
1728615	-	808-9907 COLORTREND B LAMP BLACK	32	Ounces(OZ)	08/31/22
1728616	-	888-1572 COLORTREND BROWN OXIDE	32	Ounces(OZ)	08/31/22
1728617	-	888-1572 COLORTREND BROWN OXIDE	32	Ounces(OZ)	08/31/22
1728618	-	808-0422 COLORTREND V MAGENTA	32	Ounces(OZ)	08/31/22
1728619	-	SHEETROCK LIGHTWEIGHT ALL PURPOSE JOINT COMPOUND	5	Gallon(GAL)	08/31/22
1058668	67-63-0	ISOPROPYL ALCOHOL	3.785	Liters(L)	08/31/22
1728620	-	Quikrete Portland Cement	50	Pounds(LB)	08/31/22
1058677	67-63-0	ISOPROPYL ALCOHOL	3.785	Liters(L)	08/31/22
1058686	67-63-0	ISOPROPYL ALCOHOL	3.785	Liters(L)	08/31/22
1058695	67-63-0	ISOPROPYL ALCOHOL	3.785	Liters(L)	08/31/22
1728621	-	BLUE TRAFFIC PAINT	18.9	Liters(L)	08/31/22
1728622	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	5	Gallon(GAL)	08/31/22
1728623	-	RED TRAFFIC PAINT	5	Gallon(GAL)	08/31/22
1742698	-	Buehler Epoxicure 2 Resin	64	Ounces(OZ)	08/31/22
1742699	-	EpoxiCure 2 Hardener	15	Ounces(OZ)	08/31/22
1742262	124-41-4	SODIUM METHOXIDE (SODIUM METHYLATE)	100	Gram(GM)	08/31/22
1742285	109-72-8	N-BUTYLLITHIUM 1.6M IN HEXANES	50	Milliliter(ML)	08/31/22
1742286	109-72-8	N-BUTYLLITHIUM 1.6M IN HEXANES	25	Milliliter(ML)	08/31/22
1742287	109-72-8	N-BUTYLLITHIUM 1.6M IN HEXANES	25	Milliliter(ML)	08/31/22
1742288	109-72-8	N-BUTYLLITHIUM 1.6M IN HEXANES	25	Milliliter(ML)	08/31/22
1742289	109-72-8	N-BUTYLLITHIUM 1.6M IN HEXANES	25	Milliliter(ML)	08/31/22
1742542	7558-79-4	SODIUM PHOSPHATE DIBASIC	500	Gram(GM)	08/31/22
1742543	7778-77-0	POTASSIUM PHOSPHATE MONOBASIC	500	Gram(GM)	08/31/22
1742544	7772-98-7	SODIUM THIOSULFATE	250	Gram(GM)	08/31/22
1742614	108-30-5	SUCCINIC ANHYDRIDE	250	Gram(GM)	08/31/22
1742615	-	DOW CORNING HIGH VACUUM GREASE	5.3	Ounces(OZ)	08/31/22
1742619	-	DOW CORNING HIGH VACUUM GREASE	5.3	Ounces(OZ)	08/31/22
1742616	-	DOW CORNING HIGH VACUUM GREASE	5.3	Ounces(OZ)	08/31/22
1742618	-	DOW CORNING HIGH VACUUM GREASE	5.3	Ounces(OZ)	08/31/22
1742620	-	DOW CORNING HIGH VACUUM GREASE	5.3	Ounces(OZ)	08/31/22
1742617	-	DOW CORNING HIGH VACUUM GREASE	5.3	Ounces(OZ)	08/31/22
1742621	2008-75-5	1-(2-Chloroethyl)piperidine hydrochloride	100	Gram(GM)	08/31/22
1742296	76-05-1	Trifluoroacetic acid anhydrous ZerO2 99.0+%	2	Milliliter(ML)	08/31/22
1742301	76-05-1	Trifluoroacetic acid anhydrous ZerO2 99.0+%	2	Milliliter(ML)	08/31/22
1742298	76-05-1	Trifluoroacetic acid anhydrous ZerO2 99.0+%	2	Milliliter(ML)	08/31/22
1742297	76-05-1	Trifluoroacetic acid anhydrous ZerO2 99.0+%	2	Milliliter(ML)	08/31/22
1742299	76-05-1	Trifluoroacetic acid anhydrous ZerO2 99.0+%	2	Milliliter(ML)	08/31/22
1742300	76-05-1	Trifluoroacetic acid anhydrous ZerO2 99.0+%	2	Milliliter(ML)	08/31/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1742304	76-05-1	Trifluoroacetic acid anhydrous ZerO2 99.0+%	2	Milliliter(ML)	08/31/22
1742303	76-05-1	Trifluoroacetic acid anhydrous ZerO2 99.0+%	2	Milliliter(ML)	08/31/22
1742305	76-05-1	Trifluoroacetic acid anhydrous ZerO2 99.0+%	2	Milliliter(ML)	08/31/22
1742306	76-05-1	Trifluoroacetic acid anhydrous ZerO2 99.0+%	2	Milliliter(ML)	08/31/22
1742307	76-05-1	Trifluoroacetic acid anhydrous ZerO2 99.0+%	2	Milliliter(ML)	08/31/22
1742302	76-05-1	Trifluoroacetic acid anhydrous ZerO2 99.0+%	2	Milliliter(ML)	08/31/22
1571818	-	Weather-Plate Ext Flat W/B	608	Ounces(OZ)	09/01/22
1631198	-	Weather-Plate Ext Flat W/B	608	Ounces(OZ)	09/01/22
1571815	-	Weather-Plate Ext Flat W/B	608	Ounces(OZ)	09/01/22
1631199	-	Durango Exterior Acrylic Latex Flat White Base	608	Ounces(OZ)	09/01/22
1631200	-	Durango Exterior Acrylic Latex Flat White Base	608	Ounces(OZ)	09/01/22
1631201	-	Durango Exterior Acrylic Latex Flat White Base	608	Ounces(OZ)	09/01/22
1631202	-	Durango Exterior Acrylic Latex Flat White Base	608	Ounces(OZ)	09/01/22
1629898	-	Durango Exterior Acrylic Latex Flat White Base	608	Ounces(OZ)	09/01/22
1387308	-	Durango Exterior Acrylic Latex Flat White Base	608	Ounces(OZ)	09/01/22
1454434	-	WALL TEXTURE ORANGE PEEL OIL BASED	10	Ounces(OZ)	09/01/22
1742536	-	3M RESIN FK-800	1	Kilograms(KG)	09/01/22
1742541	-	3M RESIN FK-800	1	Kilograms(KG)	09/01/22
1742539	-	3M RESIN FK-800	1	Kilograms(KG)	09/01/22
1742538	-	3M RESIN FK-800	1	Kilograms(KG)	09/01/22
1742537	-	3M RESIN FK-800	1	Kilograms(KG)	09/01/22
1742540	-	3M RESIN FK-800	1	Kilograms(KG)	09/01/22
1742622	13258-63-4	4-(2-Aminoethyl)pyridine	1	Gram(GM)	09/01/22
1742639	25182-84-7	3-nitropropan-1-ol	10	Gram(GM)	09/01/22
1742640	25182-84-7	3-nitropropan-1-ol	10	Gram(GM)	09/01/22
1742641	9005-38-3	ALGINIC ACID SODIUM SALT	250	Gram(GM)	09/01/22
1742642	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	100	Gram(GM)	09/01/22
1742695	7446-70-0	Aluminum chloride reagent plus 99%	100	Gram(GM)	09/01/22
1742696	7446-70-0	Aluminum chloride reagent plus 99%	100	Gram(GM)	09/01/22
1742697	7446-70-0	Aluminum chloride reagent plus 99%	500	Gram(GM)	09/01/22
1742700	13395-16-9	COPPER(II) ACETYLACETONATE	50	Gram(GM)	09/01/22
1742701	35585-94-5	BDPA complex with benzene(1:1) free radical	100	Milligram(MG)	09/01/22
1738896	-	VITA-D-CHLOR	5	Pounds(LB)	09/01/22
1738898	-	VITA-D-CHLOR	5	Pounds(LB)	09/01/22
1738901	-	VITA-D-CHLOR	5	Pounds(LB)	09/01/22
1738899	-	VITA-D-CHLOR	5	Pounds(LB)	09/01/22
1738900	-	VITA-D-CHLOR	5	Pounds(LB)	09/01/22
1738897	-	VITA-D-CHLOR	5	Pounds(LB)	09/01/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1742317	1336-21-6	AMMONIUM HYDROXIDE OPTIMA	1	Liters(L)	09/01/22
1742545	10028-22-5	FERRIC SULFATE 50%	600	Pounds(LB)	09/01/22
1742546	10028-22-5	FERRIC SULFATE 50%	600	Pounds(LB)	09/01/22
1742326	1336-21-6	AMMONIUM HYDROXIDE OPTIMA	1	Liters(L)	09/01/22
1742328	1336-21-6	AMMONIUM HYDROXIDE OPTIMA	1	Liters(L)	09/01/22
1742327	1336-21-6	AMMONIUM HYDROXIDE OPTIMA	1	Liters(L)	09/01/22
1742321	1336-21-6	AMMONIUM HYDROXIDE OPTIMA	1	Liters(L)	09/01/22
1742322	1336-21-6	AMMONIUM HYDROXIDE OPTIMA	1	Liters(L)	09/01/22
1742323	1336-21-6	AMMONIUM HYDROXIDE OPTIMA	1	Liters(L)	09/01/22
1742324	1336-21-6	AMMONIUM HYDROXIDE OPTIMA	1	Liters(L)	09/01/22
1742325	1336-21-6	AMMONIUM HYDROXIDE OPTIMA	1	Liters(L)	09/01/22
1742320	1336-21-6	AMMONIUM HYDROXIDE OPTIMA	1	Liters(L)	09/01/22
1742318	1336-21-6	AMMONIUM HYDROXIDE OPTIMA	1	Liters(L)	09/01/22
1742319	1336-21-6	AMMONIUM HYDROXIDE OPTIMA	1	Liters(L)	09/01/22
1742547	7440-20-2	Scandium Ingot 99%	1	Gram(GM)	09/01/22
1742548	7440-20-2	Scandium Ingot 99%	1	Gram(GM)	09/01/22
1742549	4045-44-7	1 2 3 4 5-PENTAMETHYLCYCLOPENTADIENE	5	Gram(GM)	09/01/22
1742550	4045-44-7	1 2 3 4 5-PENTAMETHYLCYCLOPENTADIENE	5	Gram(GM)	09/01/22
1742608	67-56-1	Methanol anhydrous 99.8%	1	Liters(L)	09/01/22
1742611	67-56-1	Methanol anhydrous 99.8%	1	Liters(L)	09/01/22
1742612	67-56-1	Methanol anhydrous 99.8%	1	Liters(L)	09/01/22
1742610	67-56-1	Methanol anhydrous 99.8%	1	Liters(L)	09/01/22
1742613	67-56-1	Methanol anhydrous 99.8%	1	Liters(L)	09/01/22
1742609	67-56-1	Methanol anhydrous 99.8%	1	Liters(L)	09/01/22
1742659	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Gram(GM)	09/01/22
1742668	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Gram(GM)	09/01/22
1742669	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Gram(GM)	09/01/22
1742667	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Gram(GM)	09/01/22
1742666	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Gram(GM)	09/01/22
1742665	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Gram(GM)	09/01/22
1742664	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Gram(GM)	09/01/22
1742663	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Gram(GM)	09/01/22
1742671	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Gram(GM)	09/01/22
1742672	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Gram(GM)	09/01/22
1742661	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Gram(GM)	09/01/22
1742660	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Gram(GM)	09/01/22
1742662	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Gram(GM)	09/01/22
1742670	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Gram(GM)	09/01/22
1715892	-	LOCTITE HYSOL 1C EPOXY	4	Ounces(OZ)	09/01/22
1715895	-	LOCTITE HYSOL 1C EPOXY	4	Ounces(OZ)	09/01/22
1715894	-	LOCTITE HYSOL 1C EPOXY	4	Ounces(OZ)	09/01/22
1715898	-	LOCTITE HYSOL 1C EPOXY	4	Ounces(OZ)	09/01/22
1715897	-	LOCTITE HYSOL 1C EPOXY	4	Ounces(OZ)	09/01/22
1715896	-	LOCTITE HYSOL 1C EPOXY	4	Ounces(OZ)	09/01/22
1742673	67-63-0	Isopropyl Alcohol 99.6%	4	Liters(L)	09/01/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1742674	67-63-0	Isopropyl Alcohol 99.6%	4	Liters(L)	09/01/22
1742675	7789-47-1	MERCURY(II) BROMIDE	100	Gram(GM)	09/01/22
1742676	2016-57-1	1-Aminodecane	100	Milliliter(ML)	09/01/22
1742677	146958-06-7	Formamidine Hydrobromide (99.99% trace metals basis)	5	Gram(GM)	09/01/22
1742678	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/01/22
1742679	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/01/22
1742680	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/01/22
1742681	85100-77-2	1-Butyl-3-methylimidazolium bromide	50	Gram(GM)	09/01/22
1742682	85100-77-2	1-Butyl-3-methylimidazolium bromide	50	Gram(GM)	09/01/22
1742683	284049-75-8	1-Butyl-3-methylimidazolium acetate 95%	50	Gram(GM)	09/01/22
1742684	284049-75-8	1-Butyl-3-methylimidazolium acetate 95%	50	Gram(GM)	09/01/22
1742685	79917-90-1	1-BUTYL-3-METHYLIMIDAZOLIUM CHLORIDE	10	Gram(GM)	09/01/22
1742694	79917-90-1	1-BUTYL-3-METHYLIMIDAZOLIUM CHLORIDE	10	Gram(GM)	09/01/22
1742687	79917-90-1	1-BUTYL-3-METHYLIMIDAZOLIUM CHLORIDE	10	Gram(GM)	09/01/22
1742686	79917-90-1	1-BUTYL-3-METHYLIMIDAZOLIUM CHLORIDE	10	Gram(GM)	09/01/22
1742688	79917-90-1	1-BUTYL-3-METHYLIMIDAZOLIUM CHLORIDE	10	Gram(GM)	09/01/22
1742689	79917-90-1	1-BUTYL-3-METHYLIMIDAZOLIUM CHLORIDE	10	Gram(GM)	09/01/22
1742690	79917-90-1	1-BUTYL-3-METHYLIMIDAZOLIUM CHLORIDE	10	Gram(GM)	09/01/22
1742691	79917-90-1	1-BUTYL-3-METHYLIMIDAZOLIUM CHLORIDE	10	Gram(GM)	09/01/22
1742693	79917-90-1	1-BUTYL-3-METHYLIMIDAZOLIUM CHLORIDE	10	Gram(GM)	09/01/22
1742692	79917-90-1	1-BUTYL-3-METHYLIMIDAZOLIUM CHLORIDE	10	Gram(GM)	09/01/22
1742702	-	ISOPROPANOL 70%	4	Liters(L)	09/01/22
1742703	-	ISOPROPANOL 70%	4	Liters(L)	09/01/22
1742704	-	ISOPROPANOL 70%	4	Liters(L)	09/01/22
1742705	-	ISOPROPANOL 70%	4	Liters(L)	09/01/22
1742706	1336-21-6	Ammonia solution 25% for HPLC LiChropur	250	Milliliter(ML)	09/01/22
1742707	95-01-2	2 4-DIHYDROXYBENZALDEHYDE	100	Gram(GM)	09/01/22
1742708	619-60-3	4-(Dimethylamino)phenol 95%	25	Gram(GM)	09/01/22
1742709	17754-90-4	4-(N N-Diethylamino)salicylaldehyde 98%	100	Gram(GM)	09/01/22
1742710	543-24-8	N-ACETYLGLYCINE	100	Gram(GM)	09/01/22
1742711	2450-71-7	Propargylamine 95%	100	Gram(GM)	09/01/22
1742712	1656-48-0	3 3'-Oxydipropionitrile 98%	25	Milliliter(ML)	09/01/22
1742531	78-93-3	2-Butanone suitable for HPLC 99.7%	2	Liters(L)	09/01/22
1742406	64741-88-4	Distillates (petroleum) solvent-refined heavy paraffinic	500	Gram(GM)	09/01/22
1742534	67-56-1	Methanol 99.9% (HPLC)	1	Liters(L)	09/01/22
1742713	7664-93-9	Sulfuric Acid Digital Titrator Cartridge	100	Milliliter(ML)	09/01/22
1742714	7664-93-9	Sulfuric Acid Digital Titrator Cartridge	100	Milliliter(ML)	09/01/22
1742715	7664-93-9	Sulfuric Acid Digital Titrator Cartridge	100	Milliliter(ML)	09/01/22
1742716	144-55-8	SODIUM BICARBONATE	500	Gram(GM)	09/01/22
1742717	7681-49-4	SODIUM FLUORIDE POWDER	10	Gram(GM)	09/01/22
1742591	110-54-3	n-Hexane 95% ACS	4	Liters(L)	09/01/22
1742592	110-54-3	n-Hexane 95% ACS	4	Liters(L)	09/01/22
1742597	328090-25-1	1-Ethyl-3-methylimidazolium tosylate	50	Gram(GM)	09/01/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1742598	110-86-1	Pyridine anhydrous 99.5+%	1	Liters(L)	09/01/22
1742607	7681-52-9	Sodium hypochlorite solution reagent grade available chlorine 4.00-4.99%	500	Milliliter(ML)	09/01/22
1742718	65072-00-6	Casamino acids powder	500	Gram(GM)	09/01/22
1742719	51016-92-3	TRIMETHYLAMMONIUM TETRAPHENYLBORATE	1	Gram(GM)	09/01/22
1742721	51016-92-3	TRIMETHYLAMMONIUM TETRAPHENYLBORATE	1	Gram(GM)	09/01/22
1742720	51016-92-3	TRIMETHYLAMMONIUM TETRAPHENYLBORATE	1	Gram(GM)	09/01/22
1742767	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	09/01/22
1742780	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	09/01/22
1742773	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	09/01/22
1742784	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	09/01/22
1742783	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	09/01/22
1742782	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	09/01/22
1742781	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	09/01/22
1742770	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	09/01/22
1742768	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	09/01/22
1742775	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	09/01/22
1742779	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	09/01/22
1742769	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	09/01/22
1742771	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	09/01/22
1742772	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	09/01/22
1742774	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	09/01/22
1742776	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	09/01/22
1742777	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	09/01/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1742778	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	09/01/22
1742785	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742815	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742829	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742814	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742822	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742817	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742818	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742819	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742820	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742821	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742816	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742823	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742824	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742825	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742826	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742828	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742830	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742831	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742832	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742798	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742813	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742827	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742797	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742789	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742788	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742800	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742787	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742812	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742791	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742792	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742793	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742794	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742790	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742796	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742786	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742806	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742811	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742801	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742802	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742803	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742804	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742805	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742799	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1742810	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742795	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742809	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742807	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742808	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/01/22
1742839	-	VWR VACUUM PUMP OIL 19	4	Liters(L)	09/01/22
1742841	-	VWR VACUUM PUMP OIL 19	4	Liters(L)	09/01/22
1742842	-	VWR VACUUM PUMP OIL 19	4	Liters(L)	09/01/22
1742840	-	VWR VACUUM PUMP OIL 19	4	Liters(L)	09/01/22
1742843	67-56-1	Methanol 99.9% (HPLC)	1	Liters(L)	09/01/22
1742849	67-56-1	Methanol 99.9% (HPLC)	1	Liters(L)	09/01/22
1742850	67-56-1	Methanol 99.9% (HPLC)	1	Liters(L)	09/01/22
1742851	67-56-1	Methanol 99.9% (HPLC)	1	Liters(L)	09/01/22
1742852	67-56-1	Methanol 99.9% (HPLC)	1	Liters(L)	09/01/22
1742853	67-56-1	Methanol 99.9% (HPLC)	1	Liters(L)	09/01/22
1742854	67-56-1	Methanol 99.9% (HPLC)	1	Liters(L)	09/01/22
1742848	67-56-1	Methanol 99.9% (HPLC)	1	Liters(L)	09/01/22
1742845	67-56-1	Methanol 99.9% (HPLC)	1	Liters(L)	09/01/22
1742844	67-56-1	Methanol 99.9% (HPLC)	1	Liters(L)	09/01/22
1742847	67-56-1	Methanol 99.9% (HPLC)	1	Liters(L)	09/01/22
1742846	67-56-1	Methanol 99.9% (HPLC)	1	Liters(L)	09/01/22
1742855	22560-16-3	SUPER-HYDRIDE (LITHIUM TRIETHYLBOROHYDRIDE)	100	Milliliter(ML)	09/01/22
1742857	10025-99-7	POTASSIUM TETRACHLOROPLATINATE(II)	25	Gram(GM)	09/01/22
1742858	10025-99-7	POTASSIUM TETRACHLOROPLATINATE(II)	25	Gram(GM)	09/01/22
1742859	-	ROLASERIT PE01GR (thermoplastic polybutylene terephthalate copolymer)	25	Kilograms(KG)	09/01/22
1742856	-	DOWSIL 3145 Silicone Adhesive	305	Milliliter(ML)	09/01/22
1719961	-	PSX 700 PART A(RESIN)	1	Gallon(GAL)	09/01/22
1719962	-	PSX 700 PART A(RESIN)	1	Gallon(GAL)	09/01/22
1718299	-	METAL ASSEMBLY PASTE	3	Ounces(OZ)	09/01/22
1742334	-	PSC Cryopreservation Kit	50	Milliliter(ML)	09/02/22
1742722	24324-17-2	9-FLUORENEMETHANOL	10	Gram(GM)	09/02/22
1742727	24324-17-2	9-FLUORENEMETHANOL	10	Gram(GM)	09/02/22
1742723	24324-17-2	9-FLUORENEMETHANOL	10	Gram(GM)	09/02/22
1742724	24324-17-2	9-FLUORENEMETHANOL	10	Gram(GM)	09/02/22
1742725	24324-17-2	9-FLUORENEMETHANOL	10	Gram(GM)	09/02/22
1742726	24324-17-2	9-FLUORENEMETHANOL	10	Gram(GM)	09/02/22
1742728	24324-17-2	9-FLUORENEMETHANOL	10	Gram(GM)	09/02/22
1742730	24324-17-2	9-FLUORENEMETHANOL	10	Gram(GM)	09/02/22
1742731	24324-17-2	9-FLUORENEMETHANOL	10	Gram(GM)	09/02/22
1742732	24324-17-2	9-FLUORENEMETHANOL	10	Gram(GM)	09/02/22
1742733	24324-17-2	9-FLUORENEMETHANOL	10	Gram(GM)	09/02/22
1742729	24324-17-2	9-FLUORENEMETHANOL	10	Gram(GM)	09/02/22
1742734	17499-68-2	Zirconium(IV) trifluoroacetylacetonate	1	Gram(GM)	09/02/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1742735	-	Eichrom TRU Resin Eichrom TRU Resin Cartridge	2	Milliliter(ML)	09/02/22
1742737	-	Eichrom TRU Resin Eichrom TRU Resin Cartridge	2	Milliliter(ML)	09/02/22
1742736	-	Eichrom TRU Resin Eichrom TRU Resin Cartridge	2	Milliliter(ML)	09/02/22
1742738	7647-14-5	CHLORIDE STANDARD SOLUTION	500	Milliliter(ML)	09/02/22
1742739	7681-49-4	FLUORIDE STANDARD SOLUTION	1	Liters(L)	09/02/22
1742740	25322-68-3	POLYETHYLENE GLYCOL 4000	1	Liters(L)	09/02/22
1742741	-	RESIN SEALANT LOW VAPOR PRESSURE EPOXY	5	Gram(GM)	09/02/22
1742747	-	RESIN SEALANT LOW VAPOR PRESSURE EPOXY	5	Gram(GM)	09/02/22
1742743	-	RESIN SEALANT LOW VAPOR PRESSURE EPOXY	5	Gram(GM)	09/02/22
1742750	-	RESIN SEALANT LOW VAPOR PRESSURE EPOXY	5	Gram(GM)	09/02/22
1742749	-	RESIN SEALANT LOW VAPOR PRESSURE EPOXY	5	Gram(GM)	09/02/22
1742748	-	RESIN SEALANT LOW VAPOR PRESSURE EPOXY	5	Gram(GM)	09/02/22
1742742	-	RESIN SEALANT LOW VAPOR PRESSURE EPOXY	5	Gram(GM)	09/02/22
1742744	-	RESIN SEALANT LOW VAPOR PRESSURE EPOXY	5	Gram(GM)	09/02/22
1742746	-	RESIN SEALANT LOW VAPOR PRESSURE EPOXY	5	Gram(GM)	09/02/22
1742745	-	RESIN SEALANT LOW VAPOR PRESSURE EPOXY	5	Gram(GM)	09/02/22
1742751	71902-33-5	3 5-Difluoropyridine 97%	5	Gram(GM)	09/02/22
1742752	259-79-0	Biphenylene	1	Gram(GM)	09/02/22
1742754	259-79-0	Biphenylene	1	Gram(GM)	09/02/22
1742761	259-79-0	Biphenylene	1	Gram(GM)	09/02/22
1742760	259-79-0	Biphenylene	1	Gram(GM)	09/02/22
1742759	259-79-0	Biphenylene	1	Gram(GM)	09/02/22
1742758	259-79-0	Biphenylene	1	Gram(GM)	09/02/22
1742757	259-79-0	Biphenylene	1	Gram(GM)	09/02/22
1742755	259-79-0	Biphenylene	1	Gram(GM)	09/02/22
1742753	259-79-0	Biphenylene	1	Gram(GM)	09/02/22
1742756	259-79-0	Biphenylene	1	Gram(GM)	09/02/22
1742762	142-82-5	Heptane Reagent Plus 99%	1	Liters(L)	09/02/22
1742763	-	Waste Lock 770	25	Pounds(LB)	09/02/22
1742764	67-68-5	DIMETHYL SULFOXIDE	50	Gram(GM)	09/02/22
1742861	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	09/02/22
1742862	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	09/02/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1742868	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	09/02/22
1742867	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	09/02/22
1742866	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	09/02/22
1742865	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	09/02/22
1742864	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	09/02/22
1742863	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	09/02/22
1742878	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	09/02/22
1742872	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	09/02/22
1742871	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	09/02/22
1742877	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	09/02/22
1742873	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	09/02/22
1742874	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	09/02/22
1742875	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	09/02/22
1742869	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	09/02/22
1742876	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	09/02/22
1742870	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	09/02/22
1742879	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/02/22
1742890	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/02/22
1742880	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/02/22
1742881	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/02/22
1742882	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/02/22
1742883	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/02/22
1742884	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/02/22
1742885	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/02/22
1742886	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/02/22
1742887	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/02/22
1742888	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/02/22
1742891	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/02/22
1742892	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/02/22
1742889	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	09/02/22
1742895	-	Waste Lock 770	25	Pounds(LB)	09/02/22
1742896	-	Waste Lock 770	25	Pounds(LB)	09/02/22
1742897	-	Waste Lock 770	25	Pounds(LB)	09/02/22
1742898	-	Waste Lock 770	25	Pounds(LB)	09/02/22
1742899	7722-84-1	Hydrogen Peroxide Optima	500	Milliliter(ML)	09/02/22
1742902	7722-84-1	Hydrogen Peroxide Optima	500	Milliliter(ML)	09/02/22
1742900	7722-84-1	Hydrogen Peroxide Optima	500	Milliliter(ML)	09/02/22
1742901	7722-84-1	Hydrogen Peroxide Optima	500	Milliliter(ML)	09/02/22
1742903	7789-38-0	SODIUM BROMATE	250	Gram(GM)	09/02/22
1742904	-	SU-8 3025	500	Milliliter(ML)	09/02/22
1742905	10035-10-6	Hydrobromic Acid (OPTIMA)	2	Liters(L)	09/02/22
1742907	10035-10-6	Hydrobromic Acid (OPTIMA)	2	Liters(L)	09/02/22
1742906	10035-10-6	Hydrobromic Acid (OPTIMA)	2	Liters(L)	09/02/22
1742908	554-13-2	LITHIUM CARBONATE	100	Gram(GM)	09/02/22
1742909	7447-41-8	LITHIUM CHLORIDE	100	Gram(GM)	09/02/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1742910	-	COLLODIAL SILICA SUSPENSION	128	Ounces(OZ)	09/02/22
1742911	16853-85-3	LITHIUM ALUMINUM HYDRIDE	100	Milliliter(ML)	09/02/22
1742912	534-17-8	Cesium Carbonate 99.95% trace metals basis	50	Gram(GM)	09/02/22
1742913	13446-34-9	MANGANESE CHLORIDE TETRAHYDRATE	100	Gram(GM)	09/02/22
1742914	12054-85-2	AMMONIUM PARA-MOLYBDATE TETRAHYDRATE	25	Gram(GM)	09/02/22
1742915	429-06-1	TETRAETHYLAMMONIUM TETRAFLUOROBORATE	25	Gram(GM)	09/02/22
1742916	429-06-1	TETRAETHYLAMMONIUM TETRAFLUOROBORATE	25	Gram(GM)	09/02/22
1742917	4648-54-8	AZIDOTRIMETHYLSILANE	10	Gram(GM)	09/02/22
1690458	7440-59-7	HELIUM REFRIGERATED LIQUID (CRYOGENIC LIQUID)	100	Liters(L)	09/02/22
1690390	-	6% Hydrogen 94% Argon	220	Cubic Feet(CF)	09/02/22
1690389	-	6% Hydrogen 94% Argon	220	Cubic Feet(CF)	09/02/22
1690388	-	6% Hydrogen 94% Argon	220	Cubic Feet(CF)	09/02/22
1690387	-	6% Hydrogen 94% Argon	220	Cubic Feet(CF)	09/02/22
1690385	-	6% Hydrogen 94% Argon	220	Cubic Feet(CF)	09/02/22
1690384	-	6% Hydrogen 94% Argon	220	Cubic Feet(CF)	09/02/22
1690378	-	6% Hydrogen 94% Argon	220	Cubic Feet(CF)	09/02/22
1690383	-	6% Hydrogen 94% Argon	220	Cubic Feet(CF)	09/02/22
1690379	-	6% Hydrogen 94% Argon	220	Cubic Feet(CF)	09/02/22
1690380	-	6% Hydrogen 94% Argon	220	Cubic Feet(CF)	09/02/22
1690381	-	6% Hydrogen 94% Argon	220	Cubic Feet(CF)	09/02/22
1690386	-	6% Hydrogen 94% Argon	220	Cubic Feet(CF)	09/02/22
1690382	-	6% Hydrogen 94% Argon	220	Cubic Feet(CF)	09/02/22
1690391	-	6% Hydrogen 94% Argon	220	Cubic Feet(CF)	09/02/22
1642028	-	MOBIL SHC 626	5	Gallon(GAL)	09/06/22
1642021	-	MOBIL DTE 24	55	Gallon(GAL)	09/06/22
1642060	-	Mobil Machine Tool Long Life Coolant	5	Gallon(GAL)	09/06/22
1642918	-	Synergy 735	55	Gallon(GAL)	09/06/22
1642919	-	Synergy 735	55	Gallon(GAL)	09/06/22
1719353	-	Hilti HIT-RE 500-SD	16.4	Ounces(OZ)	09/06/22
1738902	7647-01-0	Hydrochloric Acid Optima	1	Liters(L)	09/06/22
1690459	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/06/22
1738911	7647-01-0	Hydrochloric Acid Optima	1	Liters(L)	09/06/22
1738913	7647-01-0	Hydrochloric Acid Optima	1	Liters(L)	09/06/22
1738904	7647-01-0	Hydrochloric Acid Optima	1	Liters(L)	09/06/22
1738909	7647-01-0	Hydrochloric Acid Optima	1	Liters(L)	09/06/22
1738905	7647-01-0	HYDROCHLORIC ACID OPTIMA-34%	1	Liters(L)	09/06/22
1738906	7647-01-0	Hydrochloric Acid Optima	1	Liters(L)	09/06/22
1738907	7647-01-0	Hydrochloric Acid Optima	1	Liters(L)	09/06/22
1738908	7647-01-0	Hydrochloric Acid Optima	1	Liters(L)	09/06/22
1738910	7647-01-0	HYDROCHLORIC ACID OPTIMA-34%	1	Liters(L)	09/06/22
1738912	7647-01-0	Hydrochloric Acid Optima	1	Liters(L)	09/06/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1738903	7647-01-0	Hydrochloric Acid Optima	1	Liters(L)	09/06/22
1690473	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/06/22
1690465	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/06/22
1690471	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/06/22
1690470	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/06/22
1690469	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/06/22
1690468	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/06/22
1690466	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/06/22
1690472	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/06/22
1690460	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/06/22
1690467	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/06/22
1690464	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/06/22
1690463	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/06/22
1690462	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/06/22
1690461	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/06/22
1690494	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/06/22
1690474	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/06/22
1690492	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/06/22
1690489	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/06/22
1690490	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/06/22
1690493	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/06/22
1690477	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/06/22
1690481	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/06/22
1690482	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/06/22
1690483	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/06/22
1690491	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/06/22
1690480	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/06/22
1690478	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/06/22
1690476	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/06/22
1690484	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/06/22
1690485	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/06/22
1690486	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/06/22
1690487	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/06/22
1690488	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/06/22
1690475	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/06/22
1690479	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/06/22
1743055	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Gram(GM)	09/06/22
1743063	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Gram(GM)	09/06/22
1743059	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Gram(GM)	09/06/22
1743062	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Gram(GM)	09/06/22
1743061	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Gram(GM)	09/06/22
1743060	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Gram(GM)	09/06/22
1743058	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Gram(GM)	09/06/22
1743056	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Gram(GM)	09/06/22
1743064	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Gram(GM)	09/06/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1743057	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Gram(GM)	09/06/22
1690502	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/06/22
1690500	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/06/22
1690503	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/06/22
1690501	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/06/22
1742765	1493-13-6	Trifluoromethanesulfonic acid 98%	50	Gram(GM)	09/06/22
1742766	1493-13-6	Trifluoromethanesulfonic acid 98%	50	Gram(GM)	09/06/22
1690495	-	75% ARGON/25% CARBON DIOXIDE	220	Cubic Feet(CF)	09/06/22
1690499	-	75% ARGON/25% CARBON DIOXIDE	220	Cubic Feet(CF)	09/06/22
1690497	-	75% ARGON/25% CARBON DIOXIDE	220	Cubic Feet(CF)	09/06/22
1690496	-	75% ARGON/25% CARBON DIOXIDE	220	Cubic Feet(CF)	09/06/22
1690498	-	75% ARGON/25% CARBON DIOXIDE	220	Cubic Feet(CF)	09/06/22
1742836	584-84-9	TOLUENE-2 4-DIISOCYANATE	500	Gram(GM)	09/06/22
1437225	-	Oatey All Purpose Clear Cement	1	Pint(PT)	09/06/22
1742837	584-84-9	TOLUENE-2 4-DIISOCYANATE	500	Gram(GM)	09/06/22
1437227	-	Oatey All Purpose Clear Cement	1	Pint(PT)	09/06/22
1437228	-	Oatey All Purpose Clear Cement	1	Pint(PT)	09/06/22
1437226	-	Oatey All Purpose Clear Cement	1	Pint(PT)	09/06/22
1690532	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/06/22
1690533	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/06/22
1690534	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/06/22
1743066	75-09-2	Dichloromethane stabilized with ethanol	2.5	Liters(L)	09/06/22
1743067	75-09-2	Dichloromethane stabilized with ethanol	2.5	Liters(L)	09/06/22
1690535	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/06/22
1690537	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/06/22
1690544	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/06/22
1690536	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/06/22
1690539	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/06/22
1690540	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/06/22
1690541	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/06/22
1690542	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/06/22
1690543	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/06/22
1690545	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/06/22
1690538	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/06/22
1743065	492-97-7	2 2'-BITHIOPHENE	1	Gram(GM)	09/06/22
1690546	74-98-6	PROPANE	11	Gallon(GAL)	09/06/22
1690550	74-98-6	PROPANE	11	Gallon(GAL)	09/06/22
1690549	74-98-6	PROPANE	11	Gallon(GAL)	09/06/22
1690547	74-98-6	PROPANE	11	Gallon(GAL)	09/06/22
1690548	74-98-6	PROPANE	11	Gallon(GAL)	09/06/22
1437319	-	OATEY CLEAR CEMENT FOR PVC	32	Ounces(OZ)	09/06/22
1437326	-	OATEY CLEAR CEMENT FOR PVC	32	Ounces(OZ)	09/06/22
1437320	-	OATEY CLEAR CEMENT FOR PVC	32	Ounces(OZ)	09/06/22
1437330	-	OATEY CLEAR CEMENT FOR PVC	32	Ounces(OZ)	09/06/22
1437329	-	OATEY CLEAR CEMENT FOR PVC	32	Ounces(OZ)	09/06/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1437328	-	OATEY CLEAR CEMENT FOR PVC	32	Ounces(OZ)	09/06/22
1437327	-	OATEY CLEAR CEMENT FOR PVC	32	Ounces(OZ)	09/06/22
1437325	-	OATEY CLEAR CEMENT FOR PVC	32	Ounces(OZ)	09/06/22
1437323	-	OATEY CLEAR CEMENT FOR PVC	32	Ounces(OZ)	09/06/22
1437322	-	OATEY CLEAR CEMENT FOR PVC	32	Ounces(OZ)	09/06/22
1437324	-	OATEY CLEAR CEMENT FOR PVC	32	Ounces(OZ)	09/06/22
1437321	-	OATEY CLEAR CEMENT FOR PVC	32	Ounces(OZ)	09/06/22
1742991	3282-73-3	DILAURYLDIMETHYLAMMONIUM BROMIDE	25	Gram(GM)	09/06/22
1437229	-	HERCULES PURPLE PVC PRIMER	32	Ounces(OZ)	09/06/22
1690504	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	09/06/22
1437239	-	HERCULES PURPLE PVC PRIMER	32	Ounces(OZ)	09/06/22
1437238	-	HERCULES PURPLE PVC PRIMER	32	Ounces(OZ)	09/06/22
1437237	-	HERCULES PURPLE PVC PRIMER	32	Ounces(OZ)	09/06/22
1437236	-	HERCULES PURPLE PVC PRIMER	32	Ounces(OZ)	09/06/22
1437235	-	HERCULES PURPLE PVC PRIMER	32	Ounces(OZ)	09/06/22
1437234	-	HERCULES PURPLE PVC PRIMER	32	Ounces(OZ)	09/06/22
1437233	-	HERCULES PURPLE PVC PRIMER	32	Ounces(OZ)	09/06/22
1437232	-	HERCULES PURPLE PVC PRIMER	32	Ounces(OZ)	09/06/22
1437231	-	HERCULES PURPLE PVC PRIMER	32	Ounces(OZ)	09/06/22
1437230	-	HERCULES PURPLE PVC PRIMER	32	Ounces(OZ)	09/06/22
1437240	-	HERCULES PURPLE PVC PRIMER	32	Ounces(OZ)	09/06/22
1690517	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	09/06/22
1690508	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	09/06/22
1690505	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	09/06/22
1690507	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	09/06/22
1690509	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	09/06/22
1690510	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	09/06/22
1690511	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	09/06/22
1690512	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	09/06/22
1690513	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	09/06/22
1690514	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	09/06/22
1690515	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	09/06/22
1690516	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	09/06/22
1690518	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	09/06/22
1690506	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	09/06/22
1742971	546-93-0	MAGNESIUM CARBONATE	500	Gram(GM)	09/06/22
1690519	-	Compressed Air	220	Cubic Feet(CF)	09/06/22
1690521	-	Compressed Air	220	Cubic Feet(CF)	09/06/22
1690520	-	Compressed Air	220	Cubic Feet(CF)	09/06/22
1690523	-	Compressed Air	220	Cubic Feet(CF)	09/06/22
1690522	-	Compressed Air	220	Cubic Feet(CF)	09/06/22
1690524	-	Compressed Air	220	Cubic Feet(CF)	09/06/22
1690525	-	Compressed Air	220	Cubic Feet(CF)	09/06/22
1742972	145224-94-8	MES (Fine White Crystals)	100	Gram(GM)	09/06/22
1690526	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	09/06/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1690529	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	09/06/22
1690527	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	09/06/22
1690528	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	09/06/22
1690530	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	09/06/22
1690531	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	09/06/22
1742973	7758-09-0	POTASSIUM NITRITE	1	Kilograms(KG)	09/06/22
1742974	2373-51-5	Chloromethyl methyl sulfide	10	Gram(GM)	09/06/22
1742860	308066-94-6	Solid Glass Spheres and Microspheres	5	Gram(GM)	09/06/22
1742977	10025-82-8	INDIUM(III) CHLORIDE	10	Gram(GM)	09/06/22
1742978	10025-82-8	INDIUM(III) CHLORIDE	10	Gram(GM)	09/06/22
1742979	70560-51-9	KANAMYCIN SULFATE	5	Gram(GM)	09/06/22
1742980	70560-51-9	KANAMYCIN SULFATE	5	Gram(GM)	09/06/22
1742975	-	Antimony (III) Chloride	2	Gram(GM)	09/06/22
1742976	-	Antimony (III) Chloride	2	Gram(GM)	09/06/22
1742981	64-86-8	COLCHICINE	5	Gram(GM)	09/06/22
1742982	100-21-0	TEREPHTHALIC ACID	5	Gram(GM)	09/06/22
1742989	-	DIAMOND POLISHING COMPOUND (METADI) 9 MICRON	8	Ounces(OZ)	09/06/22
1742990	-	DIAMOND POLISHING COMPOUND (METADI) 9 MICRON	8	Ounces(OZ)	09/06/22
1742918	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742938	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742963	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742943	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742942	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742941	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742939	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742937	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742936	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742935	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742959	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742960	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742934	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742940	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742952	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742948	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742947	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742946	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742945	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742944	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742962	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742958	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742951	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742957	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742953	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1742921	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742954	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742955	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742956	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742949	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742950	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742923	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742931	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742930	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742929	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742928	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742927	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742926	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742925	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742932	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742924	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742961	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742920	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742967	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742919	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742964	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742933	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742922	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742965	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742966	-	DEVCON 5-MINUTE EPOXY HARDENER	25	Milliliter(ML)	09/06/22
1742987	-	MASTERPREP POLISHING SUSPENSION	32	Ounces(OZ)	09/06/22
1742988	-	MASTERPREP POLISHING SUSPENSION	32	Ounces(OZ)	09/06/22
1742968	-	Pyro-Duct 597-A	50	Gram(GM)	09/06/22
1742969	1310-73-2	Sodium hydroxide 50 wt% solution in water	4	Liters(L)	09/06/22
1742970	1310-73-2	Sodium hydroxide 50 wt% solution in water	4	Liters(L)	09/06/22
1742984	-	BUEHLER MASTERMET 2	64	Ounces(OZ)	09/06/22
1742985	-	BUEHLER MASTERMET 2	64	Ounces(OZ)	09/06/22
1742986	-	BUEHLER MASTERMET 2	64	Ounces(OZ)	09/06/22
1738924	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	50	Milliliter(ML)	09/06/22
1738925	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	50	Milliliter(ML)	09/06/22
1738928	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	50	Milliliter(ML)	09/06/22
1738927	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	50	Milliliter(ML)	09/06/22
1738926	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	50	Milliliter(ML)	09/06/22
1743007	1898-66-4	2 2-DIPHENYL-1-PICRYLHYDRAZYLHYDRATE	1	Gram(GM)	09/06/22
1743008	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	10	Gram(GM)	09/06/22
1743009	13478-00-7	NICKEL(II) NITRATE HEXAHYDRATE	100	Gram(GM)	09/06/22
1743010	27988-77-8	GOLD (III) CHLORIDE HYDRATE	5	Gram(GM)	09/06/22
1743011	95-54-5	O-PHENYLENEDIAMINE	25	Gram(GM)	09/06/22
1743106	60-29-7	Diethyl ether HPLC Grade 99%	4	Liters(L)	09/06/22
1743107	60-29-7	Diethyl ether HPLC Grade 99%	4	Liters(L)	09/06/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1743108	60-29-7	Diethyl ether HPLC Grade 99%	4	Liters(L)	09/06/22
1634057	-	SHER-CRYL HPA High Performance Acrylic Gloss Coating Safety Yellow	1	Gallon(GAL)	09/06/22
1558025	-	RED TRAFFIC PAINT	5	Gallon(GAL)	09/06/22
1558037	-	RED TRAFFIC PAINT	5	Gallon(GAL)	09/06/22
1730394	-	TRAFFIC PAINT	5	Gallon(GAL)	09/06/22
1387218	-	Grain Stain Deck N/T Cedar	1	Gallon(GAL)	09/07/22
1454372	-	Goof off	18	Ounces(OZ)	09/07/22
1454377	-	Goof off	18	Ounces(OZ)	09/07/22
1742983	77-73-6	Dicyclopentadiene typically 95% stab.	250	Gram(GM)	09/07/22
1634059	-	EuroCat Pre-Cat Lacquer Gloss	1	Gallon(GAL)	09/07/22
1454363	-	DAP Elastopatch Flexible Patching Compound	10.1	Ounces(OZ)	09/07/22
1454238	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	09/07/22
1571887	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	09/07/22
1727189	-	YELLOW SPRAY ENAMEL	12	Ounces(OZ)	09/07/22
1727191	-	YELLOW SPRAY ENAMEL	12	Ounces(OZ)	09/07/22
1727184	-	YELLOW SPRAY ENAMEL	12	Ounces(OZ)	09/07/22
1727192	-	YELLOW SPRAY ENAMEL	12	Ounces(OZ)	09/07/22
1727190	-	YELLOW SPRAY ENAMEL	12	Ounces(OZ)	09/07/22
1727188	-	YELLOW SPRAY ENAMEL	12	Ounces(OZ)	09/07/22
1727187	-	YELLOW SPRAY ENAMEL	12	Ounces(OZ)	09/07/22
1727185	-	YELLOW SPRAY ENAMEL	12	Ounces(OZ)	09/07/22
1727183	-	YELLOW SPRAY ENAMEL	12	Ounces(OZ)	09/07/22
1727182	-	YELLOW SPRAY ENAMEL	12	Ounces(OZ)	09/07/22
1727186	-	YELLOW SPRAY ENAMEL	12	Ounces(OZ)	09/07/22
1743110	-	1000 µg/mL Ruthenium	125	Milliliter(ML)	09/07/22
1743111	429-06-1	TETRAETHYLAMMONIUM TETRAFLUOROBORATE	25	Gram(GM)	09/07/22
1743112	7601-90-3	PERCHLORIC ACID OPTIMA	1	Liters(L)	09/07/22
1743113	7601-90-3	PERCHLORIC ACID OPTIMA	1	Liters(L)	09/07/22
V00000C57A	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	09/07/22
V00000C57B	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	09/07/22
1743114	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743117	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743118	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743116	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743115	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743119	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743128	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743138	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743137	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743136	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1743135	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743134	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743133	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743132	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743131	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743129	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743127	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743130	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743151	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743162	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743161	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743160	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743159	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743158	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743157	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743156	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743155	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743154	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743139	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743152	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743140	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743150	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743149	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743148	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743147	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743146	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743145	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743144	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743143	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743142	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743141	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1743153	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/07/22
1730570	-	Ardex P 51	1	Gallon(GAL)	09/07/22
1730571	-	Ardex P 51	1	Gallon(GAL)	09/07/22
V00000C57E	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/07/22
V00000C57D	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/07/22
V00000C57C	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/07/22
V00000C580	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/07/22
V00000C57F	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/07/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C581	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/07/22
1730572	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730615	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730625	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730626	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730619	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730589	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730617	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730588	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730624	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730587	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730586	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730616	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730585	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730584	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730583	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730591	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730618	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730592	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730620	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730581	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730580	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730579	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730578	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730577	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730576	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730575	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730574	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730573	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730611	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730582	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730601	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730623	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730610	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730609	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730608	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730607	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730606	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730605	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730622	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730621	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730604	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730590	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730602	-	Roofing Granules C93	60	Pounds(LB)	09/07/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1730600	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730599	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730598	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730597	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730596	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730612	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730613	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730614	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730595	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730594	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730593	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730603	-	Roofing Granules C93	60	Pounds(LB)	09/07/22
1730627	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730678	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730679	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730639	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730677	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730650	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730680	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730648	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730647	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730646	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730645	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730644	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730643	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730642	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730652	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730640	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730651	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730638	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730637	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730636	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730635	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730634	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730633	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730632	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730631	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730630	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730629	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730628	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730641	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730664	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730676	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730675	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730674	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1730673	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730672	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730671	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730670	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730669	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730668	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730667	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730649	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730665	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730653	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730659	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730654	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730655	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730656	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730666	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730658	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730660	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730661	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730662	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730663	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730657	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730681	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730731	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730734	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730733	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730732	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730730	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730729	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730696	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730691	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730702	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730701	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730700	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730699	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730697	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730695	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730726	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730694	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730698	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730692	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730705	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730690	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730689	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730688	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730687	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1730686	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730685	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730684	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730683	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730682	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730693	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730714	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730727	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730725	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730723	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730722	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730721	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730720	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730719	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730718	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730717	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730703	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730715	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730704	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730713	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730712	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730711	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730710	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730709	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730708	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730707	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730706	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730728	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730716	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1730724	497-19-8	SODA ASH	50	Pounds(LB)	09/07/22
1721383	-	KRYLON SHORT CUTS Hobby/Craft Paint Pen White	0.33	Ounces(OZ)	09/07/22
1721384	-	KRYLON SHORT CUTS Hobby/Craft Paint Pen White	0.33	Ounces(OZ)	09/07/22
1721385	-	KRYLON SHORT CUTS Hobby/Craft Paint Pen White	0.33	Ounces(OZ)	09/07/22
1437026	123-42-2	Rectorseal No. 5	1	Pint(PT)	09/08/22
1437028	123-42-2	Rectorseal No. 5	1	Pint(PT)	09/08/22
1437029	123-42-2	Rectorseal No. 5	1	Pint(PT)	09/08/22
1437027	123-42-2	Rectorseal No. 5	1	Pint(PT)	09/08/22
1437244	64742-53-6	Hercules Dark Cutting Oil	1	Gallon(GAL)	09/08/22
1437243	64742-53-6	Hercules Dark Cutting Oil	1	Gallon(GAL)	09/08/22
1738914	123-39-7	HYDRANAL COULOMAT CG-K	50	Milliliter(ML)	09/08/22
1738915	123-39-7	HYDRANAL COULOMAT CG-K	50	Milliliter(ML)	09/08/22
1738916	123-39-7	HYDRANAL COULOMAT CG-K	50	Milliliter(ML)	09/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1738917	123-39-7	HYDRANAL COULOMAT CG-K	50	Milliliter(ML)	09/08/22
1738918	123-39-7	HYDRANAL COULOMAT CG-K	50	Milliliter(ML)	09/08/22
1738919	109-86-4	HYDRANAL COULOMAT AK (2-METHOXYETHANOL)	500	Milliliter(ML)	09/08/22
1738923	109-86-4	HYDRANAL COULOMAT AK (2-METHOXYETHANOL)	500	Milliliter(ML)	09/08/22
1738920	109-86-4	HYDRANAL COULOMAT AK (2-METHOXYETHANOL)	500	Milliliter(ML)	09/08/22
1738921	109-86-4	HYDRANAL COULOMAT AK (2-METHOXYETHANOL)	500	Milliliter(ML)	09/08/22
1738922	109-86-4	HYDRANAL COULOMAT AK (2-METHOXYETHANOL)	500	Milliliter(ML)	09/08/22
1742333	-	cOmplete EDTA-free Protease Inhibitor Cocktail	50	Milliliter(ML)	09/08/22
1742992	-	Buehler Metadi Supreme Polycrystalline Diamond Susp. 1 micron	32	Ounces(OZ)	09/08/22
1742994	-	Buehler Metadi Supreme Polycrystalline Diamond Susp. 1 micron	32	Ounces(OZ)	09/08/22
1742993	-	Buehler Metadi Supreme Polycrystalline Diamond Susp. 1 micron	32	Ounces(OZ)	09/08/22
1742995	-	Buehler Metadi Supreme Polycrystalline Diamond Susp. 3 micron	32	Ounces(OZ)	09/08/22
1742996	-	Buehler Metadi Supreme Polycrystalline Diamond Susp. 3 micron	32	Ounces(OZ)	09/08/22
1742997	-	Buehler Metadi Supreme Polycrystalline Diamond Susp. 3 micron	32	Ounces(OZ)	09/08/22
1742998	-	Buehler Metadi Supreme Polycrystalline Diamond Susp. 15 micron	32	Ounces(OZ)	09/08/22
1742999	-	Buehler Metadi Supreme Polycrystalline Diamond Susp. 15 micron	32	Ounces(OZ)	09/08/22
1743000	-	Buehler Metadi Supreme Polycrystalline Diamond Susp. 15 micron	32	Ounces(OZ)	09/08/22
1730398	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730426	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730399	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730431	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730430	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730429	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730427	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730432	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730425	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730424	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730423	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730422	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730421	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1730428	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730444	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730440	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730420	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730443	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730417	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730442	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730441	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730433	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730434	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730435	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730436	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730437	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730438	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730439	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730445	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730402	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730400	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730419	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730401	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730403	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730404	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730405	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730406	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730407	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730408	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730416	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730410	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730411	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730412	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730413	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730414	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730415	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730409	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730418	-	LIFETIME WITH SILICONE	10.1	Ounces(OZ)	09/08/22
1730451	-	fast setting cement	50	Pounds(LB)	09/08/22
1730453	-	fast setting cement	50	Pounds(LB)	09/08/22
1730454	-	fast setting cement	50	Pounds(LB)	09/08/22
1730452	-	fast setting cement	50	Pounds(LB)	09/08/22
1730455	-	fast setting cement	50	Pounds(LB)	09/08/22
1743001	1344-28-1	BUEHLER MICROPOLISH ALUMINA (0.05)	5	Pounds(LB)	09/08/22
1743002	1344-28-1	BUEHLER MICROPOLISH ALUMINA (0.05)	5	Pounds(LB)	09/08/22
1743003	-	BUEHLER MICROPOLISH ALUMINA (0.3)	5	Pounds(LB)	09/08/22
1743004	-	BUEHLER MICROPOLISH ALUMINA (0.3)	5	Pounds(LB)	09/08/22
1743005	1344-28-1	BUEHLER MICROPOLISH (1.0 MICRON)	5	Pounds(LB)	09/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1743006	1344-28-1	BUEHLER MICROPOLISH (1.0 MICRON)	5	Pounds(LB)	09/08/22
1743068	-	TitraVer Solution (Sodium EDTA) Digital Titrator Cartridge 0.08M	100	Milliliter(ML)	09/08/22
1743070	-	TitraVer Solution (Sodium EDTA) Digital Titrator Cartridge 0.08M	100	Milliliter(ML)	09/08/22
1743069	-	TitraVer Solution (Sodium EDTA) Digital Titrator Cartridge 0.08M	100	Milliliter(ML)	09/08/22
1743076	-	TitraVer Solution (Sodium EDTA) Digital Titrator Cartridge 0.08M	100	Milliliter(ML)	09/08/22
1743077	-	TitraVer Solution (Sodium EDTA) Digital Titrator Cartridge 0.08M	100	Milliliter(ML)	09/08/22
1743078	-	TitraVer Solution (Sodium EDTA) Digital Titrator Cartridge 0.08M	100	Milliliter(ML)	09/08/22
1743079	-	TitraVer Solution (Sodium EDTA) Digital Titrator Cartridge 0.08M	100	Milliliter(ML)	09/08/22
1743080	-	TitraVer Solution (Sodium EDTA) Digital Titrator Cartridge 0.08M	100	Milliliter(ML)	09/08/22
1743081	-	TitraVer Solution (Sodium EDTA) Digital Titrator Cartridge 0.08M	100	Milliliter(ML)	09/08/22
1743082	-	TitraVer Solution (Sodium EDTA) Digital Titrator Cartridge 0.08M	100	Milliliter(ML)	09/08/22
1743074	-	TitraVer Solution (Sodium EDTA) Digital Titrator Cartridge 0.08M	100	Milliliter(ML)	09/08/22
1743073	-	TitraVer Solution (Sodium EDTA) Digital Titrator Cartridge 0.08M	100	Milliliter(ML)	09/08/22
1743072	-	TitraVer Solution (Sodium EDTA) Digital Titrator Cartridge 0.08M	100	Milliliter(ML)	09/08/22
1743075	-	TitraVer Solution (Sodium EDTA) Digital Titrator Cartridge 0.08M	100	Milliliter(ML)	09/08/22
1743071	-	TitraVer Solution (Sodium EDTA) Digital Titrator Cartridge 0.08M	100	Milliliter(ML)	09/08/22
1743083	7664-93-9	Sulfuric Acid Digital Titrator Cartridge	100	Milliliter(ML)	09/08/22
1743089	7664-93-9	Sulfuric Acid Digital Titrator Cartridge	100	Milliliter(ML)	09/08/22
1743088	7664-93-9	Sulfuric Acid Digital Titrator Cartridge	100	Milliliter(ML)	09/08/22
1743087	7664-93-9	Sulfuric Acid Digital Titrator Cartridge	100	Milliliter(ML)	09/08/22
1743086	7664-93-9	Sulfuric Acid Digital Titrator Cartridge	100	Milliliter(ML)	09/08/22
1743085	7664-93-9	Sulfuric Acid Digital Titrator Cartridge	100	Milliliter(ML)	09/08/22
1743084	7664-93-9	Sulfuric Acid Digital Titrator Cartridge	100	Milliliter(ML)	09/08/22
1743090	-	Copper Reagent Set Porphyrin	10	Milliliter(ML)	09/08/22
1743094	-	Copper Reagent Set Porphyrin	10	Milliliter(ML)	09/08/22
1743091	-	Copper Reagent Set Porphyrin	10	Milliliter(ML)	09/08/22
1743093	-	Copper Reagent Set Porphyrin	10	Milliliter(ML)	09/08/22
1743092	-	Copper Reagent Set Porphyrin	10	Milliliter(ML)	09/08/22
1743095	106-93-4	1 2-DIBROMOETHANE	250	Gram(GM)	09/08/22
1743096	108-88-3	Toluene anhydrous 99.8%	2	Liters(L)	09/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1743097	16219-75-3	ETHYLIDENE NORBORNENE	500	Milliliter(ML)	09/08/22
1743102	16219-75-3	ETHYLIDENE NORBORNENE	500	Milliliter(ML)	09/08/22
1743101	16219-75-3	ETHYLIDENE NORBORNENE	500	Milliliter(ML)	09/08/22
1743100	16219-75-3	ETHYLIDENE NORBORNENE	500	Milliliter(ML)	09/08/22
1743099	16219-75-3	ETHYLIDENE NORBORNENE	500	Milliliter(ML)	09/08/22
1743098	16219-75-3	ETHYLIDENE NORBORNENE	500	Milliliter(ML)	09/08/22
1743103	-	N-BUTYLITHIUM	100	Milliliter(ML)	09/08/22
1743104	-	N-BUTYLITHIUM	100	Milliliter(ML)	09/08/22
1743105	7647-01-0	HYDROCHLORIC ACID 35-37%	500	Milliliter(ML)	09/08/22
1743012	920-66-1	1 1 1 3 3 3-HEXAFLUORO-2-PROPANOL	100	Gram(GM)	09/08/22
1743013	920-66-1	1 1 1 3 3 3-HEXAFLUORO-2-PROPANOL	100	Gram(GM)	09/08/22
1743016	546-88-3	ACETOHYDROXAMIC ACID	5	Gram(GM)	09/08/22
1743017	4/3/6132	Trisodium citrate dihydrate	500	Gram(GM)	09/08/22
1743018	123-31-9	HYDROQUINONE	100	Gram(GM)	09/08/22
1743019	7782-63-0	Iron(II) sulfate heptahydrate ACS reagent 99%	500	Gram(GM)	09/08/22
1743022	7782-63-0	Iron(II) sulfate heptahydrate ACS reagent 99%	500	Gram(GM)	09/08/22
1743021	7782-63-0	Iron(II) sulfate heptahydrate ACS reagent 99%	500	Gram(GM)	09/08/22
1743023	7782-63-0	Iron(II) sulfate heptahydrate ACS reagent 99%	500	Gram(GM)	09/08/22
1743024	7782-63-0	Iron(II) sulfate heptahydrate ACS reagent 99%	500	Gram(GM)	09/08/22
1743020	7782-63-0	Iron(II) sulfate heptahydrate ACS reagent 99%	500	Gram(GM)	09/08/22
1721228	13465-08-2	HYDROXYLAMINE NITRATE	15	Gallon(GAL)	09/08/22
1454375	-	Goof off	18	Ounces(OZ)	09/08/22
1721219	-	CALCIUM GLUCONATE 2.5%	25	Gram(GM)	09/08/22
1721221	-	CALCIUM GLUCONATE 2.5%	25	Gram(GM)	09/08/22
1721224	-	CALCIUM GLUCONATE 2.5%	25	Gram(GM)	09/08/22
1721222	-	CALCIUM GLUCONATE 2.5%	25	Gram(GM)	09/08/22
1721220	-	CALCIUM GLUCONATE 2.5%	25	Gram(GM)	09/08/22
1721223	-	CALCIUM GLUCONATE 2.5%	25	Gram(GM)	09/08/22
1730456	-	3M SUPER 77 SPRAY ADHESIVE	16.75	Ounces(OZ)	09/08/22
1730457	-	3M SUPER 77 SPRAY ADHESIVE	16.75	Ounces(OZ)	09/08/22
1730459	-	3M SUPER 77 SPRAY ADHESIVE	16.75	Ounces(OZ)	09/08/22
1730458	-	3M SUPER 77 SPRAY ADHESIVE	16.75	Ounces(OZ)	09/08/22
1730460	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	09/08/22
1730461	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	09/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1730462	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Gallon(GAL)	09/08/22
1730493	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730511	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730510	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730509	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730508	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730507	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730513	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730505	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730514	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730504	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730503	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730502	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730501	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730500	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730506	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730522	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730530	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730529	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730528	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730527	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730526	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730525	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730512	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730523	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730497	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730521	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730520	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730519	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730518	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730517	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730516	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730515	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730524	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730494	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730496	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730495	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730498	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1730499	-	Matrix 102 SBS Membrane Adhesive	4.75	Gallon(GAL)	09/08/22
1743025	10138-52-0	Gadolinium(III) chloride ultra dry	5	Gram(GM)	09/08/22
1730548	-	Vers-Acryl 222 S/G Finish Neutral Base	113	NMOL	09/08/22
1743026	50-01-1	GUANIDINE HYDROCHLORIDE	500	Gram(GM)	09/08/22
1730551	-	Vers-Acryl 222 S/G Finish Neutral Base	113	NMOL	09/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1730550	-	Vers-Acryl 222 S/G Finish Neutral Base	113	NMOL	09/08/22
1730549	-	Vers-Acryl 222 S/G Finish Neutral Base	113	NMOL	09/08/22
1730552	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	09/08/22
1730554	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	09/08/22
1730557	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	09/08/22
1730555	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	09/08/22
1730553	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	09/08/22
1730556	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	09/08/22
1743027	-	BREAK FREE CLP-5 Gun Cleaner	16	Ounces(OZ)	09/08/22
1743030	-	BREAK FREE CLP-5 Gun Cleaner	16	Ounces(OZ)	09/08/22
1743029	-	BREAK FREE CLP-5 Gun Cleaner	16	Ounces(OZ)	09/08/22
1743028	-	BREAK FREE CLP-5 Gun Cleaner	16	Ounces(OZ)	09/08/22
1743031	7791-13-1	COBALT(II) CHLORIDE HEXAHYDRATE	25	Gram(GM)	09/08/22
1743032	-	LOCTITE SUPER GLUE	0.14	Ounces(OZ)	09/08/22
1743041	-	LOCTITE SUPER GLUE	0.14	Ounces(OZ)	09/08/22
1743035	-	LOCTITE SUPER GLUE	0.14	Ounces(OZ)	09/08/22
1743043	-	LOCTITE SUPER GLUE	0.14	Ounces(OZ)	09/08/22
1743037	-	LOCTITE SUPER GLUE	0.14	Ounces(OZ)	09/08/22
1743040	-	LOCTITE SUPER GLUE	0.14	Ounces(OZ)	09/08/22
1743042	-	LOCTITE SUPER GLUE	0.14	Ounces(OZ)	09/08/22
1743039	-	LOCTITE SUPER GLUE	0.14	Ounces(OZ)	09/08/22
1743038	-	LOCTITE SUPER GLUE	0.14	Ounces(OZ)	09/08/22
1743034	-	LOCTITE SUPER GLUE	0.14	Ounces(OZ)	09/08/22
1743033	-	LOCTITE SUPER GLUE	0.14	Ounces(OZ)	09/08/22
1743036	-	LOCTITE SUPER GLUE	0.14	Ounces(OZ)	09/08/22
1743044	13450-84-5	GADOLINIUM(III) CHLORIDE HEXAHYDRATE	25	Gram(GM)	09/08/22
1743045	2051-76-5	Acrylic anhydride	5	Gram(GM)	09/08/22
1743046	112724-94-4	N N-di-2-ethylhexyl-butyramide	1	Gram(GM)	09/08/22
1743047	10102-17-7	SODIUM THIOSULFATE PENTAHYDRATE	500	Gram(GM)	09/08/22
1743048	-	MagAttract HMW DNA Kit	260	Milliliter(ML)	09/08/22
1743049	-	10000 ug/mL Palladium	500	Milliliter(ML)	09/08/22
1743050	542-81-4	2-CHLOROETHYL METHYL SULFIDE (HEMISULFUR MUSTARD)	10	Gram(GM)	09/08/22
1743051	206996-61-4	Cerium(III) acetylacetonate hydrate	25	Gram(GM)	09/08/22
1721386	-	Krylon Contractor Marking Paint 7316 APWA White	15	Ounces(OZ)	09/08/22
1721388	-	Krylon Contractor Marking Paint 7316 APWA White	15	Ounces(OZ)	09/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1721387	-	Krylon Contractor Marking Paint 7316 APWA White	15	Ounces(OZ)	09/08/22
1730558	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	09/09/22
1730568	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	09/09/22
1730567	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	09/09/22
1730566	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	09/09/22
1730565	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	09/09/22
1730564	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	09/09/22
1730563	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	09/09/22
1730562	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	09/09/22
1730561	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	09/09/22
1730559	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	09/09/22
1730569	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	09/09/22
1730560	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	09/09/22
V00000C590	-	BIG STRETCH CAULK	10.1	Ounces(OZ)	09/09/22
V00000C598	-	BIG STRETCH CAULK	10.1	Ounces(OZ)	09/09/22
V00000C597	-	BIG STRETCH CAULK	10.1	Ounces(OZ)	09/09/22
V00000C596	-	BIG STRETCH CAULK	10.1	Ounces(OZ)	09/09/22
V00000C595	-	BIG STRETCH CAULK	10.1	Ounces(OZ)	09/09/22
V00000C594	-	BIG STRETCH CAULK	10.1	Ounces(OZ)	09/09/22
V00000C593	-	BIG STRETCH CAULK	10.1	Ounces(OZ)	09/09/22
V00000C592	-	BIG STRETCH CAULK	10.1	Ounces(OZ)	09/09/22
V00000C591	-	BIG STRETCH CAULK	10.1	Ounces(OZ)	09/09/22
V00000C58F	-	BIG STRETCH CAULK	10.1	Ounces(OZ)	09/09/22
V00000C58E	-	BIG STRETCH CAULK	10.1	Ounces(OZ)	09/09/22
V00000C599	-	BIG STRETCH CAULK	10.1	Ounces(OZ)	09/09/22
V00000C59A	-	HENRY 440 Cove Base Adhesive	1	Gallon(GAL)	09/09/22
V00000C59B	-	HENRY 440 Cove Base Adhesive	1	Gallon(GAL)	09/09/22
V00000C5AE	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/09/22
V00000C59C	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/09/22
V00000C59D	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/09/22
V00000C5AF	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/09/22
V00000C5AD	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C5AC	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/09/22
V00000C5AB	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/09/22
V00000C5AA	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/09/22
V00000C5A9	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/09/22
V00000C5A8	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/09/22
V00000C5A7	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/09/22
V00000C59F	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/09/22
V00000C5A5	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/09/22
V00000C5A4	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/09/22
V00000C5A3	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/09/22
V00000C5A2	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/09/22
V00000C5A1	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/09/22
V00000C5A0	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/09/22
V00000C59E	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/09/22
V00000C5A6	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/09/22
1730544	-	Excelsior ASD-800	1	Gallon(GAL)	09/09/22
1730547	-	Excelsior ASD-800	1	Gallon(GAL)	09/09/22
1730545	-	Excelsior ASD-800	1	Gallon(GAL)	09/09/22
1730546	-	Excelsior ASD-800	1	Gallon(GAL)	09/09/22
1730388	-	PSX 700 NEUTRAL TINT RESIN	0.64	Gallon(GAL)	09/09/22
1730389	-	Vers-Acryl 222 S/G Finish White Base	121	Ounces(OZ)	09/09/22
1730390	-	Vers-Acryl 222 S/G Finish White Base	121	Ounces(OZ)	09/09/22
1730391	-	Permacryl Int Latex Flat W/B	608	Ounces(OZ)	09/09/22
1730393	-	Permacryl Int Latex Flat W/B	608	Ounces(OZ)	09/09/22
1730392	-	Permacryl Int Latex Flat W/B	608	Ounces(OZ)	09/09/22
1730395	-	Permacryl Int Latex Flat W/B	608	Ounces(OZ)	09/09/22
1742838	137125-44-1	H-SiQ 14% wt/vol Hydrogen Silsesquioxane	20	Milliliter(ML)	09/09/22
1743163	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/09/22
1743191	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/09/22
1743164	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/09/22
1743192	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/09/22
1743184	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/09/22
1743168	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/09/22
1743169	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/09/22
1743167	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/09/22
1743190	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/09/22
1743189	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/09/22
1743165	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/09/22
1743187	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/09/22
1743186	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/09/22
1743185	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/09/22
1743166	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/09/22
1743170	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/09/22
1743173	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/09/22
1743188	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1743174	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/09/22
1743181	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/09/22
1743180	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/09/22
1743179	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/09/22
1743178	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/09/22
1743177	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/09/22
1743176	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/09/22
1743171	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/09/22
1743182	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/09/22
1743183	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/09/22
1743175	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/09/22
1743172	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	09/09/22
1743126	7693-26-7	POTASSIUM HYDRIDE 30% WT IN MINERAL OIL	75	Gram(GM)	09/09/22
1743120	-	BIO-RAD AG50W-X8 CATION EXCHANGE RESIN HYDROGEN FORM	500	Gram(GM)	09/09/22
1743121	-	BIO-RAD AG50W-X8 CATION EXCHANGE RESIN HYDROGEN FORM	500	Gram(GM)	09/09/22
1743122	-	BIO-RAD AG50W-X8 CATION EXCHANGE RESIN HYDROGEN FORM	500	Gram(GM)	09/09/22
1743123	-	BIO-RAD AG50W-X8 CATION EXCHANGE RESIN HYDROGEN FORM	500	Gram(GM)	09/09/22
1743124	-	BIO-RAD AG50W-X8 CATION EXCHANGE RESIN HYDROGEN FORM	500	Gram(GM)	09/09/22
1743125	-	MES (buffering agent)	50	Gram(GM)	09/09/22
1743054	7440-64-4	YTTERBIUM	25	Gram(GM)	09/09/22
1743052	-	ZIRCONIUM IN 2% OR 5% NITRIC ACID	125	Milliliter(ML)	09/09/22
1743199	82061-21-0	Lithium tetramethylcyclopentadienide min. 95%	5	Gram(GM)	09/09/22
1743201	82061-21-0	Lithium tetramethylcyclopentadienide min. 95%	5	Gram(GM)	09/09/22
1743202	82061-21-0	Lithium tetramethylcyclopentadienide min. 95%	5	Gram(GM)	09/09/22
1743200	82061-21-0	Lithium tetramethylcyclopentadienide min. 95%	5	Gram(GM)	09/09/22
1743203	82061-21-0	Lithium tetramethylcyclopentadienide min. 95%	5	Gram(GM)	09/09/22
1743193	14808-60-7	SEA SAND WASHED	5	Kilograms(KG)	09/09/22
1743204	75-09-2	Dichloromethane for HPLC	4	Liters(L)	09/09/22
1743206	75-09-2	Dichloromethane for HPLC	4	Liters(L)	09/09/22
1743205	75-09-2	Dichloromethane for HPLC	4	Liters(L)	09/09/22
1743207	75-09-2	Dichloromethane for HPLC	4	Liters(L)	09/09/22
1743208	92112-69-1	Hexanes (GC Resolv)	4	Liters(L)	09/09/22
1743210	92112-69-1	Hexanes (GC Resolv)	4	Liters(L)	09/09/22
1743209	92112-69-1	Hexanes (GC Resolv)	4	Liters(L)	09/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1743211	92112-69-1	Hexanes (GC Resolv)	4	Liters(L)	09/09/22
1743223	7697-37-2	NITRIC ACID 70%	2.5	Liters(L)	09/09/22
1743224	7697-37-2	NITRIC ACID 70%	2.5	Liters(L)	09/09/22
1743226	7697-37-2	NITRIC ACID 70%	2.5	Liters(L)	09/09/22
1743225	7697-37-2	NITRIC ACID 70%	2.5	Liters(L)	09/09/22
1743212	64-17-5	ETHYL ALCOHOL-200 PROOF	4	Gallon(GAL)	09/09/22
1743213	64-17-5	ETHYL ALCOHOL-200 PROOF	4	Gallon(GAL)	09/09/22
1743215	64-17-5	ETHYL ALCOHOL-200 PROOF	4	Gallon(GAL)	09/09/22
1743214	64-17-5	ETHYL ALCOHOL-200 PROOF	4	Gallon(GAL)	09/09/22
1743227	7697-37-2	NITRIC ACID 70%	2.5	Liters(L)	09/09/22
1743229	7697-37-2	NITRIC ACID 70%	2.5	Liters(L)	09/09/22
1743230	7697-37-2	NITRIC ACID 70%	2.5	Liters(L)	09/09/22
1743228	7697-37-2	NITRIC ACID 70%	2.5	Liters(L)	09/09/22
1743231	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	10	Milliliter(ML)	09/09/22
1743232	40244-90-4	Chlorodiisopropylphosphine 96%	25	Gram(GM)	09/09/22
1743233	-	BACTO TRYPTONE	500	Gram(GM)	09/09/22
1743234	-	BACTO TRYPTONE	500	Gram(GM)	09/09/22
1743053	392-56-3	Hexafluorobenzene 99%	100	Milliliter(ML)	09/09/22
1757535	-	DECORATIVE ENAMEL SPRAY PAINT	12	Ounces(OZ)	09/12/22
1757536	-	DECORATIVE ENAMEL SPRAY PAINT	12	Ounces(OZ)	09/12/22
1757537	-	Testors Craft Acrylic Paints - Metallic Black	2	Ounces(OZ)	09/12/22
1757539	-	Testors Craft Acrylic Paints - Matte White	2	Ounces(OZ)	09/12/22
1757540	-	Testors Craft Acrylic Paints - Matte White	2	Ounces(OZ)	09/12/22
1757538	-	Testors Craft Acrylic Paints - Metallic Black	2	Ounces(OZ)	09/12/22
1757542	-	WINSOR & NEWTON DISTILLED TURPENTINE	2.5	Ounces(OZ)	09/12/22
1716543	67-66-3	CHLOROFORM	500	Milliliter(ML)	09/12/22
1714519	-	FS-ONE	10.1	Ounces(OZ)	09/12/22
1714515	-	FS-ONE	10.1	Ounces(OZ)	09/12/22
1714516	-	FS-ONE	10.1	Ounces(OZ)	09/12/22
1714517	-	FS-ONE	10.1	Ounces(OZ)	09/12/22
1714518	-	FS-ONE	10.1	Ounces(OZ)	09/12/22
1714520	-	FS-ONE	10.1	Ounces(OZ)	09/12/22
1714514	-	FS-ONE	10.1	Ounces(OZ)	09/12/22
1728630	-	FARM AND IMPLEMENT PAINT	12	Ounces(OZ)	09/13/22
1728631	-	Yellow Concentrated Antifreeze/Coolant	1	Gallon(GAL)	09/13/22
1728634	-	Yellow Concentrated Antifreeze/Coolant	1	Gallon(GAL)	09/13/22
1728633	-	Yellow Concentrated Antifreeze/Coolant	1	Gallon(GAL)	09/13/22
1728632	-	Yellow Concentrated Antifreeze/Coolant	1	Gallon(GAL)	09/13/22
1728635	-	TITEBOND ACOUSTICAL CEILING TILE ADHESIVE	1	Gallon(GAL)	09/13/22
1728643	-	TITEBOND ACOUSTICAL CEILING TILE ADHESIVE	1	Gallon(GAL)	09/13/22
1728648	-	TITEBOND ACOUSTICAL CEILING TILE ADHESIVE	1	Gallon(GAL)	09/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1728647	-	TITEBOND ACOUSTICAL CEILING TILE ADHESIVE	1	Gallon(GAL)	09/13/22
1728645	-	TITEBOND ACOUSTICAL CEILING TILE ADHESIVE	1	Gallon(GAL)	09/13/22
1728646	-	TITEBOND ACOUSTICAL CEILING TILE ADHESIVE	1	Gallon(GAL)	09/13/22
1728637	-	TITEBOND ACOUSTICAL CEILING TILE ADHESIVE	1	Gallon(GAL)	09/13/22
1728640	-	TITEBOND ACOUSTICAL CEILING TILE ADHESIVE	1	Gallon(GAL)	09/13/22
1728638	-	TITEBOND ACOUSTICAL CEILING TILE ADHESIVE	1	Gallon(GAL)	09/13/22
1728639	-	TITEBOND ACOUSTICAL CEILING TILE ADHESIVE	1	Gallon(GAL)	09/13/22
1728642	-	TITEBOND ACOUSTICAL CEILING TILE ADHESIVE	1	Gallon(GAL)	09/13/22
1728644	-	TITEBOND ACOUSTICAL CEILING TILE ADHESIVE	1	Gallon(GAL)	09/13/22
1728636	-	TITEBOND ACOUSTICAL CEILING TILE ADHESIVE	1	Gallon(GAL)	09/13/22
1728641	-	TITEBOND ACOUSTICAL CEILING TILE ADHESIVE	1	Gallon(GAL)	09/13/22
1728624	-	ES COMPLEAT OAT ETHYLENE GLYCOL	1	Gallon(GAL)	09/13/22
1728625	-	ES COMPLEAT OAT ETHYLENE GLYCOL	1	Gallon(GAL)	09/13/22
V00000C5BB	-	Alex Plus Clear	10.1	Ounces(OZ)	09/13/22
V00000C5B7	-	Alex Plus Clear	10.1	Ounces(OZ)	09/13/22
V00000C5B6	-	Alex Plus Clear	10.1	Ounces(OZ)	09/13/22
V00000C5B8	-	Alex Plus Clear	10.1	Ounces(OZ)	09/13/22
V00000C5B9	-	Alex Plus Clear	10.1	Ounces(OZ)	09/13/22
V00000C5BA	-	Alex Plus Clear	10.1	Ounces(OZ)	09/13/22
V00000C5BC	-	Alex Plus Clear	10.1	Ounces(OZ)	09/13/22
V00000C5BD	-	Alex Plus Clear	10.1	Ounces(OZ)	09/13/22
V00000C5BE	-	Alex Plus Clear	10.1	Ounces(OZ)	09/13/22
V00000C5BF	-	Alex Plus Clear	10.1	Ounces(OZ)	09/13/22
V00000C5C1	-	Alex Plus Clear	10.1	Ounces(OZ)	09/13/22
V00000C5C0	-	Alex Plus Clear	10.1	Ounces(OZ)	09/13/22
V00000C5FF	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5DF	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5D6	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5D7	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5D8	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5D9	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5DA	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5DB	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5DC	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C5E7	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5DE	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5D3	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5E0	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5E1	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5E2	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5E3	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5E4	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5E5	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C601	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5DD	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5CB	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5C2	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5C3	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5C4	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5C5	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5C6	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5C7	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5C8	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5D5	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5CA	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5D4	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5CC	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5CD	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5CE	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5CF	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5D0	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5D1	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5D2	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5E8	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5C9	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C607	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5E6	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5FD	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5FE	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C600	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C602	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C603	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C604	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5FB	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C606	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5FA	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C608	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C609	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C60A	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C60B	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C60C	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C60D	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C60E	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C605	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5F2	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5E9	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5EA	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5EB	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5EC	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5ED	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5EE	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5EF	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5FC	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5F1	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C60F	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5F3	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5F4	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5F5	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5F6	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5F7	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5F8	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5F9	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
V00000C5F0	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/13/22
1437343	-	Blue Monster PTFE Pipe Thread Sealant	1	Pint(PT)	09/13/22
1437361	-	Blue Monster PTFE Pipe Thread Sealant	1	Pint(PT)	09/13/22
1437360	-	Blue Monster PTFE Pipe Thread Sealant	1	Pint(PT)	09/13/22
1437359	-	Blue Monster PTFE Pipe Thread Sealant	1	Pint(PT)	09/13/22
1437362	-	Blue Monster PTFE Pipe Thread Sealant	1	Pint(PT)	09/13/22
1437358	-	Blue Monster PTFE Pipe Thread Sealant	1	Pint(PT)	09/13/22
1437345	-	Blue Monster PTFE Pipe Thread Sealant	1	Pint(PT)	09/13/22
1437344	-	Blue Monster PTFE Pipe Thread Sealant	1	Pint(PT)	09/13/22
1437363	-	Blue Monster PTFE Pipe Thread Sealant	1	Pint(PT)	09/13/22
1437364	-	Blue Monster PTFE Pipe Thread Sealant	1	Pint(PT)	09/13/22
1437365	-	Blue Monster PTFE Pipe Thread Sealant	1	Pint(PT)	09/13/22
1437366	-	Blue Monster PTFE Pipe Thread Sealant	1	Pint(PT)	09/13/22
1437346	-	Blue Monster PTFE Pipe Thread Sealant	1	Pint(PT)	09/13/22
1437354	-	Blue Monster PTFE Pipe Thread Sealant	1	Pint(PT)	09/13/22
1437347	-	Blue Monster PTFE Pipe Thread Sealant	1	Pint(PT)	09/13/22
1437348	-	Blue Monster PTFE Pipe Thread Sealant	1	Pint(PT)	09/13/22
1437349	-	Blue Monster PTFE Pipe Thread Sealant	1	Pint(PT)	09/13/22
1437350	-	Blue Monster PTFE Pipe Thread Sealant	1	Pint(PT)	09/13/22
1437351	-	Blue Monster PTFE Pipe Thread Sealant	1	Pint(PT)	09/13/22
1437352	-	Blue Monster PTFE Pipe Thread Sealant	1	Pint(PT)	09/13/22
1437353	-	Blue Monster PTFE Pipe Thread Sealant	1	Pint(PT)	09/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1437356	-	Blue Monster PTFE Pipe Thread Sealant	1	Pint(PT)	09/13/22
1437355	-	Blue Monster PTFE Pipe Thread Sealant	1	Pint(PT)	09/13/22
1437357	-	Blue Monster PTFE Pipe Thread Sealant	1	Pint(PT)	09/13/22
1437241	-	NOKORODE REGULAR PASTE FLUX	16	Ounces(OZ)	09/13/22
1437242	-	NOKORODE REGULAR PASTE FLUX	16	Ounces(OZ)	09/13/22
1437245	-	silvabrite 100	1	Pounds(LB)	09/13/22
1437246	-	silvabrite 100	1	Pounds(LB)	09/13/22
1437168	-	NOKORODE AQUA FLUX	16	Ounces(OZ)	09/13/22
1437169	-	NOKORODE AQUA FLUX	16	Ounces(OZ)	09/13/22
1437331	-	WEST SYSTEM G/flex 655 Part A Resin	4.5	Ounces(OZ)	09/13/22
1437334	-	WEST SYSTEM G/flex 655 Part A Resin	4.5	Ounces(OZ)	09/13/22
1437336	-	WEST SYSTEM G/flex 655 Part A Resin	4.5	Ounces(OZ)	09/13/22
1437335	-	WEST SYSTEM G/flex 655 Part A Resin	4.5	Ounces(OZ)	09/13/22
1437333	-	WEST SYSTEM G/flex 655 Part A Resin	4.5	Ounces(OZ)	09/13/22
1437332	-	WEST SYSTEM G/flex 655 Part A Resin	4.5	Ounces(OZ)	09/13/22
1437337	-	WEST SYSTEM G/flex 655 Part B Hardener	4.5	Ounces(OZ)	09/13/22
1437340	-	WEST SYSTEM G/flex 655 Part B Hardener	4.5	Ounces(OZ)	09/13/22
1437339	-	WEST SYSTEM G/flex 655 Part B Hardener	4.5	Ounces(OZ)	09/13/22
1437341	-	WEST SYSTEM G/flex 655 Part B Hardener	4.5	Ounces(OZ)	09/13/22
1437342	-	WEST SYSTEM G/flex 655 Part B Hardener	4.5	Ounces(OZ)	09/13/22
1437338	-	WEST SYSTEM G/flex 655 Part B Hardener	4.5	Ounces(OZ)	09/13/22
V00000C654	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C635	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C65A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C65B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C65C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C63D	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C63C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C63B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C63A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C639	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C638	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C637	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C629	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C636	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C657	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C634	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C633	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C632	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C631	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C630	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C62F	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C62E	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C65E	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C640	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C62C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C62A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C65D	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C64E	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C641	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C642	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C643	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C644	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C645	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C646	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C647	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C648	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C649	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C64A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C64B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C659	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C64D	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C658	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C64F	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C650	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C651	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C652	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C653	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C63F	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C656	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C63E	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C65F	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C655	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C62B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C64C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C615	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C61D	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C61C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C61B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C610	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C619	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C61E	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C616	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C61A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C614	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C613	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C612	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C611	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C628	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C62D	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C617	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C625	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C627	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C618	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C626	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C624	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C623	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C622	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C621	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C61F	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C620	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/13/22
V00000C664	-	Mobil 1 5W-40	1	Quarts(QT)	09/13/22
V00000C660	-	Mobil 1 5W-40	1	Quarts(QT)	09/13/22
V00000C667	-	Mobil 1 5W-40	1	Quarts(QT)	09/13/22
V00000C666	-	Mobil 1 5W-40	1	Quarts(QT)	09/13/22
V00000C663	-	Mobil 1 5W-40	1	Quarts(QT)	09/13/22
V00000C662	-	Mobil 1 5W-40	1	Quarts(QT)	09/13/22
V00000C665	-	Mobil 1 5W-40	1	Quarts(QT)	09/13/22
V00000C661	-	Mobil 1 5W-40	1	Quarts(QT)	09/13/22
1728649	-	Brakleen Brake Parts Cleaner	18	Ounces(OZ)	09/13/22
1728650	-	PERMATEX THREAD SEALANT W/TEFLON	1	Ounces(OZ)	09/13/22
1728651	-	PERMATEX THREAD SEALANT W/TEFLON	1	Ounces(OZ)	09/13/22
1728652	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	09/13/22
V00000C668	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	09/13/22
1728653	-	Ronson Butane	290	Milliliter(ML)	09/13/22
V00000C669	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	09/13/22
V00000C66A	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	09/13/22
V00000C66B	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	09/13/22
V00000C66C	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	09/13/22
V00000C66D	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	09/13/22
V00000C66E	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	09/13/22
V00000C66F	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	09/13/22
1571885	-	STRIPE RED TRAFFIC MARKER	18	Ounces(OZ)	09/13/22
1728654	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728679	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728678	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728692	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728677	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1728686	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728681	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728682	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728683	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728684	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728685	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728680	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728687	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728691	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728696	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728693	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728694	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728676	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728688	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728698	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728697	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728695	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728689	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728659	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728690	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728675	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728655	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728656	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728658	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728660	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728661	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728662	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728663	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728664	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728670	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728657	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728665	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728672	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728671	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728673	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728669	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728674	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728668	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728667	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
1728666	-	LOCTITE UR 7001 URETHANE SEALANT	10.2	Ounces(OZ)	09/13/22
V00000C670	-	Alex Plus Acrylic Latex Caulk Plus Silicone - All Colors	10.1	Ounces(OZ)	09/13/22
V00000C674	-	Alex Plus Acrylic Latex Caulk Plus Silicone - All Colors	10.1	Ounces(OZ)	09/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C672	-	Alex Plus Acrylic Latex Caulk Plus Silicone - All Colors	10.1	Ounces(OZ)	09/13/22
V00000C673	-	Alex Plus Acrylic Latex Caulk Plus Silicone - All Colors	10.1	Ounces(OZ)	09/13/22
V00000C675	-	Alex Plus Acrylic Latex Caulk Plus Silicone - All Colors	10.1	Ounces(OZ)	09/13/22
V00000C671	-	Alex Plus Acrylic Latex Caulk Plus Silicone - All Colors	10.1	Ounces(OZ)	09/13/22
1728699	-	SIKAFLEX 15LM	10.1	Ounces(OZ)	09/13/22
1728701	-	'M-1 Structural Sealant	28	Ounces(OZ)	09/13/22
1728702	-	'M-1 Structural Sealant	28	Ounces(OZ)	09/13/22
1742833	-	PA 2200 Polyamide Powder	1	Kilograms(KG)	09/13/22
1742834	-	PA 2200 Polyamide Powder	1	Kilograms(KG)	09/13/22
1743194	Multi	Buffer EB	250	Milliliter(ML)	09/13/22
1743195	7440-33-7	TUNGSTEN POWDER	500	Gram(GM)	09/13/22
1743196	-	Gold nanoparticles	100	Milliliter(ML)	09/13/22
1743197	1310-73-2	SODIUM HYDROXIDE	1	Liters(L)	09/13/22
1743198	68855-54-9	Celite 535 filter aid flux calcined	1000	Gram(GM)	09/13/22
1743343	67-56-1	Methanol (HPLC)	1	Liters(L)	09/13/22
1743345	67-56-1	Methanol (HPLC)	1	Liters(L)	09/13/22
1743344	67-56-1	Methanol (HPLC)	1	Liters(L)	09/13/22
1743346	26062-79-3	POLY(DIALYLL DIMETHYL AMMONIUM CHLORIDE)	1	Liters(L)	09/13/22
1743347	7787-70-4	COPPER(I) BROMIDE	10	Gram(GM)	09/13/22
1743348	33527-91-2	Tris(2-dimethylaminoethyl)amine	1	Milliliter(ML)	09/13/22
1743349	65-85-0	BENZOIC ACID	500	Gram(GM)	09/13/22
1743350	7440-54-2	Gadolinium Powder -40 mesh	10	Gram(GM)	09/13/22
1743351	7440-54-2	Gadolinium Powder -200 mesh	5	Gram(GM)	09/13/22
1743352	-	NEODYMIUM(III) TRIFLUOROMETHANESULFONATE	5	Gram(GM)	09/13/22
1743353	1633-22-3	DPX-N PARYLENE DIMER	1	Pounds(LB)	09/13/22
1743354	1633-22-3	DPX-N PARYLENE DIMER	1	Pounds(LB)	09/13/22
1743355	2206-27-1	(METHYL SULFOXIDE)-D6 99.5 + ATOM % D	50	Gram(GM)	09/13/22
1743356	2206-27-1	(METHYL SULFOXIDE)-D6 99.5 + ATOM % D	50	Gram(GM)	09/13/22
1743357	7784-34-1	ARSENIC (III) CHLORIDE	5	Gram(GM)	09/13/22
1743358	7784-34-1	ARSENIC (III) CHLORIDE	5	Gram(GM)	09/13/22
1743359	-	ULTIMA GOLD	10	Liters(L)	09/13/22
1743360	-	ULTIMA GOLD	10	Liters(L)	09/13/22
1743361	583-53-9	1 2-Dibromobenzene 98%	25	Gram(GM)	09/13/22
1743362	23978-55-4	Kryptofix 22 for synthesis	1	Gram(GM)	09/13/22
1743363	23978-55-4	Kryptofix 22 for synthesis	1	Gram(GM)	09/13/22
1743364	23978-55-4	Kryptofix 22 for synthesis	1	Gram(GM)	09/13/22
1743365	23978-55-4	Kryptofix 22 for synthesis	1	Gram(GM)	09/13/22
1743366	23978-55-4	Kryptofix 22 for synthesis	1	Gram(GM)	09/13/22
1743367	23978-55-4	Kryptofix 22 for synthesis	1	Gram(GM)	09/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1728740	-	Permacryl Int Latex Satin W/B	5	Gallon(GAL)	09/13/22
1728742	-	Permacryl Int Latex Satin W/B	5	Gallon(GAL)	09/13/22
1728741	-	Permacryl Int Latex Satin W/B	5	Gallon(GAL)	09/13/22
1728743	-	Permacryl Int Latex Satin W/B	5	Gallon(GAL)	09/13/22
1728744	-	SHEETROCK Brand PLUS 3 Lightweight All Purpose Joint Compound Ready-Mixed	4.5	Gallon(GAL)	09/13/22
V00000C678	-	Avalon Premium 100% Acrylic Interior Flat W/B	3.6	Liters(L)	09/13/22
V00000C676	-	Avalon Premium 100% Acrylic Interior Flat W/B	3.6	Liters(L)	09/13/22
V00000C677	-	Avalon Premium 100% Acrylic Interior Flat W/B	3.6	Liters(L)	09/13/22
V00000C679	-	Avalon Premium 100% Acrylic Interior Satin W/B	3.6	Liters(L)	09/13/22
V00000C67A	-	Avalon Premium 100% Acrylic Interior Satin W/B	3.6	Liters(L)	09/13/22
V00000C67B	-	Avalon Premium 100% Acrylic Interior Satin W/B	3.6	Liters(L)	09/13/22
V00000C67C	-	Avalon Premium 100% Acrylic Interior Satin W/B	3.6	Liters(L)	09/13/22
1728745	-	Permacryl Interior Latex Satin M/B	3.6	Liters(L)	09/13/22
1728747	-	Permacryl Interior Latex Satin M/B	3.6	Liters(L)	09/13/22
1728746	-	Permacryl Interior Latex Satin M/B	3.6	Liters(L)	09/13/22
1728748	-	Permacryl Interior Latex Satin M/B	3.6	Liters(L)	09/13/22
V00000C67E	-	Permacryl Int Latex Flat W/B	3.6	Liters(L)	09/13/22
V00000C680	-	Permacryl Int Latex Flat W/B	3.6	Liters(L)	09/13/22
V00000C67F	-	Permacryl Int Latex Flat W/B	3.6	Liters(L)	09/13/22
V00000C67D	-	Permacryl Int Latex Flat W/B	3.6	Liters(L)	09/13/22
V00000C681	-	HENRY 440 Cove Base Adhesive	3.6	Liters(L)	09/13/22
1728749	-	SHEETROCK Brand PLUS 3 Lightweight All Purpose Joint Compound Ready-Mixed	4.5	Gallon(GAL)	09/13/22
1728704	-	Excelsior AW-510	4	Gallon(GAL)	09/13/22
1728705	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	09/13/22
1728706	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	09/13/22
1728707	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	09/13/22
1728712	-	Super Strip	1	Gallon(GAL)	09/13/22
1728713	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	5	Gallon(GAL)	09/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1728724	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	5	Gallon(GAL)	09/13/22
1728723	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	5	Gallon(GAL)	09/13/22
1728726	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	5	Gallon(GAL)	09/13/22
1728727	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	5	Gallon(GAL)	09/13/22
1728725	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	5	Gallon(GAL)	09/13/22
1728721	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	5	Gallon(GAL)	09/13/22
1728720	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	5	Gallon(GAL)	09/13/22
1728718	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	5	Gallon(GAL)	09/13/22
1728714	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	5	Gallon(GAL)	09/13/22
1728715	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	5	Gallon(GAL)	09/13/22
1728717	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	5	Gallon(GAL)	09/13/22
1728716	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	5	Gallon(GAL)	09/13/22
1728719	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	5	Gallon(GAL)	09/13/22
1728722	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	5	Gallon(GAL)	09/13/22
1728728	-	Sure Grip Exterior Latex Primer White	5	Gallon(GAL)	09/13/22
1728732	-	Sure Grip Exterior Latex Primer White	5	Gallon(GAL)	09/13/22
1728729	-	Sure Grip Exterior Latex Primer White	5	Gallon(GAL)	09/13/22
1728730	-	Sure Grip Exterior Latex Primer White	5	Gallon(GAL)	09/13/22
1728731	-	Sure Grip Exterior Latex Primer White	5	Gallon(GAL)	09/13/22
1728733	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	09/13/22
1728734	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	09/13/22
1728735	-	PERMACRYL INTERIOR FLAT WHITE BASE	5	Gallon(GAL)	09/13/22
1728737	-	PERMACRYL INTERIOR FLAT WHITE BASE	5	Gallon(GAL)	09/13/22
1728736	-	PERMACRYL INTERIOR FLAT WHITE BASE	5	Gallon(GAL)	09/13/22
1728738	-	PERMACRYL INTERIOR FLAT WHITE BASE	5	Gallon(GAL)	09/13/22
1728739	-	PERMACRYL INTERIOR FLAT WHITE BASE	5	Gallon(GAL)	09/13/22
1458763	-	450 SOLDERING FLUX	30	Cubic Centimete	09/13/22
V00000C686	811-97-2	Tech Spray (1 1 1 2-TETRAFLUOROETHANE)	12	Ounces(OZ)	09/14/22
V00000C682	811-97-2	Tech Spray (1 1 1 2-TETRAFLUOROETHANE)	12	Ounces(OZ)	09/14/22
V00000C683	811-97-2	Tech Spray (1 1 1 2-TETRAFLUOROETHANE)	12	Ounces(OZ)	09/14/22
V00000C684	811-97-2	Tech Spray (1 1 1 2-TETRAFLUOROETHANE)	12	Ounces(OZ)	09/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C685	811-97-2	Tech Spray (1 1 1 2-TETRAFLUOROETHANE)	12	Ounces(OZ)	09/14/22
V00000C691	811-97-2	Tech Spray (1 1 1 2-TETRAFLUOROETHANE)	12	Ounces(OZ)	09/14/22
V00000C690	811-97-2	Tech Spray (1 1 1 2-TETRAFLUOROETHANE)	12	Ounces(OZ)	09/14/22
V00000C699	811-97-2	Tech Spray (1 1 1 2-TETRAFLUOROETHANE)	12	Ounces(OZ)	09/14/22
V00000C698	811-97-2	Tech Spray (1 1 1 2-TETRAFLUOROETHANE)	12	Ounces(OZ)	09/14/22
V00000C697	811-97-2	Tech Spray (1 1 1 2-TETRAFLUOROETHANE)	12	Ounces(OZ)	09/14/22
V00000C696	811-97-2	Tech Spray (1 1 1 2-TETRAFLUOROETHANE)	12	Ounces(OZ)	09/14/22
V00000C695	811-97-2	Tech Spray (1 1 1 2-TETRAFLUOROETHANE)	12	Ounces(OZ)	09/14/22
V00000C694	811-97-2	Tech Spray (1 1 1 2-TETRAFLUOROETHANE)	12	Ounces(OZ)	09/14/22
V00000C693	811-97-2	Tech Spray (1 1 1 2-TETRAFLUOROETHANE)	12	Ounces(OZ)	09/14/22
V00000C68F	811-97-2	Tech Spray (1 1 1 2-TETRAFLUOROETHANE)	12	Ounces(OZ)	09/14/22
V00000C692	811-97-2	Tech Spray (1 1 1 2-TETRAFLUOROETHANE)	12	Ounces(OZ)	09/14/22
V00000C687	811-97-2	Tech Spray (1 1 1 2-TETRAFLUOROETHANE)	12	Ounces(OZ)	09/14/22
V00000C68E	811-97-2	Tech Spray (1 1 1 2-TETRAFLUOROETHANE)	12	Ounces(OZ)	09/14/22
V00000C68D	811-97-2	Tech Spray (1 1 1 2-TETRAFLUOROETHANE)	12	Ounces(OZ)	09/14/22
V00000C68C	811-97-2	Tech Spray (1 1 1 2-TETRAFLUOROETHANE)	12	Ounces(OZ)	09/14/22
V00000C68B	811-97-2	Tech Spray (1 1 1 2-TETRAFLUOROETHANE)	12	Ounces(OZ)	09/14/22
V00000C68A	811-97-2	Tech Spray (1 1 1 2-TETRAFLUOROETHANE)	12	Ounces(OZ)	09/14/22
V00000C689	811-97-2	Tech Spray (1 1 1 2-TETRAFLUOROETHANE)	12	Ounces(OZ)	09/14/22
V00000C688	811-97-2	Tech Spray (1 1 1 2-TETRAFLUOROETHANE)	12	Ounces(OZ)	09/14/22
1423136	-	CHAIN AND CABLE LUBRICANT	1	Quarts(QT)	09/14/22
1423138	-	CHAIN AND CABLE LUBRICANT	1	Quarts(QT)	09/14/22
1732042	-	CHEMSAFE CLEAR (CARB Compliant)	5	Gallon(GAL)	09/14/22
1732043	-	CHEMSAFE CLEAR (CARB Compliant)	5	Gallon(GAL)	09/14/22
1690621	-	95% NITROGEN/5% HYDROGEN	220	Cubic Feet(CF)	09/14/22
1690622	-	95% NITROGEN/5% HYDROGEN	220	Cubic Feet(CF)	09/14/22
1690623	-	95% NITROGEN/5% HYDROGEN	220	Cubic Feet(CF)	09/14/22
1732044	-	CHEMSAFE CLEAR (CARB Compliant)	5	Gallon(GAL)	09/14/22
1732045	-	CHEMSAFE CLEAR (CARB Compliant)	5	Gallon(GAL)	09/14/22
V00000C6A2	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/14/22
V00000C69A	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/14/22
V00000C69B	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/14/22
V00000C69C	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/14/22
V00000C69D	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/14/22
V00000C69E	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/14/22
V00000C69F	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/14/22
V00000C6A0	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/14/22
V00000C6A1	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/14/22
V00000C6A3	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/14/22
V00000C6A5	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/14/22
V00000C6A4	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/14/22
1732046	-	Hot Melt Glue Sticks	1	Pounds(LB)	09/14/22
1732047	-	Hot Melt Glue Sticks	1	Pounds(LB)	09/14/22
1732048	-	Ardex P 51	4	Gallon(GAL)	09/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C6A6	-	PARTS PLUS SAE 10W-30 SYNTHETIC MOTOR OIL	1	Quarts(QT)	09/14/22
V00000C6A7	-	PARTS PLUS SAE 10W-30 SYNTHETIC MOTOR OIL	1	Quarts(QT)	09/14/22
V00000C6A9	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/14/22
V00000C6AA	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/14/22
V00000C6AB	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/14/22
V00000C6A8	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/14/22
1743216	-	Alere Instant Bluing Tablets	2.4	Gram(GM)	09/14/22
1743220	-	Alere Instant Bluing Tablets	2.4	Gram(GM)	09/14/22
1743222	-	Alere Instant Bluing Tablets	2.4	Gram(GM)	09/14/22
1743221	-	Alere Instant Bluing Tablets	2.4	Gram(GM)	09/14/22
1743217	-	Alere Instant Bluing Tablets	2.4	Gram(GM)	09/14/22
1743218	-	Alere Instant Bluing Tablets	2.4	Gram(GM)	09/14/22
1743219	-	Alere Instant Bluing Tablets	2.4	Gram(GM)	09/14/22
1743014	-	two-neck round-bottom flask	250	Milliliter(ML)	09/14/22
1743015	-	two-neck round-bottom flask	250	Milliliter(ML)	09/14/22
V00000C6B2	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/14/22
V00000C6AD	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/14/22
V00000C6B3	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/14/22
V00000C6AC	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/14/22
V00000C6AF	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/14/22
V00000C6B0	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/14/22
V00000C6AE	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/14/22
V00000C6B1	-	ARDEX FEATHER FINISH	10	Pounds(LB)	09/14/22
1728750	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728769	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728775	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728774	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728773	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728772	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728776	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728770	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728768	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728767	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728766	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728765	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728771	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728778	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728785	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728787	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728784	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728786	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728759	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728779	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1728780	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728781	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728782	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728783	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728788	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728777	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728752	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728761	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728751	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728790	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728753	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728754	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728755	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728756	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728757	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728791	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728758	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728763	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728762	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728789	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728760	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728764	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/14/22
1728792	-	Finium DTM-AT S/G Acrylic D/B	3.5	Liters(L)	09/14/22
1728794	-	Finium DTM-AT S/G Acrylic D/B	3.5	Liters(L)	09/14/22
1728795	-	Finium DTM-AT S/G Acrylic D/B	3.5	Liters(L)	09/14/22
1728793	-	Finium DTM-AT S/G Acrylic D/B	3.5	Liters(L)	09/14/22
1728796	-	Vers-Acryl 222 S/G Finish White Base	3.6	Liters(L)	09/14/22
1728798	-	Vers-Acryl 222 S/G Finish White Base	3.6	Liters(L)	09/14/22
1728797	-	Vers-Acryl 222 S/G Finish White Base	3.6	Liters(L)	09/14/22
1642041	-	MOBIL DTE 24	55	Gallon(GAL)	09/14/22
1716224	7664-93-9	DILUT-IT SULFURIC ACID	12	Milliliter(ML)	09/14/22
1716225	7664-93-9	SULFIDE 1 REAGENT	72	Milliliter(ML)	09/14/22
V00000C6B4	-	Signature Series 5080 Pressure Sensitive Adhesive	4	Gallon(GAL)	09/14/22
1732039	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	09/14/22
1732040	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	09/14/22
1732041	64742-52-5	No. 1200-2	14.5	Ounces(OZ)	09/14/22
V00000C6B5	-	HENRY 440 Cove Base Adhesive	1	Gallon(GAL)	09/14/22
V00000C6B6	-	HENRY 440 Cove Base Adhesive	1	Gallon(GAL)	09/14/22
1642029	-	SPRAYON Brake & Parts Cleaner	14	Ounces(OZ)	09/14/22
1642039	-	SPRAYON Brake & Parts Cleaner	14	Ounces(OZ)	09/14/22
1642038	-	SPRAYON Brake & Parts Cleaner	14	Ounces(OZ)	09/14/22
1642034	-	SPRAYON Brake & Parts Cleaner	14	Ounces(OZ)	09/14/22
1642030	-	SPRAYON Brake & Parts Cleaner	14	Ounces(OZ)	09/14/22
1642031	-	SPRAYON Brake & Parts Cleaner	14	Ounces(OZ)	09/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1642033	-	SPRAYON Brake & Parts Cleaner	14	Ounces(OZ)	09/14/22
1642035	-	SPRAYON Brake & Parts Cleaner	14	Ounces(OZ)	09/14/22
1642036	-	SPRAYON Brake & Parts Cleaner	14	Ounces(OZ)	09/14/22
1642037	-	SPRAYON Brake & Parts Cleaner	14	Ounces(OZ)	09/14/22
1642040	-	SPRAYON Brake & Parts Cleaner	14	Ounces(OZ)	09/14/22
1642032	-	SPRAYON Brake & Parts Cleaner	14	Ounces(OZ)	09/14/22
1732049	-	Brakleen Brake Parts Cleaner	18	Ounces(OZ)	09/15/22
1732050	-	Brakleen Brake Parts Cleaner	18	Ounces(OZ)	09/15/22
1732051	-	ULTRA LOW VOC BRAKLEEN	14	Ounces(OZ)	09/15/22
V00000C6BF	-	Avalon Premium 100% Acrylic Interior Flat W/B	112	Ounces(OZ)	09/15/22
V00000C6BD	-	Avalon Premium 100% Acrylic Interior Flat W/B	112	Ounces(OZ)	09/15/22
V00000C6BC	-	Avalon Premium 100% Acrylic Interior Flat W/B	112	Ounces(OZ)	09/15/22
V00000C6BB	-	Avalon Premium 100% Acrylic Interior Flat W/B	112	Ounces(OZ)	09/15/22
V00000C6BA	-	Avalon Premium 100% Acrylic Interior Flat W/B	112	Ounces(OZ)	09/15/22
V00000C6B9	-	Avalon Premium 100% Acrylic Interior Flat W/B	112	Ounces(OZ)	09/15/22
V00000C6B8	-	Avalon Premium 100% Acrylic Interior Flat W/B	112	Ounces(OZ)	09/15/22
V00000C6B7	-	Avalon Premium 100% Acrylic Interior Flat W/B	112	Ounces(OZ)	09/15/22
V00000C6BE	-	Avalon Premium 100% Acrylic Interior Flat W/B	112	Ounces(OZ)	09/15/22
V00000C6C0	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
1732052	-	Valvoline AW 32 HYDRAULIC OIL	5	Gallon(GAL)	09/15/22
1732060	-	Valvoline AW 32 HYDRAULIC OIL	5	Gallon(GAL)	09/15/22
1732071	-	Valvoline AW 32 HYDRAULIC OIL	5	Gallon(GAL)	09/15/22
1732070	-	Valvoline AW 32 HYDRAULIC OIL	5	Gallon(GAL)	09/15/22
1732069	-	Valvoline AW 32 HYDRAULIC OIL	5	Gallon(GAL)	09/15/22
1732068	-	Valvoline AW 32 HYDRAULIC OIL	5	Gallon(GAL)	09/15/22
1732067	-	Valvoline AW 32 HYDRAULIC OIL	5	Gallon(GAL)	09/15/22
1732066	-	Valvoline AW 32 HYDRAULIC OIL	5	Gallon(GAL)	09/15/22
1732065	-	Valvoline AW 32 HYDRAULIC OIL	5	Gallon(GAL)	09/15/22
1732064	-	Valvoline AW 32 HYDRAULIC OIL	5	Gallon(GAL)	09/15/22
1732063	-	Valvoline AW 32 HYDRAULIC OIL	5	Gallon(GAL)	09/15/22
1732072	-	Valvoline AW 32 HYDRAULIC OIL	5	Gallon(GAL)	09/15/22
1732061	-	Valvoline AW 32 HYDRAULIC OIL	5	Gallon(GAL)	09/15/22
1732073	-	Valvoline AW 32 HYDRAULIC OIL	5	Gallon(GAL)	09/15/22
1732059	-	Valvoline AW 32 HYDRAULIC OIL	5	Gallon(GAL)	09/15/22
1732058	-	Valvoline AW 32 HYDRAULIC OIL	5	Gallon(GAL)	09/15/22
1732057	-	Valvoline AW 32 HYDRAULIC OIL	5	Gallon(GAL)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1732056	-	Valvoline AW 32 HYDRAULIC OIL	5	Gallon(GAL)	09/15/22
1732055	-	Valvoline AW 32 HYDRAULIC OIL	5	Gallon(GAL)	09/15/22
1732054	-	Valvoline AW 32 HYDRAULIC OIL	5	Gallon(GAL)	09/15/22
1732053	-	Valvoline AW 32 HYDRAULIC OIL	5	Gallon(GAL)	09/15/22
1732062	-	Valvoline AW 32 HYDRAULIC OIL	5	Gallon(GAL)	09/15/22
1730767	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	NMOL	09/15/22
1730776	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	NMOL	09/15/22
1730772	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	NMOL	09/15/22
1730773	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	NMOL	09/15/22
1730774	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	NMOL	09/15/22
1730775	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	NMOL	09/15/22
1730777	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	NMOL	09/15/22
1730778	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	NMOL	09/15/22
1730770	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	NMOL	09/15/22
1730771	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	NMOL	09/15/22
1730769	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	NMOL	09/15/22
1730768	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	NMOL	09/15/22
V00000C6D5	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	09/15/22
V00000C6D4	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	09/15/22
V00000C6D6	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	09/15/22
V00000C6D7	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	09/15/22
V00000C6CE	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	09/15/22
V00000C6D3	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	09/15/22
V00000C6C6	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	09/15/22
V00000C6D2	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	09/15/22
V00000C6D1	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	09/15/22
V00000C6D0	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	09/15/22
V00000C6CF	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	09/15/22
V00000C6D8	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	09/15/22
V00000C6C1	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	09/15/22
V00000C6CC	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	09/15/22
V00000C6CB	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	09/15/22
V00000C6CA	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C6C9	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	09/15/22
V00000C6C7	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	09/15/22
V00000C6C5	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	09/15/22
V00000C6C4	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	09/15/22
V00000C6C3	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	09/15/22
V00000C6C2	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	09/15/22
V00000C6CD	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	09/15/22
V00000C6C8	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	09/15/22
1732074	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	09/15/22
1732075	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	09/15/22
1732079	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	09/15/22
1732076	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	09/15/22
1732077	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	09/15/22
1732078	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	09/15/22
V00000C6DC	-	Avalon Premium 100% Acrylic Interior Satin N/B	113	Ounces(OZ)	09/15/22
V00000C6DB	-	Avalon Premium 100% Acrylic Interior Satin N/B	113	Ounces(OZ)	09/15/22
V00000C6DA	-	Avalon Premium 100% Acrylic Interior Satin N/B	113	Ounces(OZ)	09/15/22
V00000C6D9	-	Avalon Premium 100% Acrylic Interior Satin N/B	113	Ounces(OZ)	09/15/22
1732080	-	PARTS PLUS ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/15/22
1732081	-	PARTS PLUS ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/15/22
1732084	-	PARTS PLUS ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/15/22
1732083	-	PARTS PLUS ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/15/22
1732082	-	PARTS PLUS ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/15/22
1732085	-	PARTS PLUS ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/15/22
V00000C6DD	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6DE	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6DF	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6E0	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6E5	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6E1	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C725	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C71D	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C71E	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C71F	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C720	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C721	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C722	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C708	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C724	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C71A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C726	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C727	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C728	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C729	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C72A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C72B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6E3	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C723	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C713	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C70A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C70B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C70C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C70D	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C70E	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C70F	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C710	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C71C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C712	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C71B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C714	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C715	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C716	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C717	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C718	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C719	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C707	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C711	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6EB	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C72C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6F2	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6F1	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6F0	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6EF	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6EE	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6F4	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6EC	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6F5	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6EA	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6E9	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6E8	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6E7	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6E6	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C709	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6E4	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6ED	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6FE	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C706	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C705	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C704	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C703	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C702	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C701	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C700	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6F3	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6FF	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6E2	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6FD	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6FC	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6FB	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6FA	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6F9	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6F8	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6F7	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
V00000C6F6	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	09/15/22
1732092	-	Brakleen Brake Parts Cleaner	14	Ounces(OZ)	09/15/22
1732093	-	Brakleen Brake Parts Cleaner	14	Ounces(OZ)	09/15/22
V00000C735	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22
V00000C73F	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22
V00000C72F	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22
V00000C730	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22
V00000C731	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22
V00000C732	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22
V00000C733	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22
V00000C734	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22
V00000C736	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22
V00000C738	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22
V00000C739	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22
V00000C73A	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C73B	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22
V00000C73C	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22
V00000C72E	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22
V00000C73E	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22
V00000C72D	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22
V00000C740	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22
V00000C741	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22
V00000C742	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22
V00000C743	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22
V00000C744	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22
V00000C745	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22
V00000C746	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22
V00000C747	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22
V00000C748	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22
V00000C749	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22
V00000C74A	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22
V00000C737	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22
V00000C73D	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22
V00000C74B	-	PARTS PLUS SAE 10W-30 SYNTHETIC MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C750	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C74F	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C74E	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C74C	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C74D	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
1730749	-	DO IT BEST RUST COAT ENAMEL 1269 ALUMINUM	11	Ounces(OZ)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1730765	-	DO IT BEST RUST COAT ENAMEL 1269 ALUMINUM	11	Ounces(OZ)	09/15/22
1730758	-	DO IT BEST RUST COAT ENAMEL 1269 ALUMINUM	11	Ounces(OZ)	09/15/22
1730761	-	DO IT BEST RUST COAT ENAMEL 1269 ALUMINUM	11	Ounces(OZ)	09/15/22
1730759	-	DO IT BEST RUST COAT ENAMEL 1269 ALUMINUM	11	Ounces(OZ)	09/15/22
1730762	-	DO IT BEST RUST COAT ENAMEL 1269 ALUMINUM	11	Ounces(OZ)	09/15/22
1730763	-	DO IT BEST RUST COAT ENAMEL 1269 ALUMINUM	11	Ounces(OZ)	09/15/22
1730760	-	DO IT BEST RUST COAT ENAMEL 1269 ALUMINUM	11	Ounces(OZ)	09/15/22
1730764	-	DO IT BEST RUST COAT ENAMEL 1269 ALUMINUM	11	Ounces(OZ)	09/15/22
1730753	-	DO IT BEST RUST COAT ENAMEL 1269 ALUMINUM	11	Ounces(OZ)	09/15/22
1730757	-	DO IT BEST RUST COAT ENAMEL 1269 ALUMINUM	11	Ounces(OZ)	09/15/22
1730756	-	DO IT BEST RUST COAT ENAMEL 1269 ALUMINUM	11	Ounces(OZ)	09/15/22
1730755	-	DO IT BEST RUST COAT ENAMEL 1269 ALUMINUM	11	Ounces(OZ)	09/15/22
1730754	-	DO IT BEST RUST COAT ENAMEL 1269 ALUMINUM	11	Ounces(OZ)	09/15/22
1730766	-	DO IT BEST RUST COAT ENAMEL 1269 ALUMINUM	11	Ounces(OZ)	09/15/22
1730750	-	DO IT BEST RUST COAT ENAMEL 1269 ALUMINUM	11	Ounces(OZ)	09/15/22
1730751	-	DO IT BEST RUST COAT ENAMEL 1269 ALUMINUM	11	Ounces(OZ)	09/15/22
1730752	-	DO IT BEST RUST COAT ENAMEL 1269 ALUMINUM	11	Ounces(OZ)	09/15/22
V00000C751	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C754	-	Signature Series 5080 Pressure Sensitive Adhesive	4	Gallon(GAL)	09/15/22
V00000C753	-	Signature Series 5080 Pressure Sensitive Adhesive	4	Gallon(GAL)	09/15/22
V00000C752	-	Signature Series 5080 Pressure Sensitive Adhesive	4	Gallon(GAL)	09/15/22
1732086	-	ARDEX P 4 Primer	3.5	Gallon(GAL)	09/15/22
V00000C79B	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C75D	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C75E	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C75F	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C760	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C761	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C762	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C79A	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C79D	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C75C	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C79C	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C756	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C763	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7A4	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7A3	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7A2	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7A1	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7A0	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C79F	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C79E	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7B3	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7A5	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7B1	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7B0	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7AF	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7AE	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7AD	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7AC	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7AB	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7AA	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C758	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7A8	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C75B	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7A7	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7A6	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C755	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C797	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C757	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C798	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C759	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C75A	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7A9	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C770	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C799	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C77B	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C77A	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C779	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C778	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C777	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C776	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C775	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C774	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C773	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C77D	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C771	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C77E	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C76F	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C76E	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C76D	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C76C	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C76B	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C76A	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C769	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C768	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C767	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C766	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C765	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C772	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C78A	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C796	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C795	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C794	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C793	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C792	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C791	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C790	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C78F	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C78E	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C78D	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C77C	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C78B	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7B4	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C789	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C788	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C787	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C786	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C785	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C784	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C783	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C782	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C781	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C780	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C77F	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C78C	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7B5	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7B2	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7B6	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7B7	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7B8	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C764	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7DE	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7E6	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7E5	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7E4	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7E3	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7E2	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7E1	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7E7	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7DF	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7DD	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7E0	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7E8	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7DC	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7EA	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7D8	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7EB	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7EC	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7ED	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7EE	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7EF	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7F0	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7F1	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7F2	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7E9	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7CF	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7C3	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7C4	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7C5	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7C6	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7C7	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7C8	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7C9	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7CA	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7CB	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7CC	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7DA	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7CE	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7DB	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C7D0	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7D1	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7D2	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7D3	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7D4	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7D5	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7D6	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7D7	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7F7	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7D9	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7F3	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7CD	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C81A	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7F5	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C810	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C811	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C812	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C813	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C814	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C815	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C816	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C817	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C80E	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C819	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C80D	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7C1	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7C0	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7BF	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7BE	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7BD	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7BC	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7BB	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7BA	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7B9	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C81B	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C818	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C801	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7F6	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7C2	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7F8	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7F9	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7FA	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7FB	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7FC	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7FD	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C7FE	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7FF	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C80F	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C800	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C7F4	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C802	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C803	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C804	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C805	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C806	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C807	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C808	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C809	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C80A	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C80B	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
V00000C80C	811-97-2	CRC CONTACT CLEANER	13	Ounces(OZ)	09/15/22
1730779	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730781	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730794	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730827	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730780	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730831	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730792	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730791	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730838	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730826	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730837	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730836	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730835	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730834	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730796	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730832	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730801	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730830	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730829	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730828	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730793	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730795	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730797	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730798	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730799	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730800	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730833	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730805	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730789	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1730790	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730786	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730784	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730783	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730782	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730788	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730804	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730802	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730806	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730807	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730808	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730809	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730810	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730811	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730803	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730820	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730825	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730787	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730824	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730823	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730785	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730821	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730812	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730819	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730818	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730817	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730816	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730815	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730813	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730822	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1730814	-	DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	09/15/22
1732087	-	INGERSOLL-RAND ULTRA COOLANT	5	Liters(L)	09/15/22
1732090	-	INGERSOLL-RAND ULTRA COOLANT	5	Liters(L)	09/15/22
1732088	-	INGERSOLL-RAND ULTRA COOLANT	5	Liters(L)	09/15/22
1732089	-	INGERSOLL-RAND ULTRA COOLANT	5	Liters(L)	09/15/22
V00000C837	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C827	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C839	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C833	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C832	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C831	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C830	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C82F	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C82E	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C82D	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C82C	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C82B	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C82A	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C835	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C828	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C836	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C826	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C825	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C824	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C823	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C822	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C821	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C820	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C81F	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C81E	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C81D	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C81C	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C829	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C845	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C84E	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C84D	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C84C	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C84B	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C84A	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C849	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C848	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C834	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C846	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C844	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C83D	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C838	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C83A	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C83B	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C847	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C83C	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C843	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C83E	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C83F	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C840	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C841	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
V00000C842	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/15/22
1732091	-	SULLAIR SULLUBE	5	Gallon(GAL)	09/15/22
1732094	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	09/15/22
V00000C84F	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000C850	-	Johnsen's Power Steering Fluid	1	Quarts(QT)	09/15/22
1730839	-	ES COMPLEAT OAT 50/50 PREDILUTED; ES COMPLEAT OAT 60/40 PREDILUTED; ES COMPLEAT OAT 40/60 PREDILUTED	1	Gallon(GAL)	09/15/22
1730840	-	ES COMPLEAT OAT 50/50 PREDILUTED; ES COMPLEAT OAT 60/40 PREDILUTED; ES COMPLEAT OAT 40/60 PREDILUTED	1	Gallon(GAL)	09/15/22
1730843	-	ES COMPLEAT OAT 50/50 PREDILUTED; ES COMPLEAT OAT 60/40 PREDILUTED; ES COMPLEAT OAT 40/60 PREDILUTED	1	Gallon(GAL)	09/15/22
1730844	-	ES COMPLEAT OAT 50/50 PREDILUTED; ES COMPLEAT OAT 60/40 PREDILUTED; ES COMPLEAT OAT 40/60 PREDILUTED	1	Gallon(GAL)	09/15/22
1730841	-	ES COMPLEAT OAT 50/50 PREDILUTED; ES COMPLEAT OAT 60/40 PREDILUTED; ES COMPLEAT OAT 40/60 PREDILUTED	1	Gallon(GAL)	09/15/22
1730842	-	ES COMPLEAT OAT 50/50 PREDILUTED; ES COMPLEAT OAT 60/40 PREDILUTED; ES COMPLEAT OAT 40/60 PREDILUTED	1	Gallon(GAL)	09/15/22
1732095	-	SYNPOWER 75W-90 SYNTHETIC GEAR OIL	1	Quarts(QT)	09/15/22
V00000C851	-	CRYSTAL WINDSHIELD WASHER -25	1	Gallon(GAL)	09/15/22
1730363	-	TRAFFIC STRIPING PAINT	18	Ounces(OZ)	09/15/22
1730370	-	TRAFFIC STRIPING PAINT	18	Ounces(OZ)	09/15/22
1730374	-	TRAFFIC STRIPING PAINT	18	Ounces(OZ)	09/15/22
1730373	-	TRAFFIC STRIPING PAINT	18	Ounces(OZ)	09/15/22
1730372	-	TRAFFIC STRIPING PAINT	18	Ounces(OZ)	09/15/22
1730364	-	TRAFFIC STRIPING PAINT	18	Ounces(OZ)	09/15/22
1730371	-	TRAFFIC STRIPING PAINT	18	Ounces(OZ)	09/15/22
1730369	-	TRAFFIC STRIPING PAINT	18	Ounces(OZ)	09/15/22
1730368	-	TRAFFIC STRIPING PAINT	18	Ounces(OZ)	09/15/22
1730367	-	TRAFFIC STRIPING PAINT	18	Ounces(OZ)	09/15/22
1730366	-	TRAFFIC STRIPING PAINT	18	Ounces(OZ)	09/15/22
1730365	-	TRAFFIC STRIPING PAINT	18	Ounces(OZ)	09/15/22
1730375	-	TRAFFIC MARKING PAINT	18	Ounces(OZ)	09/15/22
1732096	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	09/15/22
1730381	-	TRAFFIC MARKING PAINT	18	Ounces(OZ)	09/15/22
1730376	-	TRAFFIC MARKING PAINT	18	Ounces(OZ)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1730377	-	TRAFFIC MARKING PAINT	18	Ounces(OZ)	09/15/22
1730378	-	TRAFFIC MARKING PAINT	18	Ounces(OZ)	09/15/22
1730379	-	TRAFFIC MARKING PAINT	18	Ounces(OZ)	09/15/22
1730382	-	TRAFFIC MARKING PAINT	18	Ounces(OZ)	09/15/22
1730383	-	TRAFFIC MARKING PAINT	18	Ounces(OZ)	09/15/22
1730384	-	TRAFFIC MARKING PAINT	18	Ounces(OZ)	09/15/22
1730385	-	TRAFFIC MARKING PAINT	18	Ounces(OZ)	09/15/22
1730386	-	TRAFFIC MARKING PAINT	18	Ounces(OZ)	09/15/22
1730380	-	TRAFFIC MARKING PAINT	18	Ounces(OZ)	09/15/22
1732099	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	09/15/22
1732097	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	09/15/22
1732107	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	09/15/22
1732098	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	09/15/22
1732105	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	09/15/22
1732108	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	09/15/22
1732109	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	09/15/22
1732110	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	09/15/22
1732111	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	09/15/22
1732112	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	09/15/22
1732106	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	09/15/22
1732113	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	09/15/22
1732104	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	09/15/22
1732103	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	09/15/22
1732102	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	09/15/22
1732101	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	09/15/22
1732100	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	09/15/22
1730387	-	PSX 700 WHITE RESIN	0.8	Gallon(GAL)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1732116	-	JOHNSEN'S PREMIUM DOT 3 BRAKE FLUID 1 GALLON	32	Ounces(OZ)	09/15/22
1732117	-	JOHNSEN'S PREMIUM DOT 3 BRAKE FLUID 1 GALLON	32	Ounces(OZ)	09/15/22
1732118	-	JOHNSEN'S PREMIUM DOT 3 BRAKE FLUID 1 GALLON	32	Ounces(OZ)	09/15/22
1730396	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	1	Quarts(QT)	09/15/22
1730397	-	PSX 700 WHITE RESIN	0.8	Ounces(OZ)	09/15/22
1730361	-	Avalon Premium 100% Acrylic Interior Satin W/B	608	Ounces(OZ)	09/15/22
V00000C852	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	09/15/22
1730362	-	Durango Exterior Acrylic Latex Satin Neutral Base	569	Ounces(OZ)	09/15/22
1730463	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	09/15/22
1730470	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	09/15/22
1730478	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	09/15/22
1730487	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	09/15/22
1730472	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	09/15/22
1730473	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	09/15/22
1730489	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	09/15/22
1730474	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	09/15/22
1730488	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	09/15/22
1730475	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	09/15/22
1730490	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	09/15/22
1730477	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	09/15/22
1730491	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	09/15/22
1730479	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	09/15/22
1730480	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	09/15/22
1730481	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	09/15/22
1730482	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	09/15/22
1730483	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	09/15/22
1730484	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	09/15/22
1730485	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	09/15/22
1730486	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	09/15/22
1730476	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	09/15/22
1730492	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	09/15/22
1730465	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	09/15/22
1730466	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	09/15/22
1730467	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	09/15/22
1730468	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	09/15/22
1730469	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	09/15/22
1730464	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1730471	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	09/15/22
V00000C85D	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	09/15/22
V00000C861	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	09/15/22
V00000C858	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	09/15/22
V00000C859	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	09/15/22
V00000C85A	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	09/15/22
V00000C85B	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	09/15/22
V00000C85C	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	09/15/22
V00000C857	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	09/15/22
V00000C860	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	09/15/22
V00000C865	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	09/15/22
V00000C862	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	09/15/22
V00000C863	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	09/15/22
V00000C864	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	09/15/22
V00000C866	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	09/15/22
V00000C868	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	09/15/22
V00000C869	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	09/15/22
V00000C85E	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	09/15/22
V00000C855	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	09/15/22
V00000C854	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	09/15/22
V00000C853	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	09/15/22
V00000C867	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	09/15/22
V00000C856	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C85F	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	09/15/22
1732119	-	Ronson Butane	290	Milliliter(ML)	09/15/22
1732120	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732123	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732134	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732122	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732127	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732124	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732126	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732128	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732133	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732129	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732130	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732131	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732132	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732121	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732125	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732178	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732168	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732169	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732170	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732171	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732172	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732173	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732174	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732175	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732176	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732167	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732177	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732180	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732179	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732153	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732181	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732183	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732184	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732185	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732186	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732187	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
1732188	-	Johnsen's Power Steering Fluid	32	Ounces(OZ)	09/15/22
1732145	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732182	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732166	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732152	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732154	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1732160	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732159	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732158	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732157	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732156	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732161	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732162	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732163	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732164	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732151	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732150	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732149	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732148	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732147	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732146	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732165	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
1732155	-	Prime Guard Power Blast	1	Gallon(GAL)	09/15/22
V00000C86B	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000C86A	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
1732135	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	09/15/22
1732136	-	PARTS PLUS ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/15/22
1732141	-	PARTS PLUS ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/15/22
1732137	-	PARTS PLUS ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/15/22
1732138	-	PARTS PLUS ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/15/22
1732140	-	PARTS PLUS ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/15/22
1732142	-	PARTS PLUS ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/15/22
1732143	-	PARTS PLUS ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/15/22
1732144	-	PARTS PLUS ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/15/22
1732139	-	PARTS PLUS ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/15/22
V00000C8A9	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8A1	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8A2	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8A3	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8A4	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8A5	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8A6	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8A0	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8A8	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C89A	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8AA	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8AB	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8AC	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8AD	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8AE	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8AF	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C8B0	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8A7	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C890	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C898	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C897	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C896	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C895	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C894	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C893	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C892	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C89C	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C870	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C89F	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8B1	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C88F	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C88E	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C899	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C89B	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C89D	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C89E	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C891	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C888	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C872	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8C0	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8C1	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8C2	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C86D	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C86C	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8C3	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8BE	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8C5	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8BD	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8C7	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8C9	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8CA	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8CB	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8CC	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8CD	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8CE	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8C4	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C873	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8B3	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8B4	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8B5	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8B6	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C8B7	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8B8	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8B9	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8BF	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C874	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8B2	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C88D	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C871	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8C6	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C86F	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C86E	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8BB	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8BC	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8BA	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C88A	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C88C	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8C8	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C875	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C88B	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C887	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C886	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C885	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C884	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C883	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C882	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C881	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C87A	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C878	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C876	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C880	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C877	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C879	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C87B	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C87C	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C87D	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C889	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C87E	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C87F	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8E1	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8DE	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8DF	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8E0	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8DD	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8E2	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8E3	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C8E5	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8D8	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8E6	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8E7	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8E8	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8E9	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8E4	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8DC	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8DB	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8D4	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8D9	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8D7	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8D6	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8D5	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8EC	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8D3	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8D2	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8D1	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8D0	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8CF	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8DA	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8F3	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8EB	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8EA	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8F4	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8F2	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8F1	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8F0	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8EF	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8EE	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C8ED	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	09/15/22
V00000C918	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C912	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C90E	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C90C	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C90F	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C910	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C911	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C90D	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C913	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C914	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C915	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C90B	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C917	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C904	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C919	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C91A	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C91B	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C91C	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C916	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C8FF	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C8F7	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C8F5	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C8F6	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C8F8	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C8FA	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C8FB	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C8FC	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C906	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C8FE	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C90A	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C900	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C901	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C902	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C903	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C905	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C907	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C908	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C909	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C8FD	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
V00000C8F9	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	09/15/22
1732189	-	rust reformer	1	Gallon(GAL)	09/15/22
1732203	-	rust reformer	1	Gallon(GAL)	09/15/22
1732204	-	rust reformer	1	Gallon(GAL)	09/15/22
1732190	-	Vers-Acryl 222 S/G Finish Neutral Base	1	Gallon(GAL)	09/15/22
1732192	-	Vers-Acryl 222 S/G Finish Neutral Base	1	Gallon(GAL)	09/15/22
1732191	-	PSX 700 Black Resin	0.8	Gallon(GAL)	09/15/22
1732193	-	3M SUPER 77 SPRAY ADHESIVE	16	Ounces(OZ)	09/15/22
V00000C938	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C939	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C93A	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C93B	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C93C	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C93D	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C93E	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C93F	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C940	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C941	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C91D	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C943	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C935	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C944	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C945	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C946	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C947	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C948	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C949	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C94A	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C94B	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C94C	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C94D	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C942	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C92A	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C91E	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C91F	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C920	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C921	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C922	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C923	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C924	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C925	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C926	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C937	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C928	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C936	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C92C	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C92D	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C92E	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C92F	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C930	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C931	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C932	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C933	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C934	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C950	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C927	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C975	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C94E	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C96A	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C96B	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C96C	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C96D	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C96E	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C96F	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C970	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C971	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C972	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C968	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C974	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C967	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C976	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C977	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C978	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C979	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C97A	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C97B	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C97C	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C97D	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C97E	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C97F	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C973	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C95C	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C929	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C951	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C952	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C953	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C954	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C955	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C956	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C957	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C958	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C959	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C969	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C95B	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C94F	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C95D	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C95E	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C95F	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C960	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C961	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C962	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C963	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C964	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C965	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C966	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C95A	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C92B	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C99B	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C993	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C994	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C995	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C996	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C997	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C998	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C9A1	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C99A	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C990	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C99C	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C99D	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C99E	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C99F	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C9A0	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C999	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C98A	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C980	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C982	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C984	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C985	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C986	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C987	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C992	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C989	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C991	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C98B	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C98C	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C98D	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C98E	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C98F	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C983	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C988	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C9B6	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C9A2	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C981	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C9B9	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C9B7	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C9B5	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C9B4	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C9B3	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C9B2	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C9B1	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C9B0	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C9AF	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C9A6	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C9A4	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C9B8	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C9A3	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C9AE	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C9A5	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C9A7	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C9A8	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C9A9	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C9AA	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C9AB	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C9AC	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C9AD	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	09/15/22
V00000C9CF	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9FC	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9CA	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9CD	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9CC	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9CB	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9CE	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C9C9	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9C8	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9C7	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9C6	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9C4	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9FD	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9FE	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9D0	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9DE	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9C5	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9DA	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9E2	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9FB	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9E1	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9E0	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9DF	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000CA0D	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9DD	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9DC	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9DB	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9D1	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9D9	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9D8	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9D7	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9D5	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9C2	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9D3	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9D2	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9FF	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9C0	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000CA0B	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000CA16	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000CA17	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000CA18	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000CA19	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9C3	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000CA14	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9E3	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000CA13	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9D6	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9BF	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9BE	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9BD	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9BC	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9BB	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000C9BA	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9C1	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000CA09	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000CA01	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000CA02	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000CA03	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000CA04	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000CA05	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000CA06	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000CA15	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000CA08	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000CA00	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000CA0A	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000CA0C	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000CA0E	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000CA0F	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000CA10	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000CA11	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000CA12	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000CA07	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9F8	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9D4	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9E4	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9EE	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9EF	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9F0	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9F3	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9F6	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9F1	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9F5	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9F4	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9F7	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9F9	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9FA	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9ED	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9EC	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9EB	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9EA	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9E9	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9E8	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9E7	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9E6	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9E5	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
V00000C9F2	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	09/15/22
1732208	-	Diamond Spray Paint Sun Yellow	12	Ounces(OZ)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1732209	-	Diamond Spray Paint Sun Yellow	12	Ounces(OZ)	09/15/22
1732210	-	Diamond Spray Paint Sun Yellow	12	Ounces(OZ)	09/15/22
1732211	-	Diamond Spray Paint Sun Yellow	12	Ounces(OZ)	09/15/22
1732212	-	Diamond Spray Paint Sun Yellow	12	Ounces(OZ)	09/15/22
1732213	-	Diamond Spray Paint Sun Yellow	12	Ounces(OZ)	09/15/22
1732214	-	ES COMPLEAT	1	Gallon(GAL)	09/15/22
1732223	-	ES COMPLEAT	1	Gallon(GAL)	09/15/22
1732228	-	ES COMPLEAT	1	Gallon(GAL)	09/15/22
1732218	-	ES COMPLEAT	1	Gallon(GAL)	09/15/22
1732227	-	ES COMPLEAT	1	Gallon(GAL)	09/15/22
1732226	-	ES COMPLEAT	1	Gallon(GAL)	09/15/22
1732225	-	ES COMPLEAT	1	Gallon(GAL)	09/15/22
1732224	-	ES COMPLEAT	1	Gallon(GAL)	09/15/22
1732229	-	ES COMPLEAT	1	Gallon(GAL)	09/15/22
1732222	-	ES COMPLEAT	1	Gallon(GAL)	09/15/22
1732221	-	ES COMPLEAT	1	Gallon(GAL)	09/15/22
1732231	-	ES COMPLEAT	1	Gallon(GAL)	09/15/22
1732219	-	ES COMPLEAT	1	Gallon(GAL)	09/15/22
1732232	-	ES COMPLEAT	1	Gallon(GAL)	09/15/22
1732217	-	ES COMPLEAT	1	Gallon(GAL)	09/15/22
1732216	-	ES COMPLEAT	1	Gallon(GAL)	09/15/22
1732215	-	ES COMPLEAT	1	Gallon(GAL)	09/15/22
1732220	-	ES COMPLEAT	1	Gallon(GAL)	09/15/22
1732242	-	ES COMPLEAT	1	Gallon(GAL)	09/15/22
1732230	-	ES COMPLEAT	1	Gallon(GAL)	09/15/22
1732243	-	ES COMPLEAT	1	Gallon(GAL)	09/15/22
1732241	-	ES COMPLEAT	1	Gallon(GAL)	09/15/22
1732240	-	ES COMPLEAT	1	Gallon(GAL)	09/15/22
1732239	-	ES COMPLEAT	1	Gallon(GAL)	09/15/22
1732238	-	ES COMPLEAT	1	Gallon(GAL)	09/15/22
1732237	-	ES COMPLEAT	1	Gallon(GAL)	09/15/22
1732235	-	ES COMPLEAT	1	Gallon(GAL)	09/15/22
1732234	-	ES COMPLEAT	1	Gallon(GAL)	09/15/22
1732233	-	ES COMPLEAT	1	Gallon(GAL)	09/15/22
1732236	-	ES COMPLEAT	1	Gallon(GAL)	09/15/22
V00000CA22	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA1D	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA36	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA1C	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA1B	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA37	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA1F	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA21	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA30	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA1A	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CA38	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA3A	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA20	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA2C	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA46	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA24	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA25	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA26	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA27	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA28	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA29	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA32	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA2B	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA35	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA2D	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA2E	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA2F	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA3B	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA31	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA3C	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA33	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA34	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA2A	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA42	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA45	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA43	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA23	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA3D	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA39	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA3E	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA40	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA3F	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA1E	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA41	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA44	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
1732194	-	PSX 700 CURE	0.2	Gallon(GAL)	09/15/22
1732195	-	PSX 700 CURE	0.2	Gallon(GAL)	09/15/22
1732196	-	SureFlo Acrylic Gloss Enamel N/B	3.4	Liters(L)	09/15/22
1732197	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/15/22
1732202	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/15/22
1732198	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/15/22
1732199	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/15/22
1732200	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/15/22
1732201	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	09/15/22
1732205	-	TRAFFIC PAINT YELLOW	5	Gallon(GAL)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1690551	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690574	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690595	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690591	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690594	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690593	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690592	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690583	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690552	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690575	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690577	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690578	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690579	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690580	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690576	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690582	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690590	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690584	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690585	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690586	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690573	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690587	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690588	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690589	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690581	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690564	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690557	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690558	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690559	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690560	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690561	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690555	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690554	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690553	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690572	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690556	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690563	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690562	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690565	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690566	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690567	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690568	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690569	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690570	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690571	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1690597	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690596	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690598	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/15/22
1690599	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/15/22
1690607	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/15/22
1690606	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/15/22
1690604	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/15/22
1690608	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/15/22
1690603	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/15/22
1690602	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/15/22
1690601	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/15/22
1690600	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/15/22
1690605	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/15/22
1690609	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/15/22
1690617	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/15/22
1690620	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/15/22
1690618	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/15/22
1690616	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/15/22
1690615	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/15/22
1690613	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/15/22
1690612	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/15/22
1690611	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/15/22
1690610	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/15/22
1690614	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/15/22
1690619	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/15/22
1690624	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/15/22
1690625	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/15/22
1690635	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/15/22
1690633	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/15/22
1690632	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/15/22
1690631	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/15/22
1690630	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/15/22
1690629	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/15/22
1690628	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/15/22
1690626	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/15/22
1690637	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/15/22
1690636	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/15/22
1690627	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/15/22
1690642	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/15/22
1690641	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/15/22
1690640	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/15/22
1690639	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/15/22
1690638	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/15/22
1690634	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/15/22
1690647	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1690644	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/15/22
1690645	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/15/22
1690646	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/15/22
1690643	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/15/22
1690648	74-98-6	PROPANE	50	Gallon(GAL)	09/15/22
1690650	74-98-6	PROPANE	50	Gallon(GAL)	09/15/22
1690649	74-98-6	PROPANE	50	Gallon(GAL)	09/15/22
1690651	74-98-6	PROPANE	11	Cubic Feet(CF)	09/15/22
1690652	74-98-6	PROPANE	11	Cubic Feet(CF)	09/15/22
1690653	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/15/22
1690654	-	Helium Carbon Dioxide	65	Pounds(LB)	09/15/22
1690656	-	Helium Carbon Dioxide	65	Pounds(LB)	09/15/22
1690655	-	Helium Carbon Dioxide	65	Pounds(LB)	09/15/22
V00000CA6D	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA6C	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA6B	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA6A	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA69	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA67	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA6E	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA65	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA66	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA68	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA6F	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA70	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA64	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA72	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA50	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA73	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA74	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA47	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA48	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA49	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA75	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA4A	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA4B	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA71	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA56	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA4C	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA60	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA5F	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA5E	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA5D	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA5C	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA5B	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CA5A	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA59	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA76	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA4E	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA57	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA63	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA77	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA55	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA78	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA54	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA53	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA52	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA51	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA4F	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA4D	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA61	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA62	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA58	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
1732244	-	FLEETGUARD ES	1	Gallon(GAL)	09/15/22
1732249	-	FLEETGUARD ES	1	Gallon(GAL)	09/15/22
1732248	-	FLEETGUARD ES	1	Gallon(GAL)	09/15/22
1732247	-	FLEETGUARD ES	1	Gallon(GAL)	09/15/22
1732246	-	FLEETGUARD ES	1	Gallon(GAL)	09/15/22
1732245	-	FLEETGUARD ES	1	Gallon(GAL)	09/15/22
V00000CA8A	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA79	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA7E	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA7D	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA7C	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA88	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA7A	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA80	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA7F	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA91	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA90	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA8F	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA8E	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA82	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA7B	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA81	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA83	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA84	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA85	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA86	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA87	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CA89	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA8B	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA8D	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
V00000CA8C	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	09/15/22
1732250	-	FLEETGUARD ES	1	Gallon(GAL)	09/15/22
1732253	-	FLEETGUARD ES	1	Gallon(GAL)	09/15/22
1732254	-	FLEETGUARD ES	1	Gallon(GAL)	09/15/22
1732252	-	FLEETGUARD ES	1	Gallon(GAL)	09/15/22
1732251	-	FLEETGUARD ES	1	Gallon(GAL)	09/15/22
1732255	-	BOSS 315 RTV 100% Silicone Sealant	300	Milliliter(ML)	09/15/22
1732262	-	BOSS 315 RTV 100% Silicone Sealant	300	Milliliter(ML)	09/15/22
1732258	-	BOSS 315 RTV 100% Silicone Sealant	300	Milliliter(ML)	09/15/22
1732257	-	BOSS 315 RTV 100% Silicone Sealant	300	Milliliter(ML)	09/15/22
1732259	-	BOSS 315 RTV 100% Silicone Sealant	300	Milliliter(ML)	09/15/22
1732260	-	BOSS 315 RTV 100% Silicone Sealant	300	Milliliter(ML)	09/15/22
1732261	-	BOSS 315 RTV 100% Silicone Sealant	300	Milliliter(ML)	09/15/22
1732264	-	BOSS 315 RTV 100% Silicone Sealant	300	Milliliter(ML)	09/15/22
1732256	-	BOSS 315 RTV 100% Silicone Sealant	300	Milliliter(ML)	09/15/22
1732263	-	BOSS 315 RTV 100% Silicone Sealant	300	Milliliter(ML)	09/15/22
1732265	-	BOSS 315 RTV 100% Silicone Sealant	300	Milliliter(ML)	09/15/22
1732266	-	BOSS 315 RTV 100% Silicone Sealant	300	Milliliter(ML)	09/15/22
1732279	-	Parts Plus DEXRON VI Automatic Transmission Fluid	1	Quarts(QT)	09/15/22
1732284	-	Parts Plus DEXRON VI Automatic Transmission Fluid	1	Quarts(QT)	09/15/22
1732281	-	Parts Plus DEXRON VI Automatic Transmission Fluid	1	Quarts(QT)	09/15/22
1732283	-	Parts Plus DEXRON VI Automatic Transmission Fluid	1	Quarts(QT)	09/15/22
1732285	-	Parts Plus DEXRON VI Automatic Transmission Fluid	1	Quarts(QT)	09/15/22
1732286	-	Parts Plus DEXRON VI Automatic Transmission Fluid	1	Quarts(QT)	09/15/22
1732287	-	Parts Plus DEXRON VI Automatic Transmission Fluid	1	Quarts(QT)	09/15/22
1732288	-	Parts Plus DEXRON VI Automatic Transmission Fluid	1	Quarts(QT)	09/15/22
1732289	-	Parts Plus DEXRON VI Automatic Transmission Fluid	1	Quarts(QT)	09/15/22
1732290	-	Parts Plus DEXRON VI Automatic Transmission Fluid	1	Quarts(QT)	09/15/22
1732280	-	Parts Plus DEXRON VI Automatic Transmission Fluid	1	Quarts(QT)	09/15/22
1732282	-	Parts Plus DEXRON VI Automatic Transmission Fluid	1	Quarts(QT)	09/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1732291	-	Valvoline HIGH PERFORMANCE SAE 75W-90 GEAR OIL	1	Quarts(QT)	09/15/22
1732293	-	Valvoline HIGH PERFORMANCE SAE 75W-90 GEAR OIL	1	Quarts(QT)	09/15/22
1732292	-	Valvoline HIGH PERFORMANCE SAE 75W-90 GEAR OIL	1	Quarts(QT)	09/15/22
1743368	1313-82-2	SODIUM SULFIDE	250	Gram(GM)	09/16/22
1743369	50-99-7	DEXTROSE ANHYDROUS	500	Gram(GM)	09/16/22
1743415	-	LANL-CAL-2B	125	Milliliter(ML)	09/16/22
1743417	-	LANL-CAL-2B	125	Milliliter(ML)	09/16/22
1743418	-	LANL-CAL-2B	125	Milliliter(ML)	09/16/22
1743416	-	LANL-CAL-2B	125	Milliliter(ML)	09/16/22
1743419	-	LANL-CAL-3	125	Milliliter(ML)	09/16/22
1743421	-	LANL-CAL-3	125	Milliliter(ML)	09/16/22
1743420	-	LANL-CAL-3	125	Milliliter(ML)	09/16/22
1743422	-	LANL-CAL-3	125	Milliliter(ML)	09/16/22
1743423	-	LANL-CAL-5	125	Milliliter(ML)	09/16/22
1743424	-	LANL-CAL-5	125	Milliliter(ML)	09/16/22
1743426	-	LANL-CAL-5	125	Milliliter(ML)	09/16/22
1743425	-	LANL-CAL-5	125	Milliliter(ML)	09/16/22
1743427	-	LANL-CAL-6A	120	Milliliter(ML)	09/16/22
1743429	-	LANL-CAL-6A	120	Milliliter(ML)	09/16/22
1743430	-	LANL-CAL-6A	120	Milliliter(ML)	09/16/22
1743428	-	LANL-CAL-6A	120	Milliliter(ML)	09/16/22
1743431	-	LANL-CCS-1A	125	Milliliter(ML)	09/16/22
1743432	-	LANL-CCS-1A	125	Milliliter(ML)	09/16/22
1743433	-	LANL-CCS-4	125	Milliliter(ML)	09/16/22
1743434	-	LANL-CCS-4	125	Milliliter(ML)	09/16/22
1743435	-	LANL-CCS-5	125	Milliliter(ML)	09/16/22
1743436	-	LANL-CCS-5	125	Milliliter(ML)	09/16/22
1743437	-	LANL-CCS-6	125	Milliliter(ML)	09/16/22
1743438	-	LANL-CCS-6	125	Milliliter(ML)	09/16/22
1736551	13826-86-3	NITRONIUM TETRAFLUOROBORATE	25	Milliliter(ML)	09/16/22
1743487	-	Diamond Suspension Water Based Polycrystalline 0.25 Micron	16	Ounces(OZ)	09/16/22
1743493	-	Diamond Suspension Water Based Polycrystalline 0.25 Micron	16	Ounces(OZ)	09/16/22
1743492	-	Diamond Suspension Water Based Polycrystalline 0.25 Micron	16	Ounces(OZ)	09/16/22
1743491	-	Diamond Suspension Water Based Polycrystalline 0.25 Micron	16	Ounces(OZ)	09/16/22
1743490	-	Diamond Suspension Water Based Polycrystalline 0.25 Micron	16	Ounces(OZ)	09/16/22
1743489	-	Diamond Suspension Water Based Polycrystalline 0.25 Micron	16	Ounces(OZ)	09/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1743498	-	Diamond Suspension Water Based Polycrystalline 0.25 Micron	16	Ounces(OZ)	09/16/22
1743494	-	Diamond Suspension Water Based Polycrystalline 0.25 Micron	16	Ounces(OZ)	09/16/22
1743496	-	Diamond Suspension Water Based Polycrystalline 0.25 Micron	16	Ounces(OZ)	09/16/22
1743499	-	Diamond Suspension Water Based Polycrystalline 0.25 Micron	16	Ounces(OZ)	09/16/22
1743502	-	Diamond Suspension Water Based Polycrystalline 0.25 Micron	16	Ounces(OZ)	09/16/22
1743495	-	Diamond Suspension Water Based Polycrystalline 0.25 Micron	16	Ounces(OZ)	09/16/22
1743501	-	Diamond Suspension Water Based Polycrystalline 0.25 Micron	16	Ounces(OZ)	09/16/22
1743500	-	Diamond Suspension Water Based Polycrystalline 0.25 Micron	16	Ounces(OZ)	09/16/22
1743488	-	Diamond Suspension Water Based Polycrystalline 0.25 Micron	16	Ounces(OZ)	09/16/22
1743497	-	Diamond Suspension Water Based Polycrystalline 0.25 Micron	16	Ounces(OZ)	09/16/22
1743329	67-64-1	Acetone Reagent ACS Grade	4	Liters(L)	09/16/22
1743336	67-64-1	Acetone Reagent ACS Grade	4	Liters(L)	09/16/22
1743334	67-64-1	Acetone Reagent ACS Grade	4	Liters(L)	09/16/22
1743333	67-64-1	Acetone Reagent ACS Grade	4	Liters(L)	09/16/22
1743332	67-64-1	Acetone Reagent ACS Grade	4	Liters(L)	09/16/22
1743331	67-64-1	Acetone Reagent ACS Grade	4	Liters(L)	09/16/22
1743330	67-64-1	Acetone Reagent ACS Grade	4	Liters(L)	09/16/22
1743335	67-64-1	Acetone Reagent ACS Grade	4	Liters(L)	09/16/22
1743503	-	Diamond Suspension Water Based Polycrystalline 1 Micron	16	Ounces(OZ)	09/16/22
1743512	-	Diamond Suspension Water Based Polycrystalline 1 Micron	16	Ounces(OZ)	09/16/22
1743513	-	Diamond Suspension Water Based Polycrystalline 1 Micron	16	Ounces(OZ)	09/16/22
1743514	-	Diamond Suspension Water Based Polycrystalline 1 Micron	16	Ounces(OZ)	09/16/22
1743515	-	Diamond Suspension Water Based Polycrystalline 1 Micron	16	Ounces(OZ)	09/16/22
1743516	-	Diamond Suspension Water Based Polycrystalline 1 Micron	16	Ounces(OZ)	09/16/22
1743511	-	Diamond Suspension Water Based Polycrystalline 1 Micron	16	Ounces(OZ)	09/16/22
1743506	-	Diamond Suspension Water Based Polycrystalline 1 Micron	16	Ounces(OZ)	09/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1743517	-	Diamond Suspension Water Based Polycrystalline 1 Micron	16	Ounces(OZ)	09/16/22
1743510	-	Diamond Suspension Water Based Polycrystalline 1 Micron	16	Ounces(OZ)	09/16/22
1743509	-	Diamond Suspension Water Based Polycrystalline 1 Micron	16	Ounces(OZ)	09/16/22
1743507	-	Diamond Suspension Water Based Polycrystalline 1 Micron	16	Ounces(OZ)	09/16/22
1743505	-	Diamond Suspension Water Based Polycrystalline 1 Micron	16	Ounces(OZ)	09/16/22
1743504	-	Diamond Suspension Water Based Polycrystalline 1 Micron	16	Ounces(OZ)	09/16/22
1743508	-	Diamond Suspension Water Based Polycrystalline 1 Micron	16	Ounces(OZ)	09/16/22
1738929	-	HYDRANAL WATER STANDARD 1.00	40	Milliliter(ML)	09/16/22
1743518	-	Diamond Suspension Water Based Polycrystalline 3 Micron	16	Ounces(OZ)	09/16/22
1743522	-	Diamond Suspension Water Based Polycrystalline 3 Micron	16	Ounces(OZ)	09/16/22
1743521	-	Diamond Suspension Water Based Polycrystalline 3 Micron	16	Ounces(OZ)	09/16/22
1743520	-	Diamond Suspension Water Based Polycrystalline 3 Micron	16	Ounces(OZ)	09/16/22
1743524	-	Diamond Suspension Water Based Polycrystalline 3 Micron	16	Ounces(OZ)	09/16/22
1743519	-	Diamond Suspension Water Based Polycrystalline 3 Micron	16	Ounces(OZ)	09/16/22
1743525	-	Diamond Suspension Water Based Polycrystalline 3 Micron	16	Ounces(OZ)	09/16/22
1743526	-	Diamond Suspension Water Based Polycrystalline 3 Micron	16	Ounces(OZ)	09/16/22
1743527	-	Diamond Suspension Water Based Polycrystalline 3 Micron	16	Ounces(OZ)	09/16/22
1743528	-	Diamond Suspension Water Based Polycrystalline 3 Micron	16	Ounces(OZ)	09/16/22
1743529	-	Diamond Suspension Water Based Polycrystalline 3 Micron	16	Ounces(OZ)	09/16/22
1743530	-	Diamond Suspension Water Based Polycrystalline 3 Micron	16	Ounces(OZ)	09/16/22
1743531	-	Diamond Suspension Water Based Polycrystalline 3 Micron	16	Ounces(OZ)	09/16/22
1743532	-	Diamond Suspension Water Based Polycrystalline 3 Micron	16	Ounces(OZ)	09/16/22
1743523	-	Diamond Suspension Water Based Polycrystalline 3 Micron	16	Ounces(OZ)	09/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1738932	-	HYDRANAL WATER STANDARD 1.00	40	Milliliter(ML)	09/16/22
1738933	-	HYDRANAL WATER STANDARD 1.00	40	Milliliter(ML)	09/16/22
1738931	-	HYDRANAL WATER STANDARD 1.00	40	Milliliter(ML)	09/16/22
1738930	-	HYDRANAL WATER STANDARD 1.00	40	Milliliter(ML)	09/16/22
1736552	-	KOD One PCR Master Mix	5	Milliliter(ML)	09/16/22
1743634	23978-09-8	KRYPTOFIX 222	1	Gram(GM)	09/16/22
1743637	23978-09-8	KRYPTOFIX 222	1	Gram(GM)	09/16/22
1743636	23978-09-8	KRYPTOFIX 222	1	Gram(GM)	09/16/22
1743635	23978-09-8	KRYPTOFIX 222	1	Gram(GM)	09/16/22
1743632	4/3/6132	Sodium citrate tribasic dihydrate	500	Gram(GM)	09/16/22
1743633	4/3/6132	Sodium citrate tribasic dihydrate	500	Gram(GM)	09/16/22
1743337	-	SOUNDSAFE	1	Gallon(GAL)	09/16/22
1743533	-	Diamond Suspension Water Based Polycrystalline 6 Micron	16	Ounces(OZ)	09/16/22
1743338	12008-06-9	GADOLINIUM BORIDE	5	Gram(GM)	09/16/22
1743537	-	Diamond Suspension Water Based Polycrystalline 6 Micron	16	Ounces(OZ)	09/16/22
1743538	-	Diamond Suspension Water Based Polycrystalline 6 Micron	16	Ounces(OZ)	09/16/22
1743536	-	Diamond Suspension Water Based Polycrystalline 6 Micron	16	Ounces(OZ)	09/16/22
1743535	-	Diamond Suspension Water Based Polycrystalline 6 Micron	16	Ounces(OZ)	09/16/22
1743534	-	Diamond Suspension Water Based Polycrystalline 6 Micron	16	Ounces(OZ)	09/16/22
1743539	-	Diamond Suspension Water Based Polycrystalline 6 Micron	16	Ounces(OZ)	09/16/22
1743339	311-45-5	Paraoxon-ethyl	100	Milligram(MG)	09/16/22
1743340	10026-11-6	ZIRCONIUM(IV) CHLORIDE	5	Gram(GM)	09/16/22
1743341	7782-61-8	IRON(III) NITRATE NONAHYDRATE	100	Gram(GM)	09/16/22
1743631	64-19-7	ACETIC ACID GLACIAL	100	Milliliter(ML)	09/16/22
1743379	25658-42-8	ZIRCONIUM NITRIDE	3	Kilograms(KG)	09/16/22
1743380	7440-57-5	GOLD	50	Gram(GM)	09/16/22
1743381	10031-22-8	Lead(II) bromide	5	Gram(GM)	09/16/22
1743540	-	Diamond Suspension Water Based Polycrystalline 9 Micron	16	Ounces(OZ)	09/16/22
1743342	1119-49-9	N-Butylacetamide	1	Gram(GM)	09/16/22
1743382	-	Braycote Micronic 803 Vacuum Grease	20	Ounces(OZ)	09/16/22
1743541	-	Diamond Suspension Water Based Polycrystalline 9 Micron	16	Ounces(OZ)	09/16/22
1743548	-	Diamond Suspension Water Based Polycrystalline 9 Micron	16	Ounces(OZ)	09/16/22
1743555	-	Diamond Suspension Water Based Polycrystalline 9 Micron	16	Ounces(OZ)	09/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1743554	-	Diamond Suspension Water Based Polycrystalline 9 Micron	16	Ounces(OZ)	09/16/22
1743553	-	Diamond Suspension Water Based Polycrystalline 9 Micron	16	Ounces(OZ)	09/16/22
1743552	-	Diamond Suspension Water Based Polycrystalline 9 Micron	16	Ounces(OZ)	09/16/22
1743542	-	Diamond Suspension Water Based Polycrystalline 9 Micron	16	Ounces(OZ)	09/16/22
1743543	-	Diamond Suspension Water Based Polycrystalline 9 Micron	16	Ounces(OZ)	09/16/22
1743551	-	Diamond Suspension Water Based Polycrystalline 9 Micron	16	Ounces(OZ)	09/16/22
1743549	-	Diamond Suspension Water Based Polycrystalline 9 Micron	16	Ounces(OZ)	09/16/22
1743547	-	Diamond Suspension Water Based Polycrystalline 9 Micron	16	Ounces(OZ)	09/16/22
1743544	-	Diamond Suspension Water Based Polycrystalline 9 Micron	16	Ounces(OZ)	09/16/22
1743545	-	Diamond Suspension Water Based Polycrystalline 9 Micron	16	Ounces(OZ)	09/16/22
1743546	-	Diamond Suspension Water Based Polycrystalline 9 Micron	16	Ounces(OZ)	09/16/22
1743550	-	Diamond Suspension Water Based Polycrystalline 9 Micron	16	Ounces(OZ)	09/16/22
1743559	-	Diamond Suspension Water Based Polycrystalline 1 Micron	8	Ounces(OZ)	09/16/22
1743561	-	Diamond Suspension Water Based Polycrystalline 1 Micron	8	Ounces(OZ)	09/16/22
1743562	-	Diamond Suspension Water Based Polycrystalline 1 Micron	8	Ounces(OZ)	09/16/22
1743563	-	Diamond Suspension Water Based Polycrystalline 1 Micron	8	Ounces(OZ)	09/16/22
1743565	-	Diamond Suspension Water Based Polycrystalline 1 Micron	8	Ounces(OZ)	09/16/22
1743566	-	Diamond Suspension Water Based Polycrystalline 1 Micron	8	Ounces(OZ)	09/16/22
1743567	-	Diamond Suspension Water Based Polycrystalline 1 Micron	8	Ounces(OZ)	09/16/22
1743568	-	Diamond Suspension Water Based Polycrystalline 1 Micron	8	Ounces(OZ)	09/16/22
1743564	-	Diamond Suspension Water Based Polycrystalline 1 Micron	8	Ounces(OZ)	09/16/22
1743560	-	Diamond Suspension Water Based Polycrystalline 1 Micron	8	Ounces(OZ)	09/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1743569	-	Diamond Suspension Water Based Polycrystalline 3 Micron	8	Ounces(OZ)	09/16/22
1743577	-	Diamond Suspension Water Based Polycrystalline 3 Micron	8	Ounces(OZ)	09/16/22
1743578	-	Diamond Suspension Water Based Polycrystalline 3 Micron	8	Ounces(OZ)	09/16/22
1743576	-	Diamond Suspension Water Based Polycrystalline 3 Micron	8	Ounces(OZ)	09/16/22
1743575	-	Diamond Suspension Water Based Polycrystalline 3 Micron	8	Ounces(OZ)	09/16/22
1743573	-	Diamond Suspension Water Based Polycrystalline 3 Micron	8	Ounces(OZ)	09/16/22
1743571	-	Diamond Suspension Water Based Polycrystalline 3 Micron	8	Ounces(OZ)	09/16/22
1743570	-	Diamond Suspension Water Based Polycrystalline 3 Micron	8	Ounces(OZ)	09/16/22
1743572	-	Diamond Suspension Water Based Polycrystalline 3 Micron	8	Ounces(OZ)	09/16/22
1743574	-	Diamond Suspension Water Based Polycrystalline 3 Micron	8	Ounces(OZ)	09/16/22
1743579	-	Diamond Suspension Water Based Polycrystalline 6 Micron	8	Ounces(OZ)	09/16/22
1743588	-	Diamond Suspension Water Based Polycrystalline 6 Micron	8	Ounces(OZ)	09/16/22
1743587	-	Diamond Suspension Water Based Polycrystalline 6 Micron	8	Ounces(OZ)	09/16/22
1743586	-	Diamond Suspension Water Based Polycrystalline 6 Micron	8	Ounces(OZ)	09/16/22
1743585	-	Diamond Suspension Water Based Polycrystalline 6 Micron	8	Ounces(OZ)	09/16/22
1743584	-	Diamond Suspension Water Based Polycrystalline 6 Micron	8	Ounces(OZ)	09/16/22
1743581	-	Diamond Suspension Water Based Polycrystalline 6 Micron	8	Ounces(OZ)	09/16/22
1743582	-	Diamond Suspension Water Based Polycrystalline 6 Micron	8	Ounces(OZ)	09/16/22
1743580	-	Diamond Suspension Water Based Polycrystalline 6 Micron	8	Ounces(OZ)	09/16/22
1743583	-	Diamond Suspension Water Based Polycrystalline 6 Micron	8	Ounces(OZ)	09/16/22
1743589	-	Diamond Suspension Water Based Polycrystalline 9 Micron	8	Ounces(OZ)	09/16/22
1743596	-	Diamond Suspension Water Based Polycrystalline 9 Micron	8	Ounces(OZ)	09/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1743590	-	Diamond Suspension Water Based Polycrystalline 9 Micron	8	Ounces(OZ)	09/16/22
1743591	-	Diamond Suspension Water Based Polycrystalline 9 Micron	8	Ounces(OZ)	09/16/22
1743592	-	Diamond Suspension Water Based Polycrystalline 9 Micron	8	Ounces(OZ)	09/16/22
1743597	-	Diamond Suspension Water Based Polycrystalline 9 Micron	8	Ounces(OZ)	09/16/22
1743595	-	Diamond Suspension Water Based Polycrystalline 9 Micron	8	Ounces(OZ)	09/16/22
1743594	-	Diamond Suspension Water Based Polycrystalline 9 Micron	8	Ounces(OZ)	09/16/22
1743593	-	Diamond Suspension Water Based Polycrystalline 9 Micron	8	Ounces(OZ)	09/16/22
1743598	-	Diamond Suspension Water Based Polycrystalline 9 Micron	8	Ounces(OZ)	09/16/22
1743235	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743253	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743238	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743263	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743262	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743261	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743260	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743259	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743258	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743257	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743249	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743255	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743237	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743266	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743239	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743240	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743241	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743248	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743247	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743246	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743245	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743244	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743243	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743236	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743275	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743242	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743252	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743251	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743250	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1743264	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743256	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743265	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743274	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743273	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743272	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743271	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743270	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743269	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743268	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743267	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743254	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743294	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743293	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743292	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743291	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743284	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743295	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743283	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743276	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743277	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743278	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743279	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743280	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743286	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743282	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743290	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743301	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743285	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743296	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743287	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743288	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743289	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743281	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743308	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743317	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743316	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743315	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743314	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743313	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743312	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743311	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743309	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743307	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743306	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1743305	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743302	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743298	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743310	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743299	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743303	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743304	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743297	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743300	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743318	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743323	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743324	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743321	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743320	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743319	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743322	7681-52-9	Clorox Concentrated Germicidal Bleach	121	Ounces(OZ)	09/16/22
1743383	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	30	Milligram(MG)	09/16/22
1743384	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	30	Milligram(MG)	09/16/22
1743385	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	30	Milligram(MG)	09/16/22
1743391	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	30	Milligram(MG)	09/16/22
1743387	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	30	Milligram(MG)	09/16/22
1743392	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	30	Milligram(MG)	09/16/22
1743388	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	30	Milligram(MG)	09/16/22
1743390	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	30	Milligram(MG)	09/16/22
1743389	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	30	Milligram(MG)	09/16/22
1743386	-	NitraVer X Nitrogen-Nitrate Reagent Set HR	30	Milligram(MG)	09/16/22
1743393	101-68-8	4 4'-Methylenebis(phenyl isocyanate)	500	Gram(GM)	09/16/22
1743394	-	Triarylsulfonium hexafluoroantimonate salts mixed	25	Milliliter(ML)	09/16/22
1661575	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661615	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661614	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661634	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661613	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661612	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661611	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661616	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661609	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661621	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661635	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661636	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661637	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661638	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661639	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661610	-	Clorox Total 360	128	Ounces(OZ)	09/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1661627	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661640	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661632	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661631	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661630	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661629	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661619	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661625	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661617	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661626	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661624	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661623	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661622	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661620	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661618	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661628	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661577	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661644	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661658	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661657	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661656	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661655	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661654	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661660	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661652	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661661	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661650	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661641	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661648	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661647	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661646	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661645	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661653	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661668	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661633	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661675	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661674	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661673	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661672	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661671	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661659	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661669	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661649	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661667	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661666	-	Clorox Total 360	128	Ounces(OZ)	09/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1661665	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661664	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661663	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661662	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661670	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661598	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661605	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661608	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661607	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661643	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661606	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661651	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661593	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661597	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661592	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661599	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661600	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661601	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661602	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661603	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661604	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661596	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661585	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661642	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661576	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661578	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661579	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661580	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661581	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661582	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661594	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661584	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661595	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661586	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661587	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661588	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661589	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661590	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661591	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1661583	-	Clorox Total 360	128	Ounces(OZ)	09/16/22
1743395	14808-60-7	Quartz rod fused	14	Gram(GM)	09/16/22
1743397	14808-60-7	Quartz rod fused	14	Gram(GM)	09/16/22
1743396	14808-60-7	Quartz rod fused	14	Gram(GM)	09/16/22
1743398	14808-60-7	Quartz rod fused	14	Gram(GM)	09/16/22
1743399	7440-64-4	Ytterbium pieces sublimed 99.9%	5	Gram(GM)	09/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1743400	7440-64-4	Ytterbium pieces sublimed 99.9%	5	Gram(GM)	09/16/22
1743401	79060-88-1	Sodium tetrakis[3 5-bis(trifluoromethyl)phenyl]borate may contain 1-5% water	1	Gram(GM)	09/16/22
1743402	-	Henkel Loctite Frekote 770-NC Semi-Permanent Release Agent	1	Gallon(GAL)	09/16/22
1743654	7440-50-8	COPPER POWDER	50	Gram(GM)	09/16/22
1743657	-	Platinum nominally 20% Ruthenium nominally 10% on Vulcan XC72 Carbon	1	Gram(GM)	09/16/22
1743658	-	TRYPLE EXPRESS	500	Milliliter(ML)	09/16/22
1743659	7646-69-7	Sodium hydride 57-63% oil dispersion	50	Gram(GM)	09/16/22
1743660	67-66-3	CHLOROFORM	500	Milliliter(ML)	09/16/22
1423139	-	Polywater J Winter Grade Lubricant	1	Quarts(QT)	09/19/22
1423140	-	Polywater J Winter Grade Lubricant	1	Quarts(QT)	09/19/22
1423141	-	Polywater J Winter Grade Lubricant	1	Quarts(QT)	09/19/22
1423137	-	Polywater J Winter Grade Lubricant	1	Quarts(QT)	09/19/22
1719964	-	PSX 700 pearl gray resin	1	Gallon(GAL)	09/19/22
1719967	-	PSX 700 pearl gray resin	1	Gallon(GAL)	09/19/22
1719966	-	PSX 700 pearl gray resin	1	Gallon(GAL)	09/19/22
1719965	-	PSX 700 pearl gray resin	1	Gallon(GAL)	09/19/22
1719968	-	PSX 700A Clear Coat Resin	1	Gallon(GAL)	09/19/22
1719971	-	PSX 700A Clear Coat Resin	1	Gallon(GAL)	09/19/22
1719970	-	PSX 700A Clear Coat Resin	1	Gallon(GAL)	09/19/22
1719969	-	PSX 700A Clear Coat Resin	1	Gallon(GAL)	09/19/22
1719972	-	PSX 700A CLEAR COAT CURE	0.17	Gallon(GAL)	09/19/22
1719975	-	PSX 700A CLEAR COAT CURE	0.17	Gallon(GAL)	09/19/22
1719974	-	PSX 700A CLEAR COAT CURE	0.17	Gallon(GAL)	09/19/22
1719973	-	PSX 700A CLEAR COAT CURE	0.17	Gallon(GAL)	09/19/22
1719976	-	PSX 700 CURE	0.2	Gallon(GAL)	09/19/22
1719977	-	PSX 700 CURE	0.2	Gallon(GAL)	09/19/22
1719978	-	PSX 700 CURE	0.2	Gallon(GAL)	09/19/22
1719979	-	PSX 700 CURE	0.2	Gallon(GAL)	09/19/22
1539408	111-42-2	DIETHANOLAMINE	1	Liters(L)	09/20/22
1660481	-	COPPER WIRE	100	Gram(GM)	09/20/22
1660477	-	COPPER WIRE	100	Gram(GM)	09/20/22
1660478	-	COPPER WIRE	100	Gram(GM)	09/20/22
1660479	-	COPPER WIRE	100	Gram(GM)	09/20/22
1660480	-	COPPER WIRE	100	Gram(GM)	09/20/22
1660483	-	SILVERED COBALT (II III) OXIDE	25	Gram(GM)	09/20/22
1660484	-	SILVERED COBALT (II III) OXIDE	25	Gram(GM)	09/20/22
1660485	-	SILVERED COBALT (II III) OXIDE	25	Gram(GM)	09/20/22
1660482	-	SILVERED COBALT (II III) OXIDE	25	Gram(GM)	09/20/22
1743685	64-17-5	Molecular Biology Grade Ethanol (200 Proof)	500	Milliliter(ML)	09/20/22
1743689	64-17-5	Molecular Biology Grade Ethanol (200 Proof)	500	Milliliter(ML)	09/20/22
1743688	64-17-5	Molecular Biology Grade Ethanol (200 Proof)	500	Milliliter(ML)	09/20/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1743687	64-17-5	Molecular Biology Grade Ethanol (200 Proof)	500	Milliliter(ML)	09/20/22
1743686	64-17-5	Molecular Biology Grade Ethanol (200 Proof)	500	Milliliter(ML)	09/20/22
1743690	64-17-5	Molecular Biology Grade Ethanol (200 Proof)	500	Milliliter(ML)	09/20/22
1728626	-	CSPE Welding Solution	5	Gallon(GAL)	09/21/22
1728627	-	CSPE Welding Solution	5	Gallon(GAL)	09/21/22
1728628	-	CSPE Welding Solution	5	Gallon(GAL)	09/21/22
1728629	-	CSPE Welding Solution	5	Gallon(GAL)	09/21/22
1728703	-	ARDEX MRF	10	Pounds(LB)	09/21/22
1728708	-	SikaTop Seal-107 CA Part A	1	Gallon(GAL)	09/21/22
1728711	-	SikaTop Seal-107 CA Part A	1	Gallon(GAL)	09/21/22
1728710	-	SikaTop Seal-107 CA Part A	1	Gallon(GAL)	09/21/22
1728709	-	SikaTop Seal-107 CA Part A	1	Gallon(GAL)	09/21/22
1732206	-	ULTRABOND ECO 575	11	Ounces(OZ)	09/21/22
1732207	-	ULTRABOND ECO 575	11	Ounces(OZ)	09/21/22
1732267	-	Marking Chalk Blue	8	Ounces(OZ)	09/21/22
1732274	-	Marking Chalk Blue	8	Ounces(OZ)	09/21/22
1732276	-	Marking Chalk Blue	8	Ounces(OZ)	09/21/22
1732278	-	Marking Chalk Blue	8	Ounces(OZ)	09/21/22
1732275	-	Marking Chalk Blue	8	Ounces(OZ)	09/21/22
1732272	-	Marking Chalk Blue	8	Ounces(OZ)	09/21/22
1732271	-	Marking Chalk Blue	8	Ounces(OZ)	09/21/22
1732270	-	Marking Chalk Blue	8	Ounces(OZ)	09/21/22
1732273	-	Marking Chalk Blue	8	Ounces(OZ)	09/21/22
1732268	-	Marking Chalk Blue	8	Ounces(OZ)	09/21/22
1732269	-	Marking Chalk Blue	8	Ounces(OZ)	09/21/22
1732277	-	Marking Chalk Blue	8	Ounces(OZ)	09/21/22
1718935	7365-45-9	HEPES BUFFER 1M SOLUTION	100	Milliliter(ML)	09/21/22
1676285	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	09/21/22
1690752	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/22/22
1690755	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/22/22
1690758	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/22/22
1690771	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/22/22
1690756	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/22/22
1690754	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/22/22
1690753	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/22/22
1690757	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/22/22
1690768	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/22/22
1690777	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/22/22
1690776	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/22/22
1690775	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/22/22
1690774	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/22/22
1690773	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/22/22
1690772	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/22/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1690769	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/22/22
1690770	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/22/22
1690760	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/22/22
1690767	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/22/22
1690766	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/22/22
1690765	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/22/22
1690764	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/22/22
1690763	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/22/22
1690762	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/22/22
1690759	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/22/22
1690761	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/22/22
1690778	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/22/22
1690787	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/22/22
1690779	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/22/22
1690780	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/22/22
1690781	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/22/22
1690782	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/22/22
1690783	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/22/22
1690784	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/22/22
1690786	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/22/22
1690788	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/22/22
1690789	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/22/22
1690790	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/22/22
1690791	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/22/22
1690785	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/22/22
1690724	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/22/22
1690734	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/22/22
1690733	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/22/22
1690732	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/22/22
1690731	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/22/22
1690730	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/22/22
1690729	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/22/22
1690728	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/22/22
1690727	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/22/22
1690726	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/22/22
1690725	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/22/22
1690792	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	09/22/22
1690805	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	09/22/22
1690793	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	09/22/22
1690804	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	09/22/22
1690803	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	09/22/22
1690802	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	09/22/22
1690801	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	09/22/22
1690800	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	09/22/22
1690799	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	09/22/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1690798	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	09/22/22
1690797	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	09/22/22
1690796	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	09/22/22
1690795	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	09/22/22
1690806	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	09/22/22
1690794	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	09/22/22
1690807	Multi	Ammonia 4995 PPM/Bal Nitrogen	150	Cubic Feet(CF)	09/22/22
1690809	Multi	Ammonia 4995 PPM/Bal Nitrogen	150	Cubic Feet(CF)	09/22/22
1690808	Multi	Ammonia 4995 PPM/Bal Nitrogen	150	Cubic Feet(CF)	09/22/22
1690657	7440-59-7	HELIUM REFRIGERATED LIQUID (CRYOGENIC LIQUID)	500	Liters(L)	09/22/22
1690659	-	OPTEON XP10 (R513A) REFRIGERANT	47	Cubic Feet(CF)	09/22/22
1690660	-	OPTEON XP10 (R513A) REFRIGERANT	47	Cubic Feet(CF)	09/22/22
1690661	-	OPTEON XP10 (R513A) REFRIGERANT	47	Cubic Feet(CF)	09/22/22
1690662	-	OPTEON XP10 (R513A) REFRIGERANT	47	Cubic Feet(CF)	09/22/22
1690693	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690721	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690714	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690710	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690696	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690711	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690712	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690716	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690717	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690718	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690709	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690720	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690703	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690719	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690708	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690707	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690706	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690722	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690704	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690715	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690702	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690701	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690700	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690699	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690698	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690697	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690705	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690713	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690695	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690694	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1690688	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690686	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690679	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690681	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690682	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690664	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690683	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690691	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690684	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690685	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690690	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690689	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690692	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690671	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690678	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690677	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690676	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690675	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690674	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690673	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690687	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690672	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690680	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690670	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690669	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690668	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690667	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690666	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690665	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/22/22
1690658	-	Methane Nitrogen	0.006	Kilograms(KG)	09/22/22
1690723	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	09/22/22
1690735	-	Compressed Air	220	Cubic Feet(CF)	09/22/22
1690743	-	Compressed Air	220	Cubic Feet(CF)	09/22/22
1690736	-	Compressed Air	220	Cubic Feet(CF)	09/22/22
1690742	-	Compressed Air	220	Cubic Feet(CF)	09/22/22
1690741	-	Compressed Air	220	Cubic Feet(CF)	09/22/22
1690739	-	Compressed Air	220	Cubic Feet(CF)	09/22/22
1690738	-	Compressed Air	220	Cubic Feet(CF)	09/22/22
1690737	-	Compressed Air	220	Cubic Feet(CF)	09/22/22
1690740	-	Compressed Air	220	Cubic Feet(CF)	09/22/22
1690744	-	Compressed Air	40	Cubic Feet(CF)	09/22/22
1690746	-	Compressed Air	40	Cubic Feet(CF)	09/22/22
1690745	-	Compressed Air	40	Cubic Feet(CF)	09/22/22
1690747	-	HYDROGEN GAS	40	Cubic Feet(CF)	09/22/22
1690748	-	HYDROGEN GAS	40	Cubic Feet(CF)	09/22/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1690749	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	09/22/22
1690750	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	09/22/22
1690751	-	OXYGEN COMPRESSED GAS	125	Cubic Feet(CF)	09/22/22
1732114	-	DUPLI-COLOR Acrylic Enamel Aerosol Paint - Semi-Gloss Black	12	Ounces(OZ)	09/22/22
1732115	-	DUPLI-COLOR Acrylic Enamel Aerosol Paint - Semi-Gloss Black	12	Ounces(OZ)	09/22/22
1690810	-	25ppm Hydrogen Chloride/Balance Nitrogen	220	Cubic Feet(CF)	09/22/22
1690811	-	25ppm Hydrogen Chloride/Balance Nitrogen	220	Cubic Feet(CF)	09/22/22
1690812	-	25ppm Hydrogen Chloride/Balance Nitrogen	220	Cubic Feet(CF)	09/22/22
1690813	-	25ppm Hydrogen Chloride/Balance Nitrogen	220	Cubic Feet(CF)	09/22/22
1690814	-	2000ppm Hydrogen Fluoride Balance Nitrogen	220	Cubic Feet(CF)	09/22/22
1690816	-	2000ppm Hydrogen Fluoride Balance Nitrogen	220	Cubic Feet(CF)	09/22/22
1690819	-	2000ppm Hydrogen Fluoride Balance Nitrogen	220	Cubic Feet(CF)	09/22/22
1690820	-	2000ppm Hydrogen Fluoride Balance Nitrogen	220	Cubic Feet(CF)	09/22/22
1690815	-	2000ppm Hydrogen Fluoride Balance Nitrogen	220	Cubic Feet(CF)	09/22/22
1690817	-	2000ppm Hydrogen Fluoride Balance Nitrogen	220	Cubic Feet(CF)	09/22/22
1690818	-	2000ppm Hydrogen Fluoride Balance Nitrogen	220	Cubic Feet(CF)	09/22/22
1690821	7664-41-7	Ammonia Anhydrous	220	Cubic Feet(CF)	09/22/22
1690825	7664-41-7	Ammonia Anhydrous	220	Cubic Feet(CF)	09/22/22
1690830	7664-41-7	Ammonia Anhydrous	220	Cubic Feet(CF)	09/22/22
1690829	7664-41-7	Ammonia Anhydrous	220	Cubic Feet(CF)	09/22/22
1690828	7664-41-7	Ammonia Anhydrous	220	Cubic Feet(CF)	09/22/22
1690826	7664-41-7	Ammonia Anhydrous	220	Cubic Feet(CF)	09/22/22
1690824	7664-41-7	Ammonia Anhydrous	220	Cubic Feet(CF)	09/22/22
1690823	7664-41-7	Ammonia Anhydrous	220	Cubic Feet(CF)	09/22/22
1690827	7664-41-7	Ammonia Anhydrous	220	Cubic Feet(CF)	09/22/22
1690822	7664-41-7	Ammonia Anhydrous	220	Cubic Feet(CF)	09/22/22
1721337	-	LOCTITE 242 THREADLOCKER	8.45	Ounces(OZ)	09/22/22
1743664	-	OBJET VEROBLUE RGD840	1	Kilograms(KG)	09/22/22
1743665	-	OBJET VEROBLUE RGD840	1	Kilograms(KG)	09/22/22
1743666	-	OBJET VEROBLUE RGD840	1	Kilograms(KG)	09/22/22
1743667	-	OBJET VEROBLUE RGD840	1	Kilograms(KG)	09/22/22
1743708	1310-73-2	SODIUM HYDROXIDE PELLETS	1	Kilograms(KG)	09/22/22
1743710	90-15-3	1-NAPHTHOL	100	Gram(GM)	09/22/22
1743414	7681-11-0	Potassium Iodide ACS Reagent 99%	2.5	Kilograms(KG)	09/22/22
1719799	-	CHAIN & CABLE LUBRICANT	1	Liters(L)	09/22/22
1719805	-	CHAIN & CABLE LUBRICANT	1	Liters(L)	09/22/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1719804	-	CHAIN & CABLE LUBRICANT	1	Liters(L)	09/22/22
1719801	-	CHAIN & CABLE LUBRICANT	1	Liters(L)	09/22/22
1719803	-	CHAIN & CABLE LUBRICANT	1	Liters(L)	09/22/22
1719800	-	CHAIN & CABLE LUBRICANT	1	Liters(L)	09/22/22
1719806	-	CHAIN & CABLE LUBRICANT	1	Liters(L)	09/22/22
1719802	-	CHAIN & CABLE LUBRICANT	1	Liters(L)	09/22/22
1719807	-	CHAIN & CABLE LUBRICANT	1	Liters(L)	09/22/22
1719808	-	CHAIN & CABLE LUBRICANT	1	Liters(L)	09/22/22
1719869	-	CHAIN & CABLE LUBRICANT	1	Liters(L)	09/22/22
1719870	-	CHAIN & CABLE LUBRICANT	1	Liters(L)	09/22/22
1719868	-	FOAM SEALANT	250	Milliliter(ML)	09/22/22
1437247	-	Propylene Glycol USP	55	Gallon(GAL)	09/23/22
1437248	-	Propylene Glycol USP	55	Gallon(GAL)	09/23/22
1642022	-	VELOCITE OIL 3	5	Gallon(GAL)	09/23/22
1642027	-	VELOCITE OIL 3	5	Gallon(GAL)	09/23/22
1642026	-	VELOCITE OIL 3	5	Gallon(GAL)	09/23/22
1642025	-	VELOCITE OIL 3	5	Gallon(GAL)	09/23/22
1642024	-	VELOCITE OIL 3	5	Gallon(GAL)	09/23/22
1642023	-	VELOCITE OIL 3	5	Gallon(GAL)	09/23/22
1642059	64742-54-7	TCS Slideway Lubricant	5	Gallon(GAL)	09/23/22
1437367	-	Blue Monster PTFE Thread Seal Tape	1	Pint(PT)	09/23/22
1437376	-	Blue Monster PTFE Thread Seal Tape	1	Pint(PT)	09/23/22
1437377	-	Blue Monster PTFE Thread Seal Tape	1	Pint(PT)	09/23/22
1437382	-	Blue Monster PTFE Thread Seal Tape	1	Pint(PT)	09/23/22
1437374	-	Blue Monster PTFE Thread Seal Tape	1	Pint(PT)	09/23/22
1437373	-	Blue Monster PTFE Thread Seal Tape	1	Pint(PT)	09/23/22
1437371	-	Blue Monster PTFE Thread Seal Tape	1	Pint(PT)	09/23/22
1437370	-	Blue Monster PTFE Thread Seal Tape	1	Pint(PT)	09/23/22
1437369	-	Blue Monster PTFE Thread Seal Tape	1	Pint(PT)	09/23/22
1437368	-	Blue Monster PTFE Thread Seal Tape	1	Pint(PT)	09/23/22
1437375	-	Blue Monster PTFE Thread Seal Tape	1	Pint(PT)	09/23/22
1437388	-	Blue Monster PTFE Thread Seal Tape	1	Pint(PT)	09/23/22
1437378	-	Blue Monster PTFE Thread Seal Tape	1	Pint(PT)	09/23/22
1437383	-	Blue Monster PTFE Thread Seal Tape	1	Pint(PT)	09/23/22
1437384	-	Blue Monster PTFE Thread Seal Tape	1	Pint(PT)	09/23/22
1437385	-	Blue Monster PTFE Thread Seal Tape	1	Pint(PT)	09/23/22
1437372	-	Blue Monster PTFE Thread Seal Tape	1	Pint(PT)	09/23/22
1437387	-	Blue Monster PTFE Thread Seal Tape	1	Pint(PT)	09/23/22
1437389	-	Blue Monster PTFE Thread Seal Tape	1	Pint(PT)	09/23/22
1437390	-	Blue Monster PTFE Thread Seal Tape	1	Pint(PT)	09/23/22
1437381	-	Blue Monster PTFE Thread Seal Tape	1	Pint(PT)	09/23/22
1437380	-	Blue Monster PTFE Thread Seal Tape	1	Pint(PT)	09/23/22
1437379	-	Blue Monster PTFE Thread Seal Tape	1	Pint(PT)	09/23/22
1437386	-	Blue Monster PTFE Thread Seal Tape	1	Pint(PT)	09/23/22
1743662	538-75-0	N N'-DICYCLOHEXYLCARBODIIMIDE 99%	100	Gram(GM)	09/23/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1743410	2206-27-1	Dimethyl sulfoxide-d6 99.9 atom % D	5	Gram(GM)	09/23/22
1743411	7772-98-7	SODIUM THIOSULFATE	2.5	Kilograms(KG)	09/23/22
1743412	1173018-62-6	Imidazole-13C 15N2 (Major)	5	Milligram(MG)	09/23/22
1743413	1173018-62-6	Imidazole-13C 15N2 (Major)	50	Milligram(MG)	09/23/22
1743407	21679-31-2	Tris(2 4-pentanedionato)chromium(III)	25	Gram(GM)	09/23/22
1743661	39160-31-1	4-Fluoropyridine Hydrochloride	5	Gram(GM)	09/23/22
1743409	112-07-2	2-BUTOXYETHYL ACETATE	25	Milliliter(ML)	09/23/22
1743408	-	TORR SEAL EPOXY	118	Gram(GM)	09/23/22
1743406	1445-75-6	DIISOPROPYL METHYLPHOSPHONATE	25	Gram(GM)	09/23/22
1743663	7664-93-9	Sulfuric Acid 5.00 N	4	Liters(L)	09/23/22
1743674	7732-18-5	Amtax Expulsion Solution 237 mL	237	Milliliter(ML)	09/23/22
1743677	7732-18-5	Amtax Expulsion Solution 237 mL	237	Milliliter(ML)	09/23/22
1743679	7732-18-5	Amtax Expulsion Solution 237 mL	237	Milliliter(ML)	09/23/22
1743680	7732-18-5	Amtax Expulsion Solution 237 mL	237	Milliliter(ML)	09/23/22
1743675	7732-18-5	Amtax Expulsion Solution 237 mL	237	Milliliter(ML)	09/23/22
1743678	7732-18-5	Amtax Expulsion Solution 237 mL	237	Milliliter(ML)	09/23/22
1743676	7732-18-5	Amtax Expulsion Solution 237 mL	237	Milliliter(ML)	09/23/22
1743682	7732-18-5	Amtax Expulsion Solution 237 mL	237	Milliliter(ML)	09/23/22
1743681	7732-18-5	Amtax Expulsion Solution 237 mL	237	Milliliter(ML)	09/23/22
1743683	7732-18-5	Amtax Expulsion Solution 237 mL	237	Milliliter(ML)	09/23/22
1743670	-	Support SUP706 B	1	Kilograms(KG)	09/23/22
1743671	-	Support SUP706 B	1	Kilograms(KG)	09/23/22
1743672	-	Support SUP706 B	1	Kilograms(KG)	09/23/22
1743673	-	Support SUP706 B	1	Kilograms(KG)	09/23/22
1743668	-	OBJET VEROCLEAR RGD810	1	Kilograms(KG)	09/23/22
1743669	-	OBJET VEROCLEAR RGD810	1	Kilograms(KG)	09/23/22
1743684	58885-58-8	3-(Boc-amino)-1-propanol 97%	10	Milliliter(ML)	09/23/22
1743703	7648-30-8	Ethyl iododifluoroacetate 98%	25	Gram(GM)	09/23/22
1743704	7648-30-8	Ethyl iododifluoroacetate 98%	25	Gram(GM)	09/23/22
1743705	7648-30-8	Ethyl iododifluoroacetate 98%	25	Gram(GM)	09/23/22
1743604	-	ESI Negative Calibration Solution for the SCIEX X500 System	100	Milliliter(ML)	09/23/22
1743605	-	ESI Negative Calibration Solution for the SCIEX X500 System	100	Milliliter(ML)	09/23/22
1743608	-	ESI Negative Calibration Solution for the SCIEX X500 System	100	Milliliter(ML)	09/23/22
1743606	-	ESI Negative Calibration Solution for the SCIEX X500 System	100	Milliliter(ML)	09/23/22
1743607	-	ESI Negative Calibration Solution for the SCIEX X500 System	100	Milliliter(ML)	09/23/22
1743706	141-78-6	Ethyl acetate anhydrous 99.8%	1	Liters(L)	09/23/22
1743707	141-78-6	Ethyl acetate anhydrous 99.8%	1	Liters(L)	09/23/22
1743709	7647-01-0	Hydrochloric acid ACS Reagent 37%	2.5	Liters(L)	09/23/22
1743403	-	UNIVOLT N 61 B	55	Gallon(GAL)	09/26/22
1743404	-	UNIVOLT N 61 B	55	Gallon(GAL)	09/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1743405	-	UNIVOLT N 61 B	55	Gallon(GAL)	09/26/22
1743655	67-56-1	METHANOL ANHYDROUS	4	Liters(L)	09/26/22
1743656	67-56-1	METHANOL ANHYDROUS	4	Liters(L)	09/26/22
1690831	7440-59-7	HELIUM REFRIGERATED LIQUID (CRYOGENIC LIQUID)	100	Liters(L)	09/26/22
1719980	-	POURABLE SEALER	0.5	Gallon(GAL)	09/26/22
1719983	-	POURABLE SEALER	0.5	Gallon(GAL)	09/26/22
1719982	-	POURABLE SEALER	0.5	Gallon(GAL)	09/26/22
1719981	-	POURABLE SEALER	0.5	Gallon(GAL)	09/26/22
1690982	74-98-6	PROPANE	5	Gallon(GAL)	09/27/22
1690921	74-98-6	PROPANE	11	Gallon(GAL)	09/27/22
1690920	74-98-6	PROPANE	11	Gallon(GAL)	09/27/22
1690919	74-98-6	PROPANE	11	Gallon(GAL)	09/27/22
1690918	74-98-6	PROPANE	11	Gallon(GAL)	09/27/22
1690916	74-98-6	PROPANE	11	Gallon(GAL)	09/27/22
1690914	74-98-6	PROPANE	11	Gallon(GAL)	09/27/22
1690913	74-98-6	PROPANE	11	Gallon(GAL)	09/27/22
1690912	74-98-6	PROPANE	11	Gallon(GAL)	09/27/22
1690911	74-98-6	PROPANE	11	Gallon(GAL)	09/27/22
1690910	74-98-6	PROPANE	11	Gallon(GAL)	09/27/22
1690909	74-98-6	PROPANE	11	Gallon(GAL)	09/27/22
1690915	74-98-6	PROPANE	11	Gallon(GAL)	09/27/22
1690917	74-98-6	PROPANE	11	Gallon(GAL)	09/27/22
1690983	74-82-8	METHANE	220	Cubic Feet(CF)	09/27/22
1690986	74-82-8	METHANE	220	Cubic Feet(CF)	09/27/22
1690985	74-82-8	METHANE	220	Cubic Feet(CF)	09/27/22
1690987	74-82-8	METHANE	220	Cubic Feet(CF)	09/27/22
1690988	74-82-8	METHANE	220	Cubic Feet(CF)	09/27/22
1690994	74-82-8	METHANE	220	Cubic Feet(CF)	09/27/22
1690993	74-82-8	METHANE	220	Cubic Feet(CF)	09/27/22
1690992	74-82-8	METHANE	220	Cubic Feet(CF)	09/27/22
1690991	74-82-8	METHANE	220	Cubic Feet(CF)	09/27/22
1690990	74-82-8	METHANE	220	Cubic Feet(CF)	09/27/22
1690989	74-82-8	METHANE	220	Cubic Feet(CF)	09/27/22
1690984	74-82-8	METHANE	220	Cubic Feet(CF)	09/27/22
1690894	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/27/22
1690898	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/27/22
1690903	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/27/22
1690908	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/27/22
1690907	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/27/22
1690906	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/27/22
1690905	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/27/22
1690904	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/27/22
1690902	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/27/22
1690901	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/27/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1690899	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/27/22
1690897	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/27/22
1690896	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/27/22
1690895	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/27/22
1690900	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	09/27/22
1690922	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/27/22
1690927	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/27/22
1690937	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/27/22
1690923	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/27/22
1690924	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/27/22
1690925	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/27/22
1690926	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/27/22
1690941	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/27/22
1690951	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/27/22
1690950	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/27/22
1690949	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/27/22
1690948	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/27/22
1690947	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/27/22
1690946	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/27/22
1690945	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/27/22
1690944	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/27/22
1690933	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/27/22
1690942	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/27/22
1690928	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/27/22
1690940	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/27/22
1690939	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/27/22
1690938	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/27/22
1690934	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/27/22
1690935	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/27/22
1690932	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/27/22
1690931	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/27/22
1690930	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/27/22
1690929	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/27/22
1690943	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/27/22
1690936	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	09/27/22
1690952	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690968	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690953	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690954	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690955	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690956	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690957	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690958	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690959	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690960	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1690961	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690962	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690964	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690967	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690963	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690969	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690970	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690971	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690972	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690973	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690974	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690975	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690976	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690977	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690978	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690979	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690980	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690981	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690966	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690965	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690853	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690848	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690849	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690850	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690852	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690854	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690855	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690856	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690857	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690858	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690859	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690860	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690861	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690862	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690851	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690863	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	09/27/22
1690832	-	SULPHUR HEXAFLUORIDE	20	Cubic Feet(CF)	09/27/22
1690833	-	SULPHUR HEXAFLUORIDE	20	Cubic Feet(CF)	09/27/22
1690834	-	Compressed Air	220	Cubic Feet(CF)	09/27/22
1690846	-	Compressed Air	220	Cubic Feet(CF)	09/27/22
1690844	-	Compressed Air	220	Cubic Feet(CF)	09/27/22
1690843	-	Compressed Air	220	Cubic Feet(CF)	09/27/22
1690842	-	Compressed Air	220	Cubic Feet(CF)	09/27/22
1690845	-	Compressed Air	220	Cubic Feet(CF)	09/27/22
1690847	-	Compressed Air	220	Cubic Feet(CF)	09/27/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1690840	-	Compressed Air	220	Cubic Feet(CF)	09/27/22
1690835	-	Compressed Air	220	Cubic Feet(CF)	09/27/22
1690836	-	Compressed Air	220	Cubic Feet(CF)	09/27/22
1690837	-	Compressed Air	220	Cubic Feet(CF)	09/27/22
1690839	-	Compressed Air	220	Cubic Feet(CF)	09/27/22
1690838	-	Compressed Air	220	Cubic Feet(CF)	09/27/22
1690841	-	Compressed Air	220	Cubic Feet(CF)	09/27/22
1690864	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/27/22
1690879	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/27/22
1690878	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/27/22
1690877	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/27/22
1690876	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/27/22
1690875	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/27/22
1690874	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/27/22
1690873	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/27/22
1690865	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/27/22
1690871	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/27/22
1690872	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/27/22
1690866	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/27/22
1690867	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/27/22
1690868	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/27/22
1690869	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/27/22
1690870	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/27/22
1690891	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/27/22
1690893	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/27/22
1690887	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/27/22
1690892	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/27/22
1690884	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/27/22
1690886	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/27/22
1690885	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/27/22
1690889	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/27/22
1690882	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/27/22
1690881	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/27/22
1690880	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/27/22
1690888	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/27/22
1690890	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/27/22
1690883	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	09/27/22
1717913	-	Kalex 42223 Part A	3.5	Gram(GM)	09/27/22
1717911	67-64-1	ACETONE	500	Milliliter(ML)	09/27/22
1717912	67-64-1	ACETONE	500	Milliliter(ML)	09/27/22
171905	64-17-5	ALCOHOL	500	Milliliter(ML)	09/27/22
1717908	64-17-5	ALCOHOL	500	Milliliter(ML)	09/27/22
1717906	64-17-5	ALCOHOL	500	Milliliter(ML)	09/27/22
1717910	64-17-5	ALCOHOL	500	Milliliter(ML)	09/27/22
1717909	64-17-5	ALCOHOL	500	Milliliter(ML)	09/27/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1717907	64-17-5	ALCOHOL	500	Milliliter(ML)	09/27/22
1717281	13465-08-2	HYDROXYLAMINE NITRATE	1000	Milliliter(ML)	09/27/22
1717280	13465-08-2	HYDROXYLAMINE NITRATE	1000	Milliliter(ML)	09/27/22
1717279	13465-08-2	HYDROXYLAMINE NITRATE	1000	Milliliter(ML)	09/27/22
1717284	13465-08-2	HYDROXYLAMINE NITRATE	1000	Milliliter(ML)	09/27/22
1717282	13465-08-2	HYDROXYLAMINE NITRATE	1000	Milliliter(ML)	09/27/22
1717283	13465-08-2	HYDROXYLAMINE NITRATE	1000	Milliliter(ML)	09/27/22
1717285	13465-08-2	HYDROXYLAMINE NITRATE	1000	Milliliter(ML)	09/27/22
1715899	-	SPECIAL WAY OIL 68 SEMI-SYNTHETIC FORMULA	1	Gallon(GAL)	09/28/22
1715902	-	SPECIAL WAY OIL 68 SEMI-SYNTHETIC FORMULA	1	Gallon(GAL)	09/28/22
1715901	-	SPECIAL WAY OIL 68 SEMI-SYNTHETIC FORMULA	1	Gallon(GAL)	09/28/22
1715900	-	SPECIAL WAY OIL 68 SEMI-SYNTHETIC FORMULA	1	Gallon(GAL)	09/28/22
1743619	10034-85-2	Hydriodic acid contains no stabilizer ACS reagent 55%	1	Liters(L)	09/28/22
1743627	10034-85-2	Hydriodic acid contains no stabilizer ACS reagent 55%	1	Liters(L)	09/28/22
1743630	10034-85-2	Hydriodic acid contains no stabilizer ACS reagent 55%	1	Liters(L)	09/28/22
1743622	10034-85-2	Hydriodic acid contains no stabilizer ACS reagent 55%	1	Liters(L)	09/28/22
1743623	10034-85-2	Hydriodic acid contains no stabilizer ACS reagent 55%	1	Liters(L)	09/28/22
1743624	10034-85-2	Hydriodic acid contains no stabilizer ACS reagent 55%	1	Liters(L)	09/28/22
1743625	10034-85-2	Hydriodic acid contains no stabilizer ACS reagent 55%	1	Liters(L)	09/28/22
1743626	10034-85-2	Hydriodic acid contains no stabilizer ACS reagent 55%	1	Liters(L)	09/28/22
1743621	10034-85-2	Hydriodic acid contains no stabilizer ACS reagent 55%	1	Liters(L)	09/28/22
1743629	10034-85-2	Hydriodic acid contains no stabilizer ACS reagent 55%	1	Liters(L)	09/28/22
1743620	10034-85-2	Hydriodic acid contains no stabilizer ACS reagent 55%	1	Liters(L)	09/28/22
1743628	10034-85-2	Hydriodic acid contains no stabilizer ACS reagent 55%	1	Liters(L)	09/28/22
1742329	-	pHrodo Red AM Intracellular pH Indicator	1	Milligram(MG)	09/28/22
1743914	7791-25-5	SULFURYL CHLORIDE	100	Milliliter(ML)	09/28/22
1719356	-	PSX 700 pearl gray resin	3.03	Liters(L)	09/28/22
1719357	-	PSX 700 pearl gray resin	3.03	Liters(L)	09/28/22
1719354	-	PSX 700 CURE	0.76	Liters(L)	09/28/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1719355	-	PSX 700 CURE	0.76	Liters(L)	09/28/22
1719358	-	LOCTITE 401	0.7	Ounces(OZ)	09/28/22
1719359	-	LOCTITE 401	0.7	Ounces(OZ)	09/28/22
1719360	-	LOCTITE 401	0.7	Ounces(OZ)	09/28/22
1719361	-	LOCTITE 401	0.7	Ounces(OZ)	09/28/22
1719362	-	LOCTITE 271	8.45	Ounces(OZ)	09/28/22
1719363	-	LOCTITE 271	8.45	Ounces(OZ)	09/28/22
1719364	-	LOCTITE 271	8.45	Ounces(OZ)	09/28/22
1743917	74507-62-3	BIS(PENTAMETHYLCYCLOPENTADIENYL)COBALT	1	Gram(GM)	09/28/22
1743918	14635-75-7	NITROSONIUM TETRAFLUOROBORATE	5	Gram(GM)	09/28/22
1743916	2206-26-0	Acetonitrile-d3 99% atom D	25	Milliliter(ML)	09/28/22
1719365	-	GROUT	50	Pounds(LB)	09/28/22
1744007	87-69-4	L(+)-TARTARIC ACID	100	Gram(GM)	09/28/22
1744006	-	ACRYLIC CONFORMAL COATING	55	Milliliter(ML)	09/28/22
1744008	10099-66-8	LUTETIUM (III) CHLORIDE	5	Gallon(GAL)	09/28/22
1717631	-	BISMUTH	15	Gram(GM)	09/28/22
1717632	-	Chip Quik Leaded Solder Paste	15	Gram(GM)	09/28/22
1721505	67-63-0	Isopropyl Alcohol 99%	1	Gallon(GAL)	09/28/22
1721506	67-63-0	Isopropyl Alcohol 99%	1	Gallon(GAL)	09/28/22
1721347	7681-52-9	Clorox Concentrated Germicidal Bleach	3.78	Quarts(QT)	09/28/22
1721349	7681-52-9	Clorox Concentrated Germicidal Bleach	3.78	Quarts(QT)	09/28/22
1721348	7681-52-9	Clorox Concentrated Germicidal Bleach	3.78	Quarts(QT)	09/28/22
1721350	7681-52-9	Clorox Concentrated Germicidal Bleach	3.78	Quarts(QT)	09/28/22
1721351	7681-52-9	Clorox Concentrated Germicidal Bleach	3.78	Quarts(QT)	09/28/22
1721518	528-50-7	Red First Contact Polymer Solutions	15	Milliliter(ML)	09/28/22
1721519	528-50-7	Red First Contact Polymer Solutions	29	Milliliter(ML)	09/28/22
1721522	528-50-7	Red First Contact Polymer Solutions	29	Milliliter(ML)	09/28/22
1721520	528-50-7	Red First Contact Polymer Solutions	29	Milliliter(ML)	09/28/22
1721521	528-50-7	Red First Contact Polymer Solutions	29	Milliliter(ML)	09/28/22
1731547	-	ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/29/22
1731551	-	ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/29/22
1731550	-	ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/29/22
1731549	-	ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/29/22
1731552	-	ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/29/22
1731553	-	ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/29/22
1731548	-	ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/29/22
1731554	-	ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/29/22
1731555	-	ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/29/22
1731557	-	ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/29/22
1731559	-	ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/29/22
1731558	-	ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/29/22
1731563	-	ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/29/22
1731562	-	ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/29/22
1731561	-	ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/29/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1731560	-	ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/29/22
1731556	-	ANTIFREEZE & COOLANT	1	Gallon(GAL)	09/29/22
1731564	-	MAG1 Dot 3 Brake Fluid	32	Ounces(OZ)	09/29/22
1731566	-	MAG1 Dot 3 Brake Fluid	32	Ounces(OZ)	09/29/22
1731565	-	MAG1 Dot 3 Brake Fluid	32	Ounces(OZ)	09/29/22
1731567	-	220 Threadlocker	0.34	Ounces(OZ)	09/29/22
1731572	-	220 Threadlocker	0.34	Ounces(OZ)	09/29/22
1731571	-	220 Threadlocker	0.34	Ounces(OZ)	09/29/22
1731570	-	220 Threadlocker	0.34	Ounces(OZ)	09/29/22
1731569	-	220 Threadlocker	0.34	Ounces(OZ)	09/29/22
1731568	-	220 Threadlocker	0.34	Ounces(OZ)	09/29/22
1731573	-	Pyroil CARB & THROTTLE BODY CLEANER PYC16	13	Ounces(OZ)	09/29/22
1731574	-	Pyroil CARB & THROTTLE BODY CLEANER PYC16	13	Ounces(OZ)	09/29/22
V00000CAAA	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	09/29/22
V00000CAB3	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	09/29/22
V00000CAAF	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	09/29/22
V00000CAAE	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	09/29/22
V00000CAAD	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	09/29/22
V00000CAB2	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	09/29/22
V00000CAAB	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	09/29/22
V00000CAB0	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	09/29/22
V00000CAA9	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	09/29/22
V00000CAA8	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	09/29/22
V00000CAA7	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	09/29/22
V00000CAA6	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	09/29/22
V00000CAA5	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	09/29/22
V00000CAA4	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	09/29/22
V00000CAA3	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	09/29/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CAA2	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	09/29/22
V00000CAAC	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	09/29/22
V00000CAB1	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	09/29/22
V00000CAB4	-	Permacryl Int Latex Flat W/B	121	Ounces(OZ)	09/29/22
V00000CAB5	-	Permacryl Int Latex Flat W/B	121	Ounces(OZ)	09/29/22
V00000CAB6	-	Permacryl Int Latex Flat W/B	121	Ounces(OZ)	09/29/22
V00000CAB7	-	Permacryl Int Latex Flat W/B	121	Ounces(OZ)	09/29/22
V00000CAC8	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	14.1	Ounces(OZ)	09/29/22
V00000CAC4	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	14.1	Ounces(OZ)	09/29/22
V00000CAC3	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	14.1	Ounces(OZ)	09/29/22
V00000CAC1	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	14.1	Ounces(OZ)	09/29/22
V00000CABF	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	14.1	Ounces(OZ)	09/29/22
V00000CABE	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	14.1	Ounces(OZ)	09/29/22
V00000CAC5	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	14.1	Ounces(OZ)	09/29/22
V00000CAC7	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	14.1	Ounces(OZ)	09/29/22
V00000CAC2	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	14.1	Ounces(OZ)	09/29/22
V00000CAC9	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	14.1	Ounces(OZ)	09/29/22
V00000CACA	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	14.1	Ounces(OZ)	09/29/22
V00000CACB	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	14.1	Ounces(OZ)	09/29/22
V00000CAC6	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	14.1	Ounces(OZ)	09/29/22
V00000CAB9	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	14.1	Ounces(OZ)	09/29/22
V00000CABC	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	14.1	Ounces(OZ)	09/29/22
V00000CABD	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	14.1	Ounces(OZ)	09/29/22
V00000CAC0	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	14.1	Ounces(OZ)	09/29/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CABA	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	14.1	Ounces(OZ)	09/29/22
V00000CAB8	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	14.1	Ounces(OZ)	09/29/22
V00000CABB	-	PERMATEX 26BR HIGH TEMP RTV RED SILICONE GASKET MAKER	14.1	Ounces(OZ)	09/29/22
1731535	-	RV AND MARINE ANTI-FREEZE	1	Gallon(GAL)	09/29/22
1731546	-	RV AND MARINE ANTI-FREEZE	1	Gallon(GAL)	09/29/22
1731536	-	RV AND MARINE ANTI-FREEZE	1	Gallon(GAL)	09/29/22
1731537	-	RV AND MARINE ANTI-FREEZE	1	Gallon(GAL)	09/29/22
1731539	-	RV AND MARINE ANTI-FREEZE	1	Gallon(GAL)	09/29/22
1731541	-	RV AND MARINE ANTI-FREEZE	1	Gallon(GAL)	09/29/22
1731542	-	RV AND MARINE ANTI-FREEZE	1	Gallon(GAL)	09/29/22
1731543	-	RV AND MARINE ANTI-FREEZE	1	Gallon(GAL)	09/29/22
1731545	-	RV AND MARINE ANTI-FREEZE	1	Gallon(GAL)	09/29/22
1731538	-	RV AND MARINE ANTI-FREEZE	1	Gallon(GAL)	09/29/22
1731544	-	RV AND MARINE ANTI-FREEZE	1	Gallon(GAL)	09/29/22
1731540	-	RV AND MARINE ANTI-FREEZE	1	Gallon(GAL)	09/29/22
1731575	-	Brakleen Brake Parts Cleaner - Non-chlorinated (aerosol)	13	Ounces(OZ)	09/29/22
1731576	-	Brakleen Brake Parts Cleaner - Non-chlorinated (aerosol)	13	Ounces(OZ)	09/29/22
1731578	-	Brakleen Brake Parts Cleaner - Non-chlorinated (aerosol)	14	Ounces(OZ)	09/29/22
1731583	-	Brakleen Brake Parts Cleaner - Non-chlorinated (aerosol)	14	Ounces(OZ)	09/29/22
1731587	-	Brakleen Brake Parts Cleaner - Non-chlorinated (aerosol)	14	Ounces(OZ)	09/29/22
1731588	-	Brakleen Brake Parts Cleaner - Non-chlorinated (aerosol)	14	Ounces(OZ)	09/29/22
1731589	-	Brakleen Brake Parts Cleaner - Non-chlorinated (aerosol)	14	Ounces(OZ)	09/29/22
1731585	-	Brakleen Brake Parts Cleaner - Non-chlorinated (aerosol)	14	Ounces(OZ)	09/29/22
1731586	-	Brakleen Brake Parts Cleaner - Non-chlorinated (aerosol)	14	Ounces(OZ)	09/29/22
1731584	-	Brakleen Brake Parts Cleaner - Non-chlorinated (aerosol)	14	Ounces(OZ)	09/29/22
1731582	-	Brakleen Brake Parts Cleaner - Non-chlorinated (aerosol)	14	Ounces(OZ)	09/29/22
1731581	-	Brakleen Brake Parts Cleaner - Non-chlorinated (aerosol)	14	Ounces(OZ)	09/29/22
1731580	-	Brakleen Brake Parts Cleaner - Non-chlorinated (aerosol)	14	Ounces(OZ)	09/29/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1731579	-	Brakleen Brake Parts Cleaner - Non-chlorinated (aerosol)	14	Ounces(OZ)	09/29/22
1731577	-	PERMATEX 98D HIGH TACK GASKET SEALANT	16	Ounces(OZ)	09/29/22
1731591	-	SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/29/22
1731595	-	SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/29/22
1731594	-	SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/29/22
1731593	-	SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/29/22
1731592	-	SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/29/22
1731597	-	SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/29/22
1731596	-	SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	09/29/22
1744009	1113-59-3	Bromopyruvic acid	10	Gram(GM)	09/29/22
1744010	10099-66-8	LUTETIUM (III) CHLORIDE	5	Gram(GM)	09/29/22
1744011	6381-59-5	POTASSIUM SODIUM TARTRATE TETRAHYDRATE	100	Gram(GM)	09/29/22
1744012	602-94-8	PENTAFLUOROBENZOIC ACID	10	Gram(GM)	09/29/22
1744013	623580-02-9	1-Butyl-1-methylpiperidinium bis(trifluoromethylsulfonyl)imide	50	Gram(GM)	09/29/22
1744014	95-46-5	2-BROMOTOLUENE	25	Gram(GM)	09/29/22
1744088	7188-38-7	tert-Butyl isocyanide 98%	5	Gram(GM)	09/29/22
1744089	-	THERMO SCIENTIFIC*PIERCE* TCEP HCl	1	Milligram(MG)	09/29/22
1744090	121-44-8	TRIETHYLAMINE	100	Milliliter(ML)	09/29/22
1743915	2206-26-0	Acetonitrile-d3 deuteration degree min. 99% for NMR spectroscopy MagniSolv	10	Milliliter(ML)	09/29/22
1743638	-	Alere Instant Bluing Tablets	2.4	Gram(GM)	09/29/22
1743647	-	Alere Instant Bluing Tablets	2.4	Gram(GM)	09/29/22
1743652	-	Alere Instant Bluing Tablets	2.4	Gram(GM)	09/29/22
1743651	-	Alere Instant Bluing Tablets	2.4	Gram(GM)	09/29/22
1743650	-	Alere Instant Bluing Tablets	2.4	Gram(GM)	09/29/22
1743653	-	Alere Instant Bluing Tablets	2.4	Gram(GM)	09/29/22
1743646	-	Alere Instant Bluing Tablets	2.4	Gram(GM)	09/29/22
1743645	-	Alere Instant Bluing Tablets	2.4	Gram(GM)	09/29/22
1743644	-	Alere Instant Bluing Tablets	2.4	Gram(GM)	09/29/22
1743639	-	Alere Instant Bluing Tablets	2.4	Gram(GM)	09/29/22
1743648	-	Alere Instant Bluing Tablets	2.4	Gram(GM)	09/29/22
1743640	-	Alere Instant Bluing Tablets	2.4	Gram(GM)	09/29/22
1743649	-	Alere Instant Bluing Tablets	2.4	Gram(GM)	09/29/22
1743643	-	Alere Instant Bluing Tablets	2.4	Gram(GM)	09/29/22
1743642	-	Alere Instant Bluing Tablets	2.4	Gram(GM)	09/29/22
1743641	-	Alere Instant Bluing Tablets	2.4	Gram(GM)	09/29/22
1743691	-	GLASSY CARBON ROD	3	Milliliter(ML)	09/29/22
1743692	-	GLASSY CARBON ROD	3	Milliliter(ML)	09/29/22
1743693	64-17-5	Ethanol 200 Proof (100%) USP/EP/ACS Tax-Paid	4	Liters(L)	09/29/22
1743694	64-17-5	Ethanol 200 Proof (100%) USP/EP/ACS Tax-Paid	4	Liters(L)	09/29/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1743695	7697-37-2	Zinc-64 spike nitrate solution	5	Milliliter(ML)	09/29/22
1743696	1314-56-3	PHOSPHORUS PENTOXIDE	500	Gram(GM)	09/29/22
1743711	-	Ethyl Ether preserved with 1.5 - 2.5% Ethanol	4	Liters(L)	09/29/22
1743712	-	Ethyl Ether preserved with 1.5 - 2.5% Ethanol	4	Liters(L)	09/29/22
1743713	-	NUTO H 68 Hydraulic Oil	5	Gallon(GAL)	09/29/22
1743714	68951-96-2	VINYL TERMINATED (4-6% DIPHENYLSILOXANE)-DIMETHYLSILOXANE COPOLYMER	3	Kilograms(KG)	09/29/22
1743715	7699-45-8	ZINC BROMIDE	50	Gram(GM)	09/29/22
1743716	10031-22-8	Lead(II) bromide	25	Gram(GM)	09/29/22
1743717	10101-63-0	Lead(II) iodide 99% trace metals basis	25	Gram(GM)	09/29/22
1743718	10139-47-6	ZINC IODIDE	25	Gram(GM)	09/29/22
1743719	492-97-7	2 2'-BITHIOPHENE	1	Gram(GM)	09/29/22
1743722	492-97-7	2 2'-BITHIOPHENE	1	Gram(GM)	09/29/22
1743720	492-97-7	2 2'-BITHIOPHENE	1	Gram(GM)	09/29/22
1743721	492-97-7	2 2'-BITHIOPHENE	1	Gram(GM)	09/29/22
1743723	59-23-4	D-(+)-GALACTOSE	100	Gram(GM)	09/29/22
1743724	87-81-0	D-(-)-Tagatose	250	Milligram(MG)	09/29/22
1743725	112-80-1	OLEIC ACID TECHNICAL GRADE 90%	1	Liters(L)	09/29/22
1743726	67-63-0	2-Propanol 99.9% (HPLC)	4	Liters(L)	09/29/22
1743727	67-64-1	Acetone HPLC	4	Liters(L)	09/29/22
1743728	-	DPD COMPOUND FOR FREE AND TOTAL CHLORINE ANALYZERS	25	Gram(GM)	09/29/22
1743729	-	DPD COMPOUND FOR FREE AND TOTAL CHLORINE ANALYZERS	25	Gram(GM)	09/29/22
1743730	-	DPD COMPOUND FOR FREE AND TOTAL CHLORINE ANALYZERS	25	Gram(GM)	09/29/22
1743731	-	DPD COMPOUND FOR FREE AND TOTAL CHLORINE ANALYZERS	25	Gram(GM)	09/29/22
1743732	-	DPD COMPOUND FOR FREE AND TOTAL CHLORINE ANALYZERS	25	Gram(GM)	09/29/22
1743733	-	DPD COMPOUND FOR FREE AND TOTAL CHLORINE ANALYZERS	25	Gram(GM)	09/29/22
1743734	7440-45-1	Cerium (pieces)	0.4	Gram(GM)	09/29/22
1743735	7440-45-1	Cerium (pieces)	0.4	Gram(GM)	09/29/22
1743736	-	OBJET VEROBLUE RGD840	3.6	Kilograms(KG)	09/29/22
1743603	-	Caspase-Glo 3/7 Assay	10	Milliliter(ML)	09/29/22
1743697	-	ULTRALANE THINNER	1	Quarts(QT)	09/29/22
1743698	7647-01-0	HYDROCHLORIC ACID 6N	500	Milliliter(ML)	09/29/22
1743699	7647-01-0	HYDROCHLORIC ACID 6N	500	Milliliter(ML)	09/29/22
1743700	-	ROBINAIR VACUUM PUMP OIL	1	Quarts(QT)	09/29/22
1743701	-	ROBINAIR VACUUM PUMP OIL	1	Pint(PT)	09/29/22
1743702	-	DNeasy PowerClean Pro Cleanup Kit	0.2	Gram(GM)	09/29/22
1743737	67-63-0	2-Propanol 99.9% (HPLC)	4	Liters(L)	09/29/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1743738	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	09/29/22
1743742	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	09/29/22
1743741	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	09/29/22
1743740	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	09/29/22
1743739	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	09/29/22
1743743	7440-32-6	TITANIUM POWDER	100	Gram(GM)	09/29/22
1743744	666-52-4	Acetone-d6 for NMR 99.8 atom % D	10	Milliliter(ML)	09/29/22
1743799	144-55-8	SODIUM BICARBONATE	500	Gram(GM)	09/29/22
1743800	95-96-5	3 6-Dimethyl-1 4-dioxane-2 5-dione	100	Gram(GM)	09/29/22
1743801	95-96-5	3 6-Dimethyl-1 4-dioxane-2 5-dione	100	Gram(GM)	09/29/22
1743802	429-06-1	Tetraethylammonium tetrafluoroborate for synthesis	100	Gram(GM)	09/29/22
1743803	142-82-5	Heptane Reagent Plus 99%	2.5	Liters(L)	09/29/22
1743804	67-64-1	Acetone Super Dehydrated	2	Liters(L)	09/29/22
1743805	67-64-1	Acetone Super Dehydrated	2	Liters(L)	09/29/22
1743806	67-64-1	Acetone Super Dehydrated	2	Liters(L)	09/29/22
1743807	67-64-1	Acetone Super Dehydrated	2	Liters(L)	09/29/22
1743745	10099-74-8	LEAD(II) NITRATE	2.5	Kilograms(KG)	09/29/22
1743746	6674-22-2	1 8-DIAZABICYCLO[5.4.0]UNDEC-7-ENE	25	Milliliter(ML)	09/29/22
1743747	67-63-0	2-Propanol (Certified ACS)	4	Liters(L)	09/29/22
1743748	67-63-0	2-Propanol (Certified ACS)	4	Liters(L)	09/29/22
1743749	67-63-0	2-Propanol (Certified ACS)	4	Liters(L)	09/29/22
1743750	127-08-2	POTASSIUM ACETATE	1	Kilograms(KG)	09/29/22
1743775	-	Epoxy Adhesive DP420 Off-White	6.76	Ounces(OZ)	09/29/22
1743777	-	Epoxy Adhesive DP420 Off-White	6.76	Ounces(OZ)	09/29/22
1743786	-	Epoxy Adhesive DP420 Off-White	6.76	Ounces(OZ)	09/29/22
1743776	-	Epoxy Adhesive DP420 Off-White	6.76	Ounces(OZ)	09/29/22
1743779	-	Epoxy Adhesive DP420 Off-White	6.76	Ounces(OZ)	09/29/22
1743781	-	Epoxy Adhesive DP420 Off-White	6.76	Ounces(OZ)	09/29/22
1743778	-	Epoxy Adhesive DP420 Off-White	6.76	Ounces(OZ)	09/29/22
1743782	-	Epoxy Adhesive DP420 Off-White	6.76	Ounces(OZ)	09/29/22
1743793	-	Epoxy Adhesive DP420 Off-White	6.76	Ounces(OZ)	09/29/22
1743787	-	Epoxy Adhesive DP420 Off-White	6.76	Ounces(OZ)	09/29/22
1743788	-	Epoxy Adhesive DP420 Off-White	6.76	Ounces(OZ)	09/29/22
1743789	-	Epoxy Adhesive DP420 Off-White	6.76	Ounces(OZ)	09/29/22
1743790	-	Epoxy Adhesive DP420 Off-White	6.76	Ounces(OZ)	09/29/22
1743780	-	Epoxy Adhesive DP420 Off-White	6.76	Ounces(OZ)	09/29/22
1743792	-	Epoxy Adhesive DP420 Off-White	6.76	Ounces(OZ)	09/29/22
1743783	-	Epoxy Adhesive DP420 Off-White	6.76	Ounces(OZ)	09/29/22
1743794	-	Epoxy Adhesive DP420 Off-White	6.76	Ounces(OZ)	09/29/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1743795	-	Epoxy Adhesive DP420 Off-White	6.76	Ounces(OZ)	09/29/22
1743796	-	Epoxy Adhesive DP420 Off-White	6.76	Ounces(OZ)	09/29/22
1743797	-	Epoxy Adhesive DP420 Off-White	6.76	Ounces(OZ)	09/29/22
1743798	-	Epoxy Adhesive DP420 Off-White	6.76	Ounces(OZ)	09/29/22
1743785	-	Epoxy Adhesive DP420 Off-White	6.76	Ounces(OZ)	09/29/22
1743784	-	Epoxy Adhesive DP420 Off-White	6.76	Ounces(OZ)	09/29/22
1743791	-	Epoxy Adhesive DP420 Off-White	6.76	Ounces(OZ)	09/29/22
1743754	88-74-4	2-Nitroaniline 98%	1	Kilograms(KG)	09/29/22
1743753	-	Samarium 10 000 ug/mL in 4% HCl	100	Milliliter(ML)	09/29/22
1743755	75-09-2	Dichloromethane anhydrous 99.7+% stab. with amylene	4	Liters(L)	09/29/22
1743757	75-09-2	Dichloromethane anhydrous 99.7+% stab. with amylene	4	Liters(L)	09/29/22
1743756	75-09-2	Dichloromethane anhydrous 99.7+% stab. with amylene	4	Liters(L)	09/29/22
1743760	75-09-2	Dichloromethane anhydrous 99.7+% stab. with amylene	4	Liters(L)	09/29/22
1743762	75-09-2	Dichloromethane anhydrous 99.7+% stab. with amylene	4	Liters(L)	09/29/22
1743759	75-09-2	Dichloromethane anhydrous 99.7+% stab. with amylene	4	Liters(L)	09/29/22
1743761	75-09-2	Dichloromethane anhydrous 99.7+% stab. with amylene	4	Liters(L)	09/29/22
1743758	75-09-2	Dichloromethane anhydrous 99.7+% stab. with amylene	4	Liters(L)	09/29/22
1743763	-	SYLGARD 184 SILICONE ELASTOMER KIT	1.1	Pounds(LB)	09/29/22
1743764	-	SYLGARD 184 SILICONE ELASTOMER KIT	1.1	Pounds(LB)	09/29/22
1743765	127-19-5	N N-Dimethylacetamide 99%	1	Liters(L)	09/29/22
1743766	127-19-5	N N-Dimethylacetamide 99%	1	Liters(L)	09/29/22
1743767	-	ALNOCHROMIX	113	Gram(GM)	09/29/22
1743768	16941-12-1	CHLOROPLATINIC ACID	50	Milliliter(ML)	09/29/22
1743769	67-56-1	Methanol anhydrous 99.8%	1	Liters(L)	09/29/22
1743770	7601-90-3	PERCHLORIC ACID 70%	2.5	Liters(L)	09/29/22
1743771	37895-73-1	4 5-Dibromoveratrole	50	Gram(GM)	09/29/22
1743772	37895-73-1	4 5-Dibromoveratrole	50	Gram(GM)	09/29/22
1743773	67-64-1	Acetone Semiconductor Grade 99.5%	4	Liters(L)	09/29/22
1743774	110-54-3	Hexane Laboratory Reagent 95%	4	Liters(L)	09/29/22
1743809	4316-93-2	4 6-DICHLORO-5-NITROPYRIMIDINE	25	Gram(GM)	09/29/22
1743810	-	AMTAX STANDARD SOLUTION	237	Milliliter(ML)	09/29/22
1743815	-	AMTAX STANDARD SOLUTION	237	Milliliter(ML)	09/29/22
1743811	-	AMTAX STANDARD SOLUTION	237	Milliliter(ML)	09/29/22
1743812	-	AMTAX STANDARD SOLUTION	237	Milliliter(ML)	09/29/22
1743813	-	AMTAX STANDARD SOLUTION	237	Milliliter(ML)	09/29/22
1743814	-	AMTAX STANDARD SOLUTION	237	Milliliter(ML)	09/29/22
1743816	-	AMTAX STANDARD SOLUTION	237	Milliliter(ML)	09/29/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1743818	-	AMTAX STANDARD SOLUTION	237	Milliliter(ML)	09/29/22
1743819	-	AMTAX STANDARD SOLUTION	237	Milliliter(ML)	09/29/22
1743817	-	AMTAX STANDARD SOLUTION	237	Milliliter(ML)	09/29/22
1743820	-	Indicator solution Amtax 0.2 -12 mg/L and 0.2-30 mg/L	1	Liters(L)	09/29/22
1743822	-	Indicator solution Amtax 0.2 -12 mg/L and 0.2-30 mg/L	1	Liters(L)	09/29/22
1743823	-	Indicator solution Amtax 0.2 -12 mg/L and 0.2-30 mg/L	1	Liters(L)	09/29/22
1743821	-	Indicator solution Amtax 0.2 -12 mg/L and 0.2-30 mg/L	1	Liters(L)	09/29/22
1743824	6674-22-2	1 8-DIAZABICYCLO[5.4.0]UNDEC-7-ENE	25	Gram(GM)	09/29/22
1743825	358-23-6	TRIFLUOROMETHANESULFONIC ANHYDRIDE	10	Gram(GM)	09/29/22
1743826	2206-27-1	(METHYL SULFOXIDE)-D6	50	Milliliter(ML)	09/29/22
1743827	64-17-5	ETHYL ALCOHOL PURE	1	Gallon(GAL)	09/29/22
1743828	64-17-5	ETHYL ALCOHOL PURE	1	Gallon(GAL)	09/29/22
1743847	-	ICP-OES Wavelenth Calibration Solutions	500	Milliliter(ML)	09/29/22
1743848	-	ICP-OES Wavelenth Calibration Solutions	500	Milliliter(ML)	09/29/22
1721239	7705-08-0	FERRIC CHLORIDE 40% SOLUTION	3500	Pounds(LB)	09/30/22
1721240	7647-01-0	Hydrochloric Acid 30-31%	3500	Pounds(LB)	09/30/22
1721241	7647-01-0	Hydrochloric Acid 30-31%	3500	Pounds(LB)	09/30/22
1736553	88-05-1	2 4 6-TRIMETHYLANILINE	100	Milliliter(ML)	09/30/22
1738934	7647-01-0	HYDROCHLORIC ACID 0.1 N	1	Liters(L)	09/30/22
1738935	1310-73-2	SODIUM HYDROXIDE .1N	1	Liters(L)	09/30/22
1742331	12/2/7719	Phosphorus trichloride 99%	50	Gram(GM)	09/30/22
1742332	7550-45-0	Titanium(IV) chloride ReagentPlus 99.9%	200	Gram(GM)	09/30/22
1743829	7647-01-0	HYDROCHLORIC ACID 35-37%	2.5	Liters(L)	09/30/22
1743830	128-37-0	2 6-DI-TERT-BUTYL-4-METHYLPHENOL	500	Gram(GM)	09/30/22
1743831	1592-23-0	CALCIUM STEARATE	1	Kilograms(KG)	09/30/22
1743832	-	ETHANOL DENATURED	1	Liters(L)	09/30/22
1743833	67-66-3	Chloroform for HPLC 99.8% amylene stabilized	1	Liters(L)	09/30/22
1743834	67-66-3	Chloroform for HPLC 99.8% amylene stabilized	1	Liters(L)	09/30/22
1743835	27607-77-8	Trimethylsilyl trifluoromethanesulfonate 99%	50	Gram(GM)	09/30/22
1743836	75-09-2	Dichloromethane suitable for HPLC 99.9+% contains 40-150 ppm amylene as stabilizer	1	Liters(L)	09/30/22
1743849	3282-30-2	TRIMETHYLACETYL CHLORIDE	250	Gram(GM)	09/30/22
1743850	10294-33-4	BORON TRIBROMIDE 1.0M SOLUTION IN METHYLENE CHLORIDE	800	Milliliter(ML)	09/30/22
1743851	112724-95-5	N N-Bis(2-ethylhexyl)-2-methylpropanamide	25	Gram(GM)	09/30/22
1743853	75-09-2	Dichloromethane for HPLC	4	Liters(L)	09/30/22
1743919	7647-01-0	Hydrochloric Acid Optima	500	Milliliter(ML)	09/30/22
1743931	7647-01-0	Hydrochloric Acid Optima	500	Milliliter(ML)	09/30/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1743933	7647-01-0	Hydrochloric Acid Optima	500	Milliliter(ML)	09/30/22
1743923	7647-01-0	Hydrochloric Acid Optima	500	Milliliter(ML)	09/30/22
1743920	7647-01-0	Hydrochloric Acid Optima	500	Milliliter(ML)	09/30/22
1743921	7647-01-0	Hydrochloric Acid Optima	500	Milliliter(ML)	09/30/22
1743922	7647-01-0	Hydrochloric Acid Optima	500	Milliliter(ML)	09/30/22
1743924	7647-01-0	Hydrochloric Acid Optima	500	Milliliter(ML)	09/30/22
1743926	7647-01-0	Hydrochloric Acid Optima	500	Milliliter(ML)	09/30/22
1743927	7647-01-0	Hydrochloric Acid Optima	500	Milliliter(ML)	09/30/22
1743928	7647-01-0	Hydrochloric Acid Optima	500	Milliliter(ML)	09/30/22
1743929	7647-01-0	Hydrochloric Acid Optima	500	Milliliter(ML)	09/30/22
1743930	7647-01-0	Hydrochloric Acid Optima	500	Milliliter(ML)	09/30/22
1743932	7647-01-0	Hydrochloric Acid Optima	500	Milliliter(ML)	09/30/22
1743925	7647-01-0	Hydrochloric Acid Optima	500	Milliliter(ML)	09/30/22
1743855	13520-83-7	URANYL NITRATE HEXAHYDRATE	500	Gram(GM)	09/30/22
1743856	13536-84-0	URANYL FLUORIDE	100	Gram(GM)	09/30/22
1743857	6159-44-0	URANYL ACETATE DIHYDRATE	100	Gram(GM)	09/30/22
1743854	10026-10-5	URANIUM(IV) CHLORIDE	20	Gram(GM)	09/30/22
1743837	358-23-6	TRIFLUOROMETHANESULFONIC ANHYDRIDE	10	Gram(GM)	09/30/22
1743844	7646-69-7	SODIUM HYDRIDE	100	Gram(GM)	09/30/22
1743858	110-54-3	Hexanes HPLC Grade	4	Liters(L)	09/30/22
1743861	110-54-3	Hexanes HPLC Grade	4	Liters(L)	09/30/22
1743860	110-54-3	Hexanes HPLC Grade	4	Liters(L)	09/30/22
1743859	110-54-3	Hexanes HPLC Grade	4	Liters(L)	09/30/22
1743862	865-49-6	CHLOROFORM-D	50	Milliliter(ML)	09/30/22
1743863	2206-26-0	Acetonitrile-d3 99% atom D	50	Milliliter(ML)	09/30/22
1743864	92-52-4	BIPHENYL	250	Gram(GM)	09/30/22
1743865	462-20-4	Lipoic Acid reduced	100	Milligram(MG)	09/30/22
1743936	-	OP-S NonDry	1	Liters(L)	09/30/22
1743947	-	OP-S NonDry	1	Liters(L)	09/30/22
1743946	-	OP-S NonDry	1	Liters(L)	09/30/22
1743945	-	OP-S NonDry	1	Liters(L)	09/30/22
1743944	-	OP-S NonDry	1	Liters(L)	09/30/22
1743943	-	OP-S NonDry	1	Liters(L)	09/30/22
1743942	-	OP-S NonDry	1	Liters(L)	09/30/22
1743941	-	OP-S NonDry	1	Liters(L)	09/30/22
1743937	-	OP-S NonDry	1	Liters(L)	09/30/22
1743951	-	OP-S NonDry	1	Liters(L)	09/30/22
1743939	-	OP-S NonDry	1	Liters(L)	09/30/22
1743959	-	OP-S NonDry	1	Liters(L)	09/30/22
1743970	-	OP-S NonDry	1	Liters(L)	09/30/22
1743969	-	OP-S NonDry	1	Liters(L)	09/30/22
1743968	-	OP-S NonDry	1	Liters(L)	09/30/22
1743967	-	OP-S NonDry	1	Liters(L)	09/30/22
1743966	-	OP-S NonDry	1	Liters(L)	09/30/22
1743965	-	OP-S NonDry	1	Liters(L)	09/30/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1743964	-	OP-S NonDry	1	Liters(L)	09/30/22
1743963	-	OP-S NonDry	1	Liters(L)	09/30/22
1743962	-	OP-S NonDry	1	Liters(L)	09/30/22
1743949	-	OP-S NonDry	1	Liters(L)	09/30/22
1743960	-	OP-S NonDry	1	Liters(L)	09/30/22
1743948	-	OP-S NonDry	1	Liters(L)	09/30/22
1743958	-	OP-S NonDry	1	Liters(L)	09/30/22
1743957	-	OP-S NonDry	1	Liters(L)	09/30/22
1743956	-	OP-S NonDry	1	Liters(L)	09/30/22
1743955	-	OP-S NonDry	1	Liters(L)	09/30/22
1743954	-	OP-S NonDry	1	Liters(L)	09/30/22
1743953	-	OP-S NonDry	1	Liters(L)	09/30/22
1743952	-	OP-S NonDry	1	Liters(L)	09/30/22
1743938	-	OP-S NonDry	1	Liters(L)	09/30/22
1743950	-	OP-S NonDry	1	Liters(L)	09/30/22
1743961	-	OP-S NonDry	1	Liters(L)	09/30/22
1743940	-	OP-S NonDry	1	Liters(L)	09/30/22
1437391	-	SIKAFLEX 1A CONSTRUCTION	10	Ounces(OZ)	09/30/22
1437399	-	SIKAFLEX 1A CONSTRUCTION	10	Ounces(OZ)	09/30/22
1437404	-	SIKAFLEX 1A CONSTRUCTION	10	Ounces(OZ)	09/30/22
1437403	-	SIKAFLEX 1A CONSTRUCTION	10	Ounces(OZ)	09/30/22
1437405	-	SIKAFLEX 1A CONSTRUCTION	10	Ounces(OZ)	09/30/22
1437402	-	SIKAFLEX 1A CONSTRUCTION	10	Ounces(OZ)	09/30/22
1437401	-	SIKAFLEX 1A CONSTRUCTION	10	Ounces(OZ)	09/30/22
1437413	-	SIKAFLEX 1A CONSTRUCTION	10	Ounces(OZ)	09/30/22
1437412	-	SIKAFLEX 1A CONSTRUCTION	10	Ounces(OZ)	09/30/22
1437411	-	SIKAFLEX 1A CONSTRUCTION	10	Ounces(OZ)	09/30/22
1437410	-	SIKAFLEX 1A CONSTRUCTION	10	Ounces(OZ)	09/30/22
1437409	-	SIKAFLEX 1A CONSTRUCTION	10	Ounces(OZ)	09/30/22
1437408	-	SIKAFLEX 1A CONSTRUCTION	10	Ounces(OZ)	09/30/22
1437406	-	SIKAFLEX 1A CONSTRUCTION	10	Ounces(OZ)	09/30/22
1437398	-	SIKAFLEX 1A CONSTRUCTION	10	Ounces(OZ)	09/30/22
1437397	-	SIKAFLEX 1A CONSTRUCTION	10	Ounces(OZ)	09/30/22
1437396	-	SIKAFLEX 1A CONSTRUCTION	10	Ounces(OZ)	09/30/22
1437395	-	SIKAFLEX 1A CONSTRUCTION	10	Ounces(OZ)	09/30/22
1437392	-	SIKAFLEX 1A CONSTRUCTION	10	Ounces(OZ)	09/30/22
1437414	-	SIKAFLEX 1A CONSTRUCTION	10	Ounces(OZ)	09/30/22
1437394	-	SIKAFLEX 1A CONSTRUCTION	10	Ounces(OZ)	09/30/22
1437407	-	SIKAFLEX 1A CONSTRUCTION	10	Ounces(OZ)	09/30/22
1437393	-	SIKAFLEX 1A CONSTRUCTION	10	Ounces(OZ)	09/30/22
1437400	-	SIKAFLEX 1A CONSTRUCTION	10	Ounces(OZ)	09/30/22
1743868	4097-89-6	Tris(2-aminoethyl)amine 96%	100	Milliliter(ML)	09/30/22
1743867	12012-50-9	POTASSIUM TRICHLOROETHYLENE PLATINATE	500	Milligram(MG)	09/30/22
1437172	-	GASOILA PLS 2 Pipe Thread and Gasket Sealer	1	Pint(PT)	09/30/22
1437173	-	VICTAULIC LUBRICANT	1	Quarts(QT)	09/30/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1743846	67-68-5	Dimethyl sulfoxide ACS Reagent 99.9%	4	Liters(L)	09/30/22
1743873	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	09/30/22
1743877	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	09/30/22
1743876	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	09/30/22
1743874	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	09/30/22
1743875	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	09/30/22
1743878	141-78-6	Ethyl Acetate (Certified ACS)	4	Liters(L)	09/30/22
1743879	141-78-6	Ethyl Acetate (Certified ACS)	4	Liters(L)	09/30/22
1743845	1190-09-6	(3-Bromopropyl)phosphonic acid	1	Gram(GM)	09/30/22
1743978	-	SAF-T-LOK Debond	2	Ounces(OZ)	09/30/22
1743866	82-86-0	ACENAPHTHENEQUINONE	100	Gram(GM)	09/30/22
1743987	-	SAF-T-LOK Debond	2	Ounces(OZ)	09/30/22
1743986	-	SAF-T-LOK Debond	2	Ounces(OZ)	09/30/22
1743984	-	SAF-T-LOK Debond	2	Ounces(OZ)	09/30/22
1743981	-	SAF-T-LOK Debond	2	Ounces(OZ)	09/30/22
1743983	-	SAF-T-LOK Debond	2	Ounces(OZ)	09/30/22
1743982	-	SAF-T-LOK Debond	2	Ounces(OZ)	09/30/22
1743979	-	SAF-T-LOK Debond	2	Ounces(OZ)	09/30/22
1743980	-	SAF-T-LOK Debond	2	Ounces(OZ)	09/30/22
1743985	-	SAF-T-LOK Debond	2	Ounces(OZ)	09/30/22
1743869	7789-20-0	Deuterium oxide for NMR 100.0% Atom D	10	Milliliter(ML)	09/30/22
1743870	7789-20-0	Deuterium oxide for NMR 100.0% Atom D	10	Milliliter(ML)	09/30/22
1743871	1190-09-6	(3-Bromopropyl)phosphonic acid	1	Gram(GM)	09/30/22
1743934	7697-37-2	Nitric Acid 67 - 70% OmniTrace	500	Milliliter(ML)	09/30/22
1743935	7697-37-2	Nitric Acid 67 - 70% OmniTrace	500	Milliliter(ML)	09/30/22
1743881	-	LEAK DETECTOR SNOOP 8OZ	8	Ounces(OZ)	09/30/22
1743882	-	LEAK DETECTOR SNOOP 8OZ	8	Ounces(OZ)	09/30/22
1743890	-	LEAK DETECTOR SNOOP 8OZ	8	Ounces(OZ)	09/30/22
1743889	-	LEAK DETECTOR SNOOP 8OZ	8	Ounces(OZ)	09/30/22
1743888	-	LEAK DETECTOR SNOOP 8OZ	8	Ounces(OZ)	09/30/22
1743887	-	LEAK DETECTOR SNOOP 8OZ	8	Ounces(OZ)	09/30/22
1743886	-	LEAK DETECTOR SNOOP 8OZ	8	Ounces(OZ)	09/30/22
1743884	-	LEAK DETECTOR SNOOP 8OZ	8	Ounces(OZ)	09/30/22
1743885	-	LEAK DETECTOR SNOOP 8OZ	8	Ounces(OZ)	09/30/22
1743883	-	LEAK DETECTOR SNOOP 8OZ	8	Ounces(OZ)	09/30/22
1743973	75-05-8	Pierce FlexMix Calibration Solution	10	Milliliter(ML)	09/30/22
1743974	75-05-8	Pierce FlexMix Calibration Solution	10	Milliliter(ML)	09/30/22
1743988	12125-02-9	AMMONIUM CHLORIDE	100	Gram(GM)	09/30/22
1743990	12125-02-9	AMMONIUM CHLORIDE	100	Gram(GM)	09/30/22
1743989	12125-02-9	AMMONIUM CHLORIDE	100	Gram(GM)	09/30/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1743838	-	P-d TYPE BENZOXAZINE	20	Kilograms(KG)	09/30/22
1743872	-	Type E Paint	1	Quarts(QT)	09/30/22
1743995	16940-66-2	SODIUM BOROHYDRIDE	100	Gram(GM)	09/30/22
1743880	9012-36-6	SEAKEM GTG AGAROSE	25	Gram(GM)	09/30/22
1743891	-	Bismuth Tin eutectic lump	500	Gram(GM)	09/30/22
1743892	67-66-3	Chloroform HPLC Grade 99.5+% min stab. with amylene	4	Liters(L)	09/30/22
1743894	7699-45-8	ZINC BROMIDE	10	Gram(GM)	09/30/22
1743895	6080-56-4	LEAD(II) ACETATE TRIHYDRATE	25	Gram(GM)	09/30/22
1743896	1317-36-8	LEAD(II) OXIDE	10	Gram(GM)	09/30/22
1743897	3473-63-0	FORMAMIDINE ACETATE (FORMAMIDINE ACETIC ACID SALT)	100	Gram(GM)	09/30/22
1743975	495-18-1	BENZOHYDROXAMIC ACID	5	Gram(GM)	09/30/22
1743976	495-18-1	BENZOHYDROXAMIC ACID	5	Gram(GM)	09/30/22
1743977	304-88-1	N-BENZOYL-N-PHENYL-HYDROXYLAMINE	5	Gram(GM)	09/30/22
1743991	-	Ammonium chloride-ammonium hydroxide buffer solution	500	Milliliter(ML)	09/30/22
1743993	-	Ammonium chloride-ammonium hydroxide buffer solution	500	Milliliter(ML)	09/30/22
1743992	-	Ammonium chloride-ammonium hydroxide buffer solution	500	Milliliter(ML)	09/30/22
1743808	64916-48-9	Palladium Hexafluoroacetylacetonate Crystals	5	Gram(GM)	09/30/22
1744063	67-63-0	2-PROPANOL HISTOLOGICAL	4	Liters(L)	09/30/22
1744064	67-63-0	2-PROPANOL HISTOLOGICAL	4	Liters(L)	09/30/22
1744075	67-63-0	2-PROPANOL HISTOLOGICAL	4	Liters(L)	09/30/22
1744086	67-63-0	2-PROPANOL HISTOLOGICAL	4	Liters(L)	09/30/22
1744080	67-63-0	2-PROPANOL HISTOLOGICAL	4	Liters(L)	09/30/22
1744085	67-63-0	2-PROPANOL HISTOLOGICAL	4	Liters(L)	09/30/22
1744087	67-63-0	2-PROPANOL HISTOLOGICAL	4	Liters(L)	09/30/22
1744066	67-63-0	2-PROPANOL HISTOLOGICAL	4	Liters(L)	09/30/22
1744084	67-63-0	2-PROPANOL HISTOLOGICAL	4	Liters(L)	09/30/22
1744068	67-63-0	2-PROPANOL HISTOLOGICAL	4	Liters(L)	09/30/22
1744083	67-63-0	2-PROPANOL HISTOLOGICAL	4	Liters(L)	09/30/22
1744067	67-63-0	2-PROPANOL HISTOLOGICAL	4	Liters(L)	09/30/22
1744065	67-63-0	2-PROPANOL HISTOLOGICAL	4	Liters(L)	09/30/22
1744082	67-63-0	2-PROPANOL HISTOLOGICAL	4	Liters(L)	09/30/22
1744070	67-63-0	2-PROPANOL HISTOLOGICAL	4	Liters(L)	09/30/22
1744076	67-63-0	2-PROPANOL HISTOLOGICAL	4	Liters(L)	09/30/22
1744081	67-63-0	2-PROPANOL HISTOLOGICAL	4	Liters(L)	09/30/22
1744077	67-63-0	2-PROPANOL HISTOLOGICAL	4	Liters(L)	09/30/22
1744079	67-63-0	2-PROPANOL HISTOLOGICAL	4	Liters(L)	09/30/22
1744069	67-63-0	2-PROPANOL HISTOLOGICAL	4	Liters(L)	09/30/22
1744078	67-63-0	2-PROPANOL HISTOLOGICAL	4	Liters(L)	09/30/22
1744074	67-63-0	2-PROPANOL HISTOLOGICAL	4	Liters(L)	09/30/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1744072	67-63-0	2-PROPANOL HISTOLOGICAL	4	Liters(L)	09/30/22
1744073	67-63-0	2-PROPANOL HISTOLOGICAL	4	Liters(L)	09/30/22
1744071	67-63-0	2-PROPANOL HISTOLOGICAL	4	Liters(L)	09/30/22
1744004	8042-47-5	Mineral oil high purity	500	Milliliter(ML)	09/30/22
1744005	8042-47-5	Mineral oil high purity	500	Milliliter(ML)	09/30/22
1744002	76-83-5	trityl chloride 98%	25	Gram(GM)	09/30/22
1744003	76-83-5	trityl chloride 98%	25	Gram(GM)	09/30/22
1743910	67-64-1	ACETONE ACS	4	Liters(L)	09/30/22
1743911	67-64-1	ACETONE ACS	4	Liters(L)	09/30/22
1743913	67-64-1	ACETONE ACS	4	Liters(L)	09/30/22
1743912	67-64-1	ACETONE ACS	4	Liters(L)	09/30/22
1743898	50-81-7	L-ASCORBIC ACID	500	Gram(GM)	09/30/22
1743899	1344-28-1	Nickel on silica/alumina	25	Gram(GM)	09/30/22
1743903	75-09-2	Dichloromethane HPLC Grade 99.7%	4	Liters(L)	09/30/22
1743904	7647-14-5	SODIUM CHLORIDE	1	Kilograms(KG)	09/30/22
1743905	7647-14-5	SODIUM CHLORIDE	1	Kilograms(KG)	09/30/22
1743906	7757-83-7	SODIUM SULFITE	500	Gram(GM)	09/30/22
1743907	12054-85-2	Ammonium molybdate tetrahydrate	50	Gram(GM)	09/30/22
1743908	112945-52-5	SILICA FUMED	100	Gram(GM)	09/30/22
1743909	429-06-1	Tetraethylammonium tetrafluoroborate for synthesis	500	Gram(GM)	09/30/22
1743996	252237-40-4	1H 1H 2H 2H- PERFLUOROOCTANEPHOSPHONIC ACID	1	Gram(GM)	09/30/22
1743997	476-66-4	ELLAGIC ACID	1	Gram(GM)	09/30/22
1743998	107-06-2	1 2-DICHLOROETHANE	4	Liters(L)	09/30/22
1743999	66108-95-0	NYCODENZ	50	Gram(GM)	09/30/22
1744000	10034-93-2	HYDRAZINE SULFATE	100	Gram(GM)	09/30/22
1744001	7440-61-1	URANIUM ICP STANDARD SOLUTION	100	Milliliter(ML)	09/30/22
1743900	-	ROLASERIT	25	Kilograms(KG)	09/30/22
1743902	-	ROLASERIT	25	Kilograms(KG)	09/30/22
1743901	-	ROLASERIT	25	Kilograms(KG)	09/30/22
1739716	-	ROLASERIT	25	Kilograms(KG)	09/30/22
1739688	-	Drierite Du-Cal	50	Pounds(LB)	09/30/22
1739673	-	Drierite Du-Cal	50	Pounds(LB)	09/30/22
1739695	-	Drierite Du-Cal	50	Pounds(LB)	09/30/22
1739694	-	Drierite Du-Cal	50	Pounds(LB)	09/30/22
1739693	-	Drierite Du-Cal	50	Pounds(LB)	09/30/22
1739674	-	Drierite Du-Cal	50	Pounds(LB)	09/30/22
1739692	-	Drierite Du-Cal	50	Pounds(LB)	09/30/22
1739691	-	Drierite Du-Cal	50	Pounds(LB)	09/30/22
1739689	-	Drierite Du-Cal	50	Pounds(LB)	09/30/22
1739675	-	Drierite Du-Cal	50	Pounds(LB)	09/30/22
1739687	-	Drierite Du-Cal	50	Pounds(LB)	09/30/22
1739686	-	Drierite Du-Cal	50	Pounds(LB)	09/30/22
1739685	-	Drierite Du-Cal	50	Pounds(LB)	09/30/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1739684	-	Drierite Du-Cal	50	Pounds(LB)	09/30/22
1739683	-	Drierite Du-Cal	50	Pounds(LB)	09/30/22
1739682	-	Drierite Du-Cal	50	Pounds(LB)	09/30/22
1739681	-	Drierite Du-Cal	50	Pounds(LB)	09/30/22
1739680	-	Drierite Du-Cal	50	Pounds(LB)	09/30/22
1739679	-	Drierite Du-Cal	50	Pounds(LB)	09/30/22
1739678	-	Drierite Du-Cal	50	Pounds(LB)	09/30/22
1739677	-	Drierite Du-Cal	50	Pounds(LB)	09/30/22
1739676	-	Drierite Du-Cal	50	Pounds(LB)	09/30/22
1739690	-	Drierite Du-Cal	50	Pounds(LB)	09/30/22
1739696	-	DRIERITE INDICATING (4 MESH)	1	Pounds(LB)	09/30/22
1739698	-	DRIERITE INDICATING (4 MESH)	1	Pounds(LB)	09/30/22
1739699	-	DRIERITE INDICATING (4 MESH)	1	Pounds(LB)	09/30/22
1739700	-	DRIERITE INDICATING (4 MESH)	1	Pounds(LB)	09/30/22
1739701	-	DRIERITE INDICATING (4 MESH)	1	Pounds(LB)	09/30/22
1739697	-	DRIERITE INDICATING (4 MESH)	1	Pounds(LB)	09/30/22
1743893	-	Chevron Bright-Cut Metalworking Fluid	55	Gallon(GAL)	09/30/22
1757657	-	DPD TOTAL CHLORINE REAGENT	100	Milligram(MG)	10/03/22
1757648	-	DPD TOTAL CHLORINE REAGENT	100	Milligram(MG)	10/03/22
1757659	-	DPD TOTAL CHLORINE REAGENT	100	Milligram(MG)	10/03/22
1757658	-	DPD TOTAL CHLORINE REAGENT	100	Milligram(MG)	10/03/22
1757656	-	DPD TOTAL CHLORINE REAGENT	100	Milligram(MG)	10/03/22
1757654	-	DPD TOTAL CHLORINE REAGENT	100	Milligram(MG)	10/03/22
1757653	-	DPD TOTAL CHLORINE REAGENT	100	Milligram(MG)	10/03/22
1757652	-	DPD TOTAL CHLORINE REAGENT	100	Milligram(MG)	10/03/22
1757651	-	DPD TOTAL CHLORINE REAGENT	100	Milligram(MG)	10/03/22
1757650	-	DPD TOTAL CHLORINE REAGENT	100	Milligram(MG)	10/03/22
1757655	-	DPD TOTAL CHLORINE REAGENT	100	Milligram(MG)	10/03/22
1757649	-	DPD TOTAL CHLORINE REAGENT	100	Milligram(MG)	10/03/22
1757627	7697-37-2	HNO3 Preservation for 500 ml Container	100	Milliliter(ML)	10/03/22
1757626	7697-37-2	HNO3 Preservation for 500 ml Container	100	Milliliter(ML)	10/03/22
1757625	7697-37-2	HNO3 Preservation for 500 ml Container	100	Milliliter(ML)	10/03/22
1757624	7697-37-2	HNO3 Preservation for 500 ml Container	100	Milliliter(ML)	10/03/22
1757623	7697-37-2	HNO3 Preservation for 500 ml Container	100	Milliliter(ML)	10/03/22
1757622	7697-37-2	HNO3 Preservation for 500 ml Container	100	Milliliter(ML)	10/03/22
1757621	7697-37-2	HNO3 Preservation for 500 ml Container	100	Milliliter(ML)	10/03/22
1757620	7697-37-2	HNO3 Preservation for 500 ml Container	100	Milliliter(ML)	10/03/22
1757619	7697-37-2	HNO3 Preservation for 500 ml Container	100	Milliliter(ML)	10/03/22
1757628	7697-37-2	HNO3 Preservation for 500 ml Container	100	Milliliter(ML)	10/03/22
1757633	-	H2SO4 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/03/22
1757637	-	H2SO4 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/03/22
1757629	-	H2SO4 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/03/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1757630	-	H2SO4 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/03/22
1757632	-	H2SO4 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/03/22
1757634	-	H2SO4 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/03/22
1757636	-	H2SO4 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/03/22
1757631	-	H2SO4 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/03/22
1757638	-	H2SO4 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/03/22
1757635	-	H2SO4 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/03/22
1757639	7647-01-0	HCl Preservation for a 1 000 mL Container	100	Milliliter(ML)	10/03/22
1757640	7647-01-0	HCl Preservation for a 1 000 mL Container	100	Milliliter(ML)	10/03/22
1757641	7647-01-0	HCl Preservation for a 1 000 mL Container	100	Milliliter(ML)	10/03/22
1757642	-	HCl Preservation for a 500 mL Container	500	Milliliter(ML)	10/03/22
1757643	-	HCl Preservation for a 500 mL Container	500	Milliliter(ML)	10/03/22
1757644	-	HCl Preservation for a 500 mL Container	500	Milliliter(ML)	10/03/22
1757614	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/03/22
1757618	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/03/22
1757607	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/03/22
1757599	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/03/22
1757600	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/03/22
1757601	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/03/22
1757602	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/03/22
1757603	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/03/22
1757604	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/03/22
1757616	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/03/22
1757606	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/03/22
1757617	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/03/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1757608	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/03/22
1757609	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/03/22
1757610	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/03/22
1757611	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/03/22
1757612	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/03/22
1757613	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/03/22
1757605	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/03/22
1757615	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/03/22
1456731	-	PCB LOCATION MIXTURE	5	Milliliter(ML)	10/03/22
1743751	67-64-1	ACETONE TECHNICAL	55	Gallon(GAL)	10/03/22
1743752	67-64-1	ACETONE TECHNICAL	55	Gallon(GAL)	10/03/22
1757645	-	HCl Preservation for a 250 mL Container	100	Milliliter(ML)	10/03/22
1757647	-	HCl Preservation for a 250 mL Container	100	Milliliter(ML)	10/03/22
1757646	-	HCl Preservation for a 250 mL Container	100	Milliliter(ML)	10/03/22
1757660	-	LOW RANGE CHLORINE STANDARD SOLUTION	40	Milliliter(ML)	10/03/22
1757667	-	LOW RANGE CHLORINE STANDARD SOLUTION	40	Milliliter(ML)	10/03/22
1757662	-	LOW RANGE CHLORINE STANDARD SOLUTION	40	Milliliter(ML)	10/03/22
1757661	-	LOW RANGE CHLORINE STANDARD SOLUTION	40	Milliliter(ML)	10/03/22
1757666	-	LOW RANGE CHLORINE STANDARD SOLUTION	40	Milliliter(ML)	10/03/22
1757663	-	LOW RANGE CHLORINE STANDARD SOLUTION	40	Milliliter(ML)	10/03/22
1757664	-	LOW RANGE CHLORINE STANDARD SOLUTION	40	Milliliter(ML)	10/03/22
1757665	-	LOW RANGE CHLORINE STANDARD SOLUTION	40	Milliliter(ML)	10/03/22
1437306	-	Freezemaster Antifreeze	20.6	Kilograms(KG)	10/03/22
1718374	-	Silver nanoparticle ink	25	Milliliter(ML)	10/03/22
1719855	-	FOAM SEALANT	250	Milliliter(ML)	10/03/22
1719866	-	FOAM SEALANT	250	Milliliter(ML)	10/03/22
1719856	-	FOAM SEALANT	250	Milliliter(ML)	10/03/22
1719857	-	FOAM SEALANT	250	Milliliter(ML)	10/03/22
1719858	-	FOAM SEALANT	250	Milliliter(ML)	10/03/22
1719865	-	FOAM SEALANT	250	Milliliter(ML)	10/03/22
1719859	-	FOAM SEALANT	250	Milliliter(ML)	10/03/22
1719864	-	FOAM SEALANT	250	Milliliter(ML)	10/03/22
1719863	-	FOAM SEALANT	250	Milliliter(ML)	10/03/22
1719867	-	FOAM SEALANT	250	Milliliter(ML)	10/03/22
1719862	-	FOAM SEALANT	250	Milliliter(ML)	10/03/22
1719861	-	FOAM SEALANT	250	Milliliter(ML)	10/03/22
1719860	-	FOAM SEALANT	250	Milliliter(ML)	10/03/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1717720	-	FullCure RGD837 - VeroPureWhite	4	Kilograms(KG)	10/04/22
1717721	-	Support SUP706 B	4	Kilograms(KG)	10/04/22
1717722	-	Support SUP706 B	4	Kilograms(KG)	10/04/22
1717723	-	VEROCLEAR RGD810	4	Kilograms(KG)	10/04/22
1717729	-	Support SUP706 B	3.6	Kilograms(KG)	10/04/22
1717730	-	Support SUP706 B	3.6	Kilograms(KG)	10/04/22
1717731	-	FullCure RGD837 - VeroPureWhite	3.6	Kilograms(KG)	10/04/22
1717732	-	VEROCYAN RGD843	3.6	Kilograms(KG)	10/04/22
1717738	-	VERO YELLOW RGD836	3.6	Kilograms(KG)	10/04/22
1717739	-	VERO MAGENTA RGD851	3.6	Kilograms(KG)	10/04/22
1690663	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/04/22
1743839	-	Multi-Etch	536	Gram(GM)	10/04/22
1743840	-	Multi-Etch	536	Gram(GM)	10/04/22
1743843	-	Multi-Etch	536	Gram(GM)	10/04/22
1743842	-	Multi-Etch	536	Gram(GM)	10/04/22
1743841	-	Multi-Etch	536	Gram(GM)	10/04/22
1422855	-	SYNTHETIC GREASE	14.5	Ounces(OZ)	10/04/22
1422856	-	SYNTHETIC GREASE	14.5	Ounces(OZ)	10/04/22
1422857	-	SYNTHETIC GREASE	14.5	Ounces(OZ)	10/04/22
1422858	-	SYNTHETIC GREASE	14.5	Ounces(OZ)	10/04/22
1422859	-	SYNTHETIC GREASE	14.5	Ounces(OZ)	10/04/22
1422864	-	SYNTHETIC GREASE	14.5	Ounces(OZ)	10/04/22
1422865	-	SYNTHETIC GREASE	14.5	Ounces(OZ)	10/04/22
1422866	-	SYNTHETIC GREASE	14.5	Ounces(OZ)	10/04/22
1422867	-	SYNTHETIC GREASE	14.5	Ounces(OZ)	10/04/22
1422868	-	SYNTHETIC GREASE	14.5	Ounces(OZ)	10/04/22
1719854	-	CHAIN & CABLE LUBRICANT	1	Liters(L)	10/04/22
1719843	-	CHAIN & CABLE LUBRICANT	1	Liters(L)	10/04/22
1719853	-	CHAIN & CABLE LUBRICANT	1	Liters(L)	10/04/22
1719852	-	CHAIN & CABLE LUBRICANT	1	Liters(L)	10/04/22
1719851	-	CHAIN & CABLE LUBRICANT	1	Liters(L)	10/04/22
1719850	-	CHAIN & CABLE LUBRICANT	1	Liters(L)	10/04/22
1719849	-	CHAIN & CABLE LUBRICANT	1	Liters(L)	10/04/22
1719848	-	CHAIN & CABLE LUBRICANT	1	Liters(L)	10/04/22
1719847	-	CHAIN & CABLE LUBRICANT	1	Liters(L)	10/04/22
1719846	-	CHAIN & CABLE LUBRICANT	1	Liters(L)	10/04/22
1719845	-	CHAIN & CABLE LUBRICANT	1	Liters(L)	10/04/22
1719844	-	CHAIN & CABLE LUBRICANT	1	Liters(L)	10/04/22
1719984	-	PRECISION COLOR GREEN LACQUER	12	Ounces(OZ)	10/04/22
1719985	-	PRECISION COLOR GREEN LACQUER	12	Ounces(OZ)	10/04/22
1719986	-	PRECISION COLOR GREEN LACQUER	12	Ounces(OZ)	10/04/22
1719987	-	PRECISION COLOR GREEN LACQUER	12	Ounces(OZ)	10/04/22
1719988	-	PRECISION COLOR GREEN LACQUER	12	Ounces(OZ)	10/04/22
1719989	-	PRECISION COLOR GREEN LACQUER	12	Ounces(OZ)	10/04/22
1731631	-	HERCULES PURPLE PVC PRIMER	32	Ounces(OZ)	10/05/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1731633	-	Hercules Plumber's Caulk White	5.5	Ounces(OZ)	10/05/22
1731642	-	Hercules Plumber's Caulk White	5.5	Ounces(OZ)	10/05/22
1731644	-	Hercules Plumber's Caulk White	5.5	Ounces(OZ)	10/05/22
1731646	-	Hercules Plumber's Caulk White	5.5	Ounces(OZ)	10/05/22
1731645	-	Hercules Plumber's Caulk White	5.5	Ounces(OZ)	10/05/22
1731641	-	Hercules Plumber's Caulk White	5.5	Ounces(OZ)	10/05/22
1731640	-	Hercules Plumber's Caulk White	5.5	Ounces(OZ)	10/05/22
1731643	-	Hercules Plumber's Caulk White	5.5	Ounces(OZ)	10/05/22
1731634	-	Hercules Plumber's Caulk White	5.5	Ounces(OZ)	10/05/22
1731635	-	Hercules Plumber's Caulk White	5.5	Ounces(OZ)	10/05/22
1731636	-	Hercules Plumber's Caulk White	5.5	Ounces(OZ)	10/05/22
1731637	-	Hercules Plumber's Caulk White	5.5	Ounces(OZ)	10/05/22
1731638	-	Hercules Plumber's Caulk White	5.5	Ounces(OZ)	10/05/22
1731639	-	Hercules Plumber's Caulk White	5.5	Ounces(OZ)	10/05/22
1731632	-	LIQUID ADHESIVE	1	Quarts(QT)	10/05/22
1731647	-	BTR SEALANT 167	5	Quarts(QT)	10/05/22
1721358	67-64-1	ACETONE	4	Liters(L)	10/05/22
1731622	-	OATEY CLEAR CEMENT FOR PVC	32	Ounces(OZ)	10/05/22
1731624	-	OATEY CLEAR CEMENT FOR PVC	32	Ounces(OZ)	10/05/22
1731625	-	OATEY CLEAR CEMENT FOR PVC	32	Ounces(OZ)	10/05/22
1731623	-	OATEY CLEAR CEMENT FOR PVC	32	Ounces(OZ)	10/05/22
1731628	-	HERCULES CLEAR PVC PRIMER	32	Ounces(OZ)	10/05/22
1731629	-	HERCULES CLEAR PVC PRIMER	32	Ounces(OZ)	10/05/22
1731626	-	Oatey Clear Primer	32	Ounces(OZ)	10/05/22
1731627	-	Oatey Clear Primer	32	Ounces(OZ)	10/05/22
1731630	-	LOW VOC Primer and Cleaner Products 911 Low VOC Clear Primer 912 Low VOC Purple Primer 914 Low VOC Pipe Cleaner	32	Ounces(OZ)	10/05/22
1721359	67-64-1	ACETONE	4	Liters(L)	10/05/22
1744040	-	CalVer® 2 Calcium Indicator Powder Pillows	100	Gram(GM)	10/05/22
1744041	-	CalVer® 2 Calcium Indicator Powder Pillows	100	Gram(GM)	10/05/22
1744046	-	CalVer® 2 Calcium Indicator Powder Pillows	100	Gram(GM)	10/05/22
1744042	-	CalVer® 2 Calcium Indicator Powder Pillows	100	Gram(GM)	10/05/22
1744043	-	CalVer® 2 Calcium Indicator Powder Pillows	100	Gram(GM)	10/05/22
1744048	-	CalVer® 2 Calcium Indicator Powder Pillows	100	Gram(GM)	10/05/22
1744047	-	CalVer® 2 Calcium Indicator Powder Pillows	100	Gram(GM)	10/05/22
1744049	-	CalVer® 2 Calcium Indicator Powder Pillows	100	Gram(GM)	10/05/22
1744044	-	CalVer® 2 Calcium Indicator Powder Pillows	100	Gram(GM)	10/05/22
1744045	-	CalVer® 2 Calcium Indicator Powder Pillows	100	Gram(GM)	10/05/22
1744052	67-56-1	Methanol 99.9% (HPLC)	4	Liters(L)	10/05/22
1744055	67-56-1	Methanol 99.9% (HPLC)	4	Liters(L)	10/05/22
1744054	67-56-1	Methanol 99.9% (HPLC)	4	Liters(L)	10/05/22
1744053	67-56-1	Methanol 99.9% (HPLC)	4	Liters(L)	10/05/22
1744135	67-64-1	Acetone Laboratory Reagent 99.5%	16	Liters(L)	10/05/22
1744141	67-64-1	Acetone Laboratory Reagent 99.5%	16	Liters(L)	10/05/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1744140	67-64-1	Acetone Laboratory Reagent 99.5%	16	Liters(L)	10/05/22
1744139	67-64-1	Acetone Laboratory Reagent 99.5%	16	Liters(L)	10/05/22
1744138	67-64-1	Acetone Laboratory Reagent 99.5%	16	Liters(L)	10/05/22
1744137	67-64-1	Acetone Laboratory Reagent 99.5%	16	Liters(L)	10/05/22
1744136	67-64-1	Acetone Laboratory Reagent 99.5%	16	Liters(L)	10/05/22
1744142	67-64-1	Acetone Laboratory Reagent 99.5%	16	Liters(L)	10/05/22
1744143	67-56-1	Methanol 99.8% ACS reagent	4	Liters(L)	10/05/22
1744146	67-56-1	Methanol 99.8% ACS reagent	4	Liters(L)	10/05/22
1744144	67-56-1	Methanol 99.8% ACS reagent	4	Liters(L)	10/05/22
1744145	67-56-1	Methanol 99.8% ACS reagent	4	Liters(L)	10/05/22
1744147	108-88-3	Toluene ACS reagent 99.5%	4	Liters(L)	10/05/22
1744148	108-88-3	Toluene ACS reagent 99.5%	4	Liters(L)	10/05/22
1744149	108-88-3	Toluene ACS reagent 99.5%	4	Liters(L)	10/05/22
1744150	108-88-3	Toluene ACS reagent 99.5%	4	Liters(L)	10/05/22
1418256	-	RUST-OLEUM EPOXY 9100 ACTIVATOR	1	Gallon(GAL)	10/05/22
1721333	-	MatterHackers ABS Filament	1	Kilograms(KG)	10/05/22
1721334	-	MatterHackers ABS Filament	1	Kilograms(KG)	10/05/22
1721335	-	MatterHackers ABS Filament	1	Kilograms(KG)	10/05/22
1721336	-	MatterHackers ABS Filament	1	Kilograms(KG)	10/05/22
1418257	-	9100 System DTM Epoxy Mastic	1	Gallon(GAL)	10/05/22
1418258	-	9100 System DTM Epoxy Mastic	1	Gallon(GAL)	10/05/22
1731615	-	MULTI-PURPOSE CLEANER/DEGREASER	1	Gallon(GAL)	10/06/22
1731616	7631-86-9	MOLYKOTE 111 Compound	5.3	Ounces(OZ)	10/06/22
1731617	7631-86-9	MOLYKOTE 111 Compound	5.3	Ounces(OZ)	10/06/22
1731598	-	PSX 700 CURE	0.8	Gallon(GAL)	10/06/22
1731601	-	PSX 700 CURE	0.8	Gallon(GAL)	10/06/22
1731599	-	PSX 700 CURE	0.8	Gallon(GAL)	10/06/22
1731602	-	PSX 700 CURE	0.8	Gallon(GAL)	10/06/22
1731600	-	PSX 700 CURE	0.8	Gallon(GAL)	10/06/22
1731603	-	PSX 700 WHITE RESIN	0.8	Gallon(GAL)	10/06/22
1731604	-	PSX 700 WHITE RESIN	0.8	Gallon(GAL)	10/06/22
1731605	-	PSX 700 WHITE RESIN	0.8	Gallon(GAL)	10/06/22
V00000CAE1	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	10/06/22
V00000CAE0	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	10/06/22
V00000CADF	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	10/06/22
V00000CADE	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	10/06/22
V00000CAE2	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	10/06/22
V00000CAE3	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	10/06/22
1731606	-	HERCULES STA-PUT PLUMBERS PUTTY	14	Ounces(OZ)	10/06/22
1731609	-	HERCULES STA-PUT PLUMBERS PUTTY	14	Ounces(OZ)	10/06/22
1731608	-	HERCULES STA-PUT PLUMBERS PUTTY	14	Ounces(OZ)	10/06/22
1731607	-	HERCULES STA-PUT PLUMBERS PUTTY	14	Ounces(OZ)	10/06/22
00 1731658	-	PSX 700 A CLEAR COAT CURE	0.38	Gallon(GAL)	10/06/22
1731661	-	PSX 700 A CLEAR COAT CURE	0.38	Gallon(GAL)	10/06/22
1731659	-	PSX 700 A CLEAR COAT CURE	0.38	Gallon(GAL)	10/06/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1731660	-	PSX 700 A CLEAR COAT CURE	0.38	Gallon(GAL)	10/06/22
1731662	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	10/06/22
1731663	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	10/06/22
1731664	-	AMERLOCK SEALER HRD 00333521	1	Gallon(GAL)	10/06/22
1731665	-	AMERLOCK SEALER HRD 00333521	1	Gallon(GAL)	10/06/22
V00000CAE4	-	Cote All M.F. (Safety) Red	128	Ounces(OZ)	10/06/22
V00000CAE5	-	Cote All M.F. (Safety) Red	128	Ounces(OZ)	10/06/22
V00000CAE6	-	Cote All M.F. (Safety) Red	128	Ounces(OZ)	10/06/22
1731648	-	Finium DTM-AT S/G Acrylic W/B	608	Ounces(OZ)	10/06/22
1731653	-	Finium DTM-AT S/G Acrylic W/B	608	Ounces(OZ)	10/06/22
1731652	-	Finium DTM-AT S/G Acrylic W/B	608	Ounces(OZ)	10/06/22
1731651	-	Finium DTM-AT S/G Acrylic W/B	608	Ounces(OZ)	10/06/22
1731650	-	Finium DTM-AT S/G Acrylic W/B	608	Ounces(OZ)	10/06/22
1731649	-	Finium DTM-AT S/G Acrylic W/B	608	Ounces(OZ)	10/06/22
1731654	-	Permacryl Int Latex Satin W/B	608	Ounces(OZ)	10/06/22
1731655	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	10/06/22
1731656	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	10/06/22
1731657	-	PSX 700 CURE	0.2	Gallon(GAL)	10/06/22
1731658	-	PSX 700 CURE	0.2	Gallon(GAL)	10/06/22
1744151	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	10/06/22
1744152	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	10/06/22
1744153	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	10/06/22
1744154	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	10/06/22
1744156	109-99-9	Tetrahydrofuran contains 250 ppm BHT as inhibitor ACS reagent 99%	16	Liters(L)	10/06/22
1744157	109-99-9	Tetrahydrofuran contains 250 ppm BHT as inhibitor ACS reagent 99%	16	Liters(L)	10/06/22
1744158	109-99-9	Tetrahydrofuran contains 250 ppm BHT as inhibitor ACS reagent 99%	16	Liters(L)	10/06/22
1744159	109-99-9	Tetrahydrofuran contains 250 ppm BHT as inhibitor ACS reagent 99%	16	Liters(L)	10/06/22
1731673	-	SULLUBE COMPRESSOR FLUID	5	Gallon(GAL)	10/06/22
1731674	-	INGERSOLL-RAND ULTRA COOLANT	5	Liters(L)	10/06/22
1721360	-	ISOPROPANOL	4	Liters(L)	10/06/22
1721361	-	ISOPROPANAL	4	Liters(L)	10/06/22
1744279	-	HYDROGEN PEROXIDE 30% AR ACS	500	Milliliter(ML)	10/06/22
1744283	-	HYDROGEN PEROXIDE 30% AR ACS	500	Milliliter(ML)	10/06/22
1744280	-	HYDROGEN PEROXIDE 30% AR ACS	500	Milliliter(ML)	10/06/22
1744284	-	HYDROGEN PEROXIDE 30% AR ACS	500	Milliliter(ML)	10/06/22
1744282	-	HYDROGEN PEROXIDE 30% AR ACS	500	Milliliter(ML)	10/06/22
1744281	-	HYDROGEN PEROXIDE 30% AR ACS	500	Milliliter(ML)	10/06/22
1744285	-	Dionex Combined Six Cation Standard-I	50	Milliliter(ML)	10/06/22
1744286	-	Promega Lysis Buffer Blood	160	Milliliter(ML)	10/06/22
1744232	-	Silica Reagent Set High Range	10	Milliliter(ML)	10/06/22
1744239	-	Silica Reagent Set High Range	10	Milliliter(ML)	10/06/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1744233	-	Silica Reagent Set High Range	10	Milliliter(ML)	10/06/22
1744234	-	Silica Reagent Set High Range	10	Milliliter(ML)	10/06/22
1744235	-	Silica Reagent Set High Range	10	Milliliter(ML)	10/06/22
1744236	-	Silica Reagent Set High Range	10	Milliliter(ML)	10/06/22
1744240	-	Silica Reagent Set High Range	10	Milliliter(ML)	10/06/22
1744241	-	Silica Reagent Set High Range	10	Milliliter(ML)	10/06/22
1744237	-	Silica Reagent Set High Range	10	Milliliter(ML)	10/06/22
1744238	-	Silica Reagent Set High Range	10	Milliliter(ML)	10/06/22
1744222	-	DIPHENYLCARBAZONE REAGENT POWDER PILLOWS	100	Milliliter(ML)	10/06/22
1744227	-	DIPHENYLCARBAZONE REAGENT POWDER PILLOWS	100	Milliliter(ML)	10/06/22
1744223	-	DIPHENYLCARBAZONE REAGENT POWDER PILLOWS	100	Milliliter(ML)	10/06/22
1744224	-	DIPHENYLCARBAZONE REAGENT POWDER PILLOWS	100	Milliliter(ML)	10/06/22
1744225	-	DIPHENYLCARBAZONE REAGENT POWDER PILLOWS	100	Milliliter(ML)	10/06/22
1744226	-	DIPHENYLCARBAZONE REAGENT POWDER PILLOWS	100	Milliliter(ML)	10/06/22
1744228	-	DIPHENYLCARBAZONE REAGENT POWDER PILLOWS	100	Milliliter(ML)	10/06/22
1744229	-	DIPHENYLCARBAZONE REAGENT POWDER PILLOWS	100	Milliliter(ML)	10/06/22
1744230	-	DIPHENYLCARBAZONE REAGENT POWDER PILLOWS	100	Milliliter(ML)	10/06/22
1744231	-	DIPHENYLCARBAZONE REAGENT POWDER PILLOWS	100	Milliliter(ML)	10/06/22
1744207	1592-23-0	CALCIUM STEARATE	5	Kilograms(KG)	10/06/22
1744210	1592-23-0	CALCIUM STEARATE	5	Kilograms(KG)	10/06/22
1744218	1592-23-0	CALCIUM STEARATE	5	Kilograms(KG)	10/06/22
1744221	1592-23-0	CALCIUM STEARATE	5	Kilograms(KG)	10/06/22
1744220	1592-23-0	CALCIUM STEARATE	5	Kilograms(KG)	10/06/22
1744219	1592-23-0	CALCIUM STEARATE	5	Kilograms(KG)	10/06/22
1744216	1592-23-0	CALCIUM STEARATE	5	Kilograms(KG)	10/06/22
1744215	1592-23-0	CALCIUM STEARATE	5	Kilograms(KG)	10/06/22
1744214	1592-23-0	CALCIUM STEARATE	5	Kilograms(KG)	10/06/22
1744213	1592-23-0	CALCIUM STEARATE	5	Kilograms(KG)	10/06/22
1744212	1592-23-0	CALCIUM STEARATE	5	Kilograms(KG)	10/06/22
1744211	1592-23-0	CALCIUM STEARATE	5	Kilograms(KG)	10/06/22
1744217	1592-23-0	CALCIUM STEARATE	5	Kilograms(KG)	10/06/22
1744209	1592-23-0	CALCIUM STEARATE	5	Kilograms(KG)	10/06/22
1744208	1592-23-0	CALCIUM STEARATE	5	Kilograms(KG)	10/06/22
1744189	-	Ammonia TNTplus Vial Test LR	12	Milligram(MG)	10/06/22
1744193	-	Ammonia TNTplus Vial Test LR	12	Milligram(MG)	10/06/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1744190	-	Ammonia TNTplus Vial Test LR	12	Milligram(MG)	10/06/22
1744192	-	Ammonia TNTplus Vial Test LR	12	Milligram(MG)	10/06/22
1744194	-	Ammonia TNTplus Vial Test LR	12	Milligram(MG)	10/06/22
1744196	-	Ammonia TNTplus Vial Test LR	12	Milligram(MG)	10/06/22
1744191	-	Ammonia TNTplus Vial Test LR	12	Milligram(MG)	10/06/22
1744197	-	Ammonia TNTplus Vial Test LR	12	Milligram(MG)	10/06/22
1744198	-	Ammonia TNTplus Vial Test LR	12	Milligram(MG)	10/06/22
1744199	-	Ammonia TNTplus Vial Test LR	12	Milligram(MG)	10/06/22
1744195	-	Ammonia TNTplus Vial Test LR	12	Milligram(MG)	10/06/22
1744186	87-90-1	TRICHLOROISOCYANURIC ACID	1	Kilograms(KG)	10/06/22
1744188	87-90-1	TRICHLOROISOCYANURIC ACID	1	Kilograms(KG)	10/06/22
1744187	87-90-1	TRICHLOROISOCYANURIC ACID	1	Kilograms(KG)	10/06/22
1744118	-	3M Scotch-Weld Epoxy Adhesive 2216 B/A Gray - KIT	41.5	Milliliter(ML)	10/06/22
1744129	-	3M Scotch-Weld Epoxy Adhesive 2216 B/A Gray - KIT	41.5	Milliliter(ML)	10/06/22
1744127	-	3M Scotch-Weld Epoxy Adhesive 2216 B/A Gray - KIT	41.5	Milliliter(ML)	10/06/22
1744120	-	3M Scotch-Weld Epoxy Adhesive 2216 B/A Gray - KIT	41.5	Milliliter(ML)	10/06/22
1744121	-	3M Scotch-Weld Epoxy Adhesive 2216 B/A Gray - KIT	41.5	Milliliter(ML)	10/06/22
1744122	-	3M Scotch-Weld Epoxy Adhesive 2216 B/A Gray - KIT	41.5	Milliliter(ML)	10/06/22
1744123	-	3M Scotch-Weld Epoxy Adhesive 2216 B/A Gray - KIT	41.5	Milliliter(ML)	10/06/22
1744124	-	3M Scotch-Weld Epoxy Adhesive 2216 B/A Gray - KIT	41.5	Milliliter(ML)	10/06/22
1744126	-	3M Scotch-Weld Epoxy Adhesive 2216 B/A Gray - KIT	41.5	Milliliter(ML)	10/06/22
1744128	-	3M Scotch-Weld Epoxy Adhesive 2216 B/A Gray - KIT	41.5	Milliliter(ML)	10/06/22
1744119	-	3M Scotch-Weld Epoxy Adhesive 2216 B/A Gray - KIT	41.5	Milliliter(ML)	10/06/22
1744125	-	3M Scotch-Weld Epoxy Adhesive 2216 B/A Gray - KIT	41.5	Milliliter(ML)	10/06/22
1744160	-	EPO-TEK H20E Part A EPO-TEK H20E Part B - KIT	1	Ounces(OZ)	10/06/22
1744161	-	EPO-TEK H20E Part A EPO-TEK H20E Part B - KIT	1	Ounces(OZ)	10/06/22
1744162	2398-37-0	3-Bromoanisole 98+%	500	Gram(GM)	10/06/22
1744163	2398-37-0	3-Bromoanisole 98+%	500	Gram(GM)	10/06/22
1744164	20662-14-0	SCANDIUM CHLORIDE HEXAHYDRATE	5	Gram(GM)	10/06/22
1744165	20662-14-0	SCANDIUM CHLORIDE HEXAHYDRATE	5	Gram(GM)	10/06/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1744166	429-06-1	TETRAETHYLAMMONIUM TETRAFLUOROBORATE	25	Gram(GM)	10/06/22
1662870	-	Bio-Based (Green) Paper Shredder Oil	1	Pint(PT)	10/07/22
1662868	-	Bio-Based (Green) Paper Shredder Oil	1	Pint(PT)	10/07/22
1662866	-	Bio-Based (Green) Paper Shredder Oil	1	Pint(PT)	10/07/22
1662867	-	Bio-Based (Green) Paper Shredder Oil	1	Pint(PT)	10/07/22
1714541	-	FIRESTOP SEALANT	10.1	Ounces(OZ)	10/07/22
1714542	-	FIRESTOP SEALANT	10.1	Ounces(OZ)	10/07/22
1744167	26590-05-6	Poly(acrylamide-co-diallyldimethylammonium chloride) solution 10 wt. % in H2O	1	Liters(L)	10/07/22
1744168	16940-66-2	Sodium borohydride solution ~12 wt. % in 14 M NaOH	25	Milliliter(ML)	10/07/22
1744170	-	Hexanes mixed isomers HPLC Grade 99+%	4	Liters(L)	10/07/22
1736555	105-58-8	Diethyl carbonate 99%	2.5	Liters(L)	10/07/22
1743616	290-37-9	PYRAZINE	5	Gram(GM)	10/07/22
1744050	-	Mobilgear 600 XP 220	17.2	Kilograms(KG)	10/07/22
1744051	1310-73-2	SODIUM HYDROXIDE PELLETS	500	Gram(GM)	10/07/22
1744113	-	Dissolved Oxygen 3 Powder Pillows	60	Milliliter(ML)	10/07/22
1744115	-	Dissolved Oxygen 3 Powder Pillows	60	Milliliter(ML)	10/07/22
1744114	-	Dissolved Oxygen 3 Powder Pillows	60	Milliliter(ML)	10/07/22
1744116	124-40-3	DIMETHYLAMINE 40% WATER	100	Milliliter(ML)	10/07/22
1744117	75-09-2	Dichloromethane for HPLC	4	Liters(L)	10/07/22
1744108	-	XIAMETER AFE-1510	44	Pounds(LB)	10/07/22
1744109	-	XIAMETER AFE-1510	44	Pounds(LB)	10/07/22
1744110	-	XIAMETER AFE-1510	44	Pounds(LB)	10/07/22
1744111	67-56-1	Methanol 99.9% (HPLC)	2.5	Liters(L)	10/07/22
1744112	67-56-1	Methanol 99.9% (HPLC)	2.5	Liters(L)	10/07/22
1744131	112724-94-4	N N-Bis(2-ethylhexyl)butyramide	1	Gram(GM)	10/07/22
1744132	112724-94-4	N N-Bis(2-ethylhexyl)butyramide	1	Gram(GM)	10/07/22
1744130	-	Masterbond EP21TCHT-1	0.25	Pint(PT)	10/07/22
1744103	-	DOW CORNING 3145 RTV MIL-A-46146 ADHESIVE/SEALANT-CLEAR	90	Milliliter(ML)	10/07/22
1744102	7791-25-5	Sulfuryl chloride 97%	25	Milliliter(ML)	10/07/22
1744056	-	Lithium aluminium hydride 4.0M solution in diethyl ether	100	Milliliter(ML)	10/07/22
1744037	5137-55-3	Methyltrioctylammonium chloride	50	Gram(GM)	10/07/22
1744038	5137-55-3	Methyltrioctylammonium chloride	50	Gram(GM)	10/07/22
1744104	-	PowderRange Ti64	100	Kilograms(KG)	10/07/22
1744106	-	PowderRange Ti64	100	Kilograms(KG)	10/07/22
1744105	-	PowderRange Ti64	100	Kilograms(KG)	10/07/22
1744107	-	POLY-L-LYSINE SOLUTION	100	Milliliter(ML)	10/07/22
1736554	79-20-9	Methyl acetate 99+% Extra Dry	1	Liters(L)	10/07/22
1743617	25068-38-6	DEVCON 5 Minute Epoxy Resin	15	Ounces(OZ)	10/07/22
1743618	-	Hard-Plus Resin-812	512.5	Gram(GM)	10/07/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1744033	1071-83-6	GLYPHOSATE	5	Gram(GM)	10/07/22
1744036	11/1/5470	HYDROXYLAMINE HYDROCHLORIDE	5	Gram(GM)	10/07/22
1744034	-	ALPHA RMA-390-DH3 Solder Paste 63Sn/37Pb 90-3-M13	500	Gram(GM)	10/07/22
1690995	7727-37-9	NITROGEN GAS	300	Cubic Feet(CF)	10/10/22
1691004	7727-37-9	NITROGEN GAS	300	Cubic Feet(CF)	10/10/22
1690997	7727-37-9	NITROGEN GAS	300	Cubic Feet(CF)	10/10/22
1690998	7727-37-9	NITROGEN GAS	300	Cubic Feet(CF)	10/10/22
1690999	7727-37-9	NITROGEN GAS	300	Cubic Feet(CF)	10/10/22
1691000	7727-37-9	NITROGEN GAS	300	Cubic Feet(CF)	10/10/22
1691001	7727-37-9	NITROGEN GAS	300	Cubic Feet(CF)	10/10/22
1691002	7727-37-9	NITROGEN GAS	300	Cubic Feet(CF)	10/10/22
1691005	7727-37-9	NITROGEN GAS	300	Cubic Feet(CF)	10/10/22
1691003	7727-37-9	NITROGEN GAS	300	Cubic Feet(CF)	10/10/22
1690996	7727-37-9	NITROGEN GAS	300	Cubic Feet(CF)	10/10/22
1691006	7727-37-9	NITROGEN GAS	300	Cubic Feet(CF)	10/10/22
1691060	7727-37-9	NITROGEN GAS	40	Cubic Feet(CF)	10/10/22
1691083	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/10/22
1691087	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/10/22
1691084	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/10/22
1691091	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/10/22
1691082	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/10/22
1691085	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/10/22
1691086	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/10/22
1691090	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/10/22
1691089	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/10/22
1691088	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/10/22
1691092	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/10/22
1691094	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/10/22
1691095	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/10/22
1691093	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/10/22
1691186	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/10/22
1691185	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/10/22
1691187	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/10/22
1691188	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/10/22
1691189	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/10/22
1691190	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/10/22
1691191	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/10/22
1691192	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/10/22
1691007	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691012	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691011	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691010	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691014	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691015	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1691016	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691017	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691018	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691013	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691008	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691009	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691019	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691174	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691176	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691177	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691179	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691180	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691181	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691182	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691175	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691183	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691184	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691178	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691143	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691139	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691140	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691154	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691153	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691152	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691151	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691172	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691142	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691156	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691144	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691145	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691146	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691150	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691149	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691148	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691141	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691163	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691147	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691170	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691169	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691168	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691167	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691166	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691138	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691164	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691155	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1691162	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691161	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691160	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691159	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691158	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691157	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691171	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691165	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691173	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691021	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691020	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/10/22
1691022	-	Compressed Air	220	Cubic Feet(CF)	10/10/22
1691027	-	Compressed Air	220	Cubic Feet(CF)	10/10/22
1691028	-	Compressed Air	220	Cubic Feet(CF)	10/10/22
1691029	-	Compressed Air	220	Cubic Feet(CF)	10/10/22
1691030	-	Compressed Air	220	Cubic Feet(CF)	10/10/22
1691031	-	Compressed Air	220	Cubic Feet(CF)	10/10/22
1691026	-	Compressed Air	220	Cubic Feet(CF)	10/10/22
1691024	-	Compressed Air	220	Cubic Feet(CF)	10/10/22
1691023	-	Compressed Air	220	Cubic Feet(CF)	10/10/22
1691025	-	Compressed Air	220	Cubic Feet(CF)	10/10/22
1691032	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	10/10/22
1691034	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	10/10/22
1691033	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	10/10/22
1691035	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	10/10/22
1691036	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	10/10/22
1691037	-	5% Hydrogen/10% Carbon Dioxide/Balance Nitrogen	220	Cubic Feet(CF)	10/10/22
1691040	-	5% Hydrogen/10% Carbon Dioxide/Balance Nitrogen	220	Cubic Feet(CF)	10/10/22
1691039	-	5% Hydrogen/10% Carbon Dioxide/Balance Nitrogen	220	Cubic Feet(CF)	10/10/22
1691038	-	5% Hydrogen/10% Carbon Dioxide/Balance Nitrogen	220	Cubic Feet(CF)	10/10/22
1691041	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22
1691056	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22
1691046	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22
1691054	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22
1691045	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22
1691053	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22
1691047	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22
1691051	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22
1691055	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22
1691044	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22
1691043	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1691042	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22
1691050	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22
1691048	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22
1691052	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22
1691049	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22
1691101	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22
1691100	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22
1691104	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22
1691102	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22
1691103	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22
1691099	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22
1691096	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22
1691097	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22
1691105	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22
1691107	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22
1691108	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22
1691109	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22
1691110	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22
1691098	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22
1691106	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/10/22
1691057	-	Nitrous Oxide/Argon	80	Cubic Feet(CF)	10/10/22
1691058	-	CARBON MONOXIDE IN NITROGEN	80	Cubic Feet(CF)	10/10/22
1691059	-	CARBON MONOXIDE IN NITROGEN	80	Cubic Feet(CF)	10/10/22
1691065	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	10/10/22
1691072	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	10/10/22
1691071	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	10/10/22
1691068	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	10/10/22
1691067	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	10/10/22
1691074	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	10/10/22
1691070	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	10/10/22
1691066	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	10/10/22
1691073	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	10/10/22
1691075	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	10/10/22
1691076	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	10/10/22
1691077	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	10/10/22
1691078	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	10/10/22
1691079	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	10/10/22
1691069	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	10/10/22
1691080	-	Argon 75% Carbon Dioxide 25%	220	Cubic Feet(CF)	10/10/22
1691081	-	Argon 75% Carbon Dioxide 25%	220	Cubic Feet(CF)	10/10/22
1691111	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	10/10/22
1691112	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	10/10/22
1691120	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	10/10/22
1691125	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	10/10/22
1691124	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	10/10/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1691122	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	10/10/22
1691119	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	10/10/22
1691118	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	10/10/22
1691117	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	10/10/22
1691116	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	10/10/22
1691115	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	10/10/22
1691113	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	10/10/22
1691123	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	10/10/22
1691114	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	10/10/22
1691121	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	10/10/22
1691126	74-98-6	PROPANE	11	Gallon(GAL)	10/10/22
1691127	74-98-6	PROPANE	11	Gallon(GAL)	10/10/22
1691132	74-98-6	PROPANE	11	Gallon(GAL)	10/10/22
1691131	74-98-6	PROPANE	11	Gallon(GAL)	10/10/22
1691130	74-98-6	PROPANE	11	Gallon(GAL)	10/10/22
1691129	74-98-6	PROPANE	11	Gallon(GAL)	10/10/22
1691128	74-98-6	PROPANE	11	Gallon(GAL)	10/10/22
1691133	-	HYDROGEN GAS	20	Cubic Feet(CF)	10/10/22
1691137	-	HYDROGEN GAS	20	Cubic Feet(CF)	10/10/22
1691136	-	HYDROGEN GAS	20	Cubic Feet(CF)	10/10/22
1691135	-	HYDROGEN GAS	20	Cubic Feet(CF)	10/10/22
1691134	-	HYDROGEN GAS	20	Cubic Feet(CF)	10/10/22
1691193	-	OXYGEN/HELIUM (1:4)	105	Cubic Feet(CF)	10/10/22
1719259	-	BUFFER SOLUTION PH 8.0	500	Milliliter(ML)	10/10/22
1719260	-	BUFFER SOLUTION PH 8.0	500	Milliliter(ML)	10/10/22
1437472	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	10/10/22
1437481	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	10/10/22
1437475	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	10/10/22
1437474	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	10/10/22
1437473	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	10/10/22
1437482	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	10/10/22
1437477	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	10/10/22
1437480	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	10/10/22
1437476	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	10/10/22
1437479	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	10/10/22
1437478	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	10/10/22
1437483	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	10/10/22
1437464	-	Spears LW-5 One-Step Low VOC Cement for LabWaste CPVC Systems	1	Quarts(QT)	10/10/22
1437465	-	Spears LW-5 One-Step Low VOC Cement for LabWaste CPVC Systems	1	Quarts(QT)	10/10/22
1437171	-	Spears CPVC-24 Low VOC CPVC Plastic Pipe Cement	1	Quarts(QT)	10/10/22
1437170	-	Spears Primer-70 Low VOC Primer for PVC and CPVC Plastic Pipe	1	Quarts(QT)	10/10/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1642043	-	Simple Green All-Purpose Cleaner	2.5	Gallon(GAL)	10/10/22
1691062	7727-37-9	NITROGEN GAS	40	Cubic Feet(CF)	10/10/22
1691061	7727-37-9	NITROGEN GAS	40	Cubic Feet(CF)	10/10/22
1691064	7727-37-9	NITROGEN GAS	40	Cubic Feet(CF)	10/10/22
1691063	7727-37-9	NITROGEN GAS	40	Cubic Feet(CF)	10/10/22
1642046	-	MOBIL VELOCITE OIL NO. 3	5	Gallon(GAL)	10/11/22
1642047	-	MOBIL VELOCITE OIL NO. 3	5	Gallon(GAL)	10/11/22
1642048	-	MOBIL VELOCITE OIL NO. 3	5	Gallon(GAL)	10/11/22
1437535	-	Triple-D	1	Gallon(GAL)	10/11/22
1705927	-	ULTIMA GOLD AB LIQUID SCINTILLATION COCKTAIL	1	Liters(L)	10/11/22
1705929	1310-73-2	SODIUM HYDROXIDE SOLUTION	1	Liters(L)	10/11/22
1736556	7289-92-1	TRIS(DIMETHYLAMINO) ANTIMONY	25	Milliliter(ML)	10/11/22
1736557	7289-92-1	TRIS(DIMETHYLAMINO) ANTIMONY	25	Milliliter(ML)	10/11/22
1744035	1317-37-9	Iron Phosphor Sulfide	1	Gram(GM)	10/11/22
1736558	11/4/7758	POTASSIUM PHOSPHATE DIBASIC	1	Kilograms(KG)	10/11/22
1744057	-	Bacto Tryptic Soy Broth	500	Gram(GM)	10/11/22
1744058	7789-23-3	POTASSIUM FLUORIDE	100	Gram(GM)	10/11/22
1744059	85-44-9	PHTHALIC ANHYDRIDE	1	Kilograms(KG)	10/11/22
1744060	14808-60-7	Quartz wool fine	50	Gram(GM)	10/11/22
1744133	64-17-5	ETHYL ALCOHOL ABSOLUTE	1	Liters(L)	10/11/22
1744134	64-17-5	ETHYL ALCOHOL ABSOLUTE	1	Liters(L)	10/11/22
1691194	7440-59-7	HELIUM GAS	100	Liters(L)	10/11/22
1744242	108-88-3	TOLUENE	1	Liters(L)	10/11/22
1744243	108-88-3	TOLUENE	1	Liters(L)	10/11/22
1691195	124-38-9	CARBON DIOXIDE	50	Pounds(LB)	10/11/22
1691196	124-38-9	CARBON DIOXIDE	50	Pounds(LB)	10/11/22
1691197	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	10/11/22
1691198	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	10/11/22
1458670	-	WD-40 AEROSOL	12	Ounces(OZ)	10/11/22
1642049	-	MISTIC METAL MOVER ALUMICUT CUTTING FLUID	1	Pint(PT)	10/11/22
1642050	-	MISTIC METAL MOVER ALUMICUT CUTTING FLUID	1	Pint(PT)	10/11/22
1642051	-	MISTIC METAL MOVER ALUMICUT CUTTING FLUID	1	Pint(PT)	10/11/22
1744244	-	ROLASERIT	25	Kilograms(KG)	10/11/22
1458671	-	WD-40 AEROSOL	12	Ounces(OZ)	10/11/22
1691199	-	Compressed Air	220	Cubic Feet(CF)	10/11/22
1642054	-	Tap Magic EP-Xtra Cutting Fluid	4	Ounces(OZ)	10/11/22
1642055	-	Tap Magic EP-Xtra Cutting Fluid	4	Ounces(OZ)	10/11/22
1642056	-	Tap Magic EP-Xtra Cutting Fluid	4	Ounces(OZ)	10/11/22
1691200	-	Compressed Air	220	Cubic Feet(CF)	10/11/22
1691201	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/11/22
1691215	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/11/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1691209	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/11/22
1691214	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/11/22
1691219	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/11/22
1691211	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/11/22
1691220	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/11/22
1691213	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/11/22
1691222	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/11/22
1691217	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/11/22
1691216	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/11/22
1691210	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/11/22
1691212	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/11/22
1691205	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/11/22
1691221	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/11/22
1691208	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/11/22
1691207	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/11/22
1691206	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/11/22
1691202	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/11/22
1691204	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/11/22
1691218	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/11/22
1691203	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/11/22
1691223	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/11/22
1691232	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/11/22
1691224	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/11/22
1691225	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/11/22
1691230	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/11/22
1691229	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/11/22
1691228	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/11/22
1691233	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/11/22
1691234	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/11/22
1691226	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/11/22
1691227	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/11/22
1691235	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/11/22
1691231	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/11/22
1691244	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/11/22
1691240	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/11/22
1691238	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/11/22
1691239	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/11/22
1691246	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/11/22
1691245	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/11/22
1691247	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/11/22
1691251	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/11/22
1691237	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/11/22
1691241	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/11/22
1691242	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/11/22
1691243	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/11/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1691249	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/11/22
1691250	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/11/22
1691248	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/11/22
1691236	7440-59-7	HELIUM GAS	300	Cubic Feet(CF)	10/11/22
1691252	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/11/22
1691260	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/11/22
1691259	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/11/22
1691258	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/11/22
1691256	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/11/22
1691265	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/11/22
1691255	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/11/22
1691254	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/11/22
1691253	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/11/22
1691257	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/11/22
1691263	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/11/22
1691261	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/11/22
1691262	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/11/22
1691264	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/11/22
1691266	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/11/22
1691267	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/11/22
1691268	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/11/22
1691269	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/11/22
1691276	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/11/22
1691277	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/11/22
1691275	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/11/22
1691274	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/11/22
1691273	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/11/22
1691272	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/11/22
1691271	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/11/22
1691278	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/11/22
1691270	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/11/22
1691279	74-98-6	PROPANE	11	Gallon(GAL)	10/11/22
1691282	74-98-6	PROPANE	11	Gallon(GAL)	10/11/22
1691284	74-98-6	PROPANE	11	Gallon(GAL)	10/11/22
1691283	74-98-6	PROPANE	11	Gallon(GAL)	10/11/22
1691280	74-98-6	PROPANE	11	Gallon(GAL)	10/11/22
1691281	74-98-6	PROPANE	11	Gallon(GAL)	10/11/22
1691285	7440-63-3	XENON	125	Cubic Feet(CF)	10/11/22
1691286	7440-63-3	XENON	125	Cubic Feet(CF)	10/11/22
1744287	3559-74-8	Trimethylsilylcyclopentadiene	25	Gram(GM)	10/11/22
1744288	3559-74-8	Trimethylsilylcyclopentadiene	5	Gram(GM)	10/11/22
1744292	3559-74-8	Trimethylsilylcyclopentadiene	1	Gram(GM)	10/11/22
1744289	3559-74-8	Trimethylsilylcyclopentadiene	5	Gram(GM)	10/11/22
1744290	3559-74-8	Trimethylsilylcyclopentadiene	5	Gram(GM)	10/11/22
1744291	3559-74-8	Trimethylsilylcyclopentadiene	5	Gram(GM)	10/11/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1744295	3559-74-8	Trimethylsilylcyclopentadiene	1	Gram(GM)	10/11/22
1744294	3559-74-8	Trimethylsilylcyclopentadiene	1	Gram(GM)	10/11/22
1744296	3559-74-8	Trimethylsilylcyclopentadiene	1	Gram(GM)	10/11/22
1744293	3559-74-8	Trimethylsilylcyclopentadiene	1	Gram(GM)	10/11/22
1744351	666-52-4	ACETONE D6	10	Gram(GM)	10/11/22
1744355	666-52-4	ACETONE D6	10	Gram(GM)	10/11/22
1744354	666-52-4	ACETONE D6	10	Gram(GM)	10/11/22
1744353	666-52-4	ACETONE D6	10	Gram(GM)	10/11/22
1744352	666-52-4	ACETONE D6	10	Gram(GM)	10/11/22
1458688	-	WD-40 AEROSOL	12	Ounces(OZ)	10/12/22
1731671	-	P-100 Primer	1	Gallon(GAL)	10/12/22
1731672	-	P-100 Primer	1	Gallon(GAL)	10/12/22
1458689	-	GE Silicone II Window and Door Sealant	2.8	Ounces(OZ)	10/12/22
1458690	-	GE Silicone II Window and Door Sealant	2.8	Ounces(OZ)	10/12/22
1721508	-	Humimic Medical Gel	1	Pounds(LB)	10/12/22
V00000CAF2	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	10/12/22
V00000CAF6	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	10/12/22
V00000CAF7	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	10/12/22
V00000CAF5	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	10/12/22
V00000CAF4	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	10/12/22
V00000CAF3	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	10/12/22
V00000CAF8	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	10/12/22
V00000CAF9	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	10/12/22
V00000CAFA	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	10/12/22
V00000CAFB	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	10/12/22
V00000CAFC	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	10/12/22
V00000CB01	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	10/12/22
V00000CAFE	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	10/12/22
V00000CB00	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	10/12/22
V00000CAFF	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	10/12/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CAFD	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	10/12/22
1730962	-	ZEREX DEX-COOL Antifreeze Coolant	1	Gallon(GAL)	10/12/22
1730967	-	ZEREX DEX-COOL Antifreeze Coolant	1	Gallon(GAL)	10/12/22
1730966	-	ZEREX DEX-COOL Antifreeze Coolant	1	Gallon(GAL)	10/12/22
1730965	-	ZEREX DEX-COOL Antifreeze Coolant	1	Gallon(GAL)	10/12/22
1730964	-	ZEREX DEX-COOL Antifreeze Coolant	1	Gallon(GAL)	10/12/22
1730963	-	ZEREX DEX-COOL Antifreeze Coolant	1	Gallon(GAL)	10/12/22
V00000CB1D	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB14	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB15	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB16	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB17	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB18	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB19	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB1A	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB13	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB1C	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB1F	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB1E	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB20	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB22	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB23	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB24	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB25	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB1B	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB09	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB02	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB03	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB04	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB05	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB21	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB06	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB12	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB08	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB0A	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB0B	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB0C	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB0D	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB0E	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB0F	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB10	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB11	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
V00000CB07	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/12/22
1730946	-	Johnsen's Power Steering Fluid	1	Quarts(QT)	10/12/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1730947	-	Johnsen's Power Steering Fluid	1	Quarts(QT)	10/12/22
1730948	-	Johnsen's Power Steering Fluid	1	Quarts(QT)	10/12/22
1730949	-	Brakleen Brake Parts Cleaner	18	Ounces(OZ)	10/12/22
1730950	-	COPPER ANTI-SEIZE LUBRICANT	16	Ounces(OZ)	10/12/22
1730951	-	COPPER ANTI-SEIZE LUBRICANT	16	Ounces(OZ)	10/12/22
1730952	Multi	The Right Stuff	10.1	Ounces(OZ)	10/12/22
1730953	Multi	The Right Stuff	10.1	Ounces(OZ)	10/12/22
1731666	-	Thin Patch	50	Pounds(LB)	10/12/22
1731668	-	Thin Patch	50	Pounds(LB)	10/12/22
1731667	-	Thin Patch	50	Pounds(LB)	10/12/22
1731669	-	Thin Patch	50	Pounds(LB)	10/12/22
1731670	-	Thin Patch	50	Pounds(LB)	10/12/22
1691287	-	ETHANE	220	Cubic Feet(CF)	10/12/22
1691288	-	ETHANE	220	Cubic Feet(CF)	10/12/22
172516	-	Humimic Medical Gel	1	Pounds(LB)	10/12/22
172509	-	Humimic Medical Gel	1	Pounds(LB)	10/12/22
172513	-	Humimic Medical Gel	1	Pounds(LB)	10/12/22
172514	-	Humimic Medical Gel	1	Pounds(LB)	10/12/22
172515	-	Humimic Medical Gel	1	Pounds(LB)	10/12/22
172510	-	Humimic Medical Gel	1	Pounds(LB)	10/12/22
172512	-	Humimic Medical Gel	1	Pounds(LB)	10/12/22
172511	-	Humimic Medical Gel	1	Pounds(LB)	10/12/22
172517	-	Humimic Medical Gel	1	Pounds(LB)	10/12/22
1721367	-	KRYTOX LUBRICANT	2	Ounces(OZ)	10/12/22
1721369	-	KRYTOX LUBRICANT	2	Ounces(OZ)	10/12/22
1721368	-	KRYTOX LUBRICANT	2	Ounces(OZ)	10/12/22
1757868	-	SNOOP	8	Ounces(OZ)	10/12/22
1721371	-	SNOOP	1	Gallon(GAL)	10/12/22
1721373	-	SNOOP	1	Gallon(GAL)	10/12/22
1721372	-	SNOOP	1	Gallon(GAL)	10/12/22
1630496	-	Clean Solutions Floor Finish	1	Gallon(GAL)	10/12/22
1721364	-	SNOOP LIQUID LEAK DETECTOR	1	Gallon(GAL)	10/12/22
1719991	-	Polywater J Winter Grade Lubricant	1	Quarts(QT)	10/12/22
1720001	-	Polywater J Winter Grade Lubricant	1	Quarts(QT)	10/12/22
1719992	-	Polywater J Winter Grade Lubricant	1	Quarts(QT)	10/12/22
1719993	-	Polywater J Winter Grade Lubricant	1	Quarts(QT)	10/12/22
1719994	-	Polywater J Winter Grade Lubricant	1	Quarts(QT)	10/12/22
1719995	-	Polywater J Winter Grade Lubricant	1	Quarts(QT)	10/12/22
1719996	-	Polywater J Winter Grade Lubricant	1	Quarts(QT)	10/12/22
1719997	-	Polywater J Winter Grade Lubricant	1	Quarts(QT)	10/12/22
1719998	-	Polywater J Winter Grade Lubricant	1	Quarts(QT)	10/12/22
1719999	-	Polywater J Winter Grade Lubricant	1	Quarts(QT)	10/12/22
1720000	-	Polywater J Winter Grade Lubricant	1	Quarts(QT)	10/12/22
1720002	-	Polywater J Winter Grade Lubricant	1	Quarts(QT)	10/12/22
1720006	-	Polywater J Winter Grade Lubricant	1	Quarts(QT)	10/12/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1720003	-	Polywater J Winter Grade Lubricant	1	Quarts(QT)	10/12/22
1720005	-	Polywater J Winter Grade Lubricant	1	Quarts(QT)	10/12/22
1720007	-	Polywater J Winter Grade Lubricant	1	Quarts(QT)	10/12/22
1720008	-	Polywater J Winter Grade Lubricant	1	Quarts(QT)	10/12/22
1720009	-	Polywater J Winter Grade Lubricant	1	Quarts(QT)	10/12/22
1720010	-	Polywater J Winter Grade Lubricant	1	Quarts(QT)	10/12/22
1720011	-	Polywater J Winter Grade Lubricant	1	Quarts(QT)	10/12/22
1720012	-	Polywater J Winter Grade Lubricant	1	Quarts(QT)	10/12/22
1720013	-	Polywater J Winter Grade Lubricant	1	Quarts(QT)	10/12/22
1720014	-	Polywater J Winter Grade Lubricant	1	Quarts(QT)	10/12/22
1720004	-	Polywater J Winter Grade Lubricant	1	Quarts(QT)	10/12/22
1730914	-	Brakleen Brake Parts Cleaner	18	Ounces(OZ)	10/13/22
1730915	-	Pyroil Non-Chlorinated Brake Parts Cleaner PY4003	13	Ounces(OZ)	10/13/22
1730919	-	Pyroil Non-Chlorinated Brake Parts Cleaner PY4003	13	Ounces(OZ)	10/13/22
1730920	-	Pyroil Non-Chlorinated Brake Parts Cleaner PY4003	13	Ounces(OZ)	10/13/22
1730918	-	Pyroil Non-Chlorinated Brake Parts Cleaner PY4003	13	Ounces(OZ)	10/13/22
1730917	-	Pyroil Non-Chlorinated Brake Parts Cleaner PY4003	13	Ounces(OZ)	10/13/22
1730916	-	Pyroil Non-Chlorinated Brake Parts Cleaner PY4003	13	Ounces(OZ)	10/13/22
V00000CB28	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/13/22
V00000CB29	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/13/22
V00000CB26	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/13/22
V00000CB27	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/13/22
V00000CB2A	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/13/22
V00000CB35	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	10/13/22
V00000CB41	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	10/13/22
V00000CB40	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	10/13/22
V00000CB3F	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	10/13/22
V00000CB3E	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	10/13/22
V00000CB3D	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	10/13/22
V00000CB3C	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	10/13/22
V00000CB3B	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	10/13/22
V00000CB3A	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	10/13/22
V00000CB39	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	10/13/22
V00000CB38	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	10/13/22
V00000CB36	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	10/13/22
V00000CB34	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	10/13/22
V00000CB33	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	10/13/22
V00000CB32	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	10/13/22
V00000CB30	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	10/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CB2E	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	10/13/22
V00000CB2D	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	10/13/22
V00000CB2C	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	10/13/22
V00000CB2B	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	10/13/22
V00000CB31	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	10/13/22
V00000CB42	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	10/13/22
V00000CB37	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	10/13/22
V00000CB2F	-	Stihl HP 2-Cycle Engine Oil	6.4	Ounces(OZ)	10/13/22
1730921	-	DUPLI-COLOR Acrylic Enamel Aerosol Paint - Semi-Gloss Black	12	Ounces(OZ)	10/13/22
1730922	-	DUPLI-COLOR Acrylic Enamel Aerosol Paint - Semi-Gloss Black	12	Ounces(OZ)	10/13/22
1730923	-	DUPLI-COLOR Acrylic Enamel Aerosol Paint - Semi-Gloss Black	12	Ounces(OZ)	10/13/22
1730924	-	DUPLI-COLOR Acrylic Enamel Aerosol Paint - Semi-Gloss Black	12	Ounces(OZ)	10/13/22
1730925	-	DUPLI-COLOR Acrylic Enamel Aerosol Paint - Semi-Gloss Black	12	Ounces(OZ)	10/13/22
1730926	-	DUPLI-COLOR Acrylic Enamel Aerosol Paint - Semi-Gloss Black	12	Ounces(OZ)	10/13/22
1730927	-	Painter's Touch 2X Ultra Cover Spray Paint	12	Ounces(OZ)	10/13/22
1730930	-	Painter's Touch 2X Ultra Cover Spray Paint	12	Ounces(OZ)	10/13/22
1730931	-	Painter's Touch 2X Ultra Cover Spray Paint	12	Ounces(OZ)	10/13/22
1730929	-	Painter's Touch 2X Ultra Cover Spray Paint	12	Ounces(OZ)	10/13/22
1730928	-	Painter's Touch 2X Ultra Cover Spray Paint	12	Ounces(OZ)	10/13/22
1730932	-	Painter's Touch 2X Ultra Cover Spray Paint	12	Ounces(OZ)	10/13/22
1730933	-	KRYLON COLORmaxx Gloss Black	12	Ounces(OZ)	10/13/22
1730944	-	KRYLON COLORmaxx Gloss Black	12	Ounces(OZ)	10/13/22
1730934	-	KRYLON COLORmaxx Gloss Black	12	Ounces(OZ)	10/13/22
1730938	-	KRYLON COLORmaxx Gloss Black	12	Ounces(OZ)	10/13/22
1730939	-	KRYLON COLORmaxx Gloss Black	12	Ounces(OZ)	10/13/22
1730940	-	KRYLON COLORmaxx Gloss Black	12	Ounces(OZ)	10/13/22
1730941	-	KRYLON COLORmaxx Gloss Black	12	Ounces(OZ)	10/13/22
1730942	-	KRYLON COLORmaxx Gloss Black	12	Ounces(OZ)	10/13/22
1730943	-	KRYLON COLORmaxx Gloss Black	12	Ounces(OZ)	10/13/22
1730936	-	KRYLON COLORmaxx Gloss Black	12	Ounces(OZ)	10/13/22
1730935	-	KRYLON COLORmaxx Gloss Black	12	Ounces(OZ)	10/13/22
1730937	-	KRYLON COLORmaxx Gloss Black	12	Ounces(OZ)	10/13/22
1730945	-	Parts Plus Conventional Green 50/50 Prediluted Antifreeze Coolant	1	Gallon(GAL)	10/13/22
1730956	-	Parts Plus Conventional Green 50/50 Prediluted Antifreeze Coolant	1	Gallon(GAL)	10/13/22
1730957	-	Parts Plus Conventional Green 50/50 Prediluted Antifreeze Coolant	1	Gallon(GAL)	10/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1730960	-	Parts Plus Conventional Green 50/50 Prediluted Antifreeze Coolant	1	Gallon(GAL)	10/13/22
1730961	-	Parts Plus Conventional Green 50/50 Prediluted Antifreeze Coolant	1	Gallon(GAL)	10/13/22
1730955	-	Parts Plus Conventional Green 50/50 Prediluted Antifreeze Coolant	1	Gallon(GAL)	10/13/22
1730954	-	Parts Plus Conventional Green 50/50 Prediluted Antifreeze Coolant	1	Gallon(GAL)	10/13/22
1730958	-	Parts Plus Conventional Green 50/50 Prediluted Antifreeze Coolant	1	Gallon(GAL)	10/13/22
1730959	-	Parts Plus Conventional Green 50/50 Prediluted Antifreeze Coolant	1	Gallon(GAL)	10/13/22
1732294	-	SULLAIR SULLUBE	5	Gallon(GAL)	10/13/22
1732295	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732304	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732299	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732310	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732309	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732308	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732307	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732305	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732303	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732302	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732301	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732300	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732298	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732296	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732306	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732297	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732368	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732393	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732392	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732391	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732390	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732389	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732384	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732388	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732387	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732386	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732362	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732332	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732327	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732367	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732366	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732331	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1732330	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732329	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732375	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732312	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732364	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732363	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732385	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732379	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732376	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732377	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732374	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732373	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732372	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732371	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732378	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732334	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732333	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732313	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732369	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732314	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732380	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732381	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732382	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732383	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732395	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732394	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732317	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732316	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732315	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732365	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732370	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732322	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732342	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732341	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732340	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732361	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732338	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732328	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732336	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732318	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732319	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732343	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732321	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732339	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732323	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1732324	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732325	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732311	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732335	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732396	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732397	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732398	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732326	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732320	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732354	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732360	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732359	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732358	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732357	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732356	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732337	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732355	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732344	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732352	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732346	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732353	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732349	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732347	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732351	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732348	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732345	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1732350	-	MOBIL DTE 24 HYDRAULIC OIL	1	Gallon(GAL)	10/13/22
1642042	-	Crown Cutting Oil 7020 Aerosol	1	Gallon(GAL)	10/13/22
1437466	-	H-P Stainless Steel Anti-Seize Nuclear Grade	8	Ounces(OZ)	10/13/22
1437471	-	H-P Stainless Steel Anti-Seize Nuclear Grade	8	Ounces(OZ)	10/13/22
1437470	-	H-P Stainless Steel Anti-Seize Nuclear Grade	8	Ounces(OZ)	10/13/22
1437469	-	H-P Stainless Steel Anti-Seize Nuclear Grade	8	Ounces(OZ)	10/13/22
1437467	-	H-P Stainless Steel Anti-Seize Nuclear Grade	8	Ounces(OZ)	10/13/22
1437468	-	H-P Stainless Steel Anti-Seize Nuclear Grade	8	Ounces(OZ)	10/13/22
1437545	-	JB Fast Vac Base	1	Gallon(GAL)	10/13/22
1730845	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730846	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730860	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730881	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730859	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730861	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730849	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730858	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730863	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730883	-	Roofing Granules C93	60	Pounds(LB)	10/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1730873	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730872	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730871	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730870	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730869	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730868	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730867	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730866	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730874	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730864	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730875	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730862	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730850	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730851	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730852	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730853	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730854	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730855	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730856	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730857	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730865	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730882	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730847	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730888	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730848	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730886	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730884	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730887	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730880	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730879	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730878	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730877	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730876	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1730885	-	Roofing Granules C93	60	Pounds(LB)	10/13/22
1437554	-	JB Fast Vac Base	1	Gallon(GAL)	10/13/22
1437549	-	JB Fast Vac Base	1	Gallon(GAL)	10/13/22
1437548	-	JB Fast Vac Base	1	Gallon(GAL)	10/13/22
1437553	-	JB Fast Vac Base	1	Gallon(GAL)	10/13/22
1437550	-	JB Fast Vac Base	1	Gallon(GAL)	10/13/22
1437552	-	JB Fast Vac Base	1	Gallon(GAL)	10/13/22
1437551	-	JB Fast Vac Base	1	Gallon(GAL)	10/13/22
1437547	-	JB Fast Vac Base	1	Gallon(GAL)	10/13/22
1437546	-	JB Fast Vac Base	1	Gallon(GAL)	10/13/22
1730889	-	Excelsior ASD-800	2	Gallon(GAL)	10/13/22
1730902	-	Excelsior ASD-800	2	Gallon(GAL)	10/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1730905	-	Excelsior ASD-800	2	Gallon(GAL)	10/13/22
1730890	-	Excelsior ASD-800	2	Gallon(GAL)	10/13/22
1730891	-	Excelsior ASD-800	2	Gallon(GAL)	10/13/22
1730892	-	Excelsior ASD-800	2	Gallon(GAL)	10/13/22
1730893	-	Excelsior ASD-800	2	Gallon(GAL)	10/13/22
1730894	-	Excelsior ASD-800	2	Gallon(GAL)	10/13/22
1730895	-	Excelsior ASD-800	2	Gallon(GAL)	10/13/22
1730896	-	Excelsior ASD-800	2	Gallon(GAL)	10/13/22
1730897	-	Excelsior ASD-800	2	Gallon(GAL)	10/13/22
1730898	-	Excelsior ASD-800	2	Gallon(GAL)	10/13/22
1730899	-	Excelsior ASD-800	2	Gallon(GAL)	10/13/22
1730900	-	Excelsior ASD-800	2	Gallon(GAL)	10/13/22
1730901	-	Excelsior ASD-800	2	Gallon(GAL)	10/13/22
1730904	-	Excelsior ASD-800	2	Gallon(GAL)	10/13/22
1730903	-	Excelsior ASD-800	2	Gallon(GAL)	10/13/22
1730906	-	Excelsior ASD-800	12	Gallon(GAL)	10/13/22
1730907	-	Durablend SAE 80W-90 SYNTHETIC BLEND GEAR OIL	1	Quarts(QT)	10/13/22
1730910	-	Durablend SAE 80W-90 SYNTHETIC BLEND GEAR OIL	1	Quarts(QT)	10/13/22
1730909	-	Durablend SAE 80W-90 SYNTHETIC BLEND GEAR OIL	1	Quarts(QT)	10/13/22
1730908	-	Durablend SAE 80W-90 SYNTHETIC BLEND GEAR OIL	1	Quarts(QT)	10/13/22
1730911	-	Valvoline Professional Series 75W-140 FULL SYNTHETIC GEAR OIL	12	Quarts(QT)	10/13/22
1730913	-	Valvoline Professional Series 75W-140 FULL SYNTHETIC GEAR OIL	12	Quarts(QT)	10/13/22
1730912	-	Valvoline Professional Series 75W-140 FULL SYNTHETIC GEAR OIL	12	Quarts(QT)	10/13/22
1730997	-	3M SUPER 77 SPRAY ADHESIVE	16.75	Ounces(OZ)	10/13/22
1731002	-	3M SUPER 77 SPRAY ADHESIVE	16.75	Ounces(OZ)	10/13/22
1731005	-	3M SUPER 77 SPRAY ADHESIVE	16.75	Ounces(OZ)	10/13/22
1730998	-	3M SUPER 77 SPRAY ADHESIVE	16.75	Ounces(OZ)	10/13/22
1730999	-	3M SUPER 77 SPRAY ADHESIVE	16.75	Ounces(OZ)	10/13/22
1731000	-	3M SUPER 77 SPRAY ADHESIVE	16.75	Ounces(OZ)	10/13/22
1731007	-	3M SUPER 77 SPRAY ADHESIVE	16.75	Ounces(OZ)	10/13/22
1731008	-	3M SUPER 77 SPRAY ADHESIVE	16.75	Ounces(OZ)	10/13/22
1731001	-	3M SUPER 77 SPRAY ADHESIVE	16.75	Ounces(OZ)	10/13/22
1731006	-	3M SUPER 77 SPRAY ADHESIVE	16.75	Ounces(OZ)	10/13/22
1731003	-	3M SUPER 77 SPRAY ADHESIVE	16.75	Ounces(OZ)	10/13/22
1731004	-	3M SUPER 77 SPRAY ADHESIVE	16.75	Ounces(OZ)	10/13/22
V00000CB7D	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB89	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB88	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CB87	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB86	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB85	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB84	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB83	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB82	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB81	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB80	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CBA5	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB7E	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB8C	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB7C	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB7B	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB7A	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB79	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB78	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB77	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB76	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB75	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB74	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB7F	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB96	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CBA4	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CBA3	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CBA2	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CBA1	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CBA0	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB9F	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB9D	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB9B	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB9A	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB99	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB8A	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB97	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB8B	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB95	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB94	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB93	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB92	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB91	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB90	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB8F	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB8E	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB8D	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB71	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CB98	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB4D	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB58	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB57	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB56	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB55	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB54	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB53	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB52	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB51	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB50	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB73	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB4E	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB5B	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB4C	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB4B	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB4A	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB49	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB48	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB47	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB46	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB45	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB44	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB43	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB4F	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB65	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB9E	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB70	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB6F	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB6E	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB6D	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB6C	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB6B	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB6A	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB69	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB68	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB59	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB66	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB5A	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB64	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB63	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB62	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB61	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB60	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB5F	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CB5E	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB5D	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB5C	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB72	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB67	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CB9C	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CBA7	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CBA8	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CBA9	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CBAA	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CBAB	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CBAC	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CBAD	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CBAE	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CBA6	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CBB0	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CBB3	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CBB1	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CBB2	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CBB4	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CBB6	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CBB7	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CBB8	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CBB9	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CBBA	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CBAF	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CBB5	-	Alex Plus Clear	10.1	Ounces(OZ)	10/13/22
V00000CBBC	-	BIN PRIMER SEALER	1	Gallon(GAL)	10/13/22
V00000CBBB	-	BIN PRIMER SEALER	1	Gallon(GAL)	10/13/22
1731009	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/13/22
1731035	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/13/22
1731034	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/13/22
1731033	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/13/22
1731032	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/13/22
1731031	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/13/22
1731030	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/13/22
1731028	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/13/22
1731038	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/13/22
1731026	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/13/22
1731036	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/13/22
1731037	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/13/22
1731029	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/13/22
1731019	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/13/22
1731011	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/13/22
1731012	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1731013	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/13/22
1731014	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/13/22
1731015	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/13/22
1731016	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/13/22
1731027	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/13/22
1731018	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/13/22
1731010	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/13/22
1731020	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/13/22
1731021	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/13/22
1731022	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/13/22
1731023	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/13/22
1731024	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/13/22
1731025	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/13/22
1731017	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/13/22
V00000CBC2	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CBBE	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CBBF	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CBC1	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CBC3	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CBC4	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CBC5	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CBBD	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CBC0	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
1730968	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	10/13/22
1730985	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	10/13/22
1730977	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	10/13/22
1730978	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	10/13/22
1730979	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	10/13/22
1730980	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	10/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1730981	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	10/13/22
1730982	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	10/13/22
1730970	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	10/13/22
1730984	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	10/13/22
1730976	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	10/13/22
1730975	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	10/13/22
1730974	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	10/13/22
1730973	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	10/13/22
1730972	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	10/13/22
1730971	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	10/13/22
1730969	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	10/13/22
1730983	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	10/13/22
1730986	-	Prime Guard Power Blast	1	Gallon(GAL)	10/13/22
1730989	-	Prime Guard Power Blast	1	Gallon(GAL)	10/13/22
1730988	-	Prime Guard Power Blast	1	Gallon(GAL)	10/13/22
1730990	-	Prime Guard Power Blast	1	Gallon(GAL)	10/13/22
1730987	-	Prime Guard Power Blast	1	Gallon(GAL)	10/13/22
1730991	-	FOOD GRADE SILICONE SPRAY	10	Ounces(OZ)	10/13/22
1730994	-	FOOD GRADE SILICONE SPRAY	10	Ounces(OZ)	10/13/22
1730992	-	FOOD GRADE SILICONE SPRAY	10	Ounces(OZ)	10/13/22
1730993	-	FOOD GRADE SILICONE SPRAY	10	Ounces(OZ)	10/13/22
1730995	-	FOOD GRADE SILICONE SPRAY	10	Ounces(OZ)	10/13/22
1730996	-	FOOD GRADE SILICONE SPRAY	10	Ounces(OZ)	10/13/22
1715767	-	2.5% Calcium Gluconate Gel	25	Gram(GM)	10/13/22
1757867	-	Bio-Based (Green) Paper Shredder Oil	1	Pint(PT)	10/13/22
1757869	-	SNOOP	8	Ounces(OZ)	10/13/22
1721370	-	SNOOP	1	Gallon(GAL)	10/13/22
1757870	-	SWAK (ANAEROBIC PIPE THREAD SEALANT)	1.69	Ounces(OZ)	10/13/22
1757872	-	SWAK (ANAEROBIC PIPE THREAD SEALANT)	1.69	Ounces(OZ)	10/13/22
1757871	-	SWAK (ANAEROBIC PIPE THREAD SEALANT)	1.69	Ounces(OZ)	10/13/22
1757873	-	SWAK (ANAEROBIC PIPE THREAD SEALANT)	1.69	Ounces(OZ)	10/13/22
1757874	-	AW 32 HYDRAULIC FLUID	1	Pint(PT)	10/13/22
1731039	-	PERMACRYL INTERIOR FLAT WHITE BASE	18	Liters(L)	10/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1731042	-	PERMACRYL INTERIOR FLAT WHITE BASE	18	Liters(L)	10/13/22
1731043	-	PERMACRYL INTERIOR FLAT WHITE BASE	18	Liters(L)	10/13/22
1731044	-	PERMACRYL INTERIOR FLAT WHITE BASE	18	Liters(L)	10/13/22
1731041	-	PERMACRYL INTERIOR FLAT WHITE BASE	18	Liters(L)	10/13/22
1731040	-	PERMACRYL INTERIOR FLAT WHITE BASE	18	Liters(L)	10/13/22
1731045	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	18	Liters(L)	10/13/22
V00000CBEB	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBF2	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBF1	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBF0	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBEF	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBEE	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBED	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBE6	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBFE	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBEA	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBE7	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBE8	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBF3	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBE9	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBEC	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBF4	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBF5	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBF6	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBF7	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBF8	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBF9	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBFA	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBFB	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBFD	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBFF	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBE5	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBE2	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CC01	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CC00	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBFC	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBD2	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBE4	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBC7	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBC8	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBC9	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBCA	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBCB	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBCC	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CBCD	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBCE	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBCF	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBD1	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBD3	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBD4	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBD5	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBDF	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBE3	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBC6	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBD0	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBE0	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBD6	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBDE	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBDD	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBDB	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBDA	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBD9	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBD8	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBDC	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBD7	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CBE1	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	10/13/22
V00000CC13	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	10/13/22
V00000CC0D	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	10/13/22
V00000CC0E	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	10/13/22
V00000CC0F	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	10/13/22
V00000CC10	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	10/13/22
V00000CC12	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	10/13/22
V00000CC05	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	10/13/22
V00000CC0C	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	10/13/22
V00000CC11	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	10/13/22
V00000CC03	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	10/13/22
V00000CC07	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	10/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CC0B	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	10/13/22
V00000CC02	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	10/13/22
V00000CC04	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	10/13/22
V00000CC06	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	10/13/22
V00000CC08	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	10/13/22
V00000CC09	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	10/13/22
V00000CC0A	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	10/13/22
V00000CC14	-	PERMACRYL INTERIOR FLAT WHITE BASE	3.6	Liters(L)	10/13/22
V00000CC15	-	PERMACRYL INTERIOR FLAT WHITE BASE	3.6	Liters(L)	10/13/22
V00000CC1F	-	BIN PRIMER SEALER	1	Gallon(GAL)	10/13/22
V00000CC17	-	BIN PRIMER SEALER	1	Gallon(GAL)	10/13/22
V00000CC1B	-	BIN PRIMER SEALER	1	Gallon(GAL)	10/13/22
V00000CC1D	-	BIN PRIMER SEALER	1	Gallon(GAL)	10/13/22
V00000CC1C	-	BIN PRIMER SEALER	1	Gallon(GAL)	10/13/22
V00000CC20	-	BIN PRIMER SEALER	1	Gallon(GAL)	10/13/22
V00000CC1A	-	BIN PRIMER SEALER	1	Gallon(GAL)	10/13/22
V00000CC18	-	BIN PRIMER SEALER	1	Gallon(GAL)	10/13/22
V00000CC16	-	BIN PRIMER SEALER	1	Gallon(GAL)	10/13/22
V00000CC1E	-	BIN PRIMER SEALER	1	Gallon(GAL)	10/13/22
V00000CC19	-	BIN PRIMER SEALER	1	Gallon(GAL)	10/13/22
V00000CC26	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	10/13/22
V00000CC25	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	10/13/22
V00000CC24	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	10/13/22
V00000CC23	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	10/13/22
V00000CC22	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	10/13/22
V00000CC21	-	SHEETROCK EASY SAND Lightweight Setting Type Joint Compound 5 20 45 90 210	18	Pounds(LB)	10/13/22
V00000CC33	-	PROSEAL PROSEAL SPRAY FIBERSEAL	1	Gallon(GAL)	10/13/22
V00000CC2E	-	PROSEAL PROSEAL SPRAY FIBERSEAL	1	Gallon(GAL)	10/13/22
V00000CC27	-	PROSEAL PROSEAL SPRAY FIBERSEAL	1	Gallon(GAL)	10/13/22
V00000CC34	-	PROSEAL PROSEAL SPRAY FIBERSEAL	1	Gallon(GAL)	10/13/22
V00000CC31	-	PROSEAL PROSEAL SPRAY FIBERSEAL	1	Gallon(GAL)	10/13/22
V00000CC32	-	PROSEAL PROSEAL SPRAY FIBERSEAL	1	Gallon(GAL)	10/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CC2F	-	PROSEAL PROSEAL SPRAY FIBERSEAL	1	Gallon(GAL)	10/13/22
V00000CC35	-	PROSEAL PROSEAL SPRAY FIBERSEAL	1	Gallon(GAL)	10/13/22
V00000CC2D	-	PROSEAL PROSEAL SPRAY FIBERSEAL	1	Gallon(GAL)	10/13/22
V00000CC2C	-	PROSEAL PROSEAL SPRAY FIBERSEAL	1	Gallon(GAL)	10/13/22
V00000CC2B	-	PROSEAL PROSEAL SPRAY FIBERSEAL	1	Gallon(GAL)	10/13/22
V00000CC2A	-	PROSEAL PROSEAL SPRAY FIBERSEAL	1	Gallon(GAL)	10/13/22
V00000CC29	-	PROSEAL PROSEAL SPRAY FIBERSEAL	1	Gallon(GAL)	10/13/22
V00000CC28	-	PROSEAL PROSEAL SPRAY FIBERSEAL	1	Gallon(GAL)	10/13/22
V00000CC30	-	PROSEAL PROSEAL SPRAY FIBERSEAL	1	Gallon(GAL)	10/13/22
1731054	-	PYROIL CARB AND CHOKE CLEANER	13	Ounces(OZ)	10/13/22
1731055	-	PYROIL CARB AND CHOKE CLEANER	13	Ounces(OZ)	10/13/22
V00000CC39	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	10/13/22
V00000CC3B	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	10/13/22
V00000CC3A	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	10/13/22
V00000CC38	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	10/13/22
V00000CC36	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	10/13/22
V00000CC37	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	10/13/22
V00000CC3C	-	PARTS PLUS SAE 10W-30 SYNTHETIC MOTOR OIL	1	Quarts(QT)	10/13/22
V00000CC3D	-	PARTS PLUS SAE 10W-30 SYNTHETIC MOTOR OIL	1	Quarts(QT)	10/13/22
1731056	-	Prime Guard Power Blast	1	Gallon(GAL)	10/13/22
1731082	-	Prime Guard Power Blast	1	Gallon(GAL)	10/13/22
1731046	-	Parts Plus Conventional Green 50/50 Prediluted Antifreeze Coolant	1	Gallon(GAL)	10/13/22
1731050	-	Parts Plus Conventional Green 50/50 Prediluted Antifreeze Coolant	1	Gallon(GAL)	10/13/22
1731051	-	Parts Plus Conventional Green 50/50 Prediluted Antifreeze Coolant	1	Gallon(GAL)	10/13/22
1731047	-	Parts Plus Conventional Green 50/50 Prediluted Antifreeze Coolant	1	Gallon(GAL)	10/13/22
1731048	-	Parts Plus Conventional Green 50/50 Prediluted Antifreeze Coolant	1	Gallon(GAL)	10/13/22
1731049	-	Parts Plus Conventional Green 50/50 Prediluted Antifreeze Coolant	1	Gallon(GAL)	10/13/22
V00000CC44	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/13/22
V00000CC46	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/13/22
V00000CC4A	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/13/22
V00000CC49	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CC47	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/13/22
V00000CC45	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/13/22
V00000CC42	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/13/22
V00000CC3E	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/13/22
V00000CC41	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/13/22
V00000CC48	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/13/22
V00000CC40	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/13/22
V00000CC3F	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/13/22
V00000CC43	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/13/22
V00000CC4E	-	Parts Plus SAE 5W-30 SYNTHETIC BLEND PP3470 MOTOR OIL	1	Quarts(QT)	10/13/22
V00000CC4F	-	Parts Plus SAE 5W-30 SYNTHETIC BLEND PP3470 MOTOR OIL	1	Quarts(QT)	10/13/22
V00000CC4D	-	Parts Plus SAE 5W-30 SYNTHETIC BLEND PP3470 MOTOR OIL	1	Quarts(QT)	10/13/22
V00000CC4C	-	Parts Plus SAE 5W-30 SYNTHETIC BLEND PP3470 MOTOR OIL	1	Quarts(QT)	10/13/22
V00000CC4B	-	Parts Plus SAE 5W-30 SYNTHETIC BLEND PP3470 MOTOR OIL	1	Quarts(QT)	10/13/22
1731052	-	JOHNSEN'S STARTING FLUID	16	Ounces(OZ)	10/13/22
1731053	-	JOHNSEN'S STARTING FLUID	16	Ounces(OZ)	10/13/22
1731057	-	ULTRA GREY SILICONE GASKET MAKER	3.5	Ounces(OZ)	10/13/22
1731058	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	10/13/22
1731065	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	10/13/22
1731068	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	10/13/22
1731063	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	10/13/22
1731067	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	10/13/22
1731066	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	10/13/22
1731064	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	10/13/22
1731069	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	10/13/22
1731061	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	10/13/22
1731062	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	10/13/22
1731060	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	10/13/22
1731059	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	10/13/22
V00000CC76	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC71	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC6B	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC6C	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC6D	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CC6E	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC69	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC68	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC6F	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC70	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC6A	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC72	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC7B	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC73	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC75	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC77	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC78	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC79	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC7A	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC67	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC57	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC74	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC54	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC50	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC51	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC59	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC53	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CC66	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC55	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC56	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC58	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC5A	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC5B	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC63	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC52	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC5C	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC64	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC62	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC61	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC60	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC5F	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC5E	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC5D	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
V00000CC65	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	10/13/22
1757875	-	GRANITE CLEANER	1	Pint(PT)	10/13/22
1757876	-	TAP MAGIC A CUTTING FLUID	0.473	Liters(L)	10/13/22
1714905	-	XIAMETER PMX-200 SILICONE FLUID 100 CS	1	Gallon(GAL)	10/13/22
1714908	-	XIAMETER PMX-200 SILICONE FLUID 100 CS	1	Gallon(GAL)	10/13/22
1714909	-	XIAMETER PMX-200 SILICONE FLUID 100 CS	1	Gallon(GAL)	10/13/22
1714907	-	XIAMETER PMX-200 SILICONE FLUID 100 CS	1	Gallon(GAL)	10/13/22
1714906	-	XIAMETER PMX-200 SILICONE FLUID 100 CS	1	Gallon(GAL)	10/13/22
1714943	-	TRANSLUCENT RTV 108	2.8	Ounces(OZ)	10/13/22
1714940	-	TRANSLUCENT RTV 108	2.8	Ounces(OZ)	10/13/22
1714942	-	TRANSLUCENT RTV 108	2.8	Ounces(OZ)	10/13/22
1714941	-	TRANSLUCENT RTV 108	2.8	Ounces(OZ)	10/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1714939	-	TRANSLUCENT RTV 108	2.8	Ounces(OZ)	10/13/22
1714938	-	TRANSLUCENT RTV 108	2.8	Ounces(OZ)	10/13/22
1714910	-	ACRYLIC COATING	1	Gallon(GAL)	10/13/22
1732399	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	8	Ounces(OZ)	10/14/22
1437430	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	8	Ounces(OZ)	10/14/22
1437429	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	8	Ounces(OZ)	10/14/22
1437432	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	8	Ounces(OZ)	10/14/22
1437433	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	8	Ounces(OZ)	10/14/22
1437428	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	8	Ounces(OZ)	10/14/22
1437434	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	8	Ounces(OZ)	10/14/22
1437427	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	8	Ounces(OZ)	10/14/22
1437426	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	8	Ounces(OZ)	10/14/22
1437425	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	8	Ounces(OZ)	10/14/22
1437431	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	8	Ounces(OZ)	10/14/22
1437436	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	8	Ounces(OZ)	10/14/22
1437420	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	8	Ounces(OZ)	10/14/22
1437419	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	8	Ounces(OZ)	10/14/22
1437438	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	8	Ounces(OZ)	10/14/22
1437417	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	8	Ounces(OZ)	10/14/22
1437416	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	8	Ounces(OZ)	10/14/22
1437424	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	8	Ounces(OZ)	10/14/22
1437437	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	8	Ounces(OZ)	10/14/22
1437418	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	8	Ounces(OZ)	10/14/22
1437435	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	8	Ounces(OZ)	10/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1437423	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	8	Ounces(OZ)	10/14/22
1437421	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	8	Ounces(OZ)	10/14/22
1437422	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	8	Ounces(OZ)	10/14/22
1437415	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	8	Ounces(OZ)	10/14/22
V00000CCA8	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CCB0	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CCA7	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CCB1	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CCAE	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CCAD	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CCAC	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CCAB	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CCA9	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CCAF	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CCAA	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CCA5	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CCA6	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC94	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC95	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC96	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC97	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC98	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC99	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CCA3	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC92	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC9A	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC91	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC9B	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CCA1	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CCA0	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CCA2	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC9F	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC7C	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC9E	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC9C	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC9D	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CCA4	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC87	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC7D	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC7E	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC7F	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CC80	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC81	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC82	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC83	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC84	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC93	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC86	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC88	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC89	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC8A	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC8B	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC8C	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC8D	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC8E	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC8F	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC90	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
V00000CC85	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/14/22
1731083	-	Parts Plus DEXRON VI Automatic Transmission Fluid	1	Quarts(QT)	10/14/22
1731086	-	Parts Plus DEXRON VI Automatic Transmission Fluid	1	Quarts(QT)	10/14/22
1731085	-	Parts Plus DEXRON VI Automatic Transmission Fluid	1	Quarts(QT)	10/14/22
1731087	-	Parts Plus DEXRON VI Automatic Transmission Fluid	1	Quarts(QT)	10/14/22
1731088	-	Parts Plus DEXRON VI Automatic Transmission Fluid	1	Quarts(QT)	10/14/22
1731084	-	Parts Plus DEXRON VI Automatic Transmission Fluid	1	Quarts(QT)	10/14/22
1731089	-	VALVOLINE AW-32 HYDRAULIC	50	Gallon(GAL)	10/14/22
1731090	-	VALVOLINE AW-32 HYDRAULIC	50	Gallon(GAL)	10/14/22
1731091	-	VALVOLINE AW-32 HYDRAULIC	50	Gallon(GAL)	10/14/22
V00000CCB2	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/14/22
V00000CCB5	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/14/22
V00000CCB6	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/14/22
V00000CCB7	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/14/22
V00000CCB4	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/14/22
V00000CCB3	-	Parts Plus SAE 15W-40 Motor Oil	1	Quarts(QT)	10/14/22
1691289	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	10/14/22
1691290	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/14/22
1691291	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/14/22
1691292	7440-37-1	ARGON GAS	1691292	Cubic Feet(CF)	10/14/22
1691293	7440-37-1	ARGON GAS	1691292	Cubic Feet(CF)	10/14/22
1691294	74-98-6	PROPANE	11	Gallon(GAL)	10/14/22
1691295	74-98-6	PROPANE	11	Gallon(GAL)	10/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1736559	77-73-6	DICYCLOPENTADIENE	100	Gram(GM)	10/14/22
1744061	326-91-0	THENOYLTRIFLUOROACETONE	100	Gram(GM)	10/14/22
1744062	326-91-0	THENOYLTRIFLUOROACETONE	100	Gram(GM)	10/14/22
1744200	67-64-1	Acetone (Certified ACS)	4	Liters(L)	10/14/22
1744201	67-64-1	Acetone (Certified ACS)	4	Liters(L)	10/14/22
1714915	-	POLYWATER	1	Quarts(QT)	10/14/22
1714918	-	POLYWATER	1	Quarts(QT)	10/14/22
1714916	-	POLYWATER	1	Quarts(QT)	10/14/22
1714924	-	POLYWATER	1	Quarts(QT)	10/14/22
1714917	-	POLYWATER	1	Quarts(QT)	10/14/22
1714926	-	POLYWATER	1	Quarts(QT)	10/14/22
1714920	-	POLYWATER	1	Quarts(QT)	10/14/22
1714921	-	POLYWATER	1	Quarts(QT)	10/14/22
1714922	-	POLYWATER	1	Quarts(QT)	10/14/22
1714919	-	POLYWATER	1	Quarts(QT)	10/14/22
1714925	-	POLYWATER	1	Quarts(QT)	10/14/22
1714923	-	POLYWATER	1	Quarts(QT)	10/14/22
1714913	-	ACRYLIC COATING	1	Gallon(GAL)	10/14/22
1714914	-	ACRYLIC COATING	1	Gallon(GAL)	10/14/22
1714911	-	ACRYLIC COATING	1	Gallon(GAL)	10/14/22
1719367	-	LOCTITE	10.1	Ounces(OZ)	10/14/22
1719368	-	LOCTITE	10.1	Ounces(OZ)	10/14/22
1714927	-	MOBIL OIL 626	55	Gallon(GAL)	10/14/22
1714928	-	Electrolyte Solution (Epsilon)-lectrolyte Gold (Epsilon)-lectrolyte Blue (Epsilon)-lectrolytr Black DF-E05 DF-E06 DF-E07 DF-E09	100	Milliliter(ML)	10/14/22
1714929	-	Electrolyte Solution (Epsilon)-lectrolyte Gold (Epsilon)-lectrolyte Blue (Epsilon)-lectrolytr Black DF-E05 DF-E06 DF-E07 DF-E09	100	Milliliter(ML)	10/14/22
1714930	-	Electrolyte Solution (Epsilon)-lectrolyte Gold (Epsilon)-lectrolyte Blue (Epsilon)-lectrolytr Black DF-E05 DF-E06 DF-E07 DF-E09	100	Milliliter(ML)	10/14/22
1714931	-	Electrolyte Solution (Epsilon)-lectrolyte Gold (Epsilon)-lectrolyte Blue (Epsilon)-lectrolytr Black DF-E05 DF-E06 DF-E07 DF-E09	100	Milliliter(ML)	10/14/22
1714932	-	Electrolyte Solution (Epsilon)-lectrolyte Gold (Epsilon)-lectrolyte Blue (Epsilon)-lectrolytr Black DF-E05 DF-E06 DF-E07 DF-E09	100	Milliliter(ML)	10/14/22
1714937	-	Electrolyte Solution (Epsilon)-lectrolyte Gold (Epsilon)-lectrolyte Blue (Epsilon)-lectrolytr Black DF-E05 DF-E06 DF-E07 DF-E09	100	Milliliter(ML)	10/14/22
1714936	-	Electrolyte Solution (Epsilon)-lectrolyte Gold (Epsilon)-lectrolyte Blue (Epsilon)-lectrolytr Black DF-E05 DF-E06 DF-E07 DF-E09	100	Milliliter(ML)	10/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1714935	-	Electrolyte Solution (Epsilon)-lectrolyte Gold (Epsilon)-lectrolyte Blue (Epsilon)-lectrolytr Black DF-E05 DF-E06 DF-E07 DF-E09	100	Milliliter(ML)	10/14/22
1714933	-	Electrolyte Solution (Epsilon)-lectrolyte Gold (Epsilon)-lectrolyte Blue (Epsilon)-lectrolytr Black DF-E05 DF-E06 DF-E07 DF-E09	100	Milliliter(ML)	10/14/22
1714934	-	Electrolyte Solution (Epsilon)-lectrolyte Gold (Epsilon)-lectrolyte Blue (Epsilon)-lectrolytr Black DF-E05 DF-E06 DF-E07 DF-E09	100	Milliliter(ML)	10/14/22
1701278	51373-66-1	Terbium(III) oxalate decahydrate	50	Gram(GM)	10/14/22
1701282	-	Cr2GeC MAX Phase Powder	20	Gram(GM)	10/14/22
1701283	12316-56-2	Perhydroxyl MXene Powder	5	Gram(GM)	10/14/22
1701280	7758-98-7	COPPER SULFATE SOLUTION 20%(W/V)	1	Liters(L)	10/14/22
1701277	62-56-6	THIOUREA	50	Gram(GM)	10/14/22
1701463	78-79-5	Isoprene 99% contains	100	Milliliter(ML)	10/14/22
1757957	78-79-5	Isoprene 99% contains	100	Milliliter(ML)	10/14/22
1757955	78-79-5	Isoprene 99% contains	100	Milliliter(ML)	10/14/22
1757956	78-79-5	Isoprene 99% contains	100	Milliliter(ML)	10/14/22
1757958	78-79-5	Isoprene 99% contains	100	Milliliter(ML)	10/14/22
1701458	-	BUEHLER KONDUCTOMET I	1	Pounds(LB)	10/14/22
1744202	-	GAK-2-200 Gage Application Kit	30	Milliliter(ML)	10/14/22
1744356	9002-89-5	POLYVINYL ALCOHOL 99-100% HYDROLYZED	500	Gram(GM)	10/14/22
1744357	1330-43-4	Borax Anhydrous	100	Gram(GM)	10/14/22
1744358	10043-35-3	BORIC ACID	500	Gram(GM)	10/14/22
1744359	10043-35-3	BORIC ACID	500	Gram(GM)	10/14/22
1744360	10043-35-3	BORIC ACID	500	Gram(GM)	10/14/22
1744361	1318-74-7	KAOLINITE	250	Gram(GM)	10/14/22
1631952	-	Type S Hydrated Lime	50	Pounds(LB)	10/14/22
1631951	-	Type S Hydrated Lime	50	Pounds(LB)	10/14/22
1744423	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744447	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744450	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744429	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744452	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744451	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744449	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744448	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744435	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744424	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744425	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744426	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744427	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744428	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744472	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744430	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1744453	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744432	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744431	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744434	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744446	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744436	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744437	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744438	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744439	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744440	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744441	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744442	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744443	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744444	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744445	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744433	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744492	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744470	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744481	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744482	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744483	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744484	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744485	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744486	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744487	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744488	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744489	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744479	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744491	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744478	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744493	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744494	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744495	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744496	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744497	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744498	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744499	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744500	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744501	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744502	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744490	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744466	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744455	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744456	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744457	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1744458	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744459	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744460	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744461	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744462	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744463	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744480	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744465	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744454	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744467	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744468	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744469	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744471	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744473	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744474	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744475	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744476	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744477	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1744464	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	10/14/22
1714944	-	Electrolyte Solution (Epsilon)-lectrolyte Gold (Epsilon)-lectrolyte Blue (Epsilon)-lectrolytr Black DF-E05 DF-E06 DF-E07 DF-E09	100	Milliliter(ML)	10/14/22
1714947	-	ACRYLIC COATING	1	Gallon(GAL)	10/14/22
1714946	-	ACRYLIC COATING	1	Gallon(GAL)	10/14/22
1714945	-	ACRYLIC COATING	1	Gallon(GAL)	10/14/22
1714948	-	ACRYLIC COATING	1	Gallon(GAL)	10/14/22
1701292	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701324	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701335	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701334	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701333	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701332	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701331	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701330	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701329	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701328	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701327	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701336	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701325	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701323	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701322	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701321	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701320	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701319	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701318	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1701317	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701326	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701344	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701352	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701353	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701354	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701351	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701350	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701349	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701348	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701347	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701338	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701345	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701337	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701343	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701342	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701341	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701340	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701309	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701355	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701316	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701356	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701339	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701346	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701360	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701297	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701296	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701315	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701294	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701311	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701298	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701359	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701295	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701361	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701362	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701363	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701364	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701365	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701366	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701358	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701357	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701314	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701293	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701312	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701299	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1701310	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701308	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701307	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701305	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701304	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701303	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701302	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701301	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701300	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701306	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1701313	7681-52-9	Clorox Concentrated Germicidal Bleach	1	Gallon(GAL)	10/14/22
1714953	-	COMPRESSOR OIL	5	Gallon(GAL)	10/14/22
1714952	-	COMPRESSOR OIL	5	Gallon(GAL)	10/14/22
1714951	-	COMPRESSOR OIL	5	Gallon(GAL)	10/14/22
1714949	-	COMPRESSOR OIL	5	Gallon(GAL)	10/14/22
1714950	-	COMPRESSOR OIL	5	Gallon(GAL)	10/14/22
1701368	-	TOTAL CHLORINE INDICATOR SOLUTION# 22634-11	473	Milliliter(ML)	10/14/22
1701370	-	TOTAL CHLORINE INDICATOR SOLUTION# 22634-11	473	Milliliter(ML)	10/14/22
1701372	-	TOTAL CHLORINE INDICATOR SOLUTION# 22634-11	473	Milliliter(ML)	10/14/22
1701374	-	TOTAL CHLORINE INDICATOR SOLUTION# 22634-11	473	Milliliter(ML)	10/14/22
1701375	7732-18-5	Total Chlorine Buffer Solution	473	Milliliter(ML)	10/14/22
1701382	7732-18-5	Total Chlorine Buffer Solution	473	Milliliter(ML)	10/14/22
1701381	7732-18-5	Total Chlorine Buffer Solution	473	Milliliter(ML)	10/14/22
1701380	7732-18-5	Total Chlorine Buffer Solution	473	Milliliter(ML)	10/14/22
1701379	7732-18-5	Total Chlorine Buffer Solution	473	Milliliter(ML)	10/14/22
1701378	7732-18-5	Total Chlorine Buffer Solution	473	Milliliter(ML)	10/14/22
1701377	7732-18-5	Total Chlorine Buffer Solution	473	Milliliter(ML)	10/14/22
1701376	7732-18-5	Total Chlorine Buffer Solution	473	Milliliter(ML)	10/14/22
1701383	-	DPD COMPOUND FOR FREE AND TOTAL CHLORINE ANALYZERS	25	Gram(GM)	10/14/22
1701386	-	DPD COMPOUND FOR FREE AND TOTAL CHLORINE ANALYZERS	25	Gram(GM)	10/14/22
1701390	-	DPD COMPOUND FOR FREE AND TOTAL CHLORINE ANALYZERS	25	Gram(GM)	10/14/22
1701389	-	DPD COMPOUND FOR FREE AND TOTAL CHLORINE ANALYZERS	25	Gram(GM)	10/14/22
1701384	-	DPD COMPOUND FOR FREE AND TOTAL CHLORINE ANALYZERS	25	Gram(GM)	10/14/22
1701387	-	DPD COMPOUND FOR FREE AND TOTAL CHLORINE ANALYZERS	25	Gram(GM)	10/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1701385	-	DPD COMPOUND FOR FREE AND TOTAL CHLORINE ANALYZERS	25	Gram(GM)	10/14/22
1701388	-	DPD COMPOUND FOR FREE AND TOTAL CHLORINE ANALYZERS	25	Gram(GM)	10/14/22
1701391	-	Ammonia TNTplus Vial Test LR	25	Milliliter(ML)	10/14/22
1701399	-	Ammonia TNTplus HR	25	Milligram(MG)	10/14/22
1701401	-	Ammonia TNTplus HR	25	Milligram(MG)	10/14/22
1701398	-	Ammonia TNTplus Vial Test LR	25	Milliliter(ML)	10/14/22
1701397	-	Ammonia TNTplus Vial Test LR	25	Milliliter(ML)	10/14/22
1701396	-	Ammonia TNTplus Vial Test LR	25	Milliliter(ML)	10/14/22
1701395	-	Ammonia TNTplus Vial Test LR	25	Milliliter(ML)	10/14/22
1701394	-	Ammonia TNTplus Vial Test LR	25	Milliliter(ML)	10/14/22
1701393	-	Ammonia TNTplus Vial Test LR	25	Milliliter(ML)	10/14/22
1701392	-	Ammonia TNTplus Vial Test LR	25	Milliliter(ML)	10/14/22
1717294	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717287	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717291	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717290	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717289	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717288	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717292	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717286	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717293	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717295	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1701403	-	NITRAVER X NITROGEN REAGENT SET	50	Milliliter(ML)	10/14/22
1701406	-	NITRAVER X NITROGEN REAGENT SET	50	Milliliter(ML)	10/14/22
1701410	-	NITRAVER X NITROGEN REAGENT SET	50	Milliliter(ML)	10/14/22
1701412	-	NITRAVER X NITROGEN REAGENT SET	50	Milliliter(ML)	10/14/22
1701408	-	NITRAVER X NITROGEN REAGENT SET	50	Milliliter(ML)	10/14/22
1701407	-	NITRAVER X NITROGEN REAGENT SET	50	Milliliter(ML)	10/14/22
1701409	-	NITRAVER X NITROGEN REAGENT SET	50	Milliliter(ML)	10/14/22
1701404	-	NITRAVER X NITROGEN REAGENT SET	50	Milliliter(ML)	10/14/22
1701405	-	NITRAVER X NITROGEN REAGENT SET	50	Milliliter(ML)	10/14/22
1701411	-	NITRAVER X NITROGEN REAGENT SET	50	Milliliter(ML)	10/14/22
1717325	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717311	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717312	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717313	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717334	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717333	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717332	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717331	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717330	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717329	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717328	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1717326	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717309	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717324	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717323	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717322	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717321	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717320	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717319	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717318	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717317	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717316	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717315	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717327	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717300	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717298	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717297	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717314	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717299	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717310	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717301	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717302	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717304	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717308	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717305	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717296	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717307	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717306	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1717303	-	3M Novec Engineered Fluid 7100	1	Gallon(GAL)	10/14/22
1701454	-	Contrex® AP Powder Detergent	4	Pounds(LB)	10/14/22
1701455	-	Contrex® AP Powder Detergent	4	Pounds(LB)	10/14/22
1701456	-	Contrex® AP Powder Detergent	4	Pounds(LB)	10/14/22
1701453	3/9/3513	Blasticidine S hydrochloride	500	Milligram(MG)	10/17/22
1718936	-	TALON METAL AFFINITY RESIN	100	Milliliter(ML)	10/17/22
1701462	12645-50-0	NICKEL-ZINC FERRITE	3	Kilograms(KG)	10/17/22
1757598	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	10/18/22
1757597	-	Additive Friction Modifier	4	Ounces(OZ)	10/18/22
1752856	-	MOBIL 1 5W-50	1	Quarts(QT)	10/18/22
1752857	-	MOBIL 1 5W-50	1	Quarts(QT)	10/18/22
1752858	-	MOBIL 1 5W-50	1	Quarts(QT)	10/18/22
1752859	-	Lucas Hub Oil	1	Quarts(QT)	10/18/22
1757950	-	(18A1) STRIPING PAINT AEROSOL	17	Ounces(OZ)	10/18/22
1757949	-	(18A1) STRIPING PAINT AEROSOL	17	Ounces(OZ)	10/18/22
1752860	-	Lucas Hub Oil	1	Quarts(QT)	10/18/22
1752855	-	CRC BATTERY CLEANER	11	Ounces(OZ)	10/18/22
1752847	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	10/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1752849	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	10/18/22
1752850	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	10/18/22
1752851	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	10/18/22
1752852	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	10/18/22
1752853	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	10/18/22
1752854	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	10/18/22
1752848	-	Lysol Disinfectant Cleaner	19	Ounces(OZ)	10/18/22
1752861	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752884	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752886	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752888	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752889	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752890	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752891	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752892	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752893	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752896	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752895	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752885	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752894	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752871	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752862	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752863	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752864	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752865	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752866	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752867	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752868	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752869	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752887	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752870	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752883	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752877	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752882	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752881	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752880	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752878	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752872	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752876	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752875	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752874	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752873	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752879	-	Lysol Sanitizing Spray (All Scents)	19	Ounces(OZ)	10/18/22
1752899	811-97-2	Klea 134a	30	Pounds(LB)	10/18/22
1744206	50-81-7	ASCORBIC ACID	500	Milligram(MG)	10/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1744389	10035-10-6	HYDROBROMIC ACID 48%	500	Milliliter(ML)	10/18/22
1744390	10035-10-6	HYDROBROMIC ACID 48%	500	Milliliter(ML)	10/18/22
1744391	10035-10-6	HYDROBROMIC ACID 48%	500	Milliliter(ML)	10/18/22
1744392	10035-10-6	HYDROBROMIC ACID 48%	500	Milliliter(ML)	10/18/22
1744393	301-10-0	Tin(II) 2-ethylhexanoate	100	Gram(GM)	10/18/22
1744394	301-10-0	Tin(II) 2-ethylhexanoate	100	Gram(GM)	10/18/22
1744395	301-10-0	Tin(II) 2-ethylhexanoate	100	Gram(GM)	10/18/22
1744396	-	ARATHANE 5750-A/B	1	Quarts(QT)	10/18/22
1744397	76-61-9	THYMOL BLUE	10	Gram(GM)	10/18/22
1744398	76-60-8	BROMOCRESOL GREEN	6	Gram(GM)	10/18/22
1744399	77-09-8	PHENOLPHTHALEIN	100	Gram(GM)	10/18/22
1744400	115-39-9	BROMOPHENOL BLUE	5	Gram(GM)	10/18/22
1744401	1/7/2303	M-CRESOL PURPLE	5	Gram(GM)	10/18/22
1744402	10031-22-8	Lead(II) bromide	5	Gram(GM)	10/18/22
1744403	10031-22-8	Lead(II) bromide	5	Gram(GM)	10/18/22
1744404	547-58-0	METHYL ORANGE	25	Gram(GM)	10/18/22
1744406	7789-20-0	Deuterium oxide for NMR 100.0% Atom D	10	Milliliter(ML)	10/18/22
1744407	7789-20-0	Deuterium oxide for NMR 100.0% Atom D	10	Milliliter(ML)	10/18/22
1744408	10045-94-0	Mercuric Nitrate Digital Titrator Cartridge 2.256 N	100	Milliliter(ML)	10/18/22
1744419	10045-94-0	Mercuric Nitrate Digital Titrator Cartridge 2.256 N	100	Milliliter(ML)	10/18/22
1744410	10045-94-0	Mercuric Nitrate Digital Titrator Cartridge 2.256 N	100	Milliliter(ML)	10/18/22
1744414	10045-94-0	Mercuric Nitrate Digital Titrator Cartridge 2.256 N	100	Milliliter(ML)	10/18/22
1744413	10045-94-0	Mercuric Nitrate Digital Titrator Cartridge 2.256 N	100	Milliliter(ML)	10/18/22
1744412	10045-94-0	Mercuric Nitrate Digital Titrator Cartridge 2.256 N	100	Milliliter(ML)	10/18/22
1744418	10045-94-0	Mercuric Nitrate Digital Titrator Cartridge 2.256 N	100	Milliliter(ML)	10/18/22
1744417	10045-94-0	Mercuric Nitrate Digital Titrator Cartridge 2.256 N	100	Milliliter(ML)	10/18/22
1744420	10045-94-0	Mercuric Nitrate Digital Titrator Cartridge 2.256 N	100	Milliliter(ML)	10/18/22
1744421	10045-94-0	Mercuric Nitrate Digital Titrator Cartridge 2.256 N	100	Milliliter(ML)	10/18/22
1744422	10045-94-0	Mercuric Nitrate Digital Titrator Cartridge 2.256 N	100	Milliliter(ML)	10/18/22
1744416	10045-94-0	Mercuric Nitrate Digital Titrator Cartridge 2.256 N	100	Milliliter(ML)	10/18/22
1744415	10045-94-0	Mercuric Nitrate Digital Titrator Cartridge 2.256 N	100	Milliliter(ML)	10/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1744409	10045-94-0	Mercuric Nitrate Digital Titrator Cartridge 2.256 N	100	Milliliter(ML)	10/18/22
1744411	10045-94-0	Mercuric Nitrate Digital Titrator Cartridge 2.256 N	100	Milliliter(ML)	10/18/22
1744503	-	VERSENE	100	Milliliter(ML)	10/18/22
1744506	-	VERSENE	100	Milliliter(ML)	10/18/22
1744507	-	VERSENE	100	Milliliter(ML)	10/18/22
1744505	-	VERSENE	100	Milliliter(ML)	10/18/22
1744504	-	VERSENE	100	Milliliter(ML)	10/18/22
1744508	-	LIVE/DEAD BacLight Bacterial Viability Kit	200	Milliliter(ML)	10/18/22
1744509	-	LIVE/DEAD BacLight Bacterial Viability Kit	200	Milliliter(ML)	10/18/22
1753211	-	Permatex High temp Sleeve Retainer	36	Milliliter(ML)	10/18/22
1752911	-	Loctite 263 Threadlocker	1.22	Ounces(OZ)	10/18/22
1752913	-	LOCTITE 266	0.36	Milliliter(ML)	10/18/22
17522912	-	LOCTITE 266	0.36	Milliliter(ML)	10/18/22
1753212	-	LUBRIPLATE NO. 105	10	Ounces(OZ)	10/18/22
1753215	-	Valvoline Professional Series SAE 75W-90 FULL SYNTHETIC GEAR OIL	1	Quarts(QT)	10/18/22
1753213	-	THREAD SEALANT W/PTFE	16	Ounces(OZ)	10/18/22
1753214	-	A/C FLUSH SOLVENT	1	Gallon(GAL)	10/18/22
1753230	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	10/18/22
1744567	-	DPBS/Modified without Calcium Salt and Magnesium Salt	50	Liters(L)	10/18/22
1744571	-	DPBS/Modified without Calcium Salt and Magnesium Salt	50	Liters(L)	10/18/22
1744570	-	DPBS/Modified without Calcium Salt and Magnesium Salt	50	Liters(L)	10/18/22
1744569	-	DPBS/Modified without Calcium Salt and Magnesium Salt	50	Liters(L)	10/18/22
1744568	-	DPBS/Modified without Calcium Salt and Magnesium Salt	50	Liters(L)	10/18/22
1744572	26628-22-8	Agencourt AMPure XP	60	Milliliter(ML)	10/18/22
1744573	-	Ammonia TNTplus Vial Test LR	25	Milligram(MG)	10/18/22
1744574	-	Ammonia TNTplus Vial Test LR	25	Milligram(MG)	10/18/22
1744575	-	Ammonia TNTplus Vial Test LR	25	Milligram(MG)	10/18/22
1744576	-	Ammonia TNTplus Vial Test LR	25	Milligram(MG)	10/18/22
1753234	-	HERCULES PURPLE PVC PRIMER	16	Ounces(OZ)	10/18/22
1744577	-	Ammonia TNTplus HR	25	Milligram(MG)	10/18/22
1744586	-	Ammonia TNTplus HR	25	Milligram(MG)	10/18/22
1744578	-	Ammonia TNTplus HR	25	Milligram(MG)	10/18/22
1744579	-	Ammonia TNTplus HR	25	Milligram(MG)	10/18/22
1744580	-	Ammonia TNTplus HR	25	Milligram(MG)	10/18/22
1744581	-	Ammonia TNTplus HR	25	Milligram(MG)	10/18/22
1744582	-	Ammonia TNTplus HR	25	Milligram(MG)	10/18/22
1744583	-	Ammonia TNTplus HR	25	Milligram(MG)	10/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1744584	-	Ammonia TNTplus HR	25	Milligram(MG)	10/18/22
1744585	-	Ammonia TNTplus HR	25	Milligram(MG)	10/18/22
1744587	123-38-6	PROPIONALDEHYDE	100	Gram(GM)	10/18/22
1744588	7440-70-2	Calcium granules	100	Gram(GM)	10/18/22
1753239	-	Pneumatic/Hydraulic Sealant	1.22	Ounces(OZ)	10/18/22
1753243	-	Brake Caliper Synthetic Grease	2.5	Ounces(OZ)	10/18/22
1744589	-	10000 ug/mL Lanthanum	100	Milliliter(ML)	10/18/22
1744590	-	10000 ug/mL Lanthanum	100	Milliliter(ML)	10/18/22
1753241	-	MARINE EPOXY	2	Ounces(OZ)	10/18/22
1753244	-	Brake Caliper Synthetic Grease	2.5	Ounces(OZ)	10/18/22
1705928	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	5	Milliliter(ML)	10/18/22
1744591	1450-85-7	2-MERCAPTOPYRIMIDINE	10	Gram(GM)	10/18/22
1744592	14040-11-0	tungsten hexacarbonyl	10	Gram(GM)	10/18/22
1753240	-	MARINE EPOXY	2	Ounces(OZ)	10/18/22
1744593	1193-02-8	4-AMINOTHIOPHENOL	5	Gram(GM)	10/18/22
1744594	5137-55-3	Methyltrioctylammonium chloride	50	Gram(GM)	10/18/22
1744595	10026-06-9	Tin(IV) chloride pentahydrate	1	Kilograms(KG)	10/18/22
1753242	-	SUPER GLUE 2 GR	0.07	Ounces(OZ)	10/18/22
1744596	109-99-9	Tetrahydrofuran inhibitor-free suitable for HPLC 99.9%	1	Liters(L)	10/18/22
1744597	109-99-9	Tetrahydrofuran inhibitor-free suitable for HPLC 99.9%	1	Liters(L)	10/18/22
1744598	67-64-1	Acetone HPLC	4	Liters(L)	10/18/22
1744601	67-64-1	Acetone HPLC	4	Liters(L)	10/18/22
1744599	67-64-1	Acetone HPLC	4	Liters(L)	10/18/22
1744600	67-64-1	Acetone HPLC	4	Liters(L)	10/18/22
1753247	-	Synthetic Brake & Caliper Grease	2.5	Ounces(OZ)	10/18/22
1744602	78-10-4	TETRAETHYL ORTHOSILICATE	1	Liters(L)	10/18/22
1744603	141-53-7	SODIUM FORMATE	500	Gram(GM)	10/18/22
1744604	-	LB BROTH MILLER	500	Gram(GM)	10/18/22
1744605	7778-18-9	DRIERITE 8 MESH	1	Pounds(LB)	10/18/22
1744606	7778-18-9	DRIERITE 8 MESH	1	Pounds(LB)	10/18/22
1744607	138-52-3	D(-)-SALICIN	100	Milligram(MG)	10/18/22
1744608	7439-98-7	TZM Powder	1	Kilograms(KG)	10/18/22
1744612	7439-98-7	TZM Powder	1	Kilograms(KG)	10/18/22
1744611	7439-98-7	TZM Powder	1	Kilograms(KG)	10/18/22
1744610	7439-98-7	TZM Powder	1	Kilograms(KG)	10/18/22
1744609	7439-98-7	TZM Powder	1	Kilograms(KG)	10/18/22
1744613	7439-98-7	TZM Powder	1	Kilograms(KG)	10/18/22
1744615	7439-98-7	TZM Powder	1	Kilograms(KG)	10/18/22
1744614	7439-98-7	TZM Powder	1	Kilograms(KG)	10/18/22
1744616	32248-43-4	Samarium(II) iodide solution 0.1 M in THF contains samarium chips as stabilizer	100	Milliliter(ML)	10/18/22
1744617	32248-43-4	Samarium(II) iodide solution 0.1 M in THF contains samarium chips as stabilizer	100	Milliliter(ML)	10/18/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1736560	108-88-3	Toluene (Certified ACS)	4	Liters(L)	10/18/22
1736562	108-88-3	Toluene (Certified ACS)	4	Liters(L)	10/18/22
1736563	108-88-3	Toluene (Certified ACS)	4	Liters(L)	10/18/22
1736561	108-88-3	Toluene (Certified ACS)	4	Liters(L)	10/18/22
1736564	67-56-1	METHANOL OPTIMA	1	Liters(L)	10/18/22
1736565	67-56-1	METHANOL OPTIMA	1	Liters(L)	10/18/22
1744510	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	10/18/22
1744521	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	10/18/22
1744512	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	10/18/22
1744519	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	10/18/22
1744511	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	10/18/22
1744520	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	10/18/22
1744513	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	10/18/22
1744518	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	10/18/22
1744517	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	10/18/22
1744516	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	10/18/22
1744515	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	10/18/22
1744514	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	10/18/22
1744522	4800-94-6	CARBENICILLIN	25	Gram(GM)	10/18/22
1744523	7647-14-5	SODIUM CHLORIDE	2	Kilograms(KG)	10/18/22
1744524	60-29-7	Diethyl ether contains 1 ppm BHT as inhibitor anhydrous 99.7%	2.5	Liters(L)	10/18/22
1744525	57-09-0	HEXADECYLTRIMETHYL AMMONIUM BROMIDE	500	Gram(GM)	10/18/22
1744526	7631-86-9	LUDOX AS-40 colloidal silica	1	Liters(L)	10/18/22
1731070	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Quarts(QT)	10/19/22
1731077	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Quarts(QT)	10/19/22
1731075	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Quarts(QT)	10/19/22
1731081	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Quarts(QT)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1731071	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Quarts(QT)	10/19/22
1731072	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Quarts(QT)	10/19/22
1731073	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Quarts(QT)	10/19/22
1731074	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Quarts(QT)	10/19/22
1731076	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Quarts(QT)	10/19/22
1731080	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Quarts(QT)	10/19/22
1731078	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Quarts(QT)	10/19/22
1731079	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Quarts(QT)	10/19/22
1731092	-	AW-68 HYDRAULIC OIL	5	Gallon(GAL)	10/19/22
1731093	-	AW-68 HYDRAULIC OIL	5	Gallon(GAL)	10/19/22
1718307	-	NOKORODE REGULAR PASTE FLUX	4	Ounces(OZ)	10/19/22
1718308	-	NOKORODE REGULAR PASTE FLUX	4	Ounces(OZ)	10/19/22
1718306	-	NOKORODE AQUA FLUX	4	Ounces(OZ)	10/19/22
1718309	-	BRIDGIT SOLDERING PASTE FLUX	4	Ounces(OZ)	10/19/22
1752900	-	VERSACHEM SUPER CLEAR SILICONE	304	Milliliter(ML)	10/19/22
1731097	-	MOBILITH SHC 460 SYNTHETIC GREASE	13.4	Ounces(OZ)	10/19/22
1731101	-	MOBILITH SHC 460 SYNTHETIC GREASE	13.4	Ounces(OZ)	10/19/22
1731108	-	MOBILITH SHC 460 SYNTHETIC GREASE	13.4	Ounces(OZ)	10/19/22
1731107	-	MOBILITH SHC 460 SYNTHETIC GREASE	13.4	Ounces(OZ)	10/19/22
1731106	-	MOBILITH SHC 460 SYNTHETIC GREASE	13.4	Ounces(OZ)	10/19/22
1731105	-	MOBILITH SHC 460 SYNTHETIC GREASE	13.4	Ounces(OZ)	10/19/22
1731104	-	MOBILITH SHC 460 SYNTHETIC GREASE	13.4	Ounces(OZ)	10/19/22
1731102	-	MOBILITH SHC 460 SYNTHETIC GREASE	13.4	Ounces(OZ)	10/19/22
1731100	-	MOBILITH SHC 460 SYNTHETIC GREASE	13.4	Ounces(OZ)	10/19/22
1731099	-	MOBILITH SHC 460 SYNTHETIC GREASE	13.4	Ounces(OZ)	10/19/22
1731098	-	MOBILITH SHC 460 SYNTHETIC GREASE	13.4	Ounces(OZ)	10/19/22
1731103	-	MOBILITH SHC 460 SYNTHETIC GREASE	13.4	Ounces(OZ)	10/19/22
1731109	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731138	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731151	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731139	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731140	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731141	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731142	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731143	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731144	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731145	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1731146	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731147	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731148	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731137	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731150	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731154	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731152	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731153	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731155	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731157	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731158	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731159	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731160	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731161	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731162	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731163	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731136	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731149	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731112	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731156	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731135	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731111	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731113	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731114	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731115	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731116	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731117	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731118	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731119	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731120	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731121	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731132	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731123	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731124	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731125	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731110	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731126	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731122	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731127	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731128	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731129	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731130	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731131	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731134	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22
1731133	-	LUBRIPLATE 1200-2	14.5	Ounces(OZ)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1752901	-	Pyroil Non-Chlorinated Brake Parts Cleaner PY4003	13	Ounces(OZ)	10/19/22
1731164	-	QUIN-CIP RECIPROCATING OIL ISO-100	1	Gallon(GAL)	10/19/22
1752910	-	Gasoila Soft Set	237	Milliliter(ML)	10/19/22
1437439	-	RECTORSEAL TRU-BLU PIPE THREAD SEALANT	1.75	Ounces(OZ)	10/19/22
1437444	-	RECTORSEAL TRU-BLU PIPE THREAD SEALANT	1.75	Ounces(OZ)	10/19/22
1437451	-	RECTORSEAL TRU-BLU PIPE THREAD SEALANT	1.75	Ounces(OZ)	10/19/22
1437450	-	RECTORSEAL TRU-BLU PIPE THREAD SEALANT	1.75	Ounces(OZ)	10/19/22
1437449	-	RECTORSEAL TRU-BLU PIPE THREAD SEALANT	1.75	Ounces(OZ)	10/19/22
1437453	-	RECTORSEAL TRU-BLU PIPE THREAD SEALANT	1.75	Ounces(OZ)	10/19/22
1437448	-	RECTORSEAL TRU-BLU PIPE THREAD SEALANT	1.75	Ounces(OZ)	10/19/22
1437454	-	RECTORSEAL TRU-BLU PIPE THREAD SEALANT	1.75	Ounces(OZ)	10/19/22
1437447	-	RECTORSEAL TRU-BLU PIPE THREAD SEALANT	1.75	Ounces(OZ)	10/19/22
1437446	-	RECTORSEAL TRU-BLU PIPE THREAD SEALANT	1.75	Ounces(OZ)	10/19/22
1437445	-	RECTORSEAL TRU-BLU PIPE THREAD SEALANT	1.75	Ounces(OZ)	10/19/22
1437452	-	RECTORSEAL TRU-BLU PIPE THREAD SEALANT	1.75	Ounces(OZ)	10/19/22
1437443	-	RECTORSEAL TRU-BLU PIPE THREAD SEALANT	1.75	Ounces(OZ)	10/19/22
1437442	-	RECTORSEAL TRU-BLU PIPE THREAD SEALANT	1.75	Ounces(OZ)	10/19/22
1437441	-	RECTORSEAL TRU-BLU PIPE THREAD SEALANT	1.75	Ounces(OZ)	10/19/22
1437440	-	RECTORSEAL TRU-BLU PIPE THREAD SEALANT	1.75	Ounces(OZ)	10/19/22
1437458	-	RECTORSEAL TRU-BLU PIPE THREAD SEALANT	1.75	Ounces(OZ)	10/19/22
1437460	-	RECTORSEAL TRU-BLU PIPE THREAD SEALANT	1.75	Ounces(OZ)	10/19/22
1437461	-	RECTORSEAL TRU-BLU PIPE THREAD SEALANT	1.75	Ounces(OZ)	10/19/22
1437457	-	RECTORSEAL TRU-BLU PIPE THREAD SEALANT	1.75	Ounces(OZ)	10/19/22
1437456	-	RECTORSEAL TRU-BLU PIPE THREAD SEALANT	1.75	Ounces(OZ)	10/19/22
1437455	-	RECTORSEAL TRU-BLU PIPE THREAD SEALANT	1.75	Ounces(OZ)	10/19/22
1437462	-	RECTORSEAL TRU-BLU PIPE THREAD SEALANT	1.75	Ounces(OZ)	10/19/22
1437463	-	RECTORSEAL TRU-BLU PIPE THREAD SEALANT	1.75	Ounces(OZ)	10/19/22
1437459	-	RECTORSEAL TRU-BLU PIPE THREAD SEALANT	1.75	Ounces(OZ)	10/19/22
1744527	9003-39-8	POLYVINYLPYRROLIDONE	100	Gram(GM)	10/19/22
1744528	5574-97-0	TETRABUTYLAMMONIUM PHOSPHATE	250	Gram(GM)	10/19/22
1731165	-	SULLAIR SRF 1/4000	5	Gallon(GAL)	10/19/22
1731166	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731205	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731200	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731201	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731202	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731204	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731199	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731171	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731203	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731207	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731180	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731179	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731178	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1731177	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731176	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731173	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731174	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731183	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731172	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731208	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731170	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731169	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731168	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731167	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731175	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731189	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731197	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731196	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731195	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731194	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731193	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731192	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731181	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731190	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731182	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731188	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731187	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731186	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731185	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731184	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731198	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731191	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1731206	-	DURABAK 18 PROTECTIVE COATING	1	Gallon(GAL)	10/19/22
1744618	1126-81-4	4-ACETAMIDOTHIOPHENOL	1	Gram(GM)	10/19/22
1744619	7646-85-7	Zinc Chloride anhydrous	100	Gram(GM)	10/19/22
V00000CCBE	-	Zinsser BULLS EYE 1-2-3	1	Gallon(GAL)	10/19/22
V00000CCBF	-	Zinsser BULLS EYE 1-2-3	1	Gallon(GAL)	10/19/22
V00000CCC0	-	Zinsser BULLS EYE 1-2-3	1	Gallon(GAL)	10/19/22
V00000CCC1	-	Zinsser BULLS EYE 1-2-3	1	Gallon(GAL)	10/19/22
V00000CCC2	-	BIN PRIMER SEALER	1	Gallon(GAL)	10/19/22
V00000CCC3	-	BIN PRIMER SEALER	1	Gallon(GAL)	10/19/22
V00000CCC4	-	BIN PRIMER SEALER	1	Gallon(GAL)	10/19/22
1731209	-	Paramount Ext. 100% Acrylic Flat W/B	3.6	Liters(L)	10/19/22
1731210	-	Paramount Ext. 100% Acrylic Flat W/B	3.6	Liters(L)	10/19/22
1731211	-	Paramount Ext. 100% Acrylic Flat W/B	3.6	Liters(L)	10/19/22
1731212	-	Paramount Ext. 100% Acrylic Flat W/B	3.6	Liters(L)	10/19/22
1731213	-	Paramount Ext. 100% Acrylic Flat W/B	3.6	Liters(L)	10/19/22
1731214	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1731225	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/19/22
1731226	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/19/22
1731228	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/19/22
1731230	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/19/22
1731231	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/19/22
1731232	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/19/22
1731224	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/19/22
1731234	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/19/22
1731219	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/19/22
1731233	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/19/22
1731223	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/19/22
1731222	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/19/22
1731235	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/19/22
1731220	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/19/22
1731229	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/19/22
1731218	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/19/22
1731217	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/19/22
1731216	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/19/22
1731215	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/19/22
1731221	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/19/22
1731237	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/19/22
1731227	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/19/22
1731236	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/19/22
1731238	-	Paramount Ext. 100% Acrylic Flat W/B	18	Liters(L)	10/19/22
1731239	-	Paramount Ext. 100% Acrylic Flat W/B	18	Liters(L)	10/19/22
1731240	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	18	Liters(L)	10/19/22
1731241	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	18	Liters(L)	10/19/22
1731242	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	18	Liters(L)	10/19/22
1731243	-	Permacryl Int Latex Satin W/B	18	Liters(L)	10/19/22
1731244	-	Permacryl Int Latex Satin W/B	18	Liters(L)	10/19/22
1731245	-	Permacryl Int Latex Satin W/B	18	Liters(L)	10/19/22
1731246	-	Permacryl Int Latex Satin W/B	18	Liters(L)	10/19/22
1731247	-	Paramount Ext. 100% Acrylic Flat W/B	3.6	Liters(L)	10/19/22
1731248	-	Paramount Ext. 100% Acrylic Flat W/B	3.6	Liters(L)	10/19/22
1744529	88946-67-2	4 5-Dimethoxyphthalonitrile	1	Gram(GM)	10/19/22
1744530	88946-67-2	4 5-Dimethoxyphthalonitrile	1	Gram(GM)	10/19/22
1744620	124-40-3	DIMETHYLAMINE 40% WATER	1	Liters(L)	10/19/22
V00000CCC8	-	Avalon Premium 100% Acrylic Interior Flat W/B	3.6	Liters(L)	10/19/22
V00000CCC5	-	Avalon Premium 100% Acrylic Interior Flat W/B	3.6	Liters(L)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CCC7	-	Avalon Premium 100% Acrylic Interior Flat W/B	3.6	Liters(L)	10/19/22
V00000CCC9	-	Avalon Premium 100% Acrylic Interior Flat W/B	3.6	Liters(L)	10/19/22
V00000CCCA	-	Avalon Premium 100% Acrylic Interior Flat W/B	3.6	Liters(L)	10/19/22
V00000CCC6	-	Avalon Premium 100% Acrylic Interior Flat W/B	3.6	Liters(L)	10/19/22
V00000CCCB	-	Cote All Safety Blue	128	Ounces(OZ)	10/19/22
V00000CCCC	-	Cote All Safety Blue	128	Ounces(OZ)	10/19/22
V00000CCCD	-	Cote All Safety Blue	128	Ounces(OZ)	10/19/22
V00000CCCE	-	Delo 400 SDE SAE 15W-40	1	Gallon(GAL)	10/19/22
V00000CCDB	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	10/19/22
V00000CCD7	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	10/19/22
V00000CCCF	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	10/19/22
V00000CCD0	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	10/19/22
V00000CCD1	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	10/19/22
V00000CCD2	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	10/19/22
V00000CCD3	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	10/19/22
V00000CCD4	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	10/19/22
V00000CCDD	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	10/19/22
V00000CCD6	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	10/19/22
V00000CCDF	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	10/19/22
V00000CCD8	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	10/19/22
V00000CCD9	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	10/19/22
V00000CCDA	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	10/19/22
V00000CCDC	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	10/19/22
V00000CCDE	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CCD5	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	10/19/22
1731249	-	LUBRIPLATE CHAIN AND CABLE FLUID	11	Ounces(OZ)	10/19/22
1731258	-	LUBRIPLATE CHAIN AND CABLE FLUID	11	Ounces(OZ)	10/19/22
1731256	-	LUBRIPLATE CHAIN AND CABLE FLUID	11	Ounces(OZ)	10/19/22
1731250	-	LUBRIPLATE CHAIN AND CABLE FLUID	11	Ounces(OZ)	10/19/22
1731259	-	LUBRIPLATE CHAIN AND CABLE FLUID	11	Ounces(OZ)	10/19/22
1731257	-	LUBRIPLATE CHAIN AND CABLE FLUID	11	Ounces(OZ)	10/19/22
1731251	-	LUBRIPLATE CHAIN AND CABLE FLUID	11	Ounces(OZ)	10/19/22
1731252	-	LUBRIPLATE CHAIN AND CABLE FLUID	11	Ounces(OZ)	10/19/22
1731253	-	LUBRIPLATE CHAIN AND CABLE FLUID	11	Ounces(OZ)	10/19/22
1731254	-	LUBRIPLATE CHAIN AND CABLE FLUID	11	Ounces(OZ)	10/19/22
1731255	-	LUBRIPLATE CHAIN AND CABLE FLUID	11	Ounces(OZ)	10/19/22
1731260	-	LUBRIPLATE CHAIN AND CABLE FLUID	11	Ounces(OZ)	10/19/22
1731261	-	Parts Plus DEXRON VI Automatic Transmission Fluid	1	Quarts(QT)	10/19/22
1731262	-	Parts Plus DEXRON VI Automatic Transmission Fluid	1	Quarts(QT)	10/19/22
V00000CCE5	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	10/19/22
V00000CCE6	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	10/19/22
V00000CCE0	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	10/19/22
V00000CCE1	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	10/19/22
V00000CCE2	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	10/19/22
V00000CCE3	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	10/19/22
V00000CCE7	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	10/19/22
V00000CCE4	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	10/19/22
V00000CCE8	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	10/19/22
V00000CCE9	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	10/19/22
V00000CCEA	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	10/19/22
1731263	-	PARTS PLUS HD SAE 30 PREMIUM MOTOR OIL PP3371	1	Quarts(QT)	10/19/22
1753207	-	10W 30 MOTOR OIL	3.4	Ounces(OZ)	10/19/22
1731264	-	fast setting cement	50	Pounds(LB)	10/19/22
1731317	-	fast setting cement	50	Pounds(LB)	10/19/22
1731316	-	fast setting cement	50	Pounds(LB)	10/19/22
1731315	-	fast setting cement	50	Pounds(LB)	10/19/22
1731318	-	fast setting cement	50	Pounds(LB)	10/19/22
1731313	-	fast setting cement	50	Pounds(LB)	10/19/22
1731327	-	fast setting cement	50	Pounds(LB)	10/19/22
1731314	-	fast setting cement	50	Pounds(LB)	10/19/22
1731319	-	fast setting cement	50	Pounds(LB)	10/19/22
1731320	-	fast setting cement	50	Pounds(LB)	10/19/22
1731321	-	fast setting cement	50	Pounds(LB)	10/19/22
1731322	-	fast setting cement	50	Pounds(LB)	10/19/22
1731326	-	fast setting cement	50	Pounds(LB)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1731298	-	fast setting cement	50	Pounds(LB)	10/19/22
1731312	-	fast setting cement	50	Pounds(LB)	10/19/22
1731324	-	fast setting cement	50	Pounds(LB)	10/19/22
1731274	-	fast setting cement	50	Pounds(LB)	10/19/22
1731285	-	fast setting cement	50	Pounds(LB)	10/19/22
1731284	-	fast setting cement	50	Pounds(LB)	10/19/22
1731283	-	fast setting cement	50	Pounds(LB)	10/19/22
1731282	-	fast setting cement	50	Pounds(LB)	10/19/22
1731281	-	fast setting cement	50	Pounds(LB)	10/19/22
1731280	-	fast setting cement	50	Pounds(LB)	10/19/22
1731279	-	fast setting cement	50	Pounds(LB)	10/19/22
1731278	-	fast setting cement	50	Pounds(LB)	10/19/22
1731277	-	fast setting cement	50	Pounds(LB)	10/19/22
1731300	-	fast setting cement	50	Pounds(LB)	10/19/22
1731275	-	fast setting cement	50	Pounds(LB)	10/19/22
1731288	-	fast setting cement	50	Pounds(LB)	10/19/22
1731273	-	fast setting cement	50	Pounds(LB)	10/19/22
1731272	-	fast setting cement	50	Pounds(LB)	10/19/22
1731271	-	fast setting cement	50	Pounds(LB)	10/19/22
1731270	-	fast setting cement	50	Pounds(LB)	10/19/22
1731269	-	fast setting cement	50	Pounds(LB)	10/19/22
1731268	-	fast setting cement	50	Pounds(LB)	10/19/22
1731267	-	fast setting cement	50	Pounds(LB)	10/19/22
1731266	-	fast setting cement	50	Pounds(LB)	10/19/22
1731265	-	fast setting cement	50	Pounds(LB)	10/19/22
1731276	-	fast setting cement	50	Pounds(LB)	10/19/22
1731325	-	fast setting cement	50	Pounds(LB)	10/19/22
1731310	-	fast setting cement	50	Pounds(LB)	10/19/22
1731309	-	fast setting cement	50	Pounds(LB)	10/19/22
1731308	-	fast setting cement	50	Pounds(LB)	10/19/22
1731307	-	fast setting cement	50	Pounds(LB)	10/19/22
1731306	-	fast setting cement	50	Pounds(LB)	10/19/22
1731305	-	fast setting cement	50	Pounds(LB)	10/19/22
1731304	-	fast setting cement	50	Pounds(LB)	10/19/22
1731303	-	fast setting cement	50	Pounds(LB)	10/19/22
1731302	-	fast setting cement	50	Pounds(LB)	10/19/22
1731286	-	fast setting cement	50	Pounds(LB)	10/19/22
1731299	-	fast setting cement	50	Pounds(LB)	10/19/22
1731287	-	fast setting cement	50	Pounds(LB)	10/19/22
1731297	-	fast setting cement	50	Pounds(LB)	10/19/22
1731296	-	fast setting cement	50	Pounds(LB)	10/19/22
1731295	-	fast setting cement	50	Pounds(LB)	10/19/22
1731294	-	fast setting cement	50	Pounds(LB)	10/19/22
1731293	-	fast setting cement	50	Pounds(LB)	10/19/22
1731292	-	fast setting cement	50	Pounds(LB)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1731291	-	fast setting cement	50	Pounds(LB)	10/19/22
1731290	-	fast setting cement	50	Pounds(LB)	10/19/22
1731289	-	fast setting cement	50	Pounds(LB)	10/19/22
1731311	-	fast setting cement	50	Pounds(LB)	10/19/22
1731301	-	fast setting cement	50	Pounds(LB)	10/19/22
1731323	-	fast setting cement	50	Pounds(LB)	10/19/22
1731461	-	fast setting cement	50	Pounds(LB)	10/19/22
1731452	-	fast setting cement	50	Pounds(LB)	10/19/22
1731454	-	fast setting cement	50	Pounds(LB)	10/19/22
1731455	-	fast setting cement	50	Pounds(LB)	10/19/22
1731456	-	fast setting cement	50	Pounds(LB)	10/19/22
1731457	-	fast setting cement	50	Pounds(LB)	10/19/22
1731458	-	fast setting cement	50	Pounds(LB)	10/19/22
1731499	-	fast setting cement	50	Pounds(LB)	10/19/22
1731460	-	fast setting cement	50	Pounds(LB)	10/19/22
1731448	-	fast setting cement	50	Pounds(LB)	10/19/22
1731462	-	fast setting cement	50	Pounds(LB)	10/19/22
1731463	-	fast setting cement	50	Pounds(LB)	10/19/22
1731464	-	fast setting cement	50	Pounds(LB)	10/19/22
1731465	-	fast setting cement	50	Pounds(LB)	10/19/22
1731466	-	fast setting cement	50	Pounds(LB)	10/19/22
1731459	-	fast setting cement	50	Pounds(LB)	10/19/22
1731442	-	fast setting cement	50	Pounds(LB)	10/19/22
1731468	-	fast setting cement	50	Pounds(LB)	10/19/22
1731436	-	fast setting cement	50	Pounds(LB)	10/19/22
1731437	-	fast setting cement	50	Pounds(LB)	10/19/22
1731438	-	fast setting cement	50	Pounds(LB)	10/19/22
1731439	-	fast setting cement	50	Pounds(LB)	10/19/22
1731450	-	fast setting cement	50	Pounds(LB)	10/19/22
1731441	-	fast setting cement	50	Pounds(LB)	10/19/22
1731449	-	fast setting cement	50	Pounds(LB)	10/19/22
1731443	-	fast setting cement	50	Pounds(LB)	10/19/22
1731444	-	fast setting cement	50	Pounds(LB)	10/19/22
1731445	-	fast setting cement	50	Pounds(LB)	10/19/22
1731446	-	fast setting cement	50	Pounds(LB)	10/19/22
1731447	-	fast setting cement	50	Pounds(LB)	10/19/22
1731453	-	fast setting cement	50	Pounds(LB)	10/19/22
1731440	-	fast setting cement	50	Pounds(LB)	10/19/22
1731481	-	fast setting cement	50	Pounds(LB)	10/19/22
1731494	-	fast setting cement	50	Pounds(LB)	10/19/22
1731493	-	fast setting cement	50	Pounds(LB)	10/19/22
1731492	-	fast setting cement	50	Pounds(LB)	10/19/22
1731491	-	fast setting cement	50	Pounds(LB)	10/19/22
1731490	-	fast setting cement	50	Pounds(LB)	10/19/22
1731489	-	fast setting cement	50	Pounds(LB)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1731488	-	fast setting cement	50	Pounds(LB)	10/19/22
1731487	-	fast setting cement	50	Pounds(LB)	10/19/22
1731486	-	fast setting cement	50	Pounds(LB)	10/19/22
1731485	-	fast setting cement	50	Pounds(LB)	10/19/22
1731484	-	fast setting cement	50	Pounds(LB)	10/19/22
1731483	-	fast setting cement	50	Pounds(LB)	10/19/22
1731495	-	fast setting cement	50	Pounds(LB)	10/19/22
1731467	-	fast setting cement	50	Pounds(LB)	10/19/22
1731472	-	fast setting cement	50	Pounds(LB)	10/19/22
1731480	-	fast setting cement	50	Pounds(LB)	10/19/22
1731479	-	fast setting cement	50	Pounds(LB)	10/19/22
1731478	-	fast setting cement	50	Pounds(LB)	10/19/22
1731477	-	fast setting cement	50	Pounds(LB)	10/19/22
1731476	-	fast setting cement	50	Pounds(LB)	10/19/22
1731475	-	fast setting cement	50	Pounds(LB)	10/19/22
1731474	-	fast setting cement	50	Pounds(LB)	10/19/22
1731473	-	fast setting cement	50	Pounds(LB)	10/19/22
1731498	-	fast setting cement	50	Pounds(LB)	10/19/22
1731471	-	fast setting cement	50	Pounds(LB)	10/19/22
1731451	-	fast setting cement	50	Pounds(LB)	10/19/22
1731470	-	fast setting cement	50	Pounds(LB)	10/19/22
1731469	-	fast setting cement	50	Pounds(LB)	10/19/22
1731482	-	fast setting cement	50	Pounds(LB)	10/19/22
1731496	-	fast setting cement	50	Pounds(LB)	10/19/22
1731497	-	fast setting cement	50	Pounds(LB)	10/19/22
1744621	7447-40-7	Potassium chloride =0.000027M Conductivity Standard	500	Milliliter(ML)	10/19/22
1744622	7447-40-7	Potassium chloride =0.000027M Conductivity Standard	500	Milliliter(ML)	10/19/22
1731328	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731354	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731345	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731346	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731347	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731348	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731350	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731361	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731353	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731342	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731355	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731356	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731357	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731358	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731359	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731360	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1731352	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731335	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731363	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731364	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731329	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731330	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731331	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731332	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731344	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731334	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731343	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731336	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731337	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731338	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731339	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731340	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731341	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731351	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731333	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731379	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731349	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731365	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731387	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731386	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731385	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731384	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731383	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731382	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731380	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731378	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731377	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731376	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731362	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731367	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731381	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731366	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731368	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731369	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731370	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731371	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731372	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731373	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731374	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731375	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1744623	301-10-0	Tin(II) 2-ethylhexanoate	100	Gram(GM)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1731427	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731411	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731412	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731413	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731414	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731415	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731416	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731417	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731418	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731419	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731422	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731420	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731397	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731421	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731425	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731426	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731424	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731423	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731410	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731428	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731393	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731399	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731400	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731390	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731398	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731429	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731404	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731388	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731389	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731395	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731394	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731409	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731401	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731392	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731403	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731391	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731405	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731406	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731407	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731408	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731396	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731402	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731435	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731434	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731433	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1731432	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731431	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
1731430	-	QUIKCRETE CONCRETE	60	Pounds(LB)	10/19/22
000010w-30	-	10W-30 SAE MOTOR OIL	1	Quarts(QT)	10/19/22
1757595	-	10W-30 SAE MOTOR OIL	1	Quarts(QT)	10/19/22
1757594	-	10W-30 SAE MOTOR OIL	1	Quarts(QT)	10/19/22
1757596	-	10W-30 SAE MOTOR OIL	1	Quarts(QT)	10/19/22
1731500	-	Finium DTM-AT S/G Acrylic N/B	16.9	Liters(L)	10/19/22
1744624	9073-78-3	THERMOLYSIN	100	Milligram(MG)	10/19/22
1731501	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	10/19/22
1731502	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	10/19/22
1731503	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	10/19/22
1731504	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	10/19/22
1731505	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	10/19/22
1731506	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	10/19/22
1744625	16940-66-2	SODIUM BOROHYDRIDE (98%)	100	Gram(GM)	10/19/22
V00000CD41	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD17	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CCEC	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CCEB	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD11	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD12	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD13	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD14	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD1D	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD16	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CCEF	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CD18	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD19	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD1A	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD46	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD45	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD44	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD00	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD15	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CCF6	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD10	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CCFE	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CCFD	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CCFC	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CCFB	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CCFA	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CCF9	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CCED	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CCF7	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CCEE	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CCF5	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CCF4	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CCF3	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CCF2	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CCF1	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CCF0	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD1E	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CCF8	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD39	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD31	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD32	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD33	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD34	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD35	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD36	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD1C	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD38	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD2E	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD3A	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD3B	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD3C	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD3D	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD3E	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD3F	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD40	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CD37	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD27	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD1F	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD20	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD21	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD22	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD42	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD23	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD24	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD30	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD26	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD2F	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD28	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD29	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD2A	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD2B	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD2C	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD2D	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD01	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD25	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD0F	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD1B	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CCFF	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD0E	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD0B	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD0A	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD09	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD08	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD07	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD43	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD06	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD05	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD4A	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD0D	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD4D	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD4C	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD04	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD03	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD02	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD4B	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD0C	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD47	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD49	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD48	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CD5C	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD5B	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD5A	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD59	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD58	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD55	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD56	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD5D	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD57	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD5E	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD5F	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD60	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD61	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD62	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD63	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD64	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD66	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD87	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD67	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD68	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD69	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD6A	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CD6B	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD65	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD8D	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD98	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD4E	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD97	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD96	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD95	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD94	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD93	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD92	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD91	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD90	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD85	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD8E	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD54	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD8C	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD8B	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD8A	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD89	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD88	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD86	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CD4F	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD53	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD84	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD83	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD82	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD8F	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD7B	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CDA5	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CDA6	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CDA7	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CDA8	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CDA9	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD77	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CDAB	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD52	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CDAD	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CDAE	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CDA4	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD51	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CDAA	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD7A	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD79	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CD78	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CDB0	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD71	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD72	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD73	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD74	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD75	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD76	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CDAF	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD7E	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD6E	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD6D	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD6C	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CDAC	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD50	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CDA3	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD6F	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD70	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD81	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD7F	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD7D	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD9D	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CDA2	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CDA1	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CDA0	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD80	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD9E	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD7C	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD9C	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD9B	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD9A	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD99	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CD9F	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CDBA	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CDB1	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CDBC	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CDBB	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CDB9	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CDB8	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CDB7	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CDB6	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CDB5	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CDB4	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CDB2	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CDB3	-	PEAK -50 Degree F BURST ETHANOL RV & MARINE ANTIFREEZE	1	Gallon(GAL)	10/19/22
V00000CDFE	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CE0E	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CE0D	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CE0C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CE0B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDE6	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDD9	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDDA	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDDB	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDDC	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDDD	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDDE	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDDF	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDE0	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDE1	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDE2	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDE3	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDF2	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDE5	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDD6	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDE7	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDE8	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDE9	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDEA	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDEB	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDEC	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDED	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDEE	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDEF	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDF0	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDF1	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDE4	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDCB	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDC2	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDC1	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDC0	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDBF	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDBE	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDBD	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDC4	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDC5	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDC6	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDC7	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CDC8	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDD8	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDCA	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDD7	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDCC	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDCD	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDCE	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CE00	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDCF	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CE0A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDD1	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDD2	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDD3	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDD4	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDD5	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDD0	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDC9	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDFD	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDF3	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDFB	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDFA	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDF7	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDF9	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDF6	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CE0F	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDF5	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDF4	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDFC	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CE10	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CE05	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CE09	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CE08	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CE07	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDF8	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDC3	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CE04	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CE03	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CE02	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CE01	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CDFF	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
V00000CE06	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/19/22
1744626	9002-18-0	AGAR GRANULATED	454	Gram(GM)	10/19/22
1731522	-	BLACK GOLD VACUUM PUMP OIL	1	Pint(PT)	10/19/22
1731533	-	BLACK GOLD VACUUM PUMP OIL	1	Pint(PT)	10/19/22
1731532	-	BLACK GOLD VACUUM PUMP OIL	1	Pint(PT)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1731531	-	BLACK GOLD VACUUM PUMP OIL	1	Pint(PT)	10/19/22
1731530	-	BLACK GOLD VACUUM PUMP OIL	1	Pint(PT)	10/19/22
1731529	-	BLACK GOLD VACUUM PUMP OIL	1	Pint(PT)	10/19/22
1731528	-	BLACK GOLD VACUUM PUMP OIL	1	Pint(PT)	10/19/22
1731527	-	BLACK GOLD VACUUM PUMP OIL	1	Pint(PT)	10/19/22
1731526	-	BLACK GOLD VACUUM PUMP OIL	1	Pint(PT)	10/19/22
1731525	-	BLACK GOLD VACUUM PUMP OIL	1	Pint(PT)	10/19/22
1731534	-	BLACK GOLD VACUUM PUMP OIL	1	Pint(PT)	10/19/22
1731523	-	BLACK GOLD VACUUM PUMP OIL	1	Pint(PT)	10/19/22
1731524	-	BLACK GOLD VACUUM PUMP OIL	1	Pint(PT)	10/19/22
1732401	-	BLACK GOLD VACUUM PUMP OIL	1	Pint(PT)	10/19/22
1732400	-	BLACK GOLD VACUUM PUMP OIL	1	Pint(PT)	10/19/22
1732402	-	BLACK GOLD VACUUM PUMP OIL	1	Pint(PT)	10/19/22
1732404	-	BLACK GOLD VACUUM PUMP OIL	1	Pint(PT)	10/19/22
1732403	-	BLACK GOLD VACUUM PUMP OIL	1	Pint(PT)	10/19/22
1732405	-	ALL-PURPOSE GRRIP PIPE JOINT & GASKET SEAL	473	Milliliter(ML)	10/19/22
1732406	-	RECTORSEAL 5 PIPE THREAD SEALANT	1	Pint(PT)	10/19/22
1752897	-	Sanit Hand Sanitizer	1	Gallon(GAL)	10/19/22
1744627	92112-69-1	Hexanes mixed isomers ACS	4	Liters(L)	10/19/22
1744628	92112-69-1	Hexanes mixed isomers ACS	4	Liters(L)	10/19/22
1744629	92112-69-1	Hexanes mixed isomers ACS	4	Liters(L)	10/19/22
1752898	-	Sanit Hand Sanitizer	1	Gallon(GAL)	10/19/22
1732407	-	HERCULES REAL TUFF TEFLON PASTE THREAD SEALANT	16	Ounces(OZ)	10/19/22
1744630	67-56-1	Methanol ACS absolute low acetone 99.8+%	4	Liters(L)	10/19/22
1744631	67-56-1	Methanol ACS absolute low acetone 99.8+%	4	Liters(L)	10/19/22
1752908	-	Silicone Lubricant Plus (Wet Type) 08877	9	Ounces(OZ)	10/19/22
1731507	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	18	Liters(L)	10/19/22
1731513	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	18	Liters(L)	10/19/22
1731511	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	18	Liters(L)	10/19/22
1731514	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	18	Liters(L)	10/19/22
1731508	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	18	Liters(L)	10/19/22
1731509	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	18	Liters(L)	10/19/22
1731510	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	18	Liters(L)	10/19/22
1731512	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	18	Liters(L)	10/19/22
1752907	-	Engine Enamel with Ceramic Daytona Yellow	12	Ounces(OZ)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1731515	-	PERMACRYL INTERIOR SEMI-GLOSS NEUTRAL BASE	3.4	Liters(L)	10/19/22
1731518	-	PERMACRYL INTERIOR SEMI-GLOSS NEUTRAL BASE	3.4	Liters(L)	10/19/22
1731517	-	PERMACRYL INTERIOR SEMI-GLOSS NEUTRAL BASE	3.4	Liters(L)	10/19/22
1731516	-	PERMACRYL INTERIOR SEMI-GLOSS NEUTRAL BASE	3.4	Liters(L)	10/19/22
1744362	7790-98-9	AMMONIUM PERCHLORATE	1	Kilograms(KG)	10/19/22
1744364	7790-98-9	AMMONIUM PERCHLORATE	1	Kilograms(KG)	10/19/22
1744363	7790-98-9	AMMONIUM PERCHLORATE	1	Kilograms(KG)	10/19/22
1752906	-	DIELECTRIC TUNE-UP GREASE	3	Ounces(OZ)	10/19/22
1744368	64-17-5	Ethanol 200 Proof (100%) USP/EP/ACS Tax-Paid	4	Liters(L)	10/19/22
1744370	64-17-5	Ethanol 200 Proof (100%) USP/EP/ACS Tax-Paid	4	Liters(L)	10/19/22
1744371	64-17-5	Ethanol 200 Proof (100%) USP/EP/ACS Tax-Paid	4	Liters(L)	10/19/22
1744369	64-17-5	Ethanol 200 Proof (100%) USP/EP/ACS Tax-Paid	4	Liters(L)	10/19/22
1731519	-	CLEAR PVC MEDIUM BODY PLASTIC PIPE CEMENT	1	Quarts(QT)	10/19/22
1744372	64-17-5	Ethyl Alcohol Denatured (Proprietary Solvent)	4	Liters(L)	10/19/22
1744375	64-17-5	Ethyl Alcohol Denatured (Proprietary Solvent)	4	Liters(L)	10/19/22
1744374	64-17-5	Ethyl Alcohol Denatured (Proprietary Solvent)	4	Liters(L)	10/19/22
1744373	64-17-5	Ethyl Alcohol Denatured (Proprietary Solvent)	4	Liters(L)	10/19/22
1731520	-	WELD-ON	1	Quarts(QT)	10/19/22
1731521	-	WELD-ON	1	Quarts(QT)	10/19/22
1752902	-	Battery Cleaner with Acid Indicator	11	Ounces(OZ)	10/19/22
1744381	67-63-0	2-Propanol 99.9% (HPLC)	4	Liters(L)	10/19/22
1744383	67-63-0	2-Propanol 99.9% (HPLC)	4	Liters(L)	10/19/22
1744382	67-63-0	2-Propanol 99.9% (HPLC)	4	Liters(L)	10/19/22
1744384	67-63-0	2-Propanol 99.9% (HPLC)	4	Liters(L)	10/19/22
1744385	60-29-7	Diethyl ether 99% ACS Reagent anhydrous	1	Liters(L)	10/19/22
1744386	7664-39-3	HYDROGEN FLUORIDE 48%	100	Milliliter(ML)	10/19/22
1744387	76-59-5	BROMOTHYMOL BLUE	5	Gram(GM)	10/19/22
1744388	7681-52-9	Sodium hypochlorite solution reagent grade available chlorine 10-15%	250	Milliliter(ML)	10/19/22
1744380	-	ROLASERIT PE01GR (thermoplastic polybutylene terephthalate copolymer)	25	Kilograms(KG)	10/19/22
1744365	-	Orion Standard All-in-One pH Buffer Kit	60	Milliliter(ML)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1744366	7541-49-3	Phytol 97+% FG	100	Gram(GM)	10/19/22
1744367	69-72-7	Salicylic acid ACS reagent 99.0+%	100	Gram(GM)	10/19/22
1744376	123-86-4	Butyl acetate ACS reagent 99.5+%	2.5	Liters(L)	10/19/22
1744377	123-86-4	Butyl acetate ACS reagent 99.5+%	2.5	Liters(L)	10/19/22
1744378	123-86-4	Butyl acetate ACS reagent 99.5+%	2.5	Liters(L)	10/19/22
1744379	96-47-9	2-Methyltetrahydrofuran 99+% Extra Dry stabilized	100	Milliliter(ML)	10/19/22
1691462	-	Hydrogen 3%/Bal. Argone	300	Cubic Feet(CF)	10/19/22
1691463	-	HYDROGEN GAS	100	Liters(L)	10/19/22
1691464	-	HYDROGEN GAS	100	Liters(L)	10/19/22
1691465	-	10% AMMONIA/BAL. NITROGEN	150	Cubic Feet(CF)	10/19/22
1691469	-	10% AMMONIA/BAL. NITROGEN	150	Cubic Feet(CF)	10/19/22
1691466	-	10% AMMONIA/BAL. NITROGEN	150	Cubic Feet(CF)	10/19/22
1691468	-	10% AMMONIA/BAL. NITROGEN	150	Cubic Feet(CF)	10/19/22
1691467	-	10% AMMONIA/BAL. NITROGEN	150	Cubic Feet(CF)	10/19/22
1691470	-	10% AMMONIA/BAL. NITROGEN	150	Cubic Feet(CF)	10/19/22
1691471	-	25ppm Hydrogen Chloride/Balance Nitrogen	200	Cubic Feet(CF)	10/19/22
1691476	-	25ppm Hydrogen Chloride/Balance Nitrogen	200	Cubic Feet(CF)	10/19/22
1691475	-	25ppm Hydrogen Chloride/Balance Nitrogen	200	Cubic Feet(CF)	10/19/22
1691474	-	25ppm Hydrogen Chloride/Balance Nitrogen	200	Cubic Feet(CF)	10/19/22
1691473	-	25ppm Hydrogen Chloride/Balance Nitrogen	200	Cubic Feet(CF)	10/19/22
1691472	-	25ppm Hydrogen Chloride/Balance Nitrogen	200	Cubic Feet(CF)	10/19/22
1691386	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/19/22
1691400	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/19/22
1691392	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/19/22
1691387	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/19/22
1691394	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/19/22
1691396	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/19/22
1691397	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/19/22
1691391	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/19/22
1691399	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/19/22
1691393	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/19/22
1691401	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/19/22
1691402	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/19/22
1691403	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/19/22
1691404	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/19/22
1691405	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/19/22
1691406	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/19/22
1691407	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/19/22
1691408	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/19/22
1691398	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/19/22
1691388	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/19/22
1691395	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/19/22
1691390	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/19/22
1691389	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1691430	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/19/22
1691429	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/19/22
1691428	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/19/22
1691427	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/19/22
1691425	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/19/22
1691424	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/19/22
1691426	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/19/22
1691409	-	HYDROGEN 6% IN ARGON	220	Cubic Feet(CF)	10/19/22
1691420	-	HYDROGEN 6% IN ARGON	220	Cubic Feet(CF)	10/19/22
1691418	-	HYDROGEN 6% IN ARGON	220	Cubic Feet(CF)	10/19/22
1691412	-	HYDROGEN 6% IN ARGON	220	Cubic Feet(CF)	10/19/22
1691411	-	HYDROGEN 6% IN ARGON	220	Cubic Feet(CF)	10/19/22
1691410	-	HYDROGEN 6% IN ARGON	220	Cubic Feet(CF)	10/19/22
1691423	-	HYDROGEN 6% IN ARGON	220	Cubic Feet(CF)	10/19/22
1691416	-	HYDROGEN 6% IN ARGON	220	Cubic Feet(CF)	10/19/22
1691414	-	HYDROGEN 6% IN ARGON	220	Cubic Feet(CF)	10/19/22
1691421	-	HYDROGEN 6% IN ARGON	220	Cubic Feet(CF)	10/19/22
1691422	-	HYDROGEN 6% IN ARGON	220	Cubic Feet(CF)	10/19/22
1691417	-	HYDROGEN 6% IN ARGON	220	Cubic Feet(CF)	10/19/22
1691419	-	HYDROGEN 6% IN ARGON	220	Cubic Feet(CF)	10/19/22
1691413	-	HYDROGEN 6% IN ARGON	220	Cubic Feet(CF)	10/19/22
1691415	-	HYDROGEN 6% IN ARGON	220	Cubic Feet(CF)	10/19/22
1691431	-	Compressed Air	220	Cubic Feet(CF)	10/19/22
1691436	-	Compressed Air	220	Cubic Feet(CF)	10/19/22
1691432	-	Compressed Air	220	Cubic Feet(CF)	10/19/22
1691433	-	Compressed Air	220	Cubic Feet(CF)	10/19/22
1691435	-	Compressed Air	220	Cubic Feet(CF)	10/19/22
1691434	-	Compressed Air	220	Cubic Feet(CF)	10/19/22
1691296	74-98-6	PROPANE	11	Gallon(GAL)	10/19/22
1691297	74-98-6	PROPANE	11	Gallon(GAL)	10/19/22
1691307	74-98-6	PROPANE	11	Gallon(GAL)	10/19/22
1691298	74-98-6	PROPANE	11	Gallon(GAL)	10/19/22
1691300	74-98-6	PROPANE	11	Gallon(GAL)	10/19/22
1691301	74-98-6	PROPANE	11	Gallon(GAL)	10/19/22
1691302	74-98-6	PROPANE	11	Gallon(GAL)	10/19/22
1691303	74-98-6	PROPANE	11	Gallon(GAL)	10/19/22
1691304	74-98-6	PROPANE	11	Gallon(GAL)	10/19/22
1691299	74-98-6	PROPANE	11	Gallon(GAL)	10/19/22
1691306	74-98-6	PROPANE	11	Gallon(GAL)	10/19/22
1691308	74-98-6	PROPANE	11	Gallon(GAL)	10/19/22
1691305	74-98-6	PROPANE	11	Gallon(GAL)	10/19/22
1732411	-	Bridgit Burn Resistant Solder Paste Flux	4	Ounces(OZ)	10/19/22
1732412	-	STAY-CLEAN PASTA FLUX	4	Ounces(OZ)	10/19/22
1732413	-	RECTORSEAL TRU-BLU PIPE THREAD SEALANT	46	Ounces(OZ)	10/19/22
1732408	-	MAGNAFLUX SPOTCHECK SKC-S	10.5	Ounces(OZ)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1691309	74-86-2	ACETYLENE STABILIZED	240	Cubic Feet(CF)	10/19/22
1691315	74-86-2	ACETYLENE STABILIZED	130	Cubic Feet(CF)	10/19/22
1691316	74-86-2	ACETYLENE STABILIZED	130	Cubic Feet(CF)	10/19/22
1691314	74-86-2	ACETYLENE STABILIZED	130	Cubic Feet(CF)	10/19/22
1691313	74-86-2	ACETYLENE STABILIZED	130	Cubic Feet(CF)	10/19/22
1691312	74-86-2	ACETYLENE STABILIZED	130	Cubic Feet(CF)	10/19/22
1691311	74-86-2	ACETYLENE STABILIZED	130	Cubic Feet(CF)	10/19/22
1691310	74-86-2	ACETYLENE STABILIZED	130	Cubic Feet(CF)	10/19/22
1691318	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	10/19/22
1691319	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	10/19/22
1691317	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	10/19/22
1691324	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	10/19/22
1691331	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	10/19/22
1691326	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	10/19/22
1691332	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	10/19/22
1691330	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	10/19/22
1691329	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	10/19/22
1691328	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	10/19/22
1691325	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	10/19/22
1691323	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	10/19/22
1691322	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	10/19/22
1691320	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	10/19/22
1691321	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	10/19/22
1691327	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	10/19/22
1691333	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691351	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691345	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691346	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691347	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691348	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691350	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691344	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691336	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691349	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691355	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691342	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691340	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691339	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691352	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691337	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691343	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691335	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691334	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691338	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691361	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1691356	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691357	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691358	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691341	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691360	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691353	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691362	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691359	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691354	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691444	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691449	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691441	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691448	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691447	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691451	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691450	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691445	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691443	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691442	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691437	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691438	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691439	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691440	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691446	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/19/22
1691363	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/19/22
1691364	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/19/22
1691365	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/19/22
1691366	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/19/22
1691367	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/19/22
1691373	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/19/22
1691372	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/19/22
1691371	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/19/22
1691370	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/19/22
1691375	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/19/22
1691376	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/19/22
1691385	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/19/22
1691377	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/19/22
1691380	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/19/22
1691374	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/19/22
1691368	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/19/22
1691378	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/19/22
1691379	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/19/22
1691384	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/19/22
1691383	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/19/22
1691382	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1691381	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/19/22
1691369	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/19/22
1691452	124-38-9	CARBON DIOXIDE	50	Pounds(LB)	10/19/22
1691457	124-38-9	CARBON DIOXIDE	50	Pounds(LB)	10/19/22
1691453	124-38-9	CARBON DIOXIDE	50	Pounds(LB)	10/19/22
1691454	124-38-9	CARBON DIOXIDE	50	Pounds(LB)	10/19/22
1691456	124-38-9	CARBON DIOXIDE	50	Pounds(LB)	10/19/22
1691458	124-38-9	CARBON DIOXIDE	50	Pounds(LB)	10/19/22
1691455	124-38-9	CARBON DIOXIDE	50	Pounds(LB)	10/19/22
1691459	124-38-9	CARBON DIOXIDE	50	Pounds(LB)	10/19/22
1691460	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	10/19/22
1691461	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	10/19/22
1691477	-	2000ppm Hydrogen Fluoride Balance Nitrogen	220	Cubic Centimete	10/19/22
1691478	-	2000ppm Hydrogen Fluoride Balance Nitrogen	220	Cubic Centimete	10/19/22
1691479	-	2000ppm Hydrogen Fluoride Balance Nitrogen	220	Cubic Centimete	10/19/22
1691480	-	2000ppm Hydrogen Fluoride Balance Nitrogen	220	Cubic Centimete	10/19/22
1691481	-	2000ppm Hydrogen Fluoride Balance Nitrogen	220	Cubic Centimete	10/19/22
1691482	-	2000ppm Hydrogen Fluoride Balance Nitrogen	220	Cubic Centimete	10/19/22
1691483	-	2000ppm Hydrogen Fluoride Balance Nitrogen	220	Cubic Centimete	10/19/22
1691484	-	25ppm Hydrogen Chloride/Balance Nitrogen	58	Liters(L)	10/19/22
1691485	7440-59-7	HELIUM REFRIGERATED LIQUID (CRYOGENIC LIQUID)	100	Cubic Feet(CF)	10/19/22
1691486	7440-59-7	HELIUM REFRIGERATED LIQUID (CRYOGENIC LIQUID)	100	Cubic Feet(CF)	10/19/22
1744632	141-78-6	Ethyl acetate ACS 99.5	4	Liters(L)	10/19/22
1744633	141-78-6	Ethyl acetate ACS 99.5	4	Liters(L)	10/19/22
1744634	4316-93-2	4 6-DICHLORO-5-NITROPYRIMIDINE	25	Gram(GM)	10/19/22
1744635	22015-35-6	EUROPIUM (II) IODIDE	1	Gram(GM)	10/19/22
1744636	151-21-3	DODECYL SODIUM SULFATE (LAURYL SULFATE SODIUM SALT)	25	Gram(GM)	10/19/22
1744637	7697-37-2	NITRIC ACID 70.0-71.0%	2.5	Liters(L)	10/19/22
1744638	7697-37-2	NITRIC ACID 70.0-71.0%	2.5	Liters(L)	10/19/22
1744640	7440-74-6	INDIUM WIRE	2.8	Gram(GM)	10/19/22
1744642	7440-74-6	INDIUM WIRE	2.8	Gram(GM)	10/19/22
1744641	7440-74-6	INDIUM WIRE	2.8	Gram(GM)	10/19/22
1744643	9003-27-4	POLYISOBUTYLENE	250	Gram(GM)	10/19/22
1744644	7440-42-8	BORON AMORPHOUS	250	Gram(GM)	10/19/22
1744645	7440-42-8	BORON AMORPHOUS	250	Gram(GM)	10/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1744646	108-32-7	Propylene carbonate anhydrous 99.7%	500	Milliliter(ML)	10/19/22
1744639	7631-86-9	LUDOX TM-40 colloidal silica	1	Liters(L)	10/19/22
1752904	-	HYDREX XV ALL SEASON	54.2	Gallon(GAL)	10/20/22
1732409	-	QD ELECTRONIC CLEANER	11	Ounces(OZ)	10/20/22
1732410	-	SPRAYON BLUE LAYOUT FLUID AEROSOL	12	Ounces(OZ)	10/20/22
1744648	75-09-2	Methylene chloride ACS	4	Liters(L)	10/20/22
1744649	75-09-2	Methylene chloride ACS	4	Liters(L)	10/20/22
1744651	75-09-2	Methylene chloride ACS	4	Liters(L)	10/20/22
1744652	75-09-2	Methylene chloride ACS	4	Liters(L)	10/20/22
1744653	75-09-2	Methylene chloride ACS	4	Liters(L)	10/20/22
1744655	75-09-2	Methylene chloride ACS	4	Liters(L)	10/20/22
1744654	75-09-2	Methylene chloride ACS	4	Liters(L)	10/20/22
1744650	75-09-2	Methylene chloride ACS	4	Liters(L)	10/20/22
1744656	67-56-1	Methanol 99.9% (HPLC)	4	Liters(L)	10/20/22
1744659	67-56-1	Methanol 99.9% (HPLC)	4	Liters(L)	10/20/22
1744658	67-56-1	Methanol 99.9% (HPLC)	4	Liters(L)	10/20/22
1744657	67-56-1	Methanol 99.9% (HPLC)	4	Liters(L)	10/20/22
1753209	-	Dr. Tranny Assemblee Goo	16	Ounces(OZ)	10/20/22
1753217	-	Do it Best Bar and Chain Oil	1	Gallon(GAL)	10/20/22
1753226	-	Do it Best Bar and Chain Oil	1	Gallon(GAL)	10/20/22
1753218	-	Do it Best Bar and Chain Oil	1	Gallon(GAL)	10/20/22
1753219	-	Do it Best Bar and Chain Oil	1	Gallon(GAL)	10/20/22
1753220	-	Do it Best Bar and Chain Oil	1	Gallon(GAL)	10/20/22
1753221	-	Do it Best Bar and Chain Oil	1	Gallon(GAL)	10/20/22
1753222	-	Do it Best Bar and Chain Oil	1	Gallon(GAL)	10/20/22
1753223	-	Do it Best Bar and Chain Oil	1	Gallon(GAL)	10/20/22
1753224	-	Do it Best Bar and Chain Oil	1	Gallon(GAL)	10/20/22
1753225	-	Do it Best Bar and Chain Oil	1	Gallon(GAL)	10/20/22
1753227	-	Do it Best Bar and Chain Oil	1	Gallon(GAL)	10/20/22
1753216	-	PERMATEX ANTI-SEIZE LUBRICANT	3.4	Ounces(OZ)	10/20/22
1744664	109-99-9	Tetrahydrofuran anhydrous 99.8+% unstabalized	1	Liters(L)	10/20/22
1744665	109-99-9	Tetrahydrofuran anhydrous 99.8+% unstabalized	1	Liters(L)	10/20/22
1752914	-	Castrol Transynd Allison Transmission Fluid	5	Gallon(GAL)	10/20/22
1752915	-	Castrol Transynd Allison Transmission Fluid	5	Gallon(GAL)	10/20/22
1752916	-	Castrol Transynd Allison Transmission Fluid	5	Gallon(GAL)	10/20/22
1752917	-	Castrol Transynd Allison Transmission Fluid	5	Gallon(GAL)	10/20/22
1744668	10034-96-5	MANGANESE(II) SULFATE MONOHYDRATE	500	Milligram(MG)	10/20/22
1744669	12030-88-5	POTASSIUM SUPEROXIDE (POTASSIUM DIOXIDE)	50	Gram(GM)	10/20/22
1744670	-	Heptanes mixture of isomers	4	Liters(L)	10/20/22
1744671	-	Heptanes mixture of isomers	4	Liters(L)	10/20/22
1744672	-	Heptanes mixture of isomers	4	Liters(L)	10/20/22
1744673	-	Heptanes mixture of isomers	4	Liters(L)	10/20/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1539409	-	THREAD LOCKER	1	Ounces(OZ)	10/20/22
1744666	74852-81-6	4-(2-Methyl-1H-imidazol-1-yl)aniline 97%	1	Gram(GM)	10/20/22
1744667	15096-52-3	Cryolite synthetic 97.0+% (from F)	2.5	Kilograms(KG)	10/20/22
1744660	67-68-5	DIMETHYL SULFOXIDE	100	Milliliter(ML)	10/20/22
1744662	-	PALLADIUM ON CARBON 10% WT	10	Gram(GM)	10/20/22
1744663	100-51-6	BENZYL ALCOHOL	500	Milliliter(ML)	10/20/22
1744661	-	1650°C (3000°F) Hi-Purity Alumina Adhesive for Bonding and Repairing High Temperature Furnace	6	Ounces(OZ)	10/20/22
1744531	1310-58-3	Potassium hydroxide solution 45 wt. % in H2O	200	Liters(L)	10/20/22
1744532	3317-61-1	5 5-Dimethyl-1-pyrroline N-oxide	100	Milligram(MG)	10/20/22
1744533	3317-61-1	5 5-Dimethyl-1-pyrroline N-oxide	100	Milligram(MG)	10/20/22
1744534	7541-49-3	Phytol 97+% FG	100	Gram(GM)	10/20/22
1744536	-	AccuGrand 209 PCB Standard	1	Milliliter(ML)	10/20/22
1736566	31643-49-9	4-Nitrophthalonitrile 99%	5	Gram(GM)	10/20/22
1736567	350-46-9	1-FLUORO-4-NITROBENZENE	100	Gram(GM)	10/20/22
1744647	618-32-6	Benzoyl Bromide 98.0+%	5	Gram(GM)	10/20/22
1744535	109-16-0	Triethylene glycol dimethacrylate contains MEHQ as inhibitor	250	Milliliter(ML)	10/20/22
1539410	-	MOBIL GREASE 28	3	Ounces(OZ)	10/20/22
1539411	-	MOBIL GREASE 28	2	Ounces(OZ)	10/20/22
1539412	-	MOBIL GREASE 28	2	Ounces(OZ)	10/20/22
1539413	-	BLINK black ink	1	Ounces(OZ)	10/20/22
1539414	-	1250 White Ink	1	Ounces(OZ)	10/20/22
1539493	-	TRA-CON BIPAX TRA-DUCT BA-2902	25	Ounces(OZ)	10/20/22
1539506	-	TRA-CON BIPAX TRA-DUCT BA-2902	25	Ounces(OZ)	10/20/22
1539505	-	TRA-CON BIPAX TRA-DUCT BA-2902	25	Ounces(OZ)	10/20/22
1539496	-	TRA-CON BIPAX TRA-DUCT BA-2902	25	Ounces(OZ)	10/20/22
1539495	-	TRA-CON BIPAX TRA-DUCT BA-2902	25	Ounces(OZ)	10/20/22
1539497	-	TRA-CON BIPAX TRA-DUCT BA-2902	25	Ounces(OZ)	10/20/22
1539498	-	TRA-CON BIPAX TRA-DUCT BA-2902	25	Ounces(OZ)	10/20/22
1539499	-	TRA-CON BIPAX TRA-DUCT BA-2902	25	Ounces(OZ)	10/20/22
1539500	-	TRA-CON BIPAX TRA-DUCT BA-2902	25	Ounces(OZ)	10/20/22
1539501	-	TRA-CON BIPAX TRA-DUCT BA-2902	25	Ounces(OZ)	10/20/22
1539502	-	TRA-CON BIPAX TRA-DUCT BA-2902	25	Ounces(OZ)	10/20/22
1539508	-	TRA-CON BIPAX TRA-DUCT BA-2902	25	Ounces(OZ)	10/20/22
1539504	-	TRA-CON BIPAX TRA-DUCT BA-2902	25	Ounces(OZ)	10/20/22
1539517	-	TRA-CON BIPAX TRA-DUCT BA-2902	25	Ounces(OZ)	10/20/22
1539507	-	TRA-CON BIPAX TRA-DUCT BA-2902	25	Ounces(OZ)	10/20/22
1539509	-	TRA-CON BIPAX TRA-DUCT BA-2902	25	Ounces(OZ)	10/20/22
1539510	-	TRA-CON BIPAX TRA-DUCT BA-2902	25	Ounces(OZ)	10/20/22
1539511	-	TRA-CON BIPAX TRA-DUCT BA-2902	25	Ounces(OZ)	10/20/22
1539512	-	TRA-CON BIPAX TRA-DUCT BA-2902	25	Ounces(OZ)	10/20/22
1539513	-	TRA-CON BIPAX TRA-DUCT BA-2902	25	Ounces(OZ)	10/20/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1539514	-	TRA-CON BIPAX TRA-DUCT BA-2902	25	Ounces(OZ)	10/20/22
1539515	-	TRA-CON BIPAX TRA-DUCT BA-2902	25	Ounces(OZ)	10/20/22
1539516	-	TRA-CON BIPAX TRA-DUCT BA-2902	25	Ounces(OZ)	10/20/22
1539503	-	TRA-CON BIPAX TRA-DUCT BA-2902	25	Ounces(OZ)	10/20/22
1539494	-	TRA-CON BIPAX TRA-DUCT BA-2902	25	Ounces(OZ)	10/20/22
1732414	-	Weathershed AEROSOL	12	Ounces(OZ)	10/20/22
1714954	-	DUO SEAL PUMP OIL	1	Gallon(GAL)	10/21/22
1714955	-	DUO SEAL PUMP OIL	1	Gallon(GAL)	10/21/22
1714956	-	DUO SEAL PUMP OIL	1	Gallon(GAL)	10/21/22
1714957	-	DUO SEAL PUMP OIL	1	Gallon(GAL)	10/21/22
1744537	109-72-8	N-BUTYLLITHIUM (2.5 M SOLUTION IN HEXANES)	100	Milliliter(ML)	10/21/22
1744538	109-72-8	N-BUTYLLITHIUM (2.5 M SOLUTION IN HEXANES)	100	Milliliter(ML)	10/21/22
1736570	67-64-1	Acetone Reagent ACS Grade	4	Liters(L)	10/21/22
1736572	1310-58-3	POTASSIUM HYDROXIDE PELLETS	100	Gram(GM)	10/21/22
1736573	10297-06-0	6-Chloro-1-hexyne 98%	5	Milliliter(ML)	10/21/22
1736574	10297-06-0	6-Chloro-1-hexyne 98%	5	Milliliter(ML)	10/21/22
1738440	56525-79-2	3 6-Diphenylcarbazole	5	Gram(GM)	10/21/22
1736571	-	MULTI ELEMENT QC-7 CHECK STANDARD SOLUTION	100	Milliliter(ML)	10/21/22
1744686	70131-67-8	Poly(dimethylsiloxane) hydroxy terminated	100	Milliliter(ML)	10/21/22
1744688	70131-67-8	Poly(dimethylsiloxane) hydroxy terminated	100	Milliliter(ML)	10/21/22
1744687	70131-67-8	Poly(dimethylsiloxane) hydroxy terminated	100	Milliliter(ML)	10/21/22
1744747	67-63-0	2-Propanol 99.9% (HPLC)	4	Liters(L)	10/21/22
1744750	67-63-0	2-Propanol 99.9% (HPLC)	4	Liters(L)	10/21/22
1744749	67-63-0	2-Propanol 99.9% (HPLC)	4	Liters(L)	10/21/22
1744748	67-63-0	2-Propanol 99.9% (HPLC)	4	Liters(L)	10/21/22
1744754	67-66-3	Chloroform stabilized with 50-200 ppm Amylene ACS Reagent Grade	4	Liters(L)	10/21/22
1744755	67-66-3	Chloroform stabilized with 50-200 ppm Amylene ACS Reagent Grade	4	Liters(L)	10/21/22
1744756	67-66-3	Chloroform stabilized with 50-200 ppm Amylene ACS Reagent Grade	4	Liters(L)	10/21/22
1744757	67-66-3	Chloroform stabilized with 50-200 ppm Amylene ACS Reagent Grade	4	Liters(L)	10/21/22
1744758	9003-53-6	POLYSTYRENE	1	Kilograms(KG)	10/21/22
1744763	-	ISOPROPYL ALCOHOL	4	Gallon(GAL)	10/21/22
1744764	-	ISOPROPYL ALCOHOL	4	Gallon(GAL)	10/21/22
1744760	4316-93-2	4 6-DICHLORO-5-NITROPYRIMIDINE	25	Gram(GM)	10/21/22
1744761	4316-93-2	4 6-DICHLORO-5-NITROPYRIMIDINE	25	Gram(GM)	10/21/22
1744762	7647-01-0	Hydrochloric acid ACS Reagent 37%	2.5	Liters(L)	10/21/22
1744751	63231-67-4	Silica Gel Desiccant (6-12 Mesh Certified ACS)	5	Kilograms(KG)	10/21/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1744753	63231-67-4	Silica Gel Desiccant (6-12 Mesh Certified ACS)	5	Kilograms(KG)	10/21/22
1744752	63231-67-4	Silica Gel Desiccant (6-12 Mesh Certified ACS)	5	Kilograms(KG)	10/21/22
1744539	3637-26-1	[2-(Methacryloyloxy)ethyl]dimethyl-(3-sulfopropyl)ammonium hydroxide	250	Gram(GM)	10/21/22
1744543	-	REAGENT ALCOHOL	2	Liters(L)	10/21/22
1744544	-	REAGENT ALCOHOL	2	Liters(L)	10/21/22
1744545	-	REAGENT ALCOHOL	2	Liters(L)	10/21/22
1744546	-	REAGENT ALCOHOL	2	Liters(L)	10/21/22
1744541	110-26-9	N N'-METHYLENEBISACRYLAMIDE	100	Gram(GM)	10/21/22
1744542	2226-96-2	4-HYDROXY-TEMPO	5	Gram(GM)	10/21/22
1744540	106797-53-9	2-Hydroxy-4'-(2-hydroxyethoxy)-2-methylpropiophenone	10	Gram(GM)	10/21/22
1744706	10294-33-4	BORON TRIBROMIDE	25	Gram(GM)	10/21/22
1744705	109-97-7	PYRROLE 98%	100	Milliliter(ML)	10/21/22
1744704	133-37-9	DL-TARTARIC ACID	100	Gram(GM)	10/21/22
1744703	34806-73-0	ZIRCONIUM SULFATE HYDRATE	25	Gram(GM)	10/21/22
1744701	-	1-BUTYL-1-METHYLPYRROLIDINIUM BIS(TRIFLUOROMETHYLSULFONYL)IMIDE	50	Gram(GM)	10/21/22
1744702	-	1-BUTYL-1-METHYLPYRROLIDINIUM BIS(TRIFLUOROMETHYLSULFONYL)IMIDE	50	Gram(GM)	10/21/22
1744689	-	AMMONIUM HEXACHLOROPALLADATE (IV)	5	Gram(GM)	10/21/22
1744690	13820-40-1	AMMONIUM TETRACHLOROPALLADATE	5	Gram(GM)	10/21/22
1744759	-	Rare earth element mix for ICP 16 elements 50 mg/L in nitric acid	100	Milliliter(ML)	10/21/22
1744691	-	Diamminepalladium(II) nitrite solution	20	Gram(GM)	10/21/22
1744693	10102-05-3	PALLADIUM(II) NITRATE HYDRATE	5	Gram(GM)	10/21/22
1744692	13820-44-5	Tetraammine palladium(II) tetrachloropalladate(II)	5	Gram(GM)	10/21/22
1744694	13782-33-7	trans-Dichlorodiammine palladium(II)	5	Gram(GM)	10/21/22
1744695	10/1/7647	Palladium(II) chloride (99.9%-Pd)	5	Gram(GM)	10/21/22
1732446	-	PSX 700 CURE	0.2	Gallon(GAL)	10/24/22
1732448	-	PSX 700 CURE	0.2	Gallon(GAL)	10/24/22
1732447	-	PSX 700 CURE	0.2	Gallon(GAL)	10/24/22
V00000CE12	-	COTE ALL WHITE BASE	3.7	Liters(L)	10/24/22
1732449	-	Finium DTM-AT S/G Acrylic N/B	1	Gallon(GAL)	10/24/22
1642044	-	HIT-HY 100 A/B	11.1	Ounces(OZ)	10/24/22
1732450	-	Finium DTM-AT S/G Acrylic N/B	1	Gallon(GAL)	10/24/22
1732451	-	Vers-Acryl 222 S/G Finish White Base	3.6	Liters(L)	10/24/22
1732452	-	Vers-Acryl 222 S/G Finish White Base	3.6	Liters(L)	10/24/22
1732453	-	Vers-Acryl 222 S/G Finish White Base	3.6	Liters(L)	10/24/22
1732454	-	Vers-Acryl 222 S/G Finish White Base	3.6	Liters(L)	10/24/22
1732455	-	Vers-Acryl 222 S/G Finish White Base	3.6	Liters(L)	10/24/22
1732456	-	Vers-Acryl 222 S/G Finish White Base	3.6	Liters(L)	10/24/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1732460	-	Vers-Acryl 222 S/G Finish White Base	3.6	Liters(L)	10/24/22
1732459	-	Vers-Acryl 222 S/G Finish White Base	3.6	Liters(L)	10/24/22
V00000CE18	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	10/24/22
V00000CE17	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	10/24/22
V00000CE1A	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	10/24/22
V00000CE14	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	10/24/22
V00000CE1B	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	10/24/22
V00000CE1C	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	10/24/22
V00000CE13	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	10/24/22
V00000CE15	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	10/24/22
V00000CE16	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	10/24/22
V00000CE19	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	10/24/22
V00000CE1E	-	COTE ALL WHITE BASE	3.7	Liters(L)	10/24/22
V00000CE1F	-	COTE ALL WHITE BASE	3.7	Liters(L)	10/24/22
V00000CE20	-	COTE ALL WHITE BASE	3.7	Liters(L)	10/24/22
V00000CE1D	-	COTE ALL WHITE BASE	3.7	Liters(L)	10/24/22
1642045	-	HIT-HY 100 A/B	11.1	Ounces(OZ)	10/24/22
1732434	-	SKID-TEX ST30 ANTI SLIP	1	Pounds(LB)	10/24/22
1732445	-	SKID-TEX ST30 ANTI SLIP	1	Pounds(LB)	10/24/22
1732441	-	SKID-TEX ST30 ANTI SLIP	1	Pounds(LB)	10/24/22
1732444	-	SKID-TEX ST30 ANTI SLIP	1	Pounds(LB)	10/24/22
1732440	-	SKID-TEX ST30 ANTI SLIP	1	Pounds(LB)	10/24/22
1732439	-	SKID-TEX ST30 ANTI SLIP	1	Pounds(LB)	10/24/22
1732438	-	SKID-TEX ST30 ANTI SLIP	1	Pounds(LB)	10/24/22
1732437	-	SKID-TEX ST30 ANTI SLIP	1	Pounds(LB)	10/24/22
1732436	-	SKID-TEX ST30 ANTI SLIP	1	Pounds(LB)	10/24/22
1732435	-	SKID-TEX ST30 ANTI SLIP	1	Pounds(LB)	10/24/22
1732443	-	SKID-TEX ST30 ANTI SLIP	1	Pounds(LB)	10/24/22
1732442	-	SKID-TEX ST30 ANTI SLIP	1	Pounds(LB)	10/24/22
1732422	-	PSX 700 SAFETY YELLOW 1979 RESIN	0.8	Gallon(GAL)	10/24/22
1732424	-	PSX 700 SAFETY YELLOW 1979 RESIN	0.8	Gallon(GAL)	10/24/22
1732423	-	PSX 700 SAFETY YELLOW 1979 RESIN	0.8	Gallon(GAL)	10/24/22
1732425	-	Amerlock Sealer HRD	1	Gallon(GAL)	10/24/22
1732427	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	10/24/22
1732428	-	Startex Lacquer Thinner	1	Gallon(GAL)	10/24/22
1732432	-	Startex Lacquer Thinner	1	Gallon(GAL)	10/24/22
1732429	-	Startex Lacquer Thinner	1	Gallon(GAL)	10/24/22
1732430	-	Startex Lacquer Thinner	1	Gallon(GAL)	10/24/22
1732431	-	Startex Lacquer Thinner	1	Gallon(GAL)	10/24/22
1732433	-	Startex Lacquer Thinner	1	Gallon(GAL)	10/24/22
1732415	-	DRY GRAPHITE FILM LUBRICANT	10	Ounces(OZ)	10/24/22
1732416	-	GREENLEE HYDRAULIC OIL	1	Gallon(GAL)	10/24/22
1732419	-	GREENLEE HYDRAULIC OIL	1	Gallon(GAL)	10/24/22
1732418	-	GREENLEE HYDRAULIC OIL	1	Gallon(GAL)	10/24/22
1732417	-	GREENLEE HYDRAULIC OIL	1	Gallon(GAL)	10/24/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1744696	-	Rubidium hydroxide 50% w/w Aqueous Solution 99.6+% (metals basis)	5	Gram(GM)	10/24/22
1744698	-	2 3 5 6-TETRAFLUOROPYRIDINE	1	Gram(GM)	10/24/22
1721523	3779-42-8	3-(BROMOPROPYL)TRIMETHYL-AMMONIUM BROMIDE	25	Gram(GM)	10/24/22
1744699	1310-73-2	SODIUM HYDROXIDE PELLETS	1	Kilograms(KG)	10/24/22
1744700	38894-11-0	3-METHYL-2-BENZOTHIAZOLINONE HYDRAZONE HYDROCHLORIDE HYDRATE	2.5	Gram(GM)	10/24/22
1744676	301-10-0	Tin(II) 2-ethylhexanoate	100	Gram(GM)	10/24/22
1744685	631-61-8	AMMONIUM ACETATE	25	Gram(GM)	10/24/22
1744684	540-69-2	AMMONIUM FORMATE	25	Gram(GM)	10/24/22
1744683	13870-90-1	COENZYME B12	100	Milligram(MG)	10/24/22
1458679	-	DTE HYDROLIC OIL	1	Gallon(GAL)	10/24/22
1458681	-	DTE HYDROLIC OIL	1	Gallon(GAL)	10/24/22
1458680	-	DTE HYDROLIC OIL	1	Gallon(GAL)	10/24/22
1458699	-	DTE HYDROLIC OIL	1	Gallon(GAL)	10/24/22
1691487	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/24/22
1691489	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/24/22
1691488	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/24/22
1691490	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/24/22
1691491	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	10/24/22
1691492	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	10/24/22
1691493	811-97-2	TETRAFLUOROETHANE	30	Pounds(LB)	10/24/22
1691494	811-97-2	TETRAFLUOROETHANE	30	Pounds(LB)	10/24/22
1691495	811-97-2	TETRAFLUOROETHANE	30	Pounds(LB)	10/24/22
1691496	811-97-2	TETRAFLUOROETHANE	30	Pounds(LB)	10/24/22
1744678	-	MOLYBDENUM BLUE TLC SPRAY REAGENT	100	Milliliter(ML)	10/24/22
1744679	1066-33-7	AMMONIUM BICARBONATE	500	Gram(GM)	10/24/22
1744680	-	CESIUM HYDROXIDE 99% 50 WT % SOLUTION IN WATER	5	Gram(GM)	10/24/22
1744681	14475-63-9	ZIRCONIUM HYDROXIDE	100	Gram(GM)	10/24/22
1744677	1310-73-2	SODIUM HYDROXIDE PELLETS	500	Gram(GM)	10/24/22
1744675	14609-54-2	4 4' 4'' 4'''-(Porphine-5 10 15 20-tetrayl)tetrakis(benzoic acid)	1	Gram(GM)	10/24/22
1744682	14691-88-4	4-Amino-TEMPO free radical	1	Gram(GM)	10/24/22
1714958	-	DUO SEAL PUMP OIL	1	Gallon(GAL)	10/24/22
1744697	1513-66-2	2 3-Difluoropyridine 95%	5	Gram(GM)	10/24/22
1757951	-	ISOPROPANOL 70%	1	Gallon(GAL)	10/24/22
1721352	-	KRYTOX 240AC FLUORINATED GREASE	2	Ounces(OZ)	10/24/22
1723879	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723883	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723882	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723880	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723881	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723878	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1723877	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723884	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723855	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723863	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723861	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723859	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723858	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723864	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723856	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723869	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723854	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723853	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723857	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723865	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723866	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723868	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723870	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723871	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723872	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723873	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723874	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723875	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723876	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723862	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723867	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723860	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723891	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723902	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723901	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723900	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723898	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723896	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723895	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723894	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723892	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723899	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723890	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723889	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723888	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723887	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723886	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723885	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723908	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723893	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723904	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1723905	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723906	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723907	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723897	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1723903	-	Smoke Detector Tester	4.8	Ounces(OZ)	10/24/22
1689886	-	HYDROGEN GAS	220	Cubic Feet(CF)	10/25/22
1752909	848301-69-9	MOBIL 1 FORMULA M 5W-40	946	Milliliter(ML)	10/25/22
1723527	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723533	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723528	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723529	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723530	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723532	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723535	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723536	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723537	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723538	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723539	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723534	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723531	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723540	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723584	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723578	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723579	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723580	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723581	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723568	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723583	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723585	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723577	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723582	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723549	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723570	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723556	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723555	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723554	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723553	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723552	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723558	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723550	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723559	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723547	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723545	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723544	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723543	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1723542	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723541	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723551	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723566	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723575	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723574	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723573	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723572	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723571	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723569	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723557	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723567	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723576	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723565	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723564	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723563	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723562	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723561	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723560	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723548	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1723546	-	Smoke Centurion	2.6	Ounces(OZ)	10/25/22
1732426	-	PERMACRYL INTERIOR FLAT WHITE BASE	18	Liters(L)	10/25/22
1732473	-	GACO SF2000 SEAM SEALER	5	Gallon(GAL)	10/25/22
1732479	-	GACO SF2000 SEAM SEALER	5	Gallon(GAL)	10/25/22
1732477	-	GACO SF2000 SEAM SEALER	5	Gallon(GAL)	10/25/22
1732475	-	GACO SF2000 SEAM SEALER	5	Gallon(GAL)	10/25/22
1732476	-	GACO SF2000 SEAM SEALER	5	Gallon(GAL)	10/25/22
1732478	-	GACO SF2000 SEAM SEALER	5	Gallon(GAL)	10/25/22
1732474	-	GACO SF2000 SEAM SEALER	5	Gallon(GAL)	10/25/22
1732480	-	GacoFlex SeamSeal Solvent-Free Silicone Sealant	5	Gallon(GAL)	10/25/22
1732481	-	GacoFlex SeamSeal Solvent-Free Silicone Sealant	5	Gallon(GAL)	10/25/22
1732482	-	3M Brand Black Super Weatherstrip Adhesive Catalog No. 3602	5	Ounces(OZ)	10/25/22
1732457	-	Vers-Acryl 222 S/G Finish Deep Base	3.5	Liters(L)	10/25/22
1732458	-	Vers-Acryl 222 S/G Finish Deep Base	3.5	Liters(L)	10/25/22
1732461	-	Vers-Acryl 222 S/G Finish Deep Base	3.5	Liters(L)	10/25/22
1732462	-	Vers-Acryl 222 S/G Finish Deep Base	3.5	Liters(L)	10/25/22
1732467	-	Vers-Acryl 222 S/G Finish Deep Base	3.5	Liters(L)	10/25/22
1732468	-	Vers-Acryl 222 S/G Finish Deep Base	3.5	Liters(L)	10/25/22
1732469	-	Vers-Acryl 222 S/G Finish Deep Base	3.5	Liters(L)	10/25/22
1732470	-	Vers-Acryl 222 S/G Finish Deep Base	3.5	Liters(L)	10/25/22
1744776	100-46-9	BENZYLAMINE 99%	500	Gram(GM)	10/25/22
1732471	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	10/25/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1732472	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	10/25/22
1744777	557-20-0	DIETHYLZINC 1.0M SOLUTION IN HEXANES	100	Milliliter(ML)	10/25/22
1744778	109-99-9	Tetrahydrofuran UV HPLC Grade 99.7+% min unstabilized	4	Liters(L)	10/25/22
1744781	109-99-9	Tetrahydrofuran UV HPLC Grade 99.7+% min unstabilized	4	Liters(L)	10/25/22
1744780	109-99-9	Tetrahydrofuran UV HPLC Grade 99.7+% min unstabilized	4	Liters(L)	10/25/22
1744779	109-99-9	Tetrahydrofuran UV HPLC Grade 99.7+% min unstabilized	4	Liters(L)	10/25/22
V00000CE28	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/25/22
V00000CE29	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/25/22
V00000CE21	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/25/22
V00000CE22	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/25/22
V00000CE25	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/25/22
V00000CE24	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/25/22
V00000CE27	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/25/22
V00000CE26	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/25/22
V00000CE23	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/25/22
V00000CE2A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	10/25/22
1744819	2530-85-0	3-(Methacryloyloxy)propyltrimethoxysilane	100	Gram(GM)	10/25/22
1744820	3/7/2680	N N-DIMETHYLACRYLAMIDE	100	Milliliter(ML)	10/25/22
1744821	7601-90-3	Perchloric Acid 65-71% OmniTrace Ultra	500	Milliliter(ML)	10/25/22
V00000CE2C	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	10/25/22
V00000CE2B	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	10/25/22
1732491	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/25/22
1732492	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/25/22
1732493	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/25/22
1732494	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/25/22
1732495	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/25/22
1732496	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/25/22
1732497	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/25/22
1732499	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/25/22
1732500	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/25/22
1732501	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/25/22
1732502	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/25/22
1732498	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	10/25/22
V00000CE31	-	HENRY 440 Cove Base Adhesive	1	Gallon(GAL)	10/25/22
V00000CE36	-	HENRY 440 Cove Base Adhesive	1	Gallon(GAL)	10/25/22
V00000CE2E	-	HENRY 440 Cove Base Adhesive	1	Gallon(GAL)	10/25/22
V00000CE2F	-	HENRY 440 Cove Base Adhesive	1	Gallon(GAL)	10/25/22
V00000CE30	-	HENRY 440 Cove Base Adhesive	1	Gallon(GAL)	10/25/22
V00000CE2D	-	HENRY 440 Cove Base Adhesive	1	Gallon(GAL)	10/25/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CE33	-	HENRY 440 Cove Base Adhesive	1	Gallon(GAL)	10/25/22
V00000CE34	-	HENRY 440 Cove Base Adhesive	1	Gallon(GAL)	10/25/22
V00000CE35	-	HENRY 440 Cove Base Adhesive	1	Gallon(GAL)	10/25/22
V00000CE32	-	HENRY 440 Cove Base Adhesive	1	Gallon(GAL)	10/25/22
1732503	-	Henry 430 ClearPro Clear VCT Floor Adhesive	4	Gallon(GAL)	10/25/22
1732504	-	Henry 430 ClearPro Clear VCT Floor Adhesive	4	Gallon(GAL)	10/25/22
1732509	-	Henry 430 ClearPro Clear VCT Floor Adhesive	4	Gallon(GAL)	10/25/22
1732508	-	Henry 430 ClearPro Clear VCT Floor Adhesive	4	Gallon(GAL)	10/25/22
1732507	-	Henry 430 ClearPro Clear VCT Floor Adhesive	4	Gallon(GAL)	10/25/22
1732506	-	Henry 430 ClearPro Clear VCT Floor Adhesive	4	Gallon(GAL)	10/25/22
1732505	-	Henry 430 ClearPro Clear VCT Floor Adhesive	4	Gallon(GAL)	10/25/22
V00000CE3B	-	Signature Series 5080 Pressure Sensitive Adhesive	4	Gallon(GAL)	10/25/22
V00000CE3C	-	Signature Series 5080 Pressure Sensitive Adhesive	4	Gallon(GAL)	10/25/22
V00000CE3A	-	Signature Series 5080 Pressure Sensitive Adhesive	4	Gallon(GAL)	10/25/22
V00000CE39	-	Signature Series 5080 Pressure Sensitive Adhesive	4	Gallon(GAL)	10/25/22
V00000CE38	-	Signature Series 5080 Pressure Sensitive Adhesive	4	Gallon(GAL)	10/25/22
V00000CE37	-	Signature Series 5080 Pressure Sensitive Adhesive	4	Gallon(GAL)	10/25/22
1732510	-	844-9955 CHROMA-CHEM®LAMP BLACK	32	Ounces(OZ)	10/25/22
1732514	-	844-9955 CHROMA-CHEM®LAMP BLACK	32	Ounces(OZ)	10/25/22
1732516	-	844-9955 CHROMA-CHEM®LAMP BLACK	32	Ounces(OZ)	10/25/22
1732513	-	844-9955 CHROMA-CHEM®LAMP BLACK	32	Ounces(OZ)	10/25/22
1732512	-	844-9955 CHROMA-CHEM®LAMP BLACK	32	Ounces(OZ)	10/25/22
1732511	-	844-9955 CHROMA-CHEM®LAMP BLACK	32	Ounces(OZ)	10/25/22
1732515	-	844-9955 CHROMA-CHEM®LAMP BLACK	32	Ounces(OZ)	10/25/22
1757953	-	ISOPROPANOL 70%	1	Gallon(GAL)	10/25/22
1757954	-	ISOPROPANOL 70%	1	Gallon(GAL)	10/25/22
1757952	-	ISOPROPANOL 70%	1	Gallon(GAL)	10/25/22
1422814	-	Freezemaster Antifreeze	5	Gallon(GAL)	10/25/22
1714961	-	Freezemaster Antifreeze	5	Gallon(GAL)	10/25/22
1714960	-	Freezemaster Antifreeze	5	Gallon(GAL)	10/25/22
1714962	-	Freezemaster Antifreeze	5	Gallon(GAL)	10/25/22
1714959	-	Freezemaster Antifreeze	5	Gallon(GAL)	10/25/22
1714964	-	Freezemaster Antifreeze	5	Gallon(GAL)	10/25/22
1714965	-	Freezemaster Antifreeze	5	Gallon(GAL)	10/25/22
1714966	-	Freezemaster Antifreeze	5	Gallon(GAL)	10/25/22
1714967	-	Freezemaster Antifreeze	5	Gallon(GAL)	10/25/22
1757877	-	Apiezon grease L	25	Gram(GM)	10/25/22
1419635	-	Freezemaster Antifreeze	5	Gallon(GAL)	10/25/22
1419637	-	Freezemaster Antifreeze	5	Gallon(GAL)	10/25/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1419636	-	Freezemaster Antifreeze	5	Gallon(GAL)	10/25/22
1757878	-	MAGNALUBE-G	0.75	Ounces(OZ)	10/25/22
1744809	-	BARCO BOND EPOXY KIT	72	Gram(GM)	10/25/22
1744813	-	BARCO BOND EPOXY KIT	72	Gram(GM)	10/25/22
1744818	-	BARCO BOND EPOXY KIT	72	Gram(GM)	10/25/22
1744817	-	BARCO BOND EPOXY KIT	72	Gram(GM)	10/25/22
1744816	-	BARCO BOND EPOXY KIT	72	Gram(GM)	10/25/22
1744814	-	BARCO BOND EPOXY KIT	72	Gram(GM)	10/25/22
1744811	-	BARCO BOND EPOXY KIT	72	Gram(GM)	10/25/22
1744810	-	BARCO BOND EPOXY KIT	72	Gram(GM)	10/25/22
1744815	-	BARCO BOND EPOXY KIT	72	Gram(GM)	10/25/22
1744812	-	BARCO BOND EPOXY KIT	72	Gram(GM)	10/25/22
1744796	17567-17-8	Potassium tri(3 5-dimethyl-1-pyrazolyl)borohydride	1	Gram(GM)	10/25/22
1744801	17567-17-8	Potassium tri(3 5-dimethyl-1-pyrazolyl)borohydride	1	Gram(GM)	10/25/22
1744797	17567-17-8	Potassium tri(3 5-dimethyl-1-pyrazolyl)borohydride	1	Gram(GM)	10/25/22
1744798	17567-17-8	Potassium tri(3 5-dimethyl-1-pyrazolyl)borohydride	1	Gram(GM)	10/25/22
1744800	17567-17-8	Potassium tri(3 5-dimethyl-1-pyrazolyl)borohydride	1	Gram(GM)	10/25/22
1744799	17567-17-8	Potassium tri(3 5-dimethyl-1-pyrazolyl)borohydride	1	Gram(GM)	10/25/22
1731682	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731693	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731691	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731683	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731684	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731685	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731686	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731687	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731688	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731695	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731690	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731692	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731699	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731694	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731696	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731697	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731698	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731689	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731714	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731715	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731716	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1731717	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731718	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731719	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731720	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731721	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731722	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731723	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731724	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731726	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731706	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731742	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731713	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731712	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731711	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731710	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731709	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731775	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731707	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731727	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731705	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731704	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731703	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731702	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731701	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731700	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731708	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731725	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731750	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731758	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731757	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731756	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731755	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731760	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731753	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731761	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731751	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731728	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731778	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731779	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731780	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731781	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731754	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731776	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731774	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731773	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1731772	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731771	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731770	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731759	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731768	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731777	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731767	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731766	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731765	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731764	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731763	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731762	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731769	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731738	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731729	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731730	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731731	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731732	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731733	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731734	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731735	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731752	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731737	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731749	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731739	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731740	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731741	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731789	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731783	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731736	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731747	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731788	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731745	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731744	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731743	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731746	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731782	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731784	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731785	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731786	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731787	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731748	497-19-8	SODA ASH	50	Pounds(LB)	10/25/22
1731790	-	RUST COAT ENAMEL	12	Ounces(OZ)	10/25/22
1744549	-	Waste Lock 770	25	Pounds(LB)	10/25/22
1744550	-	Waste Lock 770	25	Pounds(LB)	10/25/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1744547	-	Waste Lock 770	25	Pounds(LB)	10/25/22
1744548	-	Waste Lock 770	25	Pounds(LB)	10/25/22
1744551	-	Tetrahydrofuran 99.85% Extra Dry stabilized	100	Milliliter(ML)	10/25/22
1744552	-	Tetrahydrofuran 99.85% Extra Dry stabilized	100	Milliliter(ML)	10/25/22
1731791	-	STA-BIL FUEL STABILIZER	1	Quarts(QT)	10/25/22
1731793	-	STA-BIL FUEL STABILIZER	1	Quarts(QT)	10/25/22
1731792	-	STA-BIL FUEL STABILIZER	1	Quarts(QT)	10/25/22
1731794	-	VHT Flat White Aerosol Spray Flameproof Very High Temp Coat	11	Ounces(OZ)	10/25/22
1419641	-	Freezemaster Antifreeze	5	Gallon(GAL)	10/25/22
1419640	-	Freezemaster Antifreeze	5	Gallon(GAL)	10/25/22
1419639	-	Freezemaster Antifreeze	5	Gallon(GAL)	10/25/22
1419646	-	Freezemaster Antifreeze	5	Gallon(GAL)	10/25/22
1419645	-	Freezemaster Antifreeze	5	Gallon(GAL)	10/25/22
1419644	-	Freezemaster Antifreeze	5	Gallon(GAL)	10/25/22
1419643	-	Freezemaster Antifreeze	5	Gallon(GAL)	10/25/22
1419642	-	Freezemaster Antifreeze	5	Gallon(GAL)	10/25/22
1714974	-	Freezemaster Antifreeze	5	Gallon(GAL)	10/25/22
1422820	-	Freezemaster Antifreeze	5	Gallon(GAL)	10/25/22
1422821	-	Freezemaster Antifreeze	5	Gallon(GAL)	10/25/22
1422822	-	Freezemaster Antifreeze	5	Gallon(GAL)	10/25/22
1744822	-	Antifoam S 133	5	Gallon(GAL)	10/25/22
1744823	22560-16-3	SUPER-HYDRIDE (LITHIUM TRIETHYLBOROHYDRIDE)	100	Milliliter(ML)	10/25/22
1744824	22560-16-3	SUPER-HYDRIDE (LITHIUM TRIETHYLBOROHYDRIDE)	100	Milliliter(ML)	10/25/22
1717335	107-21-1	ETHYLENE GLYCOL (DIESEL ENGINE ANTI-FREEZE/COOLANT)	1	Cubic Centimete	10/25/22
1744825	13494-80-9	Tellurium powder -30 mesh 99.997% trace metals basis	25	Gram(GM)	10/25/22
1744826	10035-04-8	Calcium chloride dihydrate (Certified ACS)	3	Kilograms(KG)	10/25/22
1744833	10035-04-8	Calcium chloride dihydrate (Certified ACS)	3	Kilograms(KG)	10/25/22
1744832	10035-04-8	Calcium chloride dihydrate (Certified ACS)	3	Kilograms(KG)	10/25/22
1744831	10035-04-8	Calcium chloride dihydrate (Certified ACS)	3	Kilograms(KG)	10/25/22
1744830	10035-04-8	Calcium chloride dihydrate (Certified ACS)	3	Kilograms(KG)	10/25/22
1744829	10035-04-8	Calcium chloride dihydrate (Certified ACS)	3	Kilograms(KG)	10/25/22
1744828	10035-04-8	Calcium chloride dihydrate (Certified ACS)	3	Kilograms(KG)	10/25/22
1744827	10035-04-8	Calcium chloride dihydrate (Certified ACS)	3	Kilograms(KG)	10/25/22
1744553	108-88-3	Toluene 99.85% Extra Dry over Molecular Sieve	500	Milliliter(ML)	10/25/22
1744554	67-56-1	Methanol 99.9% Extra Dry	100	Milliliter(ML)	10/25/22
1744555	67-56-1	Methanol 99.9% Extra Dry	100	Milliliter(ML)	10/25/22
1744556	100-51-6	BENZYL ALCOHOL ANHYDROUS 99+%	1	Liters(L)	10/25/22
1744806	78-50-2	TRIOCTYLPHOSPHINE OXIDE	500	Gram(GM)	10/25/22
1744807	4039-32-1	LITHIUM BIS(TRIMETHYLSILYL)AMIDE	50	Gram(GM)	10/25/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1744802	18583-60-3	Potassium tri(1-pyrazolyl)borohydride	5	Gram(GM)	10/25/22
1744805	18583-60-3	Potassium tri(1-pyrazolyl)borohydride	5	Gram(GM)	10/25/22
1744804	18583-60-3	Potassium tri(1-pyrazolyl)borohydride	5	Gram(GM)	10/25/22
1744803	18583-60-3	Potassium tri(1-pyrazolyl)borohydride	5	Gram(GM)	10/25/22
1744808	39929-21-0	Au(tht)Cl Umicore	1	Gram(GM)	10/25/22
1744784	73018-55-0	PLATINUM CARBONYL CYCLOVINYLMETHYLSILOXANE COMPLEX	2.5	Gram(GM)	10/25/22
1744786	73018-55-0	PLATINUM CARBONYL CYCLOVINYLMETHYLSILOXANE COMPLEX	2.5	Gram(GM)	10/25/22
1744785	73018-55-0	PLATINUM CARBONYL CYCLOVINYLMETHYLSILOXANE COMPLEX	2.5	Gram(GM)	10/25/22
1744787	1633-05-2	STRONTIUM CARBONATE	100	Gram(GM)	10/25/22
1744788	1633-05-2	STRONTIUM CARBONATE	100	Gram(GM)	10/25/22
1744789	1633-05-2	STRONTIUM CARBONATE	100	Gram(GM)	10/25/22
1744790	-	Silver standard soluton (10 000ppm) for ICP DCP and A.A.S. Spex	125	Milliliter(ML)	10/25/22
1744793	-	Silver standard soluton (10 000ppm) for ICP DCP and A.A.S. Spex	125	Milliliter(ML)	10/25/22
1744791	-	Silver standard soluton (10 000ppm) for ICP DCP and A.A.S. Spex	125	Milliliter(ML)	10/25/22
1744792	-	Silver standard soluton (10 000ppm) for ICP DCP and A.A.S. Spex	125	Milliliter(ML)	10/25/22
1744794	17261-34-6	Iminodi(methylphosphonic acid) 97%	5	Gram(GM)	10/25/22
1744795	1066-51-9	(AMINOMETHYL)PHOSPHONIC ACID	1	Gram(GM)	10/25/22
1744707	75-09-2	Dichloromethane stabilized with ethanol	2.5	Liters(L)	10/25/22
1744708	75-09-2	Dichloromethane stabilized with ethanol	2.5	Liters(L)	10/25/22
1744709	67-63-0	2-Propanol 99.9% (HPLC)	4	Liters(L)	10/25/22
1744834	9002-89-5	POLY(VINYL ALCOHOL) HYDROLYZED	500	Gram(GM)	10/25/22
1744710	624-38-4	1 4-DIIDOBENZENE	50	Gram(GM)	10/25/22
1744835	9002-89-5	POLY(VINYL ALCOHOL) HYDROLYZED	250	Gram(GM)	10/25/22
1744774	67-63-0	Isopropyl Alcohol 99.6%	4	Liters(L)	10/25/22
1744775	112-90-3	OLEYLAMINE	1.5	Kilograms(KG)	10/25/22
1744783	7487-88-9	MAGNESIUM SULFATE ANHYDROUS	1	Kilograms(KG)	10/25/22
1744558	9003-27-4	POLYISOBUTYLENE	100	Gram(GM)	10/25/22
1744559	9003-27-4	POLYISOBUTYLENE	100	Gram(GM)	10/25/22
1744836	13755-38-9	Sodium nitroferricyanide(III) dihydrate ACS reagent 99.9%	100	Gram(GM)	10/25/22
1744560	-	ACETAZOLAMIDE	250	Gram(GM)	10/25/22
1744837	25014-41-9	POLYACRYLONITRILE	100	Gram(GM)	10/25/22
1744838	56-86-0	L(+)-Glutamic acid	100	Gram(GM)	10/25/22
1744839	6156-78-1	MANGANESE(II) ACETATE TETRAHYDRATE	50	Gram(GM)	10/25/22
1732463	-	Vers-Acryl 300 Acrylic DTM Primer Neutral Base	3.4	Liters(L)	10/25/22
1732466	-	Vers-Acryl 300 Acrylic DTM Primer Neutral Base	3.4	Liters(L)	10/25/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1732465	-	Vers-Acryl 300 Acrylic DTM Primer Neutral Base	3.4	Liters(L)	10/25/22
1732464	-	Vers-Acryl 300 Acrylic DTM Primer Neutral Base	3.4	Liters(L)	10/25/22
1732483	-	SW-4 OzzyJuice Heavy Duty Degreasing Solution	5	Gallon(GAL)	10/25/22
1732489	-	SW-4 OzzyJuice Heavy Duty Degreasing Solution	5	Gallon(GAL)	10/25/22
1732485	-	SW-4 OzzyJuice Heavy Duty Degreasing Solution	5	Gallon(GAL)	10/25/22
1732488	-	SW-4 OzzyJuice Heavy Duty Degreasing Solution	5	Gallon(GAL)	10/25/22
1732487	-	SW-4 OzzyJuice Heavy Duty Degreasing Solution	5	Gallon(GAL)	10/25/22
1732490	-	SW-4 OzzyJuice Heavy Duty Degreasing Solution	5	Gallon(GAL)	10/25/22
1732486	-	SW-4 OzzyJuice Heavy Duty Degreasing Solution	5	Gallon(GAL)	10/25/22
1732484	-	SW-4 OzzyJuice Heavy Duty Degreasing Solution	5	Gallon(GAL)	10/25/22
1721524	-	ACRYLIC CONCRETE SEALER	1	Gallon(GAL)	10/26/22
1691497	-	HYDROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691499	-	HYDROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691503	-	HYDROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691501	-	HYDROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691500	-	HYDROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691498	-	HYDROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691502	-	HYDROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691505	-	HYDROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691504	-	HYDROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691506	74-98-6	PROPANE	11	Gallon(GAL)	10/26/22
1691514	74-98-6	PROPANE	11	Gallon(GAL)	10/26/22
1691521	74-98-6	PROPANE	11	Gallon(GAL)	10/26/22
1691520	74-98-6	PROPANE	11	Gallon(GAL)	10/26/22
1691519	74-98-6	PROPANE	11	Gallon(GAL)	10/26/22
1691518	74-98-6	PROPANE	11	Gallon(GAL)	10/26/22
1691517	74-98-6	PROPANE	11	Gallon(GAL)	10/26/22
1691522	74-98-6	PROPANE	11	Gallon(GAL)	10/26/22
1691515	74-98-6	PROPANE	11	Gallon(GAL)	10/26/22
1691525	74-98-6	PROPANE	11	Gallon(GAL)	10/26/22
1691513	74-98-6	PROPANE	11	Gallon(GAL)	10/26/22
1691512	74-98-6	PROPANE	11	Gallon(GAL)	10/26/22
1691511	74-98-6	PROPANE	11	Gallon(GAL)	10/26/22
1691516	74-98-6	PROPANE	11	Gallon(GAL)	10/26/22
1691510	74-98-6	PROPANE	11	Gallon(GAL)	10/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1691524	74-98-6	PROPANE	11	Gallon(GAL)	10/26/22
1691508	74-98-6	PROPANE	11	Gallon(GAL)	10/26/22
1691526	74-98-6	PROPANE	11	Gallon(GAL)	10/26/22
1691527	74-98-6	PROPANE	11	Gallon(GAL)	10/26/22
1691528	74-98-6	PROPANE	11	Gallon(GAL)	10/26/22
1691529	74-98-6	PROPANE	11	Gallon(GAL)	10/26/22
1691530	74-98-6	PROPANE	11	Gallon(GAL)	10/26/22
1691531	74-98-6	PROPANE	11	Gallon(GAL)	10/26/22
1691532	74-98-6	PROPANE	11	Gallon(GAL)	10/26/22
1691533	74-98-6	PROPANE	11	Gallon(GAL)	10/26/22
1691534	74-98-6	PROPANE	11	Gallon(GAL)	10/26/22
1691535	74-98-6	PROPANE	11	Gallon(GAL)	10/26/22
1691523	74-98-6	PROPANE	11	Gallon(GAL)	10/26/22
1691509	74-98-6	PROPANE	11	Gallon(GAL)	10/26/22
1691507	74-98-6	PROPANE	11	Gallon(GAL)	10/26/22
1691536	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691552	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691545	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691546	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691547	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691554	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691548	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691541	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691550	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691544	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691551	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691537	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691538	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691539	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691549	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691542	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691553	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691543	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691555	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691556	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691540	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691557	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691625	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	10/26/22
1691622	7727-37-9	NITROGEN GAS	3.7	Cubic Feet(CF)	10/26/22
1691558	-	Compressed Air	220	Cubic Feet(CF)	10/26/22
1691559	-	Compressed Air	220	Cubic Feet(CF)	10/26/22
1691560	-	Compressed Air	220	Cubic Feet(CF)	10/26/22
1691561	-	Compressed Air	220	Cubic Feet(CF)	10/26/22
1691623	-	Compressed Air	220	Cubic Feet(CF)	10/26/22
1691624	-	Compressed Air	220	Cubic Feet(CF)	10/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1691562	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	10/26/22
1691571	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	10/26/22
1691576	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	10/26/22
1691575	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	10/26/22
1691574	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	10/26/22
1691572	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	10/26/22
1691570	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	10/26/22
1691569	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	10/26/22
1691568	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	10/26/22
1691567	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	10/26/22
1691566	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	10/26/22
1691565	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	10/26/22
1691563	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	10/26/22
1691573	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	10/26/22
1691564	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	10/26/22
1691577	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	10/26/22
1691581	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	10/26/22
1691586	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	10/26/22
1691587	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	10/26/22
1691588	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	10/26/22
1691585	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	10/26/22
1691582	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	10/26/22
1691580	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	10/26/22
1691579	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	10/26/22
1691578	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	10/26/22
1691584	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	10/26/22
1691589	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	10/26/22
1691591	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	10/26/22
1691590	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	10/26/22
1691583	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	10/26/22
1691592	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/26/22
1691595	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/26/22
1691606	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/26/22
1691598	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/26/22
1691605	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/26/22
1691600	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/26/22
1691604	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/26/22
1691596	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/26/22
1691594	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/26/22
1691593	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/26/22
1691603	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/26/22
1691602	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/26/22
1691601	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/26/22
1691599	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/26/22
1691597	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1691607	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	10/26/22
1691611	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/26/22
1691608	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/26/22
1691620	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/26/22
1691609	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/26/22
1691621	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/26/22
1691610	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/26/22
1691619	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/26/22
1691618	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/26/22
1691617	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/26/22
1691616	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/26/22
1691615	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/26/22
1691614	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/26/22
1691613	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/26/22
1691612	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	10/26/22
1691626	124-38-9	CARBON DIOXIDE	50	Pounds(LB)	10/26/22
1691627	7440-59-7	HELIUM GAS	1.2	Kilograms(KG)	10/26/22
1662898	-	LUBRICANT SPRAY (AERO KROIL)	16.5	Ounces(OZ)	10/26/22
1662905	-	LUBRICANT SPRAY (AERO KROIL)	16.5	Ounces(OZ)	10/26/22
1660486	-	Blaster	311	Gram(GM)	10/26/22
1660487	-	Steel Reinforced Epoxy Resin	25	Milliliter(ML)	10/26/22
1660488	-	Steel Reinforced Epoxy Resin	25	Milliliter(ML)	10/26/22
1539518	-	CORROSION INHIBITOR	12	Ounces(OZ)	10/26/22
1757861	-	ISOPROPANOL 70%	1	Gallon(GAL)	10/26/22
1757864	-	ISOPROPANOL 70%	1	Gallon(GAL)	10/26/22
1757862	-	ISOPROPANOL 70%	1	Gallon(GAL)	10/26/22
1757863	-	ISOPROPANOL 70%	1	Gallon(GAL)	10/26/22
7934076732	-	Loctite LB 8150 SV	8	Ounces(OZ)	10/26/22
1731822	-	JOHNSEN'S NON-CHLORINATATED BRAKE PARTS CLEANER CALIFORNIA 5 GALLON	5	Gallon(GAL)	10/26/22
1731823	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731869	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731878	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731877	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731876	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731875	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731874	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731873	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731872	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731870	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731881	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731868	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731867	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731866	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731865	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1731864	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731863	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731871	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731887	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731895	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731894	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731893	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731892	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731891	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731890	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731889	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731879	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731862	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731898	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731834	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731886	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731885	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731884	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731883	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731897	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731896	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731888	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731829	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731840	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731839	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731838	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731837	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731835	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731833	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731832	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731836	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731830	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731843	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731828	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731827	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731826	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731825	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731824	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731899	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731882	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731831	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731851	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731860	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731859	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731858	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1731857	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731856	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731855	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731854	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731841	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731852	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731842	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731850	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731849	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731848	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731847	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731846	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731845	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731844	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731861	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731853	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731880	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731910	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731921	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731920	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731919	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731918	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731917	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731916	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731915	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731914	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731913	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731922	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731911	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731909	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731908	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731906	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731905	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731904	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731903	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731902	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731901	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731900	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731946	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731912	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731939	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731945	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731944	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731907	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731923	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1731943	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731942	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731940	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731938	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731937	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731936	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731935	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731924	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731926	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731941	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731925	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731934	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731929	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731927	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731930	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731931	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731932	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731933	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731928	-	Mystik JT-6 Hi-Temp Grease NLGI No. 2	14	Ounces(OZ)	10/26/22
1731947	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731974	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731976	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731973	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731972	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731975	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731977	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731978	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731980	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731971	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731967	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731981	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731982	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731979	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731970	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731957	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731958	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731959	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731960	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731961	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731962	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731963	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731964	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731966	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731968	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731983	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1731950	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731965	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731995	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731948	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731949	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731951	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731969	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731953	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731954	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731955	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731952	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731996	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731984	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731990	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731985	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731956	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731986	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731987	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731989	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731994	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731991	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731992	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731993	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731988	-	PREMIUM WATERPROOF SILICONE METALLIC	10.1	Ounces(OZ)	10/26/22
1731997	-	Marking Chalk Blue	8	Ounces(OZ)	10/26/22
1732001	-	Marking Chalk Blue	8	Ounces(OZ)	10/26/22
1731999	-	Marking Chalk Blue	8	Ounces(OZ)	10/26/22
1731998	-	Marking Chalk Blue	8	Ounces(OZ)	10/26/22
1732000	-	Marking Chalk Blue	8	Ounces(OZ)	10/26/22
1732002	-	Marking Chalk Blue	8	Ounces(OZ)	10/26/22
1719891	-	POLYWATER	1	Quarts(QT)	10/26/22
1719897	-	POLYWATER	1	Quarts(QT)	10/26/22
1719898	-	POLYWATER	1	Quarts(QT)	10/26/22
1719900	-	POLYWATER	1	Quarts(QT)	10/26/22
1719896	-	POLYWATER	1	Quarts(QT)	10/26/22
1719895	-	POLYWATER	1	Quarts(QT)	10/26/22
1719894	-	POLYWATER	1	Quarts(QT)	10/26/22
1719893	-	POLYWATER	1	Quarts(QT)	10/26/22
1719892	-	POLYWATER	1	Quarts(QT)	10/26/22
1719899	-	POLYWATER	1	Quarts(QT)	10/26/22
1744868	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	10/27/22
1744876	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	10/27/22
1744875	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	10/27/22
1744874	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	10/27/22
1744873	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	10/27/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1744871	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	10/27/22
1744869	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	10/27/22
1744877	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	10/27/22
1744882	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	10/27/22
1744886	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	10/27/22
1744883	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	10/27/22
1744885	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	10/27/22
1744870	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	10/27/22
1744884	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	10/27/22
1744878	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	10/27/22
1744879	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	10/27/22
1744880	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	10/27/22
1744881	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	10/27/22
1744887	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	10/27/22
1744872	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	10/27/22
1731795	-	PB PENETRATING CATALYST	11	Ounces(OZ)	10/27/22
1731800	-	PB PENETRATING CATALYST	11	Ounces(OZ)	10/27/22
1731796	-	PB PENETRATING CATALYST	11	Ounces(OZ)	10/27/22
1731797	-	PB PENETRATING CATALYST	11	Ounces(OZ)	10/27/22
1731798	-	PB PENETRATING CATALYST	11	Ounces(OZ)	10/27/22
1731799	-	PB PENETRATING CATALYST	11	Ounces(OZ)	10/27/22
1731801	-	PB PENETRATING CATALYST	11	Ounces(OZ)	10/27/22
1731802	-	PB PENETRATING CATALYST	11	Ounces(OZ)	10/27/22
1731803	-	PB PENETRATING CATALYST	11	Ounces(OZ)	10/27/22
1731804	-	PB PENETRATING CATALYST	11	Ounces(OZ)	10/27/22
1731806	-	PB PENETRATING CATALYST	11	Ounces(OZ)	10/27/22
1731805	-	PB PENETRATING CATALYST	11	Ounces(OZ)	10/27/22
1731807	-	3M Super 77 Multipurpose Adhesive	16.75	Ounces(OZ)	10/27/22
1731814	-	3M Super 77 Multipurpose Adhesive	16.75	Ounces(OZ)	10/27/22
1731818	-	3M Super 77 Multipurpose Adhesive	16.75	Ounces(OZ)	10/27/22
1731809	-	3M Super 77 Multipurpose Adhesive	16.75	Ounces(OZ)	10/27/22
1731808	-	3M Super 77 Multipurpose Adhesive	16.75	Ounces(OZ)	10/27/22
1731816	-	3M Super 77 Multipurpose Adhesive	16.75	Ounces(OZ)	10/27/22
1731817	-	3M Super 77 Multipurpose Adhesive	16.75	Ounces(OZ)	10/27/22
1731815	-	3M Super 77 Multipurpose Adhesive	16.75	Ounces(OZ)	10/27/22
1731810	-	3M Super 77 Multipurpose Adhesive	16.75	Ounces(OZ)	10/27/22
1731813	-	3M Super 77 Multipurpose Adhesive	16.75	Ounces(OZ)	10/27/22
1731811	-	3M Super 77 Multipurpose Adhesive	16.75	Ounces(OZ)	10/27/22
1731812	-	3M Super 77 Multipurpose Adhesive	16.75	Ounces(OZ)	10/27/22
1744999	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745005	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745015	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745014	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745013	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745012	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1745011	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745010	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745009	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745008	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745042	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745006	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745018	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745004	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745003	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745002	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745001	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745000	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745040	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745041	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745007	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745027	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745038	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745037	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745036	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745035	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745034	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745033	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745032	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745031	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745030	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745016	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745028	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745017	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745026	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745025	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745024	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745023	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745022	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745021	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745020	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745019	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745043	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745029	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745048	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745047	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745046	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745044	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745045	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745039	-	AngstromBond 9110LV	2.5	Gram(GM)	10/27/22
1745049	308080-99-1	Molecular sieves 3A 8 to 12 mesh	500	Gram(GM)	10/27/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1745052	308080-99-1	Molecular sieves 3A 8 to 12 mesh	500	Gram(GM)	10/27/22
1745051	308080-99-1	Molecular sieves 3A 8 to 12 mesh	500	Gram(GM)	10/27/22
1745050	308080-99-1	Molecular sieves 3A 8 to 12 mesh	500	Gram(GM)	10/27/22
1539519	-	FANTASTIK ALL PURPOSE CLEANER	32	Ounces(OZ)	10/27/22
1539520	-	FANTASTIK ALL PURPOSE CLEANER	32	Ounces(OZ)	10/27/22
1539521	-	FANTASTIK ALL PURPOSE CLEANER	32	Ounces(OZ)	10/27/22
1539522	-	FANTASTIK ALL PURPOSE CLEANER	32	Ounces(OZ)	10/27/22
1539523	-	FANTASTIK ALL PURPOSE CLEANER	32	Ounces(OZ)	10/27/22
1539524	-	FANTASTIK ALL PURPOSE CLEANER	32	Ounces(OZ)	10/27/22
1642927	-	Hilti HIT-HY 200-R	11.16	Ounces(OZ)	10/27/22
1642928	-	Hilti HIT-HY 200-R	11.16	Ounces(OZ)	10/27/22
1642931	-	Hilti HIT-HY 200-R	11.16	Ounces(OZ)	10/27/22
1642930	-	Hilti HIT-HY 200-R	11.16	Ounces(OZ)	10/27/22
1642929	-	Hilti HIT-HY 200-R	11.16	Ounces(OZ)	10/27/22
1642057	-	CLR	1	Gallon(GAL)	10/27/22
1642058	-	CLR	1	Gallon(GAL)	10/27/22
1745053	603-33-8	Triphenylbismuth	5	Gram(GM)	10/27/22
1745054	603-33-8	Triphenylbismuth	5	Gram(GM)	10/27/22
1745055	603-33-8	Triphenylbismuth	5	Gram(GM)	10/27/22
1745056	603-33-8	Triphenylbismuth	5	Gram(GM)	10/27/22
1745057	603-33-8	Triphenylbismuth	5	Gram(GM)	10/27/22
1745058	70-34-8	1-FLUORO-2 4-DINITROBENZENE	250	Gram(GM)	10/27/22
1743439	-	DETERGENT 8	1	Gallon(GAL)	10/27/22
1743447	-	DETERGENT 8	1	Gallon(GAL)	10/27/22
1743440	-	DETERGENT 8	1	Gallon(GAL)	10/27/22
1743441	-	DETERGENT 8	1	Gallon(GAL)	10/27/22
1743442	-	DETERGENT 8	1	Gallon(GAL)	10/27/22
1743443	-	DETERGENT 8	1	Gallon(GAL)	10/27/22
1743444	-	DETERGENT 8	1	Gallon(GAL)	10/27/22
1743446	-	DETERGENT 8	1	Gallon(GAL)	10/27/22
1743456	-	DETERGENT 8	1	Gallon(GAL)	10/27/22
1743448	-	DETERGENT 8	1	Gallon(GAL)	10/27/22
1743449	-	DETERGENT 8	1	Gallon(GAL)	10/27/22
1743450	-	DETERGENT 8	1	Gallon(GAL)	10/27/22
1743451	-	DETERGENT 8	1	Gallon(GAL)	10/27/22
1743452	-	DETERGENT 8	1	Gallon(GAL)	10/27/22
1743445	-	DETERGENT 8	1	Gallon(GAL)	10/27/22
1743454	-	DETERGENT 8	1	Gallon(GAL)	10/27/22
1743455	-	DETERGENT 8	1	Gallon(GAL)	10/27/22
1743453	-	DETERGENT 8	1	Gallon(GAL)	10/27/22
1743457	-	DETERGENT 8	1	Gallon(GAL)	10/27/22
1743458	-	DETERGENT 8	1	Gallon(GAL)	10/27/22
1738941	-	5-MINUTE EPOXY RESIN	50	Milliliter(ML)	10/27/22
1738942	-	5-MINUTE EPOXY RESIN	50	Milliliter(ML)	10/27/22
1738943	-	5-MINUTE EPOXY RESIN	50	Milliliter(ML)	10/27/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1738944	-	5-MINUTE EPOXY RESIN	50	Milliliter(ML)	10/27/22
1738945	-	5-MINUTE EPOXY RESIN	50	Milliliter(ML)	10/27/22
1744927	71-43-2	Benzene anhydrous 99.8%	100	Milliliter(ML)	10/27/22
1744928	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	10	Gram(GM)	10/27/22
1744929	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	10	Gram(GM)	10/27/22
1744930	7778-18-9	DRIERITE 8 MESH	2	Kilograms(KG)	10/27/22
1744931	7664-38-2	PHOSPHORIC ACID	100	Milliliter(ML)	10/27/22
1744932	7664-38-2	PHOSPHORIC ACID	100	Milliliter(ML)	10/27/22
1744933	-	Mechanical Pump Oil Ultragrade 20	1	Liters(L)	10/27/22
1744301	-	DIMETHYL SULFOXIDE-D6 (D 99.9%)	100	Gram(GM)	10/27/22
1744302	-	DIMETHYL SULFOXIDE-D6 (D 99.9%)	100	Gram(GM)	10/27/22
1744298	70131-67-8	Poly(dimethylsiloxane) hydroxy terminated	100	Milliliter(ML)	10/27/22
1744299	106214-84-0	POLY(DIMETHYLSILOXANE) BIS(3-AMINOPROPYL)TERMINATED	50	Milliliter(ML)	10/27/22
1744862	112-90-3	OLEYLAMINE 70%	500	Gram(GM)	10/27/22
1744863	4731-53-7	Trioctylphosphine technical grade 90%	500	Milliliter(ML)	10/27/22
1744864	1338-23-4	2-BUTANONE PEROXIDE	100	Milliliter(ML)	10/27/22
1744865	109-99-9	Tetrahydrofuran contains 250 ppm BHT as inhibitor ACS reagent 99%	2.5	Liters(L)	10/27/22
1744866	-	1000 ug/mL Sulfur	1	Milliliter(ML)	10/27/22
1744867	-	1 ug/mL Silicon	125	Milliliter(ML)	10/27/22
1744850	299-28-5	CALCIUM GLUCONATE GEL	30	Gram(GM)	10/27/22
1744851	299-28-5	CALCIUM GLUCONATE GEL	30	Gram(GM)	10/27/22
1744852	7440-65-5	YTTRIUM STABILIZED ZIRCONIUM	10	Gram(GM)	10/27/22
1744853	7440-65-5	YTTRIUM STABILIZED ZIRCONIUM	10	Gram(GM)	10/27/22
1744304	112-80-1	OLEIC ACID TECHNICAL GRADE 90%	1	Liters(L)	10/27/22
1744305	112-88-9	1-Octadecene technical grade 90%	1	Liters(L)	10/27/22
1744563	68-12-2	N N-Dimethylformamide ACS Reagent 99.8%	2.5	Liters(L)	10/27/22
1744846	76-22-2	CAMPHOR	500	Gram(GM)	10/27/22
1744849	1309-48-4	MAGNESIUM OXIDE	500	Gram(GM)	10/27/22
1744303	-	ICP-MS-2 CALIBRATION STANDARD	125	Milliliter(ML)	10/27/22
1744857	1461-25-2	TETRABUTYLTIN	25	Gram(GM)	10/27/22
1744861	1191-08-8	1 4-BUTANEDITHIOL	25	Milliliter(ML)	10/27/22
1744297	156327-07-0	Poly(dimethylsiloxane) bis(hydroxyalkyl) terminated	25	Milliliter(ML)	10/27/22
1744300	-	Poly(dimethylsiloxane) monohydroxy terminated	50	Milliliter(ML)	10/27/22
1744561	-	EOS TPU 1301	10	Kilograms(KG)	10/27/22
1744562	-	EOS TPU 1301	10	Kilograms(KG)	10/27/22
1744847	56189-09-4	Lead stearate (dibasic)	1	Gram(GM)	10/27/22
1744848	56189-09-4	Lead stearate (dibasic)	1	Gram(GM)	10/27/22
1744854	1119-51-3	5-Bromo-1-pentene 95%	25	Gram(GM)	10/27/22
1744858	623-81-4	Diethyl Sulfite	25	Gram(GM)	10/27/22
1744859	4532-64-3	2 3-Butanedithiol	25	Gram(GM)	10/27/22
1744860	537-91-7	Bis(3-nitrophenyl) Disulfide	25	Gram(GM)	10/27/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1691628	-	CARBON MONOXIDE IN NITROGEN	120	Cubic Feet(CF)	10/28/22
1691629	-	CARBON MONOXIDE IN NITROGEN	120	Cubic Feet(CF)	10/28/22
1691630	-	Refrigerant R22	30	Pounds(LB)	10/28/22
1691631	-	Refrigerant R22	30	Pounds(LB)	10/28/22
1691634	-	Refrigerant R22	30	Pounds(LB)	10/28/22
1691633	-	Refrigerant R22	30	Pounds(LB)	10/28/22
1691632	-	Refrigerant R22	30	Pounds(LB)	10/28/22
1688746	-	CARBON MONOXIDE IN NITROGEN	120	Cubic Feet(CF)	10/28/22
1543450	106-97-8	MULTI-FILL N-BUTANE FUEL	11	Ounces(OZ)	10/28/22
1543455	2/7/2768	VINYLTRIMETHOXYSILANE	10.1	Ounces(OZ)	10/28/22
1543464	2/7/2768	VINYLTRIMETHOXYSILANE	10.1	Ounces(OZ)	10/28/22
1422829	-	SAR-GEL PASTE	1	Ounces(OZ)	10/28/22
1758391	-	SAR-GEL PASTE	1	Ounces(OZ)	10/28/22
1758399	-	SAR-GEL PASTE	1	Ounces(OZ)	10/28/22
1758392	-	SAR-GEL PASTE	1	Ounces(OZ)	10/28/22
1758393	-	SAR-GEL PASTE	1	Ounces(OZ)	10/28/22
1758394	-	SAR-GEL PASTE	1	Ounces(OZ)	10/28/22
1758395	-	SAR-GEL PASTE	1	Ounces(OZ)	10/28/22
1758396	-	SAR-GEL PASTE	1	Ounces(OZ)	10/28/22
1758397	-	SAR-GEL PASTE	1	Ounces(OZ)	10/28/22
1758398	-	SAR-GEL PASTE	1	Ounces(OZ)	10/28/22
1758400	-	SAR-GEL PASTE	1	Ounces(OZ)	10/28/22
1758401	-	SAR-GEL PASTE	1	Ounces(OZ)	10/28/22
1745143	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745156	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745169	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745167	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745166	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745165	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745152	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745153	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745154	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745164	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745171	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1745155	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745170	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745157	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745158	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745159	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745160	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745161	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745162	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745163	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745178	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745182	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745181	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745180	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745144	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745145	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745146	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745147	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745168	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745179	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745172	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745177	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745148	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1745149	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745150	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745151	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745176	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745175	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745174	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1745173	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	10/28/22
1744324	14044-65-6	Borane tetrahydrofuran complex solution 1.0 M in THF	100	Milliliter(ML)	10/28/22
1744338	14044-65-6	Borane tetrahydrofuran complex solution 1.0 M in THF	100	Milliliter(ML)	10/28/22
1744331	14044-65-6	Borane tetrahydrofuran complex solution 1.0 M in THF	100	Milliliter(ML)	10/28/22
1744341	14044-65-6	Borane tetrahydrofuran complex solution 1.0 M in THF	100	Milliliter(ML)	10/28/22
1744340	14044-65-6	Borane tetrahydrofuran complex solution 1.0 M in THF	100	Milliliter(ML)	10/28/22
1744339	14044-65-6	Borane tetrahydrofuran complex solution 1.0 M in THF	100	Milliliter(ML)	10/28/22
1744329	14044-65-6	Borane tetrahydrofuran complex solution 1.0 M in THF	100	Milliliter(ML)	10/28/22
1744333	14044-65-6	Borane tetrahydrofuran complex solution 1.0 M in THF	100	Milliliter(ML)	10/28/22
1744337	14044-65-6	Borane tetrahydrofuran complex solution 1.0 M in THF	100	Milliliter(ML)	10/28/22
1744325	14044-65-6	Borane tetrahydrofuran complex solution 1.0 M in THF	100	Milliliter(ML)	10/28/22
1744326	14044-65-6	Borane tetrahydrofuran complex solution 1.0 M in THF	100	Milliliter(ML)	10/28/22
1744327	14044-65-6	Borane tetrahydrofuran complex solution 1.0 M in THF	100	Milliliter(ML)	10/28/22
1744328	14044-65-6	Borane tetrahydrofuran complex solution 1.0 M in THF	100	Milliliter(ML)	10/28/22
1744330	14044-65-6	Borane tetrahydrofuran complex solution 1.0 M in THF	100	Milliliter(ML)	10/28/22
1744332	14044-65-6	Borane tetrahydrofuran complex solution 1.0 M in THF	100	Milliliter(ML)	10/28/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1744334	14044-65-6	Borane tetrahydrofuran complex solution 1.0 M in THF	100	Milliliter(ML)	10/28/22
1744335	14044-65-6	Borane tetrahydrofuran complex solution 1.0 M in THF	100	Milliliter(ML)	10/28/22
1744336	14044-65-6	Borane tetrahydrofuran complex solution 1.0 M in THF	100	Milliliter(ML)	10/28/22
1744306	67-63-0	Isopropyl alcohol 70% solution in water	1	Liters(L)	10/28/22
1744307	1693-74-9	Tetrahydrofuran-d8 (D 99.5%)	7.5	Milliliter(ML)	10/28/22
1744888	1888-71-7	HEXACHLOROPROPENE	100	Gram(GM)	10/28/22
1744890	1888-71-7	HEXACHLOROPROPENE	100	Gram(GM)	10/28/22
1744889	1888-71-7	HEXACHLOROPROPENE	100	Gram(GM)	10/28/22
1744891	11/1/5470	HYDROXYLAMINE HYDROCHLORIDE	250	Gram(GM)	10/28/22
1744893	11/1/5470	HYDROXYLAMINE HYDROCHLORIDE	250	Gram(GM)	10/28/22
1744892	11/1/5470	HYDROXYLAMINE HYDROCHLORIDE	250	Gram(GM)	10/28/22
1744894	7632-00-0	SODIUM NITRITE	500	Gram(GM)	10/28/22
1744896	7632-00-0	SODIUM NITRITE	500	Gram(GM)	10/28/22
1744895	7632-00-0	SODIUM NITRITE	500	Gram(GM)	10/28/22
1706826	7440-66-6	ZINC	125	Milliliter(ML)	10/28/22
1744947	1/3/2424	Diallylmethylamine 97%	1	Gram(GM)	10/28/22
1744948	1/3/2424	Diallylmethylamine 97%	1	Gram(GM)	10/28/22
1744949	1/3/2424	Diallylmethylamine 97%	1	Gram(GM)	10/28/22
1744950	1/3/2424	Diallylmethylamine 97%	1	Gram(GM)	10/28/22
1744951	1/3/2424	Diallylmethylamine 97%	1	Gram(GM)	10/28/22
1744565	16872-11-0	TETRAFLUOROBORIC ACID LIQUID 48%	500	Gram(GM)	10/28/22
1744566	106-88-7	1 2-EPOXYBUTANE	1	Liters(L)	10/28/22
1744943	7787-60-2	Bismuth(III) chloride anhydrous 99.999% (metal basis)	25	Gram(GM)	10/28/22
1744942	4039-32-1	LITHIUM BIS(TRIMETHYLSILYL)AMIDE	25	Gram(GM)	10/28/22
1745114	7778-18-9	DRIERITE 8 MESH	2	Kilograms(KG)	10/28/22
1745115	7778-18-9	DRIERITE 8 MESH	2	Kilograms(KG)	10/28/22
1745116	-	AG 50W-X8 50-100 MESH HYDROGEN FORM	500	Gram(GM)	10/28/22
1745117	-	AG 50W-X8 100-200 MESH HYDROGEN FORM	500	Gram(GM)	10/28/22
1745118	-	AG 50W-X8 200-400 MESH HYDROGEN FORM	500	Gram(GM)	10/28/22
1745120	13820-40-1	AMMONIUM TETRACHLOROPALLADATE	5	Gram(GM)	10/28/22
1744945	109-99-9	Tetrahydrofuran UV HPLC Grade 99.7+% min unstabilized	4	Liters(L)	10/28/22
1744946	67-64-1	Acetone Reagent ACS Grade	4	Liters(L)	10/28/22
1745109	-	Clear Resin	1	Liters(L)	10/28/22
1745110	-	Clear Resin	1	Liters(L)	10/28/22
1745111	-	Clear Resin	1	Liters(L)	10/28/22
1745112	-	High Temp Resin	1	Liters(L)	10/28/22
1745113	-	High Temp Resin	1	Liters(L)	10/28/22
1745059	67-56-1	Methanol 99.9% (HPLC)	4	Liters(L)	10/31/22
1745062	67-56-1	Methanol 99.9% (HPLC)	4	Liters(L)	10/31/22
1745061	67-56-1	Methanol 99.9% (HPLC)	4	Liters(L)	10/31/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1745060	67-56-1	Methanol 99.9% (HPLC)	4	Liters(L)	10/31/22
1745065	7440-21-3	HIGH VACUUM GREASE SILICONE LUBRICANT	150	Gram(GM)	10/31/22
1745066	7440-21-3	HIGH VACUUM GREASE SILICON LUBRICANT	150	Gram(GM)	10/31/22
1745077	18162-48-6	TERT-BUTYLDIMETHYLSILYL CHLORIDE	25	Gram(GM)	10/31/22
1745078	24650-42-8	2 2-DIMETHOXY-2-PHENYLACETOPHENONE	50	Gram(GM)	10/31/22
1745079	110-26-9	N N'-METHYLENEBISACRYLAMIDE	100	Gram(GM)	10/31/22
1745071	60506-81-2	Dipentaerythritol penta-/hexa-acrylate	100	Milliliter(ML)	10/31/22
1745081	7440-42-8	BORON AMORPHOUS	250	Gram(GM)	10/31/22
1745083	7440-42-8	BORON AMORPHOUS	250	Gram(GM)	10/31/22
1745082	7440-42-8	BORON AMORPHOUS	250	Gram(GM)	10/31/22
1745089	42855-00-5	4 5-Dimethoxy-2-nitrobenzyl chloroformate	1	Gram(GM)	10/31/22
1745090	42855-00-5	4 5-Dimethoxy-2-nitrobenzyl chloroformate	1	Gram(GM)	10/31/22
1745096	9002-93-1	Triton X-100	500	Milliliter(ML)	10/31/22
1745097	-	PROTEASE INHIBITOR COCKTAIL	100	Milliliter(ML)	10/31/22
1745098	1330-20-7	Xylenes ACS reagent 98.5%	4	Liters(L)	10/31/22
1745106	628-13-7	PYRIDINE HYDROCHLORIDE	100	Gram(GM)	10/31/22
1745107	18162-48-6	TERT-BUTYLDIMETHYLSILYI CHLORIDE 97%	25	Gram(GM)	10/31/22
1745108	14044-65-6	Borane tetrahydrofuran complex solution 1.0 M in THF	100	Milliliter(ML)	10/31/22
1649676	7664-93-9	H2SO4 500ML PRESERVATION VIALS	100	Milliliter(ML)	10/31/22
1649678	7664-93-9	H2SO4 500ML PRESERVATION VIALS	100	Milliliter(ML)	10/31/22
1649679	7664-93-9	H2SO4 500ML PRESERVATION VIALS	100	Milliliter(ML)	10/31/22
1649677	7664-93-9	H2SO4 500ML PRESERVATION VIALS	100	Milliliter(ML)	10/31/22
1649680	7664-93-9	H2SO4 500ML PRESERVATION VIALS	100	Milliliter(ML)	10/31/22
1649681	7664-93-9	H2SO4 500ML PRESERVATION VIALS	100	Milliliter(ML)	10/31/22
1649682	7664-93-9	H2SO4 500ML PRESERVATION VIALS	100	Milliliter(ML)	10/31/22
1649685	7664-93-9	H2SO4 500ML PRESERVATION VIALS	100	Milliliter(ML)	10/31/22
1649684	7664-93-9	H2SO4 500ML PRESERVATION VIALS	100	Milliliter(ML)	10/31/22
1649683	7664-93-9	H2SO4 500ML PRESERVATION VIALS	100	Milliliter(ML)	10/31/22
1649686	7697-37-2	HNO3 Preservation for 500 ml Container	100	Milliliter(ML)	10/31/22
1649688	7697-37-2	HNO3 Preservation for 500 ml Container	100	Milliliter(ML)	10/31/22
1649690	7697-37-2	HNO3 Preservation for 500 ml Container	100	Milliliter(ML)	10/31/22
1649689	7697-37-2	HNO3 Preservation for 500 ml Container	100	Milliliter(ML)	10/31/22
1649687	7697-37-2	HNO3 Preservation for 500 ml Container	100	Milliliter(ML)	10/31/22
1649691	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/31/22
1649694	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/31/22
1649696	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/31/22
1649693	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/31/22
1649692	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/31/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1649698	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/31/22
1649695	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/31/22
1649697	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	10/31/22
1649699	-	HNO3 PRESERVATION FOR 125 ML	100	Milliliter(ML)	10/31/22
1649700	-	HNO3 PRESERVATION FOR 125 ML	100	Milliliter(ML)	10/31/22
1744944	4245-76-5	1-Methyl-3-nitroguanidine	25	Gram(GM)	10/31/22
1745119	498-66-8	2-Norbornene	400	Gram(GM)	10/31/22
1744952	96-05-9	Allyl methacrylate contains 50-185 ppm MEHQ as inhibitor 98%	100	Milliliter(ML)	10/31/22
1744953	-	Potassium bis(trimethylsilyl)amide 0.5M solution in toluene 99.4+%	100	Milliliter(ML)	10/31/22
1649701	1310-73-2	NaOH Preservation for 250 ml Container	4	Milliliter(ML)	10/31/22
1649702	1310-73-2	NaOH Preservation for 250 ml Container	4	Milliliter(ML)	10/31/22
1649706	1310-73-2	NaOH Preservation for 250 ml Container	4	Milliliter(ML)	10/31/22
1649703	1310-73-2	NaOH Preservation for 250 ml Container	4	Milliliter(ML)	10/31/22
1649704	1310-73-2	NaOH Preservation for 250 ml Container	4	Milliliter(ML)	10/31/22
1649705	1310-73-2	NaOH Preservation for 250 ml Container	4	Milliliter(ML)	10/31/22
1649707	1310-73-2	NaOH Preservation for 250 ml Container	4	Milliliter(ML)	10/31/22
1649710	1310-73-2	NaOH Preservation for 250 ml Container	4	Milliliter(ML)	10/31/22
1649708	1310-73-2	NaOH Preservation for 250 ml Container	4	Milliliter(ML)	10/31/22
1649709	1310-73-2	NaOH Preservation for 250 ml Container	4	Milliliter(ML)	10/31/22
1649712	7732-18-5	BUFFER SOLUTION PH4	5	Gallon(GAL)	10/31/22
1649711	7732-18-5	WATER (BUFFER SOLUTION PH10)	5	Gallon(GAL)	10/31/22
1649713	-	BUFFER SOLUTION PH 7.0	5	Gallon(GAL)	10/31/22
1649714	-	ORP Standard 220 mV	1	Liters(L)	10/31/22
1649716	7647-01-0	Hydrochloric Acid	40	Milliliter(ML)	10/31/22
1649718	7647-01-0	Hydrochloric Acid	40	Milliliter(ML)	10/31/22
1649717	7647-01-0	Hydrochloric Acid	40	Milliliter(ML)	10/31/22
1649719	7647-01-0	Hydrochloric Acid	40	Milliliter(ML)	10/31/22
1717740	-	FullCure RGD837 - VeroPureWhite	4	Kilograms(KG)	11/01/22
1717741	-	FullCure RGD837 - VeroPureWhite	4	Kilograms(KG)	11/01/22
1717747	-	FullCure RGD837 - VeroPureWhite	4	Kilograms(KG)	11/01/22
1717748	-	Support SUP706 B	4	Kilograms(KG)	11/01/22
1437615	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437627	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437626	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437625	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437624	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437622	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437620	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437618	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437616	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1437617	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437621	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437619	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437623	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437637	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437636	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437635	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437634	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437631	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437633	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437630	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437632	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437629	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437671	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437678	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437669	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437677	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437670	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437666	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437676	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437675	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437674	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437673	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437672	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437653	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437655	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437663	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437664	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437665	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437667	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437668	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437662	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437661	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437660	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437659	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437658	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437651	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437656	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437639	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437645	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437640	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437641	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437642	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437657	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437644	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1437654	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437646	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437647	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437648	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437649	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437650	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437652	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1437643	-	Freezemaster Antifreeze	5	Gallon(GAL)	11/01/22
1648935	1310-73-2	NaOH Preservation for 250 ml Container	100	Milliliter(ML)	11/01/22
1648937	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	11/01/22
1648936	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	11/01/22
1648941	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	11/01/22
1648939	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	11/01/22
1648940	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	11/01/22
1648938	-	HNO3 PRESERVATION KIT FOR 1000 ML CONTAINER	100	Milliliter(ML)	11/01/22
1759060	-	3M Scotch-Weld Epoxy Adhesive DP110 Gray - Part A	1.64	Ounces(OZ)	11/01/22
1759070	-	3M Scotch-Weld Epoxy Adhesive DP110 Gray - Part A	1.64	Ounces(OZ)	11/01/22
1759067	-	3M Scotch-Weld Epoxy Adhesive DP110 Gray - Part A	1.64	Ounces(OZ)	11/01/22
1759072	-	3M Scotch-Weld Epoxy Adhesive DP110 Gray - Part A	1.64	Ounces(OZ)	11/01/22
1759066	-	3M Scotch-Weld Epoxy Adhesive DP110 Gray - Part A	1.64	Ounces(OZ)	11/01/22
1759069	-	3M Scotch-Weld Epoxy Adhesive DP110 Gray - Part A	1.64	Ounces(OZ)	11/01/22
1759068	-	3M Scotch-Weld Epoxy Adhesive DP110 Gray - Part A	1.64	Ounces(OZ)	11/01/22
1759071	-	3M Scotch-Weld Epoxy Adhesive DP110 Gray - Part A	1.64	Ounces(OZ)	11/01/22
1759074	-	3M Scotch-Weld Epoxy Adhesive DP110 Gray - Part A	1.64	Ounces(OZ)	11/01/22
1759073	-	3M Scotch-Weld Epoxy Adhesive DP110 Gray - Part A	1.64	Ounces(OZ)	11/01/22
1759065	-	3M Scotch-Weld Epoxy Adhesive DP110 Gray - Part A	1.64	Ounces(OZ)	11/01/22
1759061	-	3M Scotch-Weld Epoxy Adhesive DP110 Gray - Part A	1.64	Ounces(OZ)	11/01/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1759064	-	3M Scotch-Weld Epoxy Adhesive DP110 Gray - Part A	1.64	Ounces(OZ)	11/01/22
1759062	-	3M Scotch-Weld Epoxy Adhesive DP110 Gray - Part A	1.64	Ounces(OZ)	11/01/22
1759063	-	3M Scotch-Weld Epoxy Adhesive DP110 Gray - Part A	1.64	Ounces(OZ)	11/01/22
1539525	-	CONATHANE EN-7 PART B CURATIVE	1	Liters(L)	11/01/22
1539527	-	CONATHANE EN-7 PART B CURATIVE	1	Liters(L)	11/01/22
1539531	-	CONATHANE EN-7 PART B CURATIVE	1	Liters(L)	11/01/22
1539530	-	CONATHANE EN-7 PART B CURATIVE	1	Liters(L)	11/01/22
1539528	-	CONATHANE EN-7 PART B CURATIVE	1	Liters(L)	11/01/22
1539526	-	CONATHANE EN-7 PART B CURATIVE	1	Liters(L)	11/01/22
1539529	-	CONATHANE EN-7 PART B CURATIVE	1	Liters(L)	11/01/22
1539532	-	CONATHANE® EN-4 Part A Urethane Prepolymer	1	Gallon(GAL)	11/01/22
1539536	-	CONATHANE® EN-4 Part A Urethane Prepolymer	1	Gallon(GAL)	11/01/22
1539537	-	CONATHANE® EN-4 Part A Urethane Prepolymer	1	Gallon(GAL)	11/01/22
1539538	-	CONATHANE® EN-4 Part A Urethane Prepolymer	1	Gallon(GAL)	11/01/22
1539533	-	CONATHANE® EN-4 Part A Urethane Prepolymer	1	Gallon(GAL)	11/01/22
1539534	-	CONATHANE® EN-4 Part A Urethane Prepolymer	1	Gallon(GAL)	11/01/22
1539535	-	CONATHANE® EN-4 Part A Urethane Prepolymer	1	Gallon(GAL)	11/01/22
1744318	108-88-3	Toluene HPLC	1	Liters(L)	11/01/22
1744319	-	High Temp Resin	1	Liters(L)	11/01/22
1744320	-	High Temp Resin	1	Liters(L)	11/01/22
1744323	7646-85-7	ZINC CHLORIDE	10	Gram(GM)	11/01/22
1744840	-	10 ppm Fluoride Stable Elements ICP Standard CMS-3	125	Milliliter(ML)	11/01/22
1744342	868-77-9	2-HYDROXYETHYL METHACRYLATE	100	Milliliter(ML)	11/01/22
1744343	-	BIS-TRIS	100	Gram(GM)	11/01/22
1744344	13880-05-02	N-(TRIS(HYDROXYMETHYL)METHYL)ACRYLAMIDE 93%	25	Gram(GM)	11/01/22
1745239	110-63-4	1 4-BUTANEDIOL	100	Gram(GM)	11/01/22
1540581	69991-67-9	GALDEN HT110 Perfluorinated polyether	5	Kilograms(KG)	11/01/22
1745241	110-63-4	1 4-BUTANEDIOL	100	Gram(GM)	11/01/22
1745240	110-63-4	1 4-BUTANEDIOL	100	Gram(GM)	11/01/22
1540582	69991-67-9	GALDEN HT110 Perfluorinated polyether	5	Kilograms(KG)	11/01/22
1540583	69991-67-9	GALDEN HT110 Perfluorinated polyether	5	Kilograms(KG)	11/01/22
1540584	69991-67-9	GALDEN HT110 Perfluorinated polyether	5	Kilograms(KG)	11/01/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1745242	4316-93-2	4 6-DICHLORO-5-NITROPYRIMIDINE	25	Gram(GM)	11/01/22
1744841	7647-01-0	10 ppm Precious Metals ICP Standard CMS-2	125	Milliliter(ML)	11/01/22
1745237	445473-58-5	1-BUTYL-3-METHYLIMIDAZOLIUM OCTYLSULFATE	5	Gram(GM)	11/01/22
1745238	402846-78-0	1-BUTYL-2 3-DIMETHYLIMIDAZOLIUM TETRAFLUOROBORATE	50	Gram(GM)	11/01/22
1744345	9004-74-4	POLY(ETHYLENE GLYCOL) METHYL ETHER	5	Gram(GM)	11/01/22
1744842	7697-37-2	10 ppm ICP Mix Standard 4 CMS-4	125	Milliliter(ML)	11/01/22
1731094	-	Chevron 1000 THF	5	Gallon(GAL)	11/01/22
1731096	-	Chevron 1000 THF	5	Gallon(GAL)	11/01/22
1731095	-	Chevron 1000 THF	5	Gallon(GAL)	11/01/22
1744843	7697-37-2	10 ppm ICP Mix Standard 5 CMS-5	125	Milliliter(ML)	11/01/22
1744844	7697-37-2	10 ppm Rare Earth U TH ICP Standard CMS-1	125	Milliliter(ML)	11/01/22
1744845	-	Hysol MB 50 Cutting Fluid	55	Gallon(GAL)	11/01/22
1744855	-	10 000 ug/mL Silver	500	Milliliter(ML)	11/01/22
1744856	-	10 000 ug/mL Silver	500	Milliliter(ML)	11/01/22
1721242	-	MicroC 2000	2700	Pounds(LB)	11/01/22
1721243	-	MicroC 2000	2700	Pounds(LB)	11/01/22
1744954	67-63-0	Isopropyl alcohol 70% solution in water	2.5	Liters(L)	11/02/22
1744957	67-63-0	Isopropyl alcohol 70% solution in water	2.5	Liters(L)	11/02/22
1744955	67-63-0	Isopropyl alcohol 70% solution in water	2.5	Liters(L)	11/02/22
1744956	67-63-0	Isopropyl alcohol 70% solution in water	2.5	Liters(L)	11/02/22
1745129	7722-84-1	HYDROGEN PEROXIDE 30%	4	Liters(L)	11/02/22
1745132	7722-84-1	HYDROGEN PEROXIDE 30%	4	Liters(L)	11/02/22
1745131	7722-84-1	HYDROGEN PEROXIDE 30%	4	Liters(L)	11/02/22
1745130	7722-84-1	HYDROGEN PEROXIDE 30%	4	Liters(L)	11/02/22
1745183	-	Ammonia TNTplus Vial Test LR	12	Milligram(MG)	11/02/22
1745194	-	Ammonia TNTplus Vial Test LR	12	Milligram(MG)	11/02/22
1745197	-	Ammonia TNTplus Vial Test LR	12	Milligram(MG)	11/02/22
1745184	-	Ammonia TNTplus Vial Test LR	12	Milligram(MG)	11/02/22
1745195	-	Ammonia TNTplus Vial Test LR	12	Milligram(MG)	11/02/22
1745193	-	Ammonia TNTplus Vial Test LR	12	Milligram(MG)	11/02/22
1745192	-	Ammonia TNTplus Vial Test LR	12	Milligram(MG)	11/02/22
1745191	-	Ammonia TNTplus Vial Test LR	12	Milligram(MG)	11/02/22
1745190	-	Ammonia TNTplus Vial Test LR	12	Milligram(MG)	11/02/22
1745186	-	Ammonia TNTplus Vial Test LR	12	Milligram(MG)	11/02/22
1745185	-	Ammonia TNTplus Vial Test LR	12	Milligram(MG)	11/02/22
1745189	-	Ammonia TNTplus Vial Test LR	12	Milligram(MG)	11/02/22
1745187	-	Ammonia TNTplus Vial Test LR	12	Milligram(MG)	11/02/22
1745188	-	Ammonia TNTplus Vial Test LR	12	Milligram(MG)	11/02/22
1745196	-	Ammonia TNTplus Vial Test LR	12	Milligram(MG)	11/02/22
1745198	-	Ammonia TNTplus HR	47	Milligram(MG)	11/02/22
1745207	-	Ammonia TNTplus HR	47	Milligram(MG)	11/02/22
1745199	-	Ammonia TNTplus HR	47	Milligram(MG)	11/02/22
1745200	-	Ammonia TNTplus HR	47	Milligram(MG)	11/02/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1745201	-	Ammonia TNTplus HR	47	Milligram(MG)	11/02/22
1745202	-	Ammonia TNTplus HR	47	Milligram(MG)	11/02/22
1745203	-	Ammonia TNTplus HR	47	Milligram(MG)	11/02/22
1745204	-	Ammonia TNTplus HR	47	Milligram(MG)	11/02/22
1745208	-	Ammonia TNTplus HR	47	Milligram(MG)	11/02/22
1745209	-	Ammonia TNTplus HR	47	Milligram(MG)	11/02/22
1745210	-	Ammonia TNTplus HR	47	Milligram(MG)	11/02/22
1745211	-	Ammonia TNTplus HR	47	Milligram(MG)	11/02/22
1745212	-	Ammonia TNTplus HR	47	Milligram(MG)	11/02/22
1745206	-	Ammonia TNTplus HR	47	Milligram(MG)	11/02/22
1745205	-	Ammonia TNTplus HR	47	Milligram(MG)	11/02/22
1745215	7784-27-2	ALUMINUM NITRATE NONAHYDRATE	500	Gram(GM)	11/02/22
1745220	7784-27-2	ALUMINUM NITRATE NONAHYDRATE	500	Gram(GM)	11/02/22
1745219	7784-27-2	ALUMINUM NITRATE NONAHYDRATE	500	Gram(GM)	11/02/22
1745218	7784-27-2	ALUMINUM NITRATE NONAHYDRATE	500	Gram(GM)	11/02/22
1745217	7784-27-2	ALUMINUM NITRATE NONAHYDRATE	500	Gram(GM)	11/02/22
1745216	7784-27-2	ALUMINUM NITRATE NONAHYDRATE	500	Gram(GM)	11/02/22
1745214	77-73-6	DICYCLOPENTADIENE	500	Gram(GM)	11/02/22
1745213	121-32-4	ETHYL VANILLIN	12	Kilograms(KG)	11/02/22
1745141	7789-45-9	COPPER(II) BROMIDE	100	Gram(GM)	11/02/22
1745140	120-80-9	1 2-Dihydroxybenzene	5	Gram(GM)	11/02/22
1745138	501-98-4	p-Coumaric Acid	5	Gram(GM)	11/02/22
1745137	121-33-5	P-VANILLIN	2	Gram(GM)	11/02/22
1745136	140-10-3	T-CINNAMIC ACID	5	Gram(GM)	11/02/22
1745135	99-50-3	3 4-DIHYDROXYBENZOIC ACID (PROTOCATECHUIC ACID)	25	Gram(GM)	11/02/22
1745133	121-44-8	TRIETHYLAMINE	100	Milliliter(ML)	11/02/22
1745128	8002-74-2	PARAFFIN SOLID	1	Kilograms(KG)	11/02/22
1744959	3030-47-5	1 1 4 7 7-PENTAMETHYLDIETHYLENETRIAMINE	250	Milliliter(ML)	11/02/22
1744960	110-54-3	HEXANE REAGENT PLUS	500	Milliliter(ML)	11/02/22
1744961	110-54-3	HEXANE REAGENT PLUS	500	Milliliter(ML)	11/02/22
1745121	-	3M FLUORINERT FC-43	11	Pounds(LB)	11/02/22
1745122	109-80-8	1 3-PROPANEDITHIOL 96%	25	Gram(GM)	11/02/22
1757879	64742-65-0	UNILUBE PREMIUM AW 32	100	Milliliter(ML)	11/02/22
1757880	-	WD-40	11	Ounces(OZ)	11/02/22
1736975	7601-90-3	PERCHLORIC ACID OPTIMA	1	Liters(L)	11/02/22
1691818	-	FREON 22	30	Pounds(LB)	11/02/22
1691819	-	FREON 22	30	Pounds(LB)	11/02/22
1691820	-	FREON 22	30	Pounds(LB)	11/02/22
1691821	-	FREON 22	30	Pounds(LB)	11/02/22
1691822	-	FREON 22	30	Pounds(LB)	11/02/22
1691635	7440-37-1	ARGON GAS	0.25	Cubic Feet(CF)	11/02/22
1691636	7647-01-0	HYDROGEN CHLORIDE	40	Cubic Feet(CF)	11/02/22
1691637	7647-01-0	HYDROGEN CHLORIDE	40	Cubic Feet(CF)	11/02/22
1691638	74-98-6	PROPANE	11	Gallon(GAL)	11/02/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1691645	74-98-6	PROPANE	11	Gallon(GAL)	11/02/22
1691646	74-98-6	PROPANE	11	Gallon(GAL)	11/02/22
1691649	74-98-6	PROPANE	11	Gallon(GAL)	11/02/22
1691647	74-98-6	PROPANE	11	Gallon(GAL)	11/02/22
1691640	74-98-6	PROPANE	11	Gallon(GAL)	11/02/22
1691639	74-98-6	PROPANE	11	Gallon(GAL)	11/02/22
1691643	74-98-6	PROPANE	11	Gallon(GAL)	11/02/22
1691642	74-98-6	PROPANE	11	Gallon(GAL)	11/02/22
1691641	74-98-6	PROPANE	11	Gallon(GAL)	11/02/22
1691644	74-98-6	PROPANE	11	Gallon(GAL)	11/02/22
1691648	74-98-6	PROPANE	11	Gallon(GAL)	11/02/22
1691650	-	HYDROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691662	-	HYDROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691661	-	HYDROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691660	-	HYDROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691659	-	HYDROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691658	-	HYDROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691657	-	HYDROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691656	-	HYDROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691654	-	HYDROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691653	-	HYDROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691652	-	HYDROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691651	-	HYDROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691664	-	HYDROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691665	-	HYDROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691655	-	HYDROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691666	-	HYDROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691667	-	HYDROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691668	-	HYDROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691669	-	HYDROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691663	-	HYDROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691670	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691697	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691683	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691684	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691685	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691686	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691687	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691688	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691689	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691691	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691680	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691698	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691699	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691692	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1691690	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691673	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691671	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691672	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691696	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691682	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691694	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691681	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691674	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691675	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691676	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691677	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691678	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691679	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691693	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691695	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691780	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691781	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691782	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/02/22
1691700	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/02/22
1691712	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/02/22
1691701	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/02/22
1691702	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/02/22
1691705	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/02/22
1691704	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/02/22
1691703	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/02/22
1691710	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/02/22
1691711	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/02/22
1691708	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/02/22
1691707	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/02/22
1691706	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/02/22
1691709	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/02/22
1691714	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/02/22
1691713	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/02/22
1691760	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/02/22
1691757	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/02/22
1691751	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/02/22
1691759	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/02/22
1691752	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/02/22
1691755	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/02/22
1691754	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/02/22
1691749	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/02/22
1691750	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/02/22
1691756	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/02/22
1691758	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/02/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1691753	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/02/22
1691748	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/02/22
1691747	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/02/22
1691746	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/02/22
1691715	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691717	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691728	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691727	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691730	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691726	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691724	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691729	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691716	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691718	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691719	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691720	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691721	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691722	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691723	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691725	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691770	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691761	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691772	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691773	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691771	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691769	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691768	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691767	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691762	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691764	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691765	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691766	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691763	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691797	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691796	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691794	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691795	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/02/22
1691731	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/02/22
1691744	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/02/22
1691736	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/02/22
1691737	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/02/22
1691738	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/02/22
1691734	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/02/22
1691739	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/02/22
1691740	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/02/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1691741	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/02/22
1691742	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/02/22
1691743	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/02/22
1691733	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/02/22
1691745	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/02/22
1691735	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/02/22
1691732	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/02/22
1691790	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/02/22
1660473	1000	activated alumina	450	Gram(GM)	11/02/22
1691774	124-38-9	CARBON DIOXIDE	50	Pounds(LB)	11/02/22
1691779	124-38-9	CARBON DIOXIDE	50	Pounds(LB)	11/02/22
1691776	124-38-9	CARBON DIOXIDE	50	Pounds(LB)	11/02/22
1691778	124-38-9	CARBON DIOXIDE	50	Pounds(LB)	11/02/22
1691775	124-38-9	CARBON DIOXIDE	50	Pounds(LB)	11/02/22
1691777	124-38-9	CARBON DIOXIDE	50	Pounds(LB)	11/02/22
1691783	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/02/22
1691784	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/02/22
1691785	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/02/22
1691786	-	Compressed Air	220	Cubic Feet(CF)	11/02/22
1691788	-	Compressed Air	220	Cubic Feet(CF)	11/02/22
1691787	-	Compressed Air	220	Cubic Feet(CF)	11/02/22
1691789	74-82-8	METHANE	40	Cubic Feet(CF)	11/02/22
1718863	-	M-BOND GA-2 ADHESIVE KIT	15	Gram(GM)	11/02/22
1691791	-	CARBON DIOXIDE 10% BAL ARGON	220	Cubic Feet(CF)	11/02/22
1718869	-	M-BOND GA-2 ADHESIVE KIT	15	Gram(GM)	11/02/22
1718865	-	M-BOND GA-2 ADHESIVE KIT	15	Gram(GM)	11/02/22
1718866	-	M-BOND GA-2 ADHESIVE KIT	15	Gram(GM)	11/02/22
1718867	-	M-BOND GA-2 ADHESIVE KIT	15	Gram(GM)	11/02/22
1718868	-	M-BOND GA-2 ADHESIVE KIT	15	Gram(GM)	11/02/22
1718864	-	M-BOND GA-2 ADHESIVE KIT	15	Gram(GM)	11/02/22
1691792	-	CARBON DIOXIDE 10% BAL ARGON	220	Cubic Feet(CF)	11/02/22
1691793	-	CARBON DIOXIDE 10% BAL ARGON	220	Cubic Feet(CF)	11/02/22
1718875	-	JB WELD STIK	2	Ounces(OZ)	11/02/22
1718876	-	JB WELD STIK	2	Ounces(OZ)	11/02/22
1718874	-	JB WELD STIK	2	Ounces(OZ)	11/02/22
1718870	-	JB WELD STIK	2	Ounces(OZ)	11/02/22
1718872	-	JB WELD STIK	2	Ounces(OZ)	11/02/22
1718873	-	JB WELD STIK	2	Ounces(OZ)	11/02/22
1718871	-	JB WELD STIK	2	Ounces(OZ)	11/02/22
1719439	-	PSX 700 WHITE RESIN	5	Gallon(GAL)	11/03/22
1719440	-	PSX 700 CURE	1	Quarts(QT)	11/03/22
1719441	-	PSX 700 CURE	1	Quarts(QT)	11/03/22
1719442	-	PSX 700 CURE	1	Quarts(QT)	11/03/22
1719443	-	PSX 700 CURE	1	Quarts(QT)	11/03/22
1719444	-	PAINT THINNER	1	Gallon(GAL)	11/03/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1719448	-	PAINT THINNER	1	Gallon(GAL)	11/03/22
1719447	-	PAINT THINNER	1	Gallon(GAL)	11/03/22
1719446	-	PAINT THINNER	1	Gallon(GAL)	11/03/22
1719445	-	PAINT THINNER	1	Gallon(GAL)	11/03/22
1717336	-	3 IN ONE HOUSE HOLD OIL	4	Ounces(OZ)	11/03/22
1717337	-	3 IN ONE HOUSE HOLD OIL	4	Ounces(OZ)	11/03/22
1717340	-	3 IN ONE HOUSE HOLD OIL	4	Ounces(OZ)	11/03/22
1717338	-	3 IN ONE HOUSE HOLD OIL	4	Ounces(OZ)	11/03/22
1717346	-	3 IN ONE HOUSE HOLD OIL	4	Ounces(OZ)	11/03/22
1717345	-	3 IN ONE HOUSE HOLD OIL	4	Ounces(OZ)	11/03/22
1717339	-	3 IN ONE HOUSE HOLD OIL	4	Ounces(OZ)	11/03/22
1717341	-	3 IN ONE HOUSE HOLD OIL	4	Ounces(OZ)	11/03/22
1717342	-	3 IN ONE HOUSE HOLD OIL	4	Ounces(OZ)	11/03/22
1717343	-	3 IN ONE HOUSE HOLD OIL	4	Ounces(OZ)	11/03/22
1717344	-	3 IN ONE HOUSE HOLD OIL	4	Ounces(OZ)	11/03/22
1639372	-	WD-40 SMART STRAW	11	Ounces(OZ)	11/03/22
1639373	-	WD-40 SMART STRAW	11	Ounces(OZ)	11/03/22
1639376	-	WD-40 SMART STRAW	11	Ounces(OZ)	11/03/22
1639375	-	WD-40 SMART STRAW	11	Ounces(OZ)	11/03/22
1420886	-	SILVER GOOP	1	Ounces(OZ)	11/03/22
1420880	-	LEAK DETECTOR SNOOP 8OZ	8	Ounces(OZ)	11/03/22
1267248	642742-52-5	Lubriplate No. 3	1	Quarts(QT)	11/03/22
1420885	-	LEAK DETECTOR SNOOP 8OZ	8	Ounces(OZ)	11/03/22
1420883	-	LEAK DETECTOR SNOOP 8OZ	8	Ounces(OZ)	11/03/22
1420884	-	LEAK DETECTOR SNOOP 8OZ	8	Ounces(OZ)	11/03/22
1420881	-	LEAK DETECTOR SNOOP 8OZ	8	Ounces(OZ)	11/03/22
1420882	-	LEAK DETECTOR SNOOP 8OZ	8	Ounces(OZ)	11/03/22
1422797	-	HI-TEMP BEARING GREASE	13.7	Ounces(OZ)	11/03/22
1422804	-	HI-TEMP BEARING GREASE	13.7	Ounces(OZ)	11/03/22
1422795	-	HI-TEMP BEARING GREASE	13.7	Ounces(OZ)	11/03/22
1422796	-	HI-TEMP BEARING GREASE	13.7	Ounces(OZ)	11/03/22
1422802	-	HI-TEMP BEARING GREASE	13.7	Ounces(OZ)	11/03/22
1422801	-	HI-TEMP BEARING GREASE	13.7	Ounces(OZ)	11/03/22
1422800	-	HI-TEMP BEARING GREASE	13.7	Ounces(OZ)	11/03/22
1422798	-	HI-TEMP BEARING GREASE	13.7	Ounces(OZ)	11/03/22
1422803	-	HI-TEMP BEARING GREASE	13.7	Ounces(OZ)	11/03/22
1422799	-	HI-TEMP BEARING GREASE	13.7	Ounces(OZ)	11/03/22
1745222	-	Buehler Epothin 2 Resin / SDS# 9130600	32	Ounces(OZ)	11/03/22
1717494	-	Buehler Epothin 2 Resin / SDS# 9130600	32	Ounces(OZ)	11/03/22
1717492	-	Buehler Epothin 2 Resin / SDS# 9130600	32	Ounces(OZ)	11/03/22
1717495	-	Buehler Epothin 2 Resin / SDS# 9130600	32	Ounces(OZ)	11/03/22
1717496	-	Buehler Epothin 2 Resin / SDS# 9130600	32	Ounces(OZ)	11/03/22
1717493	-	Buehler Epothin 2 Resin / SDS# 9130600	32	Ounces(OZ)	11/03/22
1745221	-	Buehler EpoThin 2 Hardener	16	Ounces(OZ)	11/03/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1745223	-	METADI II DIAMOND PASTE MEDIUM CONCENTRATION 1 UM BLUE	20	Gram(GM)	11/03/22
1717497	-	METADI II DIAMOND PASTE MEDIUM CONCENTRATION 1 UM BLUE	20	Gram(GM)	11/03/22
1691823	-	Air Duster	10	Ounces(OZ)	11/03/22
1691825	-	Air Duster	10	Ounces(OZ)	11/03/22
1691828	-	Air Duster	10	Ounces(OZ)	11/03/22
1691827	-	Air Duster	10	Ounces(OZ)	11/03/22
1691826	-	Air Duster	10	Ounces(OZ)	11/03/22
1691824	-	Air Duster	10	Ounces(OZ)	11/03/22
1691829	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/03/22
1649291	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/03/22
1649302	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/03/22
1649294	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/03/22
1649295	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/03/22
1649296	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/03/22
1649292	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/03/22
1649303	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/03/22
1649301	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/03/22
1649300	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/03/22
1649297	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/03/22
1649298	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/03/22
1649299	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/03/22
1649293	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/03/22
1649304	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/03/22
1649305	7727-37-9	NITROGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/03/22
1731819	-	ES COMPLEAT	1	Gallon(GAL)	11/03/22
1731820	-	ES COMPLEAT	1	Gallon(GAL)	11/03/22
1731821	-	ES COMPLEAT	1	Gallon(GAL)	11/03/22
V00000CE4E	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	11/03/22
V00000CE4F	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	11/03/22
V00000CE50	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	11/03/22
V00000CE51	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	11/03/22
V00000CE52	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	11/03/22
V00000CE53	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	11/03/22
V00000CE54	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	11/03/22
V00000CE55	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	11/03/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CE56	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	11/03/22
V00000CE57	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	11/03/22
V00000CE58	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	11/03/22
V00000CE59	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	11/03/22
V00000CE5B	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	11/03/22
V00000CE5D	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	11/03/22
V00000CE5F	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	11/03/22
V00000CE5A	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	11/03/22
V00000CE5E	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	11/03/22
V00000CE5C	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	11/03/22
1	-	FANTASTIK ALL PURPOSE CLEANER	32	Ounces(OZ)	11/04/22
1234567543	-	FANTASTIK ALL PURPOSE CLEANER	32	Ounces(OZ)	11/04/22
1745226	40244-90-4	Chlorodiisopropylphosphine 96%	25	Gram(GM)	11/04/22
1745227	40244-90-4	Chlorodiisopropylphosphine 96%	25	Gram(GM)	11/04/22
1745228	1120-71-4	1 3-PROPANESULTONE	25	Gram(GM)	11/04/22
1745229	5205-93-6	N-[3-(Dimethylamino)propyl]methacrylamide	250	Milliliter(ML)	11/04/22
1745230	600-00-0	Ethyl a-bromoisobutyrate 98%	5	Gram(GM)	11/04/22
1745231	7473-98-5	2-Hydroxy-2-methylpropiophenone	50	Milliliter(ML)	11/04/22
1745232	1344-28-1	ALUMINUM OXIDE ACTIVATED	1	Kilograms(KG)	11/04/22
1745233	50-81-7	L-ASCORBIC ACID	100	Gram(GM)	11/04/22
1745234	1344-28-1	Aluminum oxide activated neutral Brockmann Activity I	1	Kilograms(KG)	11/04/22
1745235	87-69-4	TARTARIC ACID	500	Gram(GM)	11/04/22
1745236	-	SYLGARD 182 SILICONE ELASTOMER KIT	3.9	Kilograms(KG)	11/04/22
1744310	10034-81-8	Magnesium Perchlorate (Anhydrone)	1	Pounds(LB)	11/04/22
1744312	-	COPPER OXIDE (RARE EARTH BASE)	50	Gram(GM)	11/04/22
1744315	-	COPPER OXIDE (RARE EARTH BASE)	50	Gram(GM)	11/04/22
1744314	-	COPPER OXIDE (RARE EARTH BASE)	50	Gram(GM)	11/04/22
1744313	-	COPPER OXIDE (RARE EARTH BASE)	50	Gram(GM)	11/04/22
1744317	-	CITRANOX	1	Quarts(QT)	11/04/22
1744316	7440-50-8	COPPER METAL ACCELERATOR	200	Gram(GM)	11/04/22
1744309	-	Lecosorb 20 - 30 mesh	500	Gram(GM)	11/04/22
1744347	1663-67-8	MALONYL DICHLORIDE	25	Gram(GM)	11/04/22
1744348	-	PermaTreat PC-510T	55	Gallon(GAL)	11/04/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1745224	-	Ceramic Resin Cartridge	1	Liters(L)	11/04/22
1745225	-	Ceramic Resin Cartridge	1	Liters(L)	11/04/22
1744962	67-63-0	2-Propanol 99.9% (HPLC)	4	Liters(L)	11/04/22
1744963	1344-00-9	MOLE SIEVES 4A 8-12MESH	500	Gram(GM)	11/04/22
1744964	1344-00-9	MOLE SIEVES 4A 8-12MESH	500	Gram(GM)	11/04/22
1744906	-	MOLECULAR SIEVES 4A 8-12 MESH	500	Gram(GM)	11/04/22
1744901	57-55-6	Propylene Glycol 85% Aqueous	500	Milliliter(ML)	11/04/22
1744965	67-63-0	ISOPROPYL ALCOHOL	4	Liters(L)	11/04/22
1744966	67-64-1	Acetone Reagent ACS Grade	4	Liters(L)	11/04/22
1744967	67-56-1	Methanol 99.8% ACS reagent	4	Liters(L)	11/04/22
1744968	141-78-6	Ethyl acetate ACS 99.5	4	Liters(L)	11/04/22
1744969	618-32-6	Benzoyl Bromide 98.0+%	25	Gram(GM)	11/04/22
1744970	150-76-5	4-METHOXYPHENOL	100	Gram(GM)	11/04/22
1745142	2/3/7758	POTASSIUM BROMIDE	100	Gram(GM)	11/04/22
1744311	-	Platinum Silica Catalyst	15	Gram(GM)	11/04/22
1744321	17096-07-0	3-[Tris(trimethylsiloxy)silyl]propyl methacrylate contains MEHQ + HQ as stabilizer 98%	25	Milliliter(ML)	11/04/22
1744322	17096-07-0	3-[Tris(trimethylsiloxy)silyl]propyl methacrylate contains MEHQ + HQ as stabilizer 98%	25	Milliliter(ML)	11/04/22
1744346	513-86-0	Acetoin	1000	Milligram(MG)	11/04/22
1745243	-	Maxi-Cut Oil-Based Cutting Fluid (Undiluted)	3.8	Liters(L)	11/04/22
1745099	-	IV-68427 2.5 mmol/L ea: La Nd Pr Sm	500	Milliliter(ML)	11/04/22
1745100	-	IV-68428 2.5 mmol/L ea: Dy Eu Gd Sm	500	Milliliter(ML)	11/04/22
1745101	-	IV-68429 2.5 mmol/L ea: Dy Eu Ho Tm	500	Milliliter(ML)	11/04/22
1745102	-	IV-68421 375.9 µg/mL: Sm; 360.6 µg/mL: Nd; 352.3 µg/mL: Pr; 347.3 µg/mL: La	500	Milliliter(ML)	11/04/22
1745103	-	IV-68423 406.25 µg/mL: Dy; 393.1 µg/mL: Gd; 379.9 µg/mL: Eu; 375.9 µg/mL: Sm	500	Milliliter(ML)	11/04/22
1745104	-	IV-68424 422.3 µg/mL: Tm; 412.3 µg/mL: Ho; 406.25 µg/mL: Dy; 379.9 µg/mL: Eu	500	Milliliter(ML)	11/04/22
1745105	-	IV-68425 577.4 ug/mL: Lu; 571.1 ug/mL: Yb; 557.5 ug/mL: Tm	500	Milliliter(ML)	11/04/22
1745362	-	High Temp Resin	1	Liters(L)	11/04/22
1745363	-	High Temp Resin	1	Liters(L)	11/04/22
1745359	-	Clear Resin	1	Liters(L)	11/04/22
1745360	-	Clear Resin	1	Liters(L)	11/04/22
1745361	-	Clear Resin	1	Liters(L)	11/04/22
1745301	-	FREEZE SPRAY	10	Ounces(OZ)	11/04/22
1744169	10476-85-4	Strontium chloride anhydrous	5	Gram(GM)	11/04/22
1744978	-	Leybonol LVO 130	1	Liters(L)	11/04/22
1744981	-	Leybonol LVO 130	1	Liters(L)	11/04/22
1744980	-	Leybonol LVO 130	1	Liters(L)	11/04/22
1744979	-	Leybonol LVO 130	1	Liters(L)	11/04/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1745259	15059-52-6	DYSPROSIUM(III) CHLORIDE HEXAHYDRATE	25	Gram(GM)	11/04/22
1745260	10035-01-5	YTTERBIUM(III) CHLORIDE HEXAHYDRATE	10	Gram(GM)	11/04/22
1745261	10035-01-5	YTTERBIUM(III) CHLORIDE HEXAHYDRATE	10	Gram(GM)	11/04/22
1745295	1185-53-1	TRIS-Hcl 1M	1	Liters(L)	11/04/22
1745293	95-92-1	DIETHYL OXALATE	500	Gram(GM)	11/04/22
1745294	95-92-1	DIETHYL OXALATE	500	Gram(GM)	11/04/22
1745290	67-64-1	ACETONE ACS	1	Gallon(GAL)	11/04/22
1745291	67-64-1	ACETONE ACS	1	Gallon(GAL)	11/04/22
1745292	52217-57-9	7-OCTENYLTRIMETHOXYSILANE	25	Gram(GM)	11/04/22
1745277	67-56-1	Methanol ultrapure Spectrophotometric Grade 99.8+%	4	Liters(L)	11/04/22
1745279	67-56-1	Methanol ultrapure Spectrophotometric Grade 99.8+%	4	Liters(L)	11/04/22
1745278	67-56-1	Methanol ultrapure Spectrophotometric Grade 99.8+%	4	Liters(L)	11/04/22
1745280	67-56-1	Methanol ultrapure Spectrophotometric Grade 99.8+%	4	Liters(L)	11/04/22
1745281	2226-96-2	4-HYDROXY-TEMPO	1	Gram(GM)	11/04/22
1745282	108-88-3	Toluene HPLC	4	Liters(L)	11/04/22
1745283	7783-85-9	AMMONIUM IRON(II) SULFATE HEXAHYDRATE	100	Gram(GM)	11/04/22
1745284	95-92-1	DIETHYL OXALATE	250	Milliliter(ML)	11/04/22
1745285	95-92-1	DIETHYL OXALATE	250	Milliliter(ML)	11/04/22
1745288	24424-99-5	Di-tert-butyl dicarbonate 99%	25	Gram(GM)	11/04/22
1745289	11/1/5470	HYDROXYLAMINE HYDROCHLORIDE	250	Gram(GM)	11/04/22
1745302	-	FREEZE SPRAY	10	Ounces(OZ)	11/04/22
1745305	-	FREEZE SPRAY	10	Ounces(OZ)	11/04/22
1745303	-	FREEZE SPRAY	10	Ounces(OZ)	11/04/22
1745304	-	FREEZE SPRAY	10	Ounces(OZ)	11/04/22
1745306	-	FREEZE SPRAY	10	Ounces(OZ)	11/04/22
1745263	9036-19-5	IGEPAL CA-630	50	Milliliter(ML)	11/04/22
1745265	23978-09-8	KRYPTOFIX 222	5	Gram(GM)	11/04/22
1745266	12033-89-5	SILICON NITRIDE	4	Gram(GM)	11/04/22
1745269	2351-50-0	4-IODOSTYRENE	25	Gram(GM)	11/04/22
1745270	-	NEODYMIUM PLASMA STANDARD	500	Milliliter(ML)	11/04/22
1745271	-	NEODYMIUM PLASMA STANDARD	500	Milliliter(ML)	11/04/22
1745264	-	10000 ug/mL Lanthanum	100	Milliliter(ML)	11/04/22
1721244	7647-01-0	Hydrochloric Acid 30-31%	3000	Pounds(LB)	11/07/22
1744900	7439-98-7	MOLYBDENUM POWDER	100	Gram(GM)	11/07/22
1758402	-	ANTIFREEZE	30	Gallon(GAL)	11/07/22
1758406	-	ANTIFREEZE	30	Gallon(GAL)	11/07/22
1758403	-	ANTIFREEZE	30	Gallon(GAL)	11/07/22
1758404	-	ANTIFREEZE	30	Gallon(GAL)	11/07/22
1758405	-	ANTIFREEZE	30	Gallon(GAL)	11/07/22
1745262	126-96-5	Sodium acetate buffer solution 3M	100	Milliliter(ML)	11/07/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1745267	65997-17-3	Controlled pore glass - BET specific surface area nominal pore diameter 300 nm	5	Gram(GM)	11/07/22
1745268	65997-17-3	Controlled pore glass - BET specific surface area nominal pore diameter 300 nm	5	Gram(GM)	11/07/22
1745272	778577-34-7	(MERCAPTOPROPYL)METHYLSILOXANE HOMOPOLYMER	100	Gram(GM)	11/07/22
1745273	68083-19-2	POLY(DIMETHYLSILOXANE) VINYL TERMINATED	100	Gram(GM)	11/07/22
1745274	68083-19-2	POLY(DIMETHYLSILOXANE) VINYL TERMINATED	100	Gram(GM)	11/07/22
1745275	63148-57-2	POLYMETHYLHYDROSILOXANE TRIMETHYLSILYL TERMINATED	100	Gram(GM)	11/07/22
1745276	68083-19-2	POLY(DIMETHYLSILOXANE) VINYL TERMINATED	100	Gram(GM)	11/07/22
1745286	100-46-9	BENZYLAMINE (15N 98%)	10	Gram(GM)	11/07/22
1745296	7631-86-9	Silica Gel	5	Gram(GM)	11/07/22
1745300	7631-86-9	Silica Gel	5	Gram(GM)	11/07/22
1745299	7631-86-9	Silica Gel	5	Gram(GM)	11/07/22
1745298	7631-86-9	Silica Gel	5	Gram(GM)	11/07/22
1745297	7631-86-9	Silica Gel	5	Gram(GM)	11/07/22
1743374	-	BUFFER SOLUTION PH 4.00	500	Milliliter(ML)	11/07/22
1744349	-	Polystyrene-b-poly(dimethylsiloxane) diblock copolymer	1	Gram(GM)	11/07/22
1744972	1633-05-2	STRONTIUM CARBONATE	1	Kilograms(KG)	11/07/22
1744973	1633-05-2	STRONTIUM CARBONATE	1	Kilograms(KG)	11/07/22
1744974	602-94-8	PENTAFLUOROBENZOIC ACID	25	Gram(GM)	11/07/22
1744975	621-23-8	1 3 5-TRIMETHOXYBENZENE	50	Gram(GM)	11/07/22
1744976	10025-69-1	TIN(II) CHLORIDE DIHYDRATE	100	Gram(GM)	11/07/22
1744977	108-86-1	Bromobenzene 99.5%	100	Milliliter(ML)	11/07/22
1745287	-	BUFFER SOLUTION PH 10.00	500	Milliliter(ML)	11/07/22
1744350	10043-35-3	BORIC ACID	1	Kilograms(KG)	11/07/22
1744971	106-38-7	4-BROMOTOLUENE	100	Gram(GM)	11/07/22
1743375	-	BUFFER SOLUTION PH 4.00	500	Milliliter(ML)	11/07/22
1744308	-	CLEANING DUSTER	10	Ounces(OZ)	11/07/22
1691798	-	OXYGEN & NITROGEN	103	Cubic Feet(CF)	11/07/22
1691801	-	OXYGEN & NITROGEN	103	Cubic Feet(CF)	11/07/22
1691800	-	OXYGEN & NITROGEN	103	Cubic Feet(CF)	11/07/22
1691799	-	OXYGEN & NITROGEN	103	Cubic Feet(CF)	11/07/22
1691802	-	CARBON MONOXIDE IN AIR	103	Cubic Feet(CF)	11/07/22
1691803	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	11/07/22
1691816	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	11/07/22
1691808	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	11/07/22
1691810	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	11/07/22
1691812	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	11/07/22
1691807	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	11/07/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1691813	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	11/07/22
1691806	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	11/07/22
1691815	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	11/07/22
1691809	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	11/07/22
1691817	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	11/07/22
1691814	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	11/07/22
1691804	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	11/07/22
1691811	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	11/07/22
1691805	-	Pentafluoroethane/Difluoromethane	25	Pounds(LB)	11/07/22
1716307	-	X60-A	400	Gram(GM)	11/07/22
1716298	-	X60-B	200	Milliliter(ML)	11/07/22
1716299	-	X60-B	200	Milliliter(ML)	11/07/22
1630686	-	QD-64 Fresh Scent	1	Gallon(GAL)	11/07/22
1630688	-	QD-64 Fresh Scent	1	Gallon(GAL)	11/07/22
1630690	-	QD-64 Fresh Scent	1	Gallon(GAL)	11/07/22
1630691	-	QD-64 Fresh Scent	1	Gallon(GAL)	11/07/22
1630692	-	QD-64 Fresh Scent	1	Gallon(GAL)	11/07/22
1630693	-	QD-64 Fresh Scent	1	Gallon(GAL)	11/07/22
1630687	-	QD-64 Fresh Scent	1	Gallon(GAL)	11/07/22
1630689	-	QD-64 Fresh Scent	1	Gallon(GAL)	11/07/22
1732003	-	Valvoline HIGH PERFORMANCE SAE 75W-90 GEAR OIL	1	Quarts(QT)	11/07/22
1732004	-	Valvoline HIGH PERFORMANCE SAE 75W-90 GEAR OIL	1	Quarts(QT)	11/07/22
1732005	-	DRY GRAPHITE LUBRICANT	0.21	Ounces(OZ)	11/07/22
1732006	-	DRY GRAPHITE LUBRICANT	0.21	Ounces(OZ)	11/07/22
1732007	-	NAPA Prem Perf Non-Detergent Sae 30 Motor Oil	1	Quarts(QT)	11/07/22
1732008	-	NAPA Prem Perf Non-Detergent Sae 30 Motor Oil	1	Quarts(QT)	11/07/22
1732009	-	NAPA Prem Perf Non-Detergent Sae 30 Motor Oil	1	Quarts(QT)	11/07/22
1732010	-	NAPA Prem Perf Non-Detergent Sae 30 Motor Oil	1	Quarts(QT)	11/07/22
1732011	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732026	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732031	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732038	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732037	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1732036	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732035	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732034	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732033	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732032	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732019	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732012	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732013	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732014	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732015	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732016	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732028	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732018	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732030	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732020	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732021	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732022	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732017	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732029	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732027	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732025	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732024	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1732023	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732544	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732540	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732557	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732558	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732539	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732545	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732543	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732550	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732549	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732551	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732541	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732556	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732548	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732546	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732547	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732554	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732553	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732552	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732555	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
1732542	-	Parts Plus DEX/MERC AUTOMATIC TRANSMISSION FLUID	1	Quarts(QT)	11/07/22
V00000CEA3	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CEA5	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CEA4	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CEA2	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CEA1	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CEA6	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CEA7	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CEA8	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CEA9	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CEAA	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CEAB	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CEAC	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CEAD	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CEAF	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE96	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CEB1	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CEB0	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CEAE	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE7C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE83	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE75	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE76	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE77	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE78	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE79	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE73	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE7B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE72	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE7D	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE7E	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE7F	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE80	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE98	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE81	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CEA0	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE7A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE6A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE62	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE63	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE64	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE65	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE66	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE67	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE74	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE69	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE82	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE6B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE6C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CE6D	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE6E	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE6F	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE70	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE71	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE68	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE93	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE86	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE88	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE89	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE8A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE8B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE8C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE8D	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE8E	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE8F	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE90	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE84	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE92	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE85	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE94	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE95	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE97	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE99	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE9A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE9B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE9C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE9D	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE9E	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE9F	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE91	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
V00000CE87	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	11/07/22
1732559	-	Quikrete Portland Cement	70	Pounds(LB)	11/07/22
1732560	-	Quikrete Portland Cement	70	Pounds(LB)	11/07/22
1732561	-	Rust-Oleum Pro Qt 2PK Safety Yellow	12	Ounces(OZ)	11/07/22
1732562	-	Rust-Oleum Pro Qt 2PK Safety Yellow	12	Ounces(OZ)	11/07/22
1732563	-	Rust-Oleum Pro Qt 2PK Safety Yellow	12	Ounces(OZ)	11/07/22
1732564	-	Rust-Oleum Pro Qt 2PK Safety Yellow	12	Ounces(OZ)	11/07/22
1732565	-	Rust-Oleum Pro Qt 2PK Safety Yellow	12	Ounces(OZ)	11/07/22
1732573	-	Rust-Oleum Pro Qt 2PK Safety Yellow	12	Ounces(OZ)	11/07/22
1732566	-	Rust-Oleum Pro Qt 2PK Safety Yellow	12	Ounces(OZ)	11/07/22
1732568	-	Rust-Oleum Pro Qt 2PK Safety Yellow	12	Ounces(OZ)	11/07/22
1732567	-	Rust-Oleum Pro Qt 2PK Safety Yellow	12	Ounces(OZ)	11/07/22
1732584	-	Rust-Oleum Pro Qt 2PK Safety Yellow	12	Ounces(OZ)	11/07/22
1732570	-	Rust-Oleum Pro Qt 2PK Safety Yellow	12	Ounces(OZ)	11/07/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1732572	-	Rust-Oleum Pro Qt 2PK Safety Yellow	12	Ounces(OZ)	11/07/22
1732574	-	Rust-Oleum Pro Qt 2PK Safety Yellow	12	Ounces(OZ)	11/07/22
1732575	-	Rust-Oleum Pro Qt 2PK Safety Yellow	12	Ounces(OZ)	11/07/22
1732576	-	Rust-Oleum Pro Qt 2PK Safety Yellow	12	Ounces(OZ)	11/07/22
1732577	-	Rust-Oleum Pro Qt 2PK Safety Yellow	12	Ounces(OZ)	11/07/22
1732578	-	Rust-Oleum Pro Qt 2PK Safety Yellow	12	Ounces(OZ)	11/07/22
1732579	-	Rust-Oleum Pro Qt 2PK Safety Yellow	12	Ounces(OZ)	11/07/22
1732580	-	Rust-Oleum Pro Qt 2PK Safety Yellow	12	Ounces(OZ)	11/07/22
1732581	-	Rust-Oleum Pro Qt 2PK Safety Yellow	12	Ounces(OZ)	11/07/22
1732582	-	Rust-Oleum Pro Qt 2PK Safety Yellow	12	Ounces(OZ)	11/07/22
1732583	-	Rust-Oleum Pro Qt 2PK Safety Yellow	12	Ounces(OZ)	11/07/22
1732569	-	Rust-Oleum Pro Qt 2PK Safety Yellow	12	Ounces(OZ)	11/07/22
1732571	-	Rust-Oleum Pro Qt 2PK Safety Yellow	12	Ounces(OZ)	11/07/22
V00000CEC2	-	LPS TAPMATIC TRIPLE E CUTTING FLUID	16	Ounces(OZ)	11/07/22
V00000CEBB	-	LPS TAPMATIC TRIPLE E CUTTING FLUID	16	Ounces(OZ)	11/07/22
V00000CEBC	-	LPS TAPMATIC TRIPLE E CUTTING FLUID	16	Ounces(OZ)	11/07/22
V00000CEB3	-	LPS TAPMATIC TRIPLE E CUTTING FLUID	16	Ounces(OZ)	11/07/22
V00000CEBD	-	LPS TAPMATIC TRIPLE E CUTTING FLUID	16	Ounces(OZ)	11/07/22
V00000CEBE	-	LPS TAPMATIC TRIPLE E CUTTING FLUID	16	Ounces(OZ)	11/07/22
V00000CEBF	-	LPS TAPMATIC TRIPLE E CUTTING FLUID	16	Ounces(OZ)	11/07/22
V00000CEBA	-	LPS TAPMATIC TRIPLE E CUTTING FLUID	16	Ounces(OZ)	11/07/22
V00000CEC1	-	LPS TAPMATIC TRIPLE E CUTTING FLUID	16	Ounces(OZ)	11/07/22
V00000CEC5	-	LPS TAPMATIC TRIPLE E CUTTING FLUID	16	Ounces(OZ)	11/07/22
V00000CEC3	-	LPS TAPMATIC TRIPLE E CUTTING FLUID	16	Ounces(OZ)	11/07/22
V00000CEC4	-	LPS TAPMATIC TRIPLE E CUTTING FLUID	16	Ounces(OZ)	11/07/22
V00000CEC6	-	LPS TAPMATIC TRIPLE E CUTTING FLUID	16	Ounces(OZ)	11/07/22
V00000CEC7	-	LPS TAPMATIC TRIPLE E CUTTING FLUID	16	Ounces(OZ)	11/07/22
V00000CEC8	-	LPS TAPMATIC TRIPLE E CUTTING FLUID	16	Ounces(OZ)	11/07/22
V00000CEC9	-	LPS TAPMATIC TRIPLE E CUTTING FLUID	16	Ounces(OZ)	11/07/22
V00000CEC0	-	LPS TAPMATIC TRIPLE E CUTTING FLUID	16	Ounces(OZ)	11/07/22
V00000CEB2	-	LPS TAPMATIC TRIPLE E CUTTING FLUID	16	Ounces(OZ)	11/07/22
V00000CEB8	-	LPS TAPMATIC TRIPLE E CUTTING FLUID	16	Ounces(OZ)	11/07/22
V00000CEB9	-	LPS TAPMATIC TRIPLE E CUTTING FLUID	16	Ounces(OZ)	11/07/22
V00000CEB4	-	LPS TAPMATIC TRIPLE E CUTTING FLUID	16	Ounces(OZ)	11/07/22
V00000CEB5	-	LPS TAPMATIC TRIPLE E CUTTING FLUID	16	Ounces(OZ)	11/07/22
V00000CEB6	-	LPS TAPMATIC TRIPLE E CUTTING FLUID	16	Ounces(OZ)	11/07/22
V00000CEB7	-	LPS TAPMATIC TRIPLE E CUTTING FLUID	16	Ounces(OZ)	11/07/22
1743459	50-81-7	L-ASCORBIC ACID	100	Gram(GM)	11/08/22
1743464	50-81-7	L-ASCORBIC ACID	100	Gram(GM)	11/08/22
1743462	50-81-7	L-ASCORBIC ACID	100	Gram(GM)	11/08/22
1743463	50-81-7	L-ASCORBIC ACID	100	Gram(GM)	11/08/22
1743460	50-81-7	L-ASCORBIC ACID	100	Gram(GM)	11/08/22
1743461	50-81-7	L-ASCORBIC ACID	100	Gram(GM)	11/08/22
1745253	79-06-1	ACRYLAMIDE	100	Gram(GM)	11/08/22
1745247	107-46-0	DOWSIL OS-10 Fluid	500	Milliliter(ML)	11/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1745248	107-46-0	DOWSIL OS-10 Fluid	500	Milliliter(ML)	11/08/22
1745249	107-46-0	DOWSIL OS-10 Fluid	500	Milliliter(ML)	11/08/22
1745250	107-46-0	DOWSIL OS-10 Fluid	500	Milliliter(ML)	11/08/22
1745255	7722-84-1	Hydrogen peroxide solution contains inhibitor 30 wt. % in H2O ACS reagent	500	Milliliter(ML)	11/08/22
1745256	7722-84-1	Hydrogen peroxide solution contains inhibitor 30 wt. % in H2O ACS reagent	500	Milliliter(ML)	11/08/22
1745252	111-30-8	GLUTARALDEHYDE 50% AQUEOUS SOLUTION	500	Gram(GM)	11/08/22
1745244	75-05-8	Acetonitrile ACS 99.5+%	4	Liters(L)	11/08/22
1745246	75-07-0	Acetaldehyde 99.0+%	500	Milliliter(ML)	11/08/22
1745251	67674-67-3	MONOCARBINOL TERMINATED FUNCTIONAL POLYDIMETHYLSILOXANE	100	Gram(GM)	11/08/22
1745254	64-18-6	Formic acid 97% ACS reagent	500	Gram(GM)	11/08/22
1745257	7697-37-2	11 Boron in 5% (v/v) HNO3	100	Milliliter(ML)	11/08/22
1745258	7697-37-2	10 Boron in 5% (v/v) HNO3	100	Milliliter(ML)	11/08/22
1745431	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745452	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745453	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745454	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745451	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745447	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745450	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745449	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745448	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745455	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745437	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745461	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745462	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745463	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745464	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1745465	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745438	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745456	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745439	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745460	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745459	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745441	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745457	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745446	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745432	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745433	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745434	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745435	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745436	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745440	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745442	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745443	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745444	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745445	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745458	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745503	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745480	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1745495	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745494	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745493	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745492	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745501	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745490	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745488	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745487	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745486	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745485	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745484	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745483	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745466	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745481	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745498	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745479	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745478	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745477	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745476	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745475	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745474	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745473	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1745472	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745471	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745470	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745469	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745468	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745467	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745482	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745513	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745528	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745527	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745526	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745525	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745524	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745523	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745522	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745521	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745520	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745519	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745518	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745517	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745516	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745496	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1745507	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745489	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745499	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745500	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745502	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745504	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745515	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745506	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745514	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745508	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745509	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745510	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745511	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745512	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745497	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745505	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745491	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745530	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745529	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745531	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745532	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745533	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1745534	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745536	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745537	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745538	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745539	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745535	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745541	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745542	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745550	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745549	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745548	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745547	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745543	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745545	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745544	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745540	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1745546	-	Sprayon MR 312 - Dry Zinc Stearate Release Agent	12	Ounces(OZ)	11/08/22
1744245	298-07-7	Bis(2-ethylhexyl) phosphate 97%	500	Gram(GM)	11/08/22
1744249	298-07-7	Bis(2-ethylhexyl) phosphate 97%	500	Gram(GM)	11/08/22
1744248	298-07-7	Bis(2-ethylhexyl) phosphate 97%	500	Gram(GM)	11/08/22
1744247	298-07-7	Bis(2-ethylhexyl) phosphate 97%	500	Gram(GM)	11/08/22
1744246	298-07-7	Bis(2-ethylhexyl) phosphate 97%	500	Gram(GM)	11/08/22
V00000CECA	-	Cote All M.F. (Safety) Red	128	Ounces(OZ)	11/08/22
V00000CECC	-	COTE ALL WHITE BASE	3.7	Liters(L)	11/08/22
V00000CECB	-	COTE ALL WHITE BASE	3.7	Liters(L)	11/08/22
V00000CED0	-	Zinsser BULLS EYE 1-2-3	1	Gallon(GAL)	11/08/22
V00000CECF	-	Zinsser BULLS EYE 1-2-3	1	Gallon(GAL)	11/08/22
V00000CECE	-	Zinsser BULLS EYE 1-2-3	1	Gallon(GAL)	11/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CECD	-	Zinsser BULLS EYE 1-2-3	1	Gallon(GAL)	11/08/22
1732740	-	Amerlock Sealer HRD	1	Gallon(GAL)	11/08/22
1719842	-	AMERCOAT	5	Gallon(GAL)	11/08/22
1744936	9/9/7775	SODIUM CHLORATE	1	Kilograms(KG)	11/09/22
1744941	9/9/7775	SODIUM CHLORATE	1	Kilograms(KG)	11/09/22
1744940	9/9/7775	SODIUM CHLORATE	1	Kilograms(KG)	11/09/22
1744939	9/9/7775	SODIUM CHLORATE	1	Kilograms(KG)	11/09/22
1744937	9/9/7775	SODIUM CHLORATE	1	Kilograms(KG)	11/09/22
1744938	9/9/7775	SODIUM CHLORATE	1	Kilograms(KG)	11/09/22
1745072	-	SYLGARD 184	10	Gram(GM)	11/09/22
1745074	-	SYLGARD 184	10	Gram(GM)	11/09/22
1745076	-	SYLGARD 184	10	Gram(GM)	11/09/22
1745075	-	SYLGARD 184	10	Gram(GM)	11/09/22
1745073	-	SYLGARD 184	10	Gram(GM)	11/09/22
1745084	-	SYLGARD 184	10	Gram(GM)	11/09/22
1745087	-	SYLGARD 184	10	Gram(GM)	11/09/22
1745088	-	SYLGARD 184	10	Gram(GM)	11/09/22
1745086	-	SYLGARD 184	10	Gram(GM)	11/09/22
1745085	-	SYLGARD 184	10	Gram(GM)	11/09/22
1745091	666-52-4	ACETONE D6	10	Gram(GM)	11/09/22
1745095	666-52-4	ACETONE D6	10	Gram(GM)	11/09/22
1745093	666-52-4	ACETONE D6	10	Gram(GM)	11/09/22
1745094	666-52-4	ACETONE D6	10	Gram(GM)	11/09/22
1745092	666-52-4	ACETONE D6	10	Gram(GM)	11/09/22
1744982	75-07-0	Acetaldehyde 99.5%	100	Milliliter(ML)	11/09/22
1744983	1407-55-3	POTASSIUM TETRAFLUOROBORATE	500	Gram(GM)	11/09/22
1744984	17084-13-8	POTASSIUM HEXAFLUOROPHOSPHATE	500	Gram(GM)	11/09/22
1744985	1934-75-4	SODIUM DICYANAMIDE	500	Gram(GM)	11/09/22
1387750	-	Husqvarna Bar and Chain Oil	1	Quarts(QT)	11/09/22
1387741	-	Husqvarna Bar and Chain Oil	1	Quarts(QT)	11/09/22
1745365	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	11/09/22
1691830	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/09/22
1691834	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/09/22
1691833	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/09/22
1691832	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/09/22
1691831	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/09/22
1691836	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/09/22
1691837	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/09/22
1691838	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/09/22
1691839	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/09/22
1691844	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/09/22
1691835	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/09/22
1691845	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/09/22
1691843	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/09/22
1691842	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1691841	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/09/22
1691840	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/09/22
1691870	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/09/22
1691871	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/09/22
1691872	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/09/22
1691951	7727-37-9	NITROGEN GAS	300	Cubic Feet(CF)	11/09/22
1691950	7727-37-9	NITROGEN GAS	300	Cubic Feet(CF)	11/09/22
1691949	7727-37-9	NITROGEN GAS	300	Cubic Feet(CF)	11/09/22
1691948	7727-37-9	NITROGEN GAS	300	Cubic Feet(CF)	11/09/22
1691947	7727-37-9	NITROGEN GAS	300	Cubic Feet(CF)	11/09/22
1691952	7727-37-9	NITROGEN GAS	300	Cubic Feet(CF)	11/09/22
1691846	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/09/22
1691847	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/09/22
1691848	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/09/22
1691849	-	Compressed Air	20	Cubic Feet(CF)	11/09/22
1691854	-	Compressed Air	220	Cubic Feet(CF)	11/09/22
1691856	-	Compressed Air	220	Cubic Feet(CF)	11/09/22
1691857	-	Compressed Air	220	Cubic Feet(CF)	11/09/22
1691850	-	Compressed Air	220	Cubic Feet(CF)	11/09/22
1691851	-	Compressed Air	220	Cubic Feet(CF)	11/09/22
1691852	-	Compressed Air	220	Cubic Feet(CF)	11/09/22
1691855	-	Compressed Air	220	Cubic Feet(CF)	11/09/22
1691853	-	Compressed Air	220	Cubic Feet(CF)	11/09/22
1691972	-	Compressed Air	20	Cubic Feet(CF)	11/09/22
1691971	-	Compressed Air	20	Cubic Feet(CF)	11/09/22
1691970	-	Compressed Air	20	Cubic Feet(CF)	11/09/22
1691858	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/09/22
1691863	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/09/22
1691864	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/09/22
1691865	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/09/22
1691866	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/09/22
1691867	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/09/22
1691868	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/09/22
1691859	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/09/22
1691862	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/09/22
1691860	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/09/22
1691869	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/09/22
1691861	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/09/22
1691873	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691881	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691879	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691878	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691877	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691874	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691875	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1691882	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691883	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691884	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691880	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691885	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691886	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691887	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691876	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691906	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691922	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691921	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691920	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691909	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691912	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691911	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691910	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691931	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691923	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691908	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691904	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691905	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691919	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691903	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691913	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691914	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691915	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691916	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691917	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691918	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691907	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691935	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691946	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691945	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691944	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691943	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691942	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691941	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691940	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691939	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691938	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691929	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691936	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691924	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691934	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691933	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1691932	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691930	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691928	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691927	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691926	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691925	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691937	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/09/22
1691888	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/09/22
1691902	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/09/22
1691898	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/09/22
1691900	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/09/22
1691889	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/09/22
1691899	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/09/22
1691897	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/09/22
1691896	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/09/22
1691895	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/09/22
1691894	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/09/22
1691893	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/09/22
1691892	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/09/22
1691891	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/09/22
1691890	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/09/22
1691901	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/09/22
1691953	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/09/22
1691954	74-98-6	PROPANE	11	Gallon(GAL)	11/09/22
1691963	74-98-6	PROPANE	11	Gallon(GAL)	11/09/22
1691962	74-98-6	PROPANE	11	Gallon(GAL)	11/09/22
1691968	74-98-6	PROPANE	11	Gallon(GAL)	11/09/22
1691967	74-98-6	PROPANE	11	Gallon(GAL)	11/09/22
1691966	74-98-6	PROPANE	11	Gallon(GAL)	11/09/22
1691964	74-98-6	PROPANE	11	Gallon(GAL)	11/09/22
1691960	74-98-6	PROPANE	11	Gallon(GAL)	11/09/22
1691959	74-98-6	PROPANE	11	Gallon(GAL)	11/09/22
1691958	74-98-6	PROPANE	11	Gallon(GAL)	11/09/22
1691957	74-98-6	PROPANE	11	Gallon(GAL)	11/09/22
1691955	74-98-6	PROPANE	11	Gallon(GAL)	11/09/22
1691956	74-98-6	PROPANE	11	Gallon(GAL)	11/09/22
1691961	74-98-6	PROPANE	11	Gallon(GAL)	11/09/22
1691965	74-98-6	PROPANE	11	Gallon(GAL)	11/09/22
1691969	74-98-6	PROPANE	25	Gallon(GAL)	11/09/22
1691973	-	hydrogen fluoride	40	Cubic Feet(CF)	11/09/22
1745067	75-12-7	FORMAMIDE	5	Gram(GM)	11/09/22
1745069	75-12-7	FORMAMIDE	1	Gram(GM)	11/09/22
1745070	75-12-7	FORMAMIDE	1	Gram(GM)	11/09/22
1691974	-	hydrogen fluoride	40	Cubic Feet(CF)	11/09/22
1744897	-	MICROTOX ACUTE REAGENT	10	Gram(GM)	11/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1744898	-	MICROTOX ACUTE REAGENT	10	Gram(GM)	11/09/22
1719901	-	POLYWATER	1	Quarts(QT)	11/09/22
1719904	-	POLYWATER	1	Quarts(QT)	11/09/22
1719902	-	POLYWATER	1	Quarts(QT)	11/09/22
1719903	-	POLYWATER	1	Quarts(QT)	11/09/22
1719905	-	POLYWATER	1	Quarts(QT)	11/09/22
1719906	-	POLYWATER	1	Quarts(QT)	11/09/22
1688278	7440-59-7	HELIUM GAS	244	Cubic Feet(CF)	11/10/22
1688279	7440-59-7	HELIUM GAS	244	Cubic Feet(CF)	11/10/22
1688281	7727-37-9	NITROGEN GAS	255	Cubic Feet(CF)	11/10/22
1744909	68-12-2	N N-Dimethylformamide anhydrous 99.8%	100	Milliliter(ML)	11/10/22
1744912	68-12-2	N N-Dimethylformamide anhydrous 99.8%	100	Milliliter(ML)	11/10/22
1744911	68-12-2	N N-Dimethylformamide anhydrous 99.8%	100	Milliliter(ML)	11/10/22
1744910	68-12-2	N N-Dimethylformamide anhydrous 99.8%	100	Milliliter(ML)	11/10/22
1744913	141-78-6	Ethyl acetate anhydrous 99.8%	1	Liters(L)	11/10/22
1744914	141-78-6	Ethyl acetate anhydrous 99.8%	1	Liters(L)	11/10/22
1745311	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	11/10/22
1745313	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	11/10/22
1745312	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	11/10/22
1745314	67-64-1	Acetone (Certified ACS)	4	Liters(L)	11/10/22
1745315	67-64-1	Acetone (Certified ACS)	4	Liters(L)	11/10/22
1745310	7601-90-3	PERCHLORIC ACID OPTIMA	1	Liters(L)	11/10/22
1745377	50-00-0	Formaldehyde solution for molecular biology 36.5-38% in H2O	25	Milliliter(ML)	11/10/22
1745378	50-00-0	Formaldehyde solution for molecular biology 36.5-38% in H2O	25	Milliliter(ML)	11/10/22
1745380	524-38-9	N-HYDROXYPHTHALIMIDE	5	Gram(GM)	11/10/22
1745381	110-88-3	1 3 5-Trioxane	500	Gram(GM)	11/10/22
1745382	7631-86-9	Silica Gel	2.5	Kilograms(KG)	11/10/22
1744260	108-95-2	PHENOL	100	Gram(GM)	11/10/22
1744261	56-81-5	glycerol for molecular biology 99%	4	Liters(L)	11/10/22
1744262	7447-41-8	LITHIUM CHLORIDE	500	Gram(GM)	11/10/22
1745386	63231-67-4	Silica Gel Desiccant (6-12 Mesh Certified ACS)	5	Kilograms(KG)	11/10/22
1745387	63231-67-4	Silica Gel Desiccant (6-12 Mesh Certified ACS)	5	Kilograms(KG)	11/10/22
1745388	127-19-5	N N-Dimethylacetamide 99%	500	Milliliter(ML)	11/10/22
1745389	64-17-5	Ethyl alcohol Pure 200 proof ACS reagent 99.5%	4	Liters(L)	11/10/22
1745390	64-17-5	Ethyl alcohol Pure 200 proof ACS reagent 99.5%	4	Liters(L)	11/10/22
1745391	67-64-1	Acetone HPLC Plus	4	Liters(L)	11/10/22
1745392	67-64-1	Acetone HPLC Plus	4	Liters(L)	11/10/22
1745393	109-99-9	Tetrahydrofuran anhydrous 99.8+% stab. with 0.025% BHT	1	Liters(L)	11/10/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1745394	109-99-9	Tetrahydrofuran anhydrous 99.8+% stab. with 0.025% BHT	1	Liters(L)	11/10/22
1745395	141-78-6	Ethyl acetate ACS 99.5	4	Liters(L)	11/10/22
1745396	141-78-6	Ethyl acetate ACS 99.5	4	Liters(L)	11/10/22
1745397	18497-13-7	REAGENT A.C.S. CHLOROPLATINIC ACID HEXAHYDRATE	5	Gram(GM)	11/10/22
1745574	1122-58-3	4-(DIMETHYLAMINO)PYRIDINE	5	Gram(GM)	11/10/22
1745316	7647-01-0	Hydrochloric acid ACS Reagent 37%	500	Milliliter(ML)	11/10/22
1744259	13477-89-9	NEODYMIUM(III) CHLORIDE HEXAHYDRATE (99.9% Nd) (REO)	25	Gram(GM)	11/10/22
1745379	149-73-5	Trimethyl orthoformate anhydrous 99.8%	2	Liters(L)	11/10/22
1745383	3958-60-9	2-Nitrobenzyl bromide	25	Gram(GM)	11/10/22
1745384	3958-60-9	2-Nitrobenzyl bromide	25	Gram(GM)	11/10/22
1745385	-	Tenax PC-ABS 3D printing filament	500	Gram(GM)	11/10/22
1719907	-	POLYWATER	250	Milliliter(ML)	11/14/22
1719909	-	POLYWATER	250	Milliliter(ML)	11/14/22
1719910	-	POLYWATER	250	Milliliter(ML)	11/14/22
1719911	-	POLYWATER	250	Milliliter(ML)	11/14/22
1719908	-	POLYWATER	250	Milliliter(ML)	11/14/22
1744986	36603-80-2	Sodium tricyanomethanide 98%	500	Gram(GM)	11/14/22
1744987	29420-49-3	Potassium perfluorobutane sulfonate	100	Gram(GM)	11/14/22
1744989	145022-44-2	1-ETHYL-3-METHYLIMIDAZOLIUM	500	Gram(GM)	11/14/22
1744990	145022-44-2	1-ETHYL-3-METHYLIMIDAZOLIUM	250	Gram(GM)	11/14/22
1744991	-	Tributylmethylphosphonium bis(trifluoromethylsulfonyl)imide	250	Gram(GM)	11/14/22
1744992	174899-83-3	1-Butyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide	250	Gram(GM)	11/14/22
1744993	382150-50-7	1-Hexyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide	250	Gram(GM)	11/14/22
1744995	331717-63-6	1-Ethyl-3-methylimidazolium thiocyanate	250	Gram(GM)	11/14/22
1744998	344790-87-0	1-Butyl-3-methylimidazolium thiocyanate	250	Gram(GM)	11/14/22
1745307	-	Mineral Gear Oil	55	Gallon(GAL)	11/14/22
1745308	-	Mineral Gear Oil	55	Gallon(GAL)	11/14/22
1745364	71-36-3	1-Butanol 99%	1000	Milliliter(ML)	11/14/22
1744994	-	Betaine bis(trifluoromethylsulfonyl)imide	1000	Gram(GM)	11/14/22
1744996	258273-75-5	Butyltrimethylammonium bis(trifluoromethylsulfonyl)imide	500	Gram(GM)	11/14/22
1744997	375395-33-8	Methyltrioctylammonium bis(trifluoromethylsulfonyl)imide	500	Gram(GM)	11/14/22
1715903	67-64-1	ACETONE	4	Liters(L)	11/14/22
1744934	78560-45-9	1H 1H 2H 2H-Perfluorooctyltrichlorosilane 97%	10	Gram(GM)	11/14/22
1744935	-	EfferSan Effervescent Tablets	4	Gram(GM)	11/14/22
1745068	332360-05-1	Glyoxal sodium bisulfite addition compound hydrate	250	Gram(GM)	11/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1745080	100125-12-0	3 8-Dibromo-1 10-phenanthroline	5	Gram(GM)	11/14/22
1745318	-	Intellipack SmartFoam A	55	Gallon(GAL)	11/15/22
1745319	-	Intellipack SmartFoam A	55	Gallon(GAL)	11/15/22
1745320	-	Intellipack SmartFoam B	55	Gallon(GAL)	11/15/22
1745321	-	Intellipack SmartFoam B	55	Gallon(GAL)	11/15/22
1744272	68989-21-9	MOLECULAR SIEVES 3A	5	Kilograms(KG)	11/15/22
1744273	64-17-5	ETHYL ALCOHOL-200 PROOF	4	Liters(L)	11/15/22
1744276	64-17-5	ETHYL ALCOHOL-200 PROOF	4	Liters(L)	11/15/22
1744275	64-17-5	ETHYL ALCOHOL-200 PROOF	4	Liters(L)	11/15/22
1744274	64-17-5	ETHYL ALCOHOL-200 PROOF	4	Liters(L)	11/15/22
1744277	109-66-0	Pentane reagent grade 98%	4	Liters(L)	11/15/22
1744278	7647-17-8	CESIUM CHLORIDE	100	Gram(GM)	11/15/22
1691975	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1691982	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1691977	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1691978	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1691979	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1691976	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1691981	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1691989	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1691983	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1691984	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1691985	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1691986	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1691987	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1691988	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1691980	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1692055	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1692054	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1692050	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1692051	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1692052	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1692048	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1692053	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1692047	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1692049	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1692056	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1692057	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1692058	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1692065	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1692064	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1692063	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1692062	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1692067	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1692068	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1692069	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1692066	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1692072	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1692073	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1692074	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1692075	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1692076	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1692071	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1692070	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/15/22
1692005	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/15/22
1692006	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/15/22
1692008	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/15/22
1692009	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/15/22
1692010	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/15/22
1692011	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/15/22
1692012	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/15/22
1692014	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/15/22
1692015	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/15/22
1692007	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/15/22
1692013	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/15/22
1691990	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/15/22
1692001	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/15/22
1692004	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/15/22
1692002	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/15/22
1692000	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/15/22
1691999	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/15/22
1691998	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/15/22
1691997	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/15/22
1691996	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/15/22
1691995	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/15/22
1691994	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/15/22
1691993	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/15/22
1691992	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/15/22
1691991	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/15/22
1692003	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/15/22
1642052	-	Mobil Vacuoline 1409	5	Gallon(GAL)	11/16/22
1642053	-	Mobil Vacuoline 1409	5	Gallon(GAL)	11/16/22
1642932	-	CP 618 Firestop Putty Stick	1	Pounds(LB)	11/16/22
1642937	-	CP 618 Firestop Putty Stick	1	Pounds(LB)	11/16/22
1642951	-	CP 618 Firestop Putty Stick	1	Pounds(LB)	11/16/22
1642952	-	CP 618 Firestop Putty Stick	1	Pounds(LB)	11/16/22
1642953	-	CP 618 Firestop Putty Stick	1	Pounds(LB)	11/16/22
1642954	-	CP 618 Firestop Putty Stick	1	Pounds(LB)	11/16/22
1642955	-	CP 618 Firestop Putty Stick	1	Pounds(LB)	11/16/22
1642950	-	CP 618 Firestop Putty Stick	1	Pounds(LB)	11/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1642934	-	CP 618 Firestop Putty Stick	1	Pounds(LB)	11/16/22
1642935	-	CP 618 Firestop Putty Stick	1	Pounds(LB)	11/16/22
1642933	-	CP 618 Firestop Putty Stick	1	Pounds(LB)	11/16/22
1642936	-	CP 618 Firestop Putty Stick	1	Pounds(LB)	11/16/22
1642949	-	CP 618 Firestop Putty Stick	1	Pounds(LB)	11/16/22
1642938	-	CP 618 Firestop Putty Stick	1	Pounds(LB)	11/16/22
1642939	-	CP 618 Firestop Putty Stick	1	Pounds(LB)	11/16/22
1642940	-	CP 618 Firestop Putty Stick	1	Pounds(LB)	11/16/22
1642941	-	CP 618 Firestop Putty Stick	1	Pounds(LB)	11/16/22
1642942	-	CP 618 Firestop Putty Stick	1	Pounds(LB)	11/16/22
1642943	-	CP 618 Firestop Putty Stick	1	Pounds(LB)	11/16/22
1642944	-	CP 618 Firestop Putty Stick	1	Pounds(LB)	11/16/22
1642945	-	CP 618 Firestop Putty Stick	1	Pounds(LB)	11/16/22
1642946	-	CP 618 Firestop Putty Stick	1	Pounds(LB)	11/16/22
1642947	-	CP 618 Firestop Putty Stick	1	Pounds(LB)	11/16/22
1642948	-	CP 618 Firestop Putty Stick	1	Pounds(LB)	11/16/22
1642917	-	CP 637 Firestop Mortar	30	Pounds(LB)	11/16/22
1642956	-	LPS PRESOLVE CLEANER/DEGREASER	20	Ounces(OZ)	11/16/22
1642968	-	LPS PRESOLVE CLEANER/DEGREASER	20	Ounces(OZ)	11/16/22
1642971	-	LPS PRESOLVE CLEANER/DEGREASER	20	Ounces(OZ)	11/16/22
1642961	-	LPS PRESOLVE CLEANER/DEGREASER	20	Ounces(OZ)	11/16/22
1642962	-	LPS PRESOLVE CLEANER/DEGREASER	20	Ounces(OZ)	11/16/22
1642963	-	LPS PRESOLVE CLEANER/DEGREASER	20	Ounces(OZ)	11/16/22
1642964	-	LPS PRESOLVE CLEANER/DEGREASER	20	Ounces(OZ)	11/16/22
1642965	-	LPS PRESOLVE CLEANER/DEGREASER	20	Ounces(OZ)	11/16/22
1642966	-	LPS PRESOLVE CLEANER/DEGREASER	20	Ounces(OZ)	11/16/22
1642967	-	LPS PRESOLVE CLEANER/DEGREASER	20	Ounces(OZ)	11/16/22
1642970	-	LPS PRESOLVE CLEANER/DEGREASER	20	Ounces(OZ)	11/16/22
1642969	-	LPS PRESOLVE CLEANER/DEGREASER	20	Ounces(OZ)	11/16/22
1642979	-	LPS PRESOLVE CLEANER/DEGREASER	20	Ounces(OZ)	11/16/22
1642972	-	LPS PRESOLVE CLEANER/DEGREASER	20	Ounces(OZ)	11/16/22
1642973	-	LPS PRESOLVE CLEANER/DEGREASER	20	Ounces(OZ)	11/16/22
1642974	-	LPS PRESOLVE CLEANER/DEGREASER	20	Ounces(OZ)	11/16/22
1642975	-	LPS PRESOLVE CLEANER/DEGREASER	20	Ounces(OZ)	11/16/22
1642976	-	LPS PRESOLVE CLEANER/DEGREASER	20	Ounces(OZ)	11/16/22
1642977	-	LPS PRESOLVE CLEANER/DEGREASER	20	Ounces(OZ)	11/16/22
1642978	-	LPS PRESOLVE CLEANER/DEGREASER	20	Ounces(OZ)	11/16/22
1642958	-	LPS PRESOLVE CLEANER/DEGREASER	20	Ounces(OZ)	11/16/22
1642959	-	LPS PRESOLVE CLEANER/DEGREASER	20	Ounces(OZ)	11/16/22
1642957	-	LPS PRESOLVE CLEANER/DEGREASER	20	Ounces(OZ)	11/16/22
1642960	-	LPS PRESOLVE CLEANER/DEGREASER	20	Ounces(OZ)	11/16/22
1459835	-	EPOXY RESIN	1	Pint(PT)	11/16/22
1459837	-	EPOXY RESIN	1	Pint(PT)	11/16/22
1459836	-	EPOXY RESIN	1	Pint(PT)	11/16/22
1459838	-	CURING AGENT	1	Pint(PT)	11/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1459839	-	CURING AGENT	1	Pint(PT)	11/16/22
1459840	-	CURING AGENT	1	Pint(PT)	11/16/22
1692016	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/16/22
1692020	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/16/22
1692021	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/16/22
1692022	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/16/22
1692023	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/16/22
1692024	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/16/22
1692025	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/16/22
1692026	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/16/22
1692017	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/16/22
1692019	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/16/22
1692018	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/16/22
1692061	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/16/22
1692060	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/16/22
1692059	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/16/22
1692028	-	ARGON 10% BAL. HELIUM	40	Cubic Feet(CF)	11/16/22
1692029	-	AIR COMPRESSED	220	Cubic Feet(CF)	11/16/22
1692031	-	AIR COMPRESSED	220	Cubic Feet(CF)	11/16/22
1692030	-	AIR COMPRESSED	220	Cubic Feet(CF)	11/16/22
1692086	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/16/22
1692091	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/16/22
1692080	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/16/22
1692081	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/16/22
1692082	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/16/22
1692088	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/16/22
1692083	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/16/22
1692084	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/16/22
1692085	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/16/22
1692078	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/16/22
1692087	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/16/22
1692077	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/16/22
1692089	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/16/22
1692090	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/16/22
1692079	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/16/22
1692045	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/16/22
1692037	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/16/22
1692044	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/16/22
1692043	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/16/22
1692042	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/16/22
1692041	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/16/22
1692040	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/16/22
1692039	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/16/22
1692038	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/16/22
1692036	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1692034	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/16/22
1692033	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/16/22
1692032	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/16/22
1692046	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/16/22
1692035	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/16/22
1692092	74-98-6	PROPANE	11	Gallon(GAL)	11/16/22
1692093	74-98-6	PROPANE	11	Gallon(GAL)	11/16/22
1692094	74-98-6	PROPANE	11	Gallon(GAL)	11/16/22
1692095	74-98-6	PROPANE	11	Gallon(GAL)	11/16/22
1692096	74-98-6	PROPANE	11	Gallon(GAL)	11/16/22
1692097	74-98-6	PROPANE	11	Gallon(GAL)	11/16/22
1692098	-	25ppm Hydrogen Chloride/Balance Nitrogen	2.05	Cubic Feet(CF)	11/16/22
1692102	-	25ppm Hydrogen Chloride/Balance Nitrogen	2.05	Cubic Feet(CF)	11/16/22
1692105	-	25ppm Hydrogen Chloride/Balance Nitrogen	2.05	Cubic Feet(CF)	11/16/22
1692103	-	25ppm Hydrogen Chloride/Balance Nitrogen	2.05	Cubic Feet(CF)	11/16/22
1692101	-	25ppm Hydrogen Chloride/Balance Nitrogen	2.05	Cubic Feet(CF)	11/16/22
1692100	-	25ppm Hydrogen Chloride/Balance Nitrogen	2.05	Cubic Feet(CF)	11/16/22
1692099	-	25ppm Hydrogen Chloride/Balance Nitrogen	2.05	Cubic Feet(CF)	11/16/22
1692104	-	25ppm Hydrogen Chloride/Balance Nitrogen	2.05	Cubic Feet(CF)	11/16/22
1745427	3886-69-9	(R)-(+)-a-Methylbenzylamine	100	Milliliter(ML)	11/16/22
1745428	55788-44-8	3-bromopropanesulfonic acid sodium salt	10	Gram(GM)	11/17/22
1745429	-	RBS-35 CONCENTRATE	5	Kilograms(KG)	11/17/22
1745430	1074-36-8	4-MERCAPTOBENZOIC ACID	1	Gram(GM)	11/17/22
1745577	Multi	FAST DNA SPIN KIT FOR SOIL	25	Gram(GM)	11/17/22
1745578	-	PLASMID MINI KIT	30	Milliliter(ML)	11/17/22
1745579	865-49-6	CHLOROFORM-D 99.8+ ATOM% D	100	Milliliter(ML)	11/17/22
1745580	865-49-6	CHLOROFORM-D 99.8+ ATOM% D	100	Milliliter(ML)	11/17/22
1745581	631-61-8	AMMONIUM ACETATE	250	Milliliter(ML)	11/17/22
1745582	-	Edwards TW Oil	1	Liters(L)	11/17/22
1720159	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720164	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720161	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720160	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720167	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720163	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720166	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720165	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720168	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720162	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1745647	91-20-3	NAPHTHALENE	50	Gram(GM)	11/17/22
1745648	298-46-4	CARBAMAZEPINE	250	Milliliter(ML)	11/17/22
1745649	7758-99-8	COPPER(II)SULFATE PENTAHYDRATE 99+%	100	Gram(GM)	11/17/22
1745650	124-04-9	ADIPIC ACID	1	Kilograms(KG)	11/17/22
1745651	124-04-9	ADIPIC ACID	1	Kilograms(KG)	11/17/22
1745652	10031-22-8	Lead(II) bromide	100	Gram(GM)	11/17/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1745653	7440-74-6	INDIUM WIRE	91.8	Gram(GM)	11/17/22
1745657	142-68-7	TETRAHYDROPYRAN	500	Milliliter(ML)	11/17/22
1745658	113712-08-6	L-Arginine 7-amido-4-methylcoumarin dihydrochloride	100	Milligram(MG)	11/17/22
1745659	77471-42-2	Glycine 7-amido-4-methylcoumarin	100	Milligram(MG)	11/17/22
1745322	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	11/17/22
1745329	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	11/17/22
1745327	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	11/17/22
1745331	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	11/17/22
1745330	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	11/17/22
1745328	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	11/17/22
1745326	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	11/17/22
1745325	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	11/17/22
1745324	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	11/17/22
1745323	10043-52-4	CALCIUM CHLORIDE ANHYDROUS	1	Kilograms(KG)	11/17/22
1745583	-	Ultragrade 70 pump oil	5	Liters(L)	11/17/22
1745584	-	Copper Reagent Set Porphyrin	10	Milliliter(ML)	11/17/22
1745585	-	COPPER STANDARD SOLUTION	100	Milliliter(ML)	11/17/22
1745586	-	COPPER STANDARD SOLUTION	100	Milliliter(ML)	11/17/22
1745587	-	OMEGABOND 500 POWDER	8	Ounces(OZ)	11/17/22
1745588	-	OMEGABOND 500 LIQUID	8	Ounces(OZ)	11/17/22
1745589	7664-93-9	Sulfuric acid ACS 95.0-98.0%	500	Milliliter(ML)	11/17/22
1745594	7664-93-9	Sulfuric acid ACS 95.0-98.0%	500	Milliliter(ML)	11/17/22
1745593	7664-93-9	Sulfuric acid ACS 95.0-98.0%	500	Milliliter(ML)	11/17/22
1745592	7664-93-9	Sulfuric acid ACS 95.0-98.0%	500	Milliliter(ML)	11/17/22
1745590	7664-93-9	Sulfuric acid ACS 95.0-98.0%	500	Milliliter(ML)	11/17/22
1745591	7664-93-9	Sulfuric acid ACS 95.0-98.0%	500	Milliliter(ML)	11/17/22
1720169	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720224	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720233	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720235	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720230	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720236	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720203	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720202	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720234	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720231	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720229	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720228	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720227	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720201	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720225	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720186	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720226	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720232	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1720219	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720223	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720195	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720196	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720194	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720193	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720192	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720191	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720190	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720189	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720184	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720187	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720200	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720185	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720183	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720180	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720182	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720181	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720204	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720197	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720198	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720199	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720188	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720209	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720173	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720174	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720175	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720176	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720177	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720179	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720172	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720210	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720178	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720208	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720207	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720206	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720205	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720222	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720221	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720211	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720220	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720170	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720212	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720213	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720214	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1720215	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720216	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720217	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720171	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1720218	-	HALTHANE 73-18 2 PART KIT	1	Ounces(OZ)	11/17/22
1539539	-	SCOTCHCAST ELECTRICAL RESIN	1	Gallon(GAL)	11/17/22
1539548	-	SCOTCHCAST ELECTRICAL RESIN	1	Gallon(GAL)	11/17/22
1539545	-	SCOTCHCAST ELECTRICAL RESIN	1	Gallon(GAL)	11/17/22
1539540	-	SCOTCHCAST ELECTRICAL RESIN	1	Gallon(GAL)	11/17/22
1539542	-	SCOTCHCAST ELECTRICAL RESIN	1	Gallon(GAL)	11/17/22
1539549	-	SCOTCHCAST ELECTRICAL RESIN	1	Gallon(GAL)	11/17/22
1539541	-	SCOTCHCAST ELECTRICAL RESIN	1	Gallon(GAL)	11/17/22
1539544	-	SCOTCHCAST ELECTRICAL RESIN	1	Gallon(GAL)	11/17/22
1539546	-	SCOTCHCAST ELECTRICAL RESIN	1	Gallon(GAL)	11/17/22
1539543	-	SCOTCHCAST ELECTRICAL RESIN	1	Gallon(GAL)	11/17/22
1539552	-	SCOTCHCAST ELECTRICAL RESIN	1	Gallon(GAL)	11/17/22
1539551	-	SCOTCHCAST ELECTRICAL RESIN	1	Gallon(GAL)	11/17/22
1539550	-	SCOTCHCAST ELECTRICAL RESIN	1	Gallon(GAL)	11/17/22
1539547	-	SCOTCHCAST ELECTRICAL RESIN	1	Gallon(GAL)	11/17/22
1745563	67-64-1	Acetone (Certified ACS)	1	Liters(L)	11/17/22
1745569	67-64-1	Acetone (Certified ACS)	1	Liters(L)	11/17/22
1745564	67-64-1	Acetone (Certified ACS)	1	Liters(L)	11/17/22
1745565	67-64-1	Acetone (Certified ACS)	1	Liters(L)	11/17/22
1745566	67-64-1	Acetone (Certified ACS)	1	Liters(L)	11/17/22
1745568	67-64-1	Acetone (Certified ACS)	1	Liters(L)	11/17/22
1745570	67-64-1	Acetone (Certified ACS)	1	Liters(L)	11/17/22
1745567	67-64-1	Acetone (Certified ACS)	1	Liters(L)	11/17/22
1745595	14040-11-0	tungsten hexacarbonyl	10	Gram(GM)	11/17/22
1745572	5329-14-6	SULFAMIC ACID	25	Gram(GM)	11/17/22
1745573	5329-14-6	SULFAMIC ACID	25	Gram(GM)	11/17/22
1745599	64-19-7	ACETIC ACID GLACIAL	500	Milliliter(ML)	11/17/22
1745571	67-68-5	DIMETHYL SULFOXIDE	1	Liters(L)	11/17/22
1745656	7440-74-6	INDIUM WIRE	91.8	Gram(GM)	11/17/22
1745654	7440-74-6	INDIUM WIRE	91.8	Gram(GM)	11/17/22
1745655	7440-74-6	INDIUM WIRE	91.8	Gram(GM)	11/17/22
1745063	3375-31-3	PALLADIUM(II) ACETATE	5	Gram(GM)	11/17/22
1745064	3375-31-3	PALLADIUM(II) ACETATE	5	Gram(GM)	11/17/22
1745317	-	Clear Control 1.5%	5	Gallon(GAL)	11/17/22
1745600	16219-75-3	5-Ethylidene-2-norbornene	500	Milliliter(ML)	11/17/22
1745603	16219-75-3	5-Ethylidene-2-norbornene	2	Liters(L)	11/17/22
1745602	16219-75-3	5-Ethylidene-2-norbornene	500	Milliliter(ML)	11/17/22
1745601	16219-75-3	5-Ethylidene-2-norbornene	500	Milliliter(ML)	11/17/22
1745604	1344-28-1	ALUMINA ACTIVATED	500	Gram(GM)	11/17/22
1745660	74-88-4	Iodomethane contains copper as stabilizer 99%	250	Milligram(MG)	11/17/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1745370	51016-92-3	TRIMETHYLAMMONIUM TETRAPHENYLBORATE	1	Gram(GM)	11/17/22
1745373	51016-92-3	TRIMETHYLAMMONIUM TETRAPHENYLBORATE	1	Gram(GM)	11/17/22
1745372	51016-92-3	TRIMETHYLAMMONIUM TETRAPHENYLBORATE	1	Gram(GM)	11/17/22
1745371	51016-92-3	TRIMETHYLAMMONIUM TETRAPHENYLBORATE	1	Gram(GM)	11/17/22
1745374	15522-59-5	TETRABUTYLAMMONIUM TETRAPHENYLBORATE	5	Gram(GM)	11/17/22
1745375	15522-59-5	TETRABUTYLAMMONIUM TETRAPHENYLBORATE	5	Gram(GM)	11/17/22
1745376	15522-59-5	TETRABUTYLAMMONIUM TETRAPHENYLBORATE	5	Gram(GM)	11/17/22
1745554	110-54-3	Hexane anhydrous 95%	1	Liters(L)	11/17/22
1744256	1849-27-0	1 4-BIS(PHENYLETHYNYL)BENZENE	25	Gram(GM)	11/17/22
1744257	1849-27-0	1 4-BIS(PHENYLETHYNYL)BENZENE	25	Gram(GM)	11/17/22
1418906	-	MICROSET 101 FLUID REPLICATING COMPOUNDS	50	Milliliter(ML)	11/17/22
1418905	-	MICROSET 101 FLUID REPLICATING COMPOUNDS	50	Milliliter(ML)	11/17/22
1418907	-	MICROSET 101 FLUID REPLICATING COMPOUNDS	50	Milliliter(ML)	11/17/22
1744258	1344-28-1	ALUMINA BASIC	500	Gram(GM)	11/17/22
1745309	10035-04-8	Calcium chloride dihydrate (Certified ACS)	1	Kilograms(KG)	11/17/22
1744250	106-42-3	P-XYLENE	500	Milliliter(ML)	11/17/22
1744251	106-42-3	P-XYLENE	500	Milliliter(ML)	11/17/22
1744254	106-42-3	P-XYLENE	500	Milliliter(ML)	11/17/22
1744253	106-42-3	P-XYLENE	500	Milliliter(ML)	11/17/22
1744255	106-42-3	P-XYLENE	500	Milliliter(ML)	11/17/22
1744252	106-42-3	P-XYLENE	500	Milliliter(ML)	11/17/22
1745661	4245-76-5	1-Methyl-3-nitroguanidine	25	Gram(GM)	11/17/22
1745662	-	METADI MONOCRYSTALLINE DIAMOND PASTE AND METADI II MONOCRYSTALLINE DIAMOND PASTE	20	Gram(GM)	11/17/22
1745663	-	METADI MONOCRYSTALLINE DIAMOND PASTE AND METADI II MONOCRYSTALLINE DIAMOND PASTE	20	Gram(GM)	11/17/22
1745664	-	METADI MONOCRYSTALLINE DIAMOND PASTE AND METADI II MONOCRYSTALLINE DIAMOND PASTE	20	Gram(GM)	11/17/22
1745665	77-58-7	DIBUTYLTIN DILAURATE	25	Gram(GM)	11/17/22
1745666	77-58-7	DIBUTYLTIN DILAURATE	25	Gram(GM)	11/17/22
1745673	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	11/17/22
1745676	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	11/17/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1745677	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	11/17/22
1745675	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	11/17/22
1745674	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	11/17/22
1745680	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	11/17/22
1745679	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	11/17/22
1745678	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	11/17/22
1745681	7722-84-1	HYDROGEN PEROXIDE 30% SOLUTION WITH WATER	500	Milliliter(ML)	11/17/22
1745682	97-94-9	TRIETHYLBORANE 1.0 M SOLUTION IN HEXANES	100	Milliliter(ML)	11/17/22
1745669	16219-75-3	5-Ethylidene-2-norbornene	500	Milliliter(ML)	11/17/22
1745670	1310-58-3	POTASSIUM HYDROXIDE PELLETS	100	Gram(GM)	11/17/22
1745671	7787-58-8	BISMUTH(III) BROMIDE	25	Gram(GM)	11/17/22
1745672	78-50-2	TRIOCTYLPHOSPHINE OXIDE	100	Gram(GM)	11/17/22
1745596	1332-58-7	Ball Clay	20	Pounds(LB)	11/17/22
1745597	999999-99-4	Old Mine #4 Old Mine 4 OM4	20	Pounds(LB)	11/17/22
1745598	999999-99-4	Ball KT #1-4	20	Pounds(LB)	11/17/22
1745667	129365-93-1	4 5-Diaminophthalonitrile	200	Milligram(MG)	11/17/22
1745668	-	CombiSolvent Keto Aquastar	1	Liters(L)	11/17/22
1758407	-	SYNTHETIC LUBRICANT	15	Liters(L)	11/18/22
1758412	-	SYNTHETIC LUBRICANT	15	Liters(L)	11/18/22
1758413	-	SYNTHETIC LUBRICANT	15	Liters(L)	11/18/22
1758415	-	SYNTHETIC LUBRICANT	15	Liters(L)	11/18/22
1758417	-	SYNTHETIC LUBRICANT	15	Liters(L)	11/18/22
1758414	-	SYNTHETIC LUBRICANT	15	Liters(L)	11/18/22
1758410	-	SYNTHETIC LUBRICANT	15	Liters(L)	11/18/22
1758418	-	SYNTHETIC LUBRICANT	15	Liters(L)	11/18/22
1758416	-	SYNTHETIC LUBRICANT	15	Liters(L)	11/18/22
1758409	-	SYNTHETIC LUBRICANT	15	Liters(L)	11/18/22
1758411	-	SYNTHETIC LUBRICANT	15	Liters(L)	11/18/22
1758408	-	SYNTHETIC LUBRICANT	15	Liters(L)	11/18/22
1758420	-	SYNTHETIC LUBRICANT	15	Liters(L)	11/18/22
1758419	-	SYNTHETIC LUBRICANT	15	Liters(L)	11/18/22
1758421	-	SYNTHETIC LUBRICANT	15	Liters(L)	11/18/22
1745367	2446-83-5	DIISOPROPYL AZODICARBOXYLATE	5	Gram(GM)	11/18/22
1745368	100-58-3	PHENYLMAGNESIUM CHLORIDE 1.0M SOLUTION IN TETRAHYDROFURAN	100	Milliliter(ML)	11/18/22
1745369	302-01-2	Hydrazine anhydrous 98%	50	Gram(GM)	11/18/22
1745366	845835-03-2	1-Butyl-3-methylpyridin-1-ium hexafluorophosphate(V)	25	Gram(GM)	11/18/22
1744263	68-19-9	VITAMIN B12	5	Gram(GM)	11/18/22
1719272	-	EXXON MOBIL DTE HYDRAULIC OIL	5	Gallon(GAL)	11/21/22
1719273	-	MOBIL DTE 24 HYDRAULIC OIL	5	Gallon(GAL)	11/21/22
1719274	-	MOBIL DTE 24 HYDRAULIC OIL	5	Gallon(GAL)	11/21/22
1719275	-	MOBIL DTE 24 HYDRAULIC OIL	5	Gallon(GAL)	11/21/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1719269	-	MOBIL VACTRA 2	5	Gallon(GAL)	11/21/22
1719270	-	MOBIL VACTRA 2	5	Gallon(GAL)	11/21/22
1719271	-	MOBIL VACTRA 2	5	Gallon(GAL)	11/21/22
1719276	-	WD-40	1	Gallon(GAL)	11/21/22
1719277	-	WD-40 LUBRICANT	1	Gallon(GAL)	11/21/22
1719278	-	WD-40 LUBRICANT	1	Gallon(GAL)	11/21/22
1539553	-	THREAD LOCKER	1	Ounces(OZ)	11/21/22
1539555	-	THREAD LOCKER	1	Ounces(OZ)	11/21/22
1539554	-	THREAD LOCKER	1	Ounces(OZ)	11/21/22
1660366	63148-62-9	PURE SILICONE FLUID	5	Gallon(GAL)	11/21/22
1660367	-	PLASTER OF PARIS	25	Pounds(LB)	11/22/22
1660368	5/9/8002	CRUDE OIL	1	Liters(L)	11/22/22
1744265	110-63-4	1 4-BUTANEDIOL	1	Liters(L)	11/22/22
1744266	110-63-4	1 4-BUTANEDIOL	1	Liters(L)	11/22/22
1744267	110-63-4	1 4-BUTANEDIOL	1	Liters(L)	11/22/22
1744264	60-29-7	Diethyl ether contains 1 ppm BHT as inhibitor anhydrous 99.7%	1	Liters(L)	11/22/22
1745398	-	Koolance 702 Liquid Coolant High-Performance UV Blue	700	Milliliter(ML)	11/22/22
1745403	-	Koolance 702 Liquid Coolant High-Performance UV Blue	700	Milliliter(ML)	11/22/22
1745402	-	Koolance 702 Liquid Coolant High-Performance UV Blue	700	Milliliter(ML)	11/22/22
1745401	-	Koolance 702 Liquid Coolant High-Performance UV Blue	700	Milliliter(ML)	11/22/22
1745400	-	Koolance 702 Liquid Coolant High-Performance UV Blue	700	Milliliter(ML)	11/22/22
1745399	-	Koolance 702 Liquid Coolant High-Performance UV Blue	700	Milliliter(ML)	11/22/22
1745404	-	Eichrom TEVA Resin Columns	100	Milliliter(ML)	11/22/22
1745405	-	Eichrom TEVA Resin Columns	100	Milliliter(ML)	11/22/22
1745407	-	Omega Bond 400 Powder	8	Ounces(OZ)	11/22/22
1745414	-	Omega Bond 400 Powder	8	Ounces(OZ)	11/22/22
1745412	-	Omega Bond 400 Powder	8	Ounces(OZ)	11/22/22
1745409	-	Omega Bond 400 Powder	8	Ounces(OZ)	11/22/22
1745410	-	Omega Bond 400 Powder	8	Ounces(OZ)	11/22/22
1745413	-	Omega Bond 400 Powder	8	Ounces(OZ)	11/22/22
1745408	-	Omega Bond 400 Powder	8	Ounces(OZ)	11/22/22
1745411	-	Omega Bond 400 Powder	8	Ounces(OZ)	11/22/22
1744269	1762-95-4	AMMONIUM THIOCYANATE	250	Gram(GM)	11/22/22
1744270	1762-95-4	AMMONIUM THIOCYANATE	250	Gram(GM)	11/22/22
1692224	-	95% NITROGEN/5% HYDROGEN	220	Cubic Feet(CF)	11/22/22
1692232	-	95% NITROGEN/5% HYDROGEN	220	Cubic Feet(CF)	11/22/22
1692225	-	95% NITROGEN/5% HYDROGEN	220	Cubic Feet(CF)	11/22/22
1692233	-	95% NITROGEN/5% HYDROGEN	220	Cubic Feet(CF)	11/22/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1692226	-	95% NITROGEN/5% HYDROGEN	220	Cubic Feet(CF)	11/22/22
1692231	-	95% NITROGEN/5% HYDROGEN	220	Cubic Feet(CF)	11/22/22
1692230	-	95% NITROGEN/5% HYDROGEN	220	Cubic Feet(CF)	11/22/22
1692229	-	95% NITROGEN/5% HYDROGEN	220	Cubic Feet(CF)	11/22/22
1692228	-	95% NITROGEN/5% HYDROGEN	220	Cubic Feet(CF)	11/22/22
1692227	-	95% NITROGEN/5% HYDROGEN	220	Cubic Feet(CF)	11/22/22
1692234	-	95% NITROGEN/5% HYDROGEN	220	Cubic Feet(CF)	11/22/22
1692235	74-98-6	PROPANE	11	Gallon(GAL)	11/22/22
1692236	74-98-6	PROPANE	11	Gallon(GAL)	11/22/22
1692237	74-98-6	PROPANE	11	Gallon(GAL)	11/22/22
1692238	74-98-6	PROPANE	11	Gallon(GAL)	11/22/22
1692239	74-98-6	PROPANE	11	Gallon(GAL)	11/22/22
1692106	-	Air Duster	12	Ounces(OZ)	11/22/22
1692115	-	Air Duster	12	Ounces(OZ)	11/22/22
1692107	-	Air Duster	12	Ounces(OZ)	11/22/22
1692108	-	Air Duster	12	Ounces(OZ)	11/22/22
1692109	-	Air Duster	12	Ounces(OZ)	11/22/22
1692110	-	Air Duster	12	Ounces(OZ)	11/22/22
1692111	-	Air Duster	12	Ounces(OZ)	11/22/22
1692112	-	Air Duster	12	Ounces(OZ)	11/22/22
1692113	-	Air Duster	12	Ounces(OZ)	11/22/22
1692114	-	Air Duster	12	Ounces(OZ)	11/22/22
1692116	-	Air Duster	12	Ounces(OZ)	11/22/22
1692117	-	Air Duster	12	Ounces(OZ)	11/22/22
1692118	7440-59-7	HELIUM REFRIGERATED LIQUID (CRYOGENIC LIQUID)	100	Liters(L)	11/22/22
1692119	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/22/22
1692122	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/22/22
1692121	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/22/22
1692129	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/22/22
1692123	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/22/22
1692124	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/22/22
1692125	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/22/22
1692126	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/22/22
1692130	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/22/22
1692127	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/22/22
1692128	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/22/22
1692133	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/22/22
1692132	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/22/22
1692131	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/22/22
1692120	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	11/22/22
1692134	-	Argon 75% Carbon Dioxide 25%	220	Cubic Feet(CF)	11/22/22
1692136	-	Argon 75% Carbon Dioxide 25%	220	Cubic Feet(CF)	11/22/22
1692135	-	Argon 75% Carbon Dioxide 25%	220	Cubic Feet(CF)	11/22/22
1692137	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/22/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1692138	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/22/22
1692139	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/22/22
1692140	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	11/22/22
1692141	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692150	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692149	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692148	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692147	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692146	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692151	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692144	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692145	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692143	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692142	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692156	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692163	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692152	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692158	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692159	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692160	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692162	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692157	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692155	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692154	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692153	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692161	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692175	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692176	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692177	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692171	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692178	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692174	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692173	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692172	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692168	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692169	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692164	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692165	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692166	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692167	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692170	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	11/22/22
1692179	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/22/22
1692196	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/22/22
1692197	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/22/22
1692192	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/22/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1692180	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/22/22
1692201	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/22/22
1692194	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/22/22
1692203	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/22/22
1692190	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/22/22
1692198	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/22/22
1692199	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/22/22
1692181	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/22/22
1692191	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/22/22
1692200	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/22/22
1692193	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/22/22
1692202	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/22/22
1692207	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/22/22
1692195	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/22/22
1692206	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/22/22
1692205	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/22/22
1692204	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/22/22
1692208	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/22/22
1692189	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/22/22
1692182	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/22/22
1692183	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/22/22
1692184	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/22/22
1692188	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/22/22
1692187	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/22/22
1692186	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/22/22
1692185	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/22/22
1692209	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/22/22
1692223	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/22/22
1692222	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/22/22
1692213	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/22/22
1692211	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/22/22
1692219	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/22/22
1692212	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/22/22
1692218	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/22/22
1692210	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/22/22
1692220	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/22/22
1692214	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/22/22
1692215	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/22/22
1692216	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/22/22
1692217	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/22/22
1692221	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/22/22
1745416	60-29-7	Diethyl ether 99% ACS Reagent anhydrous	1	Liters(L)	11/22/22
1745417	60-29-7	Diethyl ether 99% ACS Reagent anhydrous	1	Liters(L)	11/22/22
1745415	14044-65-6	Borane tetrahydrofuran complex solution 1.0 M in THF	1	Liters(L)	11/22/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1745418	12007-60-2	Lithium Tetraborate 99.9% Trace Metal	1	Kilograms(KG)	11/22/22
1745419	12007-60-2	LITHIUM TETRABORATE	1	Kilograms(KG)	11/22/22
1745420	12007-60-2	Lithium Tetraborate 99.9% Trace Metal	1	Kilograms(KG)	11/22/22
1745421	31011-57-1	Tetrachlorobis(tetrahydrofuran)titanium(IV)	5	Gram(GM)	11/22/22
1745423	78-67-1	2 2-AZOBIS(2-METHYLPROPIONITRILE) 98%	25	Gram(GM)	11/22/22
1745424	67-66-3	CHLOROFORM ANHYDROUS stabilized with 0.5-1% ethanol	2	Liters(L)	11/22/22
1745425	-	CHLORINE STANDARD SOLUTION	2	Milliliter(ML)	11/22/22
1745426	13446-03-2	MANGANESE(II) BROMIDE	25	Gram(GM)	11/22/22
1745406	9002-89-5	Polyvinyl alcohol hydrolyzed	1	Kilograms(KG)	11/22/22
1744268	67-56-1	METHANOL	4	Liters(L)	11/22/22
1744271	7631-86-9	Silica Gel	1	Kilograms(KG)	11/22/22
1745422	1344-28-1	Aluminum oxide super activated basic Grade I	250	Gram(GM)	11/22/22
1745605	-	AG 1-X4 Resin Chloride Form	500	Gram(GM)	11/22/22
1745606	-	AG 1-X4 Resin Chloride Form	500	Gram(GM)	11/22/22
1745615	-	AG 1-X4 Resin Chloride Form	500	Gram(GM)	11/22/22
1745607	-	AG 1-X4 Resin Chloride Form	500	Gram(GM)	11/22/22
1745619	-	AG 1-X4 Resin Chloride Form	500	Gram(GM)	11/22/22
1745609	-	AG 1-X4 Resin Chloride Form	500	Gram(GM)	11/22/22
1745610	-	AG 1-X4 Resin Chloride Form	500	Gram(GM)	11/22/22
1745611	-	AG 1-X4 Resin Chloride Form	500	Gram(GM)	11/22/22
1745612	-	AG 1-X4 Resin Chloride Form	500	Gram(GM)	11/22/22
1745613	-	AG 1-X4 Resin Chloride Form	500	Gram(GM)	11/22/22
1745614	-	AG 1-X4 Resin Chloride Form	500	Gram(GM)	11/22/22
1745608	-	AG 1-X4 Resin Chloride Form	500	Gram(GM)	11/22/22
1745616	-	AG 1-X4 Resin Chloride Form	500	Gram(GM)	11/22/22
1745617	-	AG 1-X4 Resin Chloride Form	500	Gram(GM)	11/22/22
1745618	-	AG 1-X4 Resin Chloride Form	500	Gram(GM)	11/22/22
1745620	-	AG 1-X4 Resin Chloride Form	500	Gram(GM)	11/22/22
1745621	-	AG 1-X4 Resin Chloride Form	500	Gram(GM)	11/22/22
1745622	-	AG 1-X4 Resin Chloride Form	500	Gram(GM)	11/22/22
1757543	-	Rust-Oleum 2X Ultra Cover Primer Spray - White	12	Ounces(OZ)	11/23/22
1692240	-	AIR ZERO	100	Liters(L)	11/23/22
1692241	-	AIR ZERO	100	Liters(L)	11/23/22
1692242	-	Oxygen Nitrogen	100	Liters(L)	11/23/22
1692243	-	Oxygen Nitrogen	100	Liters(L)	11/23/22
1663128	14459-95-1	POTASSIUM FERROCYANIDE(II) TRIHYDRATE	100	Gram(GM)	11/28/22
1717774	-	Super Lube Multi-Purpose Synthetic Grease with Syncolon (PTFE)	3	Ounces(OZ)	11/28/22
1721354	-	KRYTOX 240AC FLUORINATED GREASE	2	Ounces(OZ)	11/28/22
1721355	-	KRYTOX 240AC FLUORINATED GREASE	2	Ounces(OZ)	11/28/22
1721356	-	KRYTOX 240AC FLUORINATED GREASE	2	Ounces(OZ)	11/28/22
1721357	-	KRYTOX 240AC FLUORINATED GREASE	2	Ounces(OZ)	11/28/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1721353	-	KRYTOX 240AC FLUORINATED GREASE	2	Ounces(OZ)	11/28/22
1717773	-	ROSIN FLUX PEN	0.32	Ounces(OZ)	11/28/22
1717772	-	ROSIN FLUX PEN	0.32	Ounces(OZ)	11/28/22
1717771	-	ROSIN FLUX PEN	0.32	Ounces(OZ)	11/28/22
1717770	-	Super Lube Multi-Purpose Synthetic Grease with Syncolon (PTFE)	3	Ounces(OZ)	11/28/22
1759615	-	M-BOND 610 CURE	1	Ounces(OZ)	11/28/22
1759624	-	M-BOND 610 ADHESIVE	1	Ounces(OZ)	11/28/22
1759616	-	M-BOND 610 CURE	1	Ounces(OZ)	11/28/22
1759625	-	M-BOND 610 CURE	1	Ounces(OZ)	11/28/22
1759617	-	M-BOND 610 ADHESIVE	1	Ounces(OZ)	11/28/22
1759626	-	M-BOND 610 ADHESIVE	1	Ounces(OZ)	11/28/22
1759618	-	M-BOND 610 CURE	1	Ounces(OZ)	11/28/22
1759627	-	M-BOND 610 ADHESIVE	1	Ounces(OZ)	11/28/22
1759628	7085-85-0	Ethyl 2-cyanoacrylate	1	Ounces(OZ)	11/28/22
1759629	7085-85-0	Ethyl 2-cyanoacrylate	1	Ounces(OZ)	11/28/22
1759619	-	LOCTITE SUPER GLUE	1	Ounces(OZ)	11/28/22
1759620	-	Loctite Super Glue Control Liquid	1	Ounces(OZ)	11/28/22
1759421	-	Devcon Epoxy Plus 25	50	Milliliter(ML)	11/28/22
1662939	-	100% SILICONE SEALANT	10.3	Ounces(OZ)	11/28/22
1662938	-	100% SILICONE SEALANT	10.3	Ounces(OZ)	11/28/22
1662937	-	100% SILICONE SEALANT	10.3	Ounces(OZ)	11/28/22
1662954	-	734 FLOWABLE SEALANT CLEAR	10.1	Ounces(OZ)	11/28/22
1662956	-	734 FLOWABLE SEALANT CLEAR	10.1	Ounces(OZ)	11/28/22
1662955	-	734 FLOWABLE SEALANT CLEAR	10.1	Ounces(OZ)	11/28/22
1759402	-	734 FLOWABLE SEALANT CLEAR	3	Ounces(OZ)	11/28/22
1759403	-	734 FLOWABLE SEALANT CLEAR	3	Ounces(OZ)	11/28/22
1759405	-	734 FLOWABLE SEALANT CLEAR	3	Ounces(OZ)	11/28/22
1759406	-	734 FLOWABLE SEALANT CLEAR	3	Ounces(OZ)	11/28/22
1759407	-	734 FLOWABLE SEALANT CLEAR	3	Ounces(OZ)	11/28/22
1759408	-	734 FLOWABLE SEALANT CLEAR	3	Ounces(OZ)	11/28/22
1759404	-	734 FLOWABLE SEALANT CLEAR	3	Ounces(OZ)	11/28/22
1759409	-	734 FLOWABLE SEALANT CLEAR	3	Ounces(OZ)	11/28/22
1759413	-	Devcon Epoxy Plus 25	50	Milliliter(ML)	11/28/22
1759418	-	Devcon Epoxy Plus 25	50	Milliliter(ML)	11/28/22
1759417	-	Devcon Epoxy Plus 25	50	Milliliter(ML)	11/28/22
1759416	-	Devcon Epoxy Plus 25	50	Milliliter(ML)	11/28/22
1759415	-	Devcon Epoxy Plus 25	50	Milliliter(ML)	11/28/22
1759419	-	Devcon Epoxy Plus 25	50	Milliliter(ML)	11/28/22
1759412	-	Devcon Epoxy Plus 25	50	Milliliter(ML)	11/28/22
1759420	-	Devcon Epoxy Plus 25	50	Milliliter(ML)	11/28/22
1759414	-	Devcon Epoxy Plus 25	50	Milliliter(ML)	11/28/22
1759411	25068-38-6	DEVCON 5 MINUTE EPOXY AMBER	50	Milliliter(ML)	11/28/22
1759429	-	Devcon Epoxy Plus 25	50	Milliliter(ML)	11/28/22
1759423	-	Devcon Epoxy Plus 25	50	Milliliter(ML)	11/28/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1759424	-	Devcon Epoxy Plus 25	50	Milliliter(ML)	11/28/22
1759428	-	Devcon Epoxy Plus 25	50	Milliliter(ML)	11/28/22
1759425	-	Devcon Epoxy Plus 25	50	Milliliter(ML)	11/28/22
1759427	-	Devcon Epoxy Plus 25	50	Milliliter(ML)	11/28/22
1759426	-	Devcon Epoxy Plus 25	50	Milliliter(ML)	11/28/22
1759430	-	Devcon Epoxy Plus 25	50	Milliliter(ML)	11/28/22
1759431	-	Devcon Epoxy Plus 25	50	Milliliter(ML)	11/28/22
1759422	-	Devcon Epoxy Plus 25	50	Milliliter(ML)	11/28/22
1759445	-	WD-40	1	Gallon(GAL)	11/28/22
1759433	-	CUT-EASE STICK LUBRICANT	1	Pounds(LB)	11/28/22
1759439	-	CUT-EASE STICK LUBRICANT	1	Pounds(LB)	11/28/22
1759440	-	CUT-EASE STICK LUBRICANT	1	Pounds(LB)	11/28/22
1759441	-	CUT-EASE STICK LUBRICANT	1	Pounds(LB)	11/28/22
1759442	-	CUT-EASE STICK LUBRICANT	1	Pounds(LB)	11/28/22
1759443	-	CUT-EASE STICK LUBRICANT	1	Pounds(LB)	11/28/22
1759434	-	CUT-EASE STICK LUBRICANT	1	Pounds(LB)	11/28/22
1759435	-	CUT-EASE STICK LUBRICANT	1	Pounds(LB)	11/28/22
1759436	-	CUT-EASE STICK LUBRICANT	1	Pounds(LB)	11/28/22
1759438	-	CUT-EASE STICK LUBRICANT	1	Pounds(LB)	11/28/22
1759437	-	CUT-EASE STICK LUBRICANT	1	Pounds(LB)	11/28/22
1662942	-	TAP MAGIC CUTTING FLUID	1	Gallon(GAL)	11/28/22
1662941	-	TAP MAGIC CUTTING FLUID	1	Gallon(GAL)	11/28/22
1759399	-	786 RTV SILICONE SEALANT	10.3	Ounces(OZ)	11/28/22
1759400	-	734 SEALANT	10.3	Ounces(OZ)	11/28/22
1540838	-	RUST COAT ENAMEL - FLAT BLACK	12	Ounces(OZ)	11/29/22
1540839	-	RUST COAT ENAMEL - FLAT BLACK	12	Ounces(OZ)	11/29/22
1745623	7664-93-9	Sulfuric Acid 5.00 N	1	Liters(L)	11/29/22
1745624	7664-93-9	Sulfuric Acid 5.00 N	1	Liters(L)	11/29/22
1745627	7664-93-9	Sulfuric Acid 5.00 N	1	Liters(L)	11/29/22
1745626	7664-93-9	Sulfuric Acid 5.00 N	1	Liters(L)	11/29/22
1745625	7664-93-9	Sulfuric Acid 5.00 N	1	Liters(L)	11/29/22
1745628	-	ISOPROPYL ALCOHOL 70%	20	Liters(L)	11/29/22
1745719	14802-03-0	(2-Ethylhexyl)phosphonic acid mono-2-ethylhexyl este	100	Gram(GM)	11/29/22
1745720	14802-03-0	(2-Ethylhexyl)phosphonic acid mono-2-ethylhexyl este	100	Gram(GM)	11/29/22
1745721	14802-03-0	(2-Ethylhexyl)phosphonic acid mono-2-ethylhexyl este	100	Gram(GM)	11/29/22
1745722	14802-03-0	(2-Ethylhexyl)phosphonic acid mono-2-ethylhexyl este	100	Gram(GM)	11/29/22
1745723	7447-41-8	LITHIUM CHLORIDE	2.5	Kilograms(KG)	11/29/22
1745724	7447-41-8	LITHIUM CHLORIDE	2.5	Kilograms(KG)	11/29/22
1745725	77-92-9	CITRIC ACID	2.5	Kilograms(KG)	11/29/22
1745644	7647-01-0	Hydrochloric acid ACS Reagent 37%	2.5	Liters(L)	11/29/22
1745645	7647-01-0	Hydrochloric acid ACS Reagent 37%	2.5	Liters(L)	11/29/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1745634	302-01-2	Hydrazine solution 35 wt. % in H2O	100	Gram(GM)	11/29/22
1745635	302-01-2	Hydrazine solution 35 wt. % in H2O	100	Gram(GM)	11/29/22
1745636	3/1/7783	TUNGSTIC ACID	500	Gram(GM)	11/29/22
1745637	7790-60-5	POTASSIUM TUNGSTATE	100	Gram(GM)	11/29/22
1745638	10213-10-2	SODIUM TUNGSTATE DIHYDRATE	500	Gram(GM)	11/29/22
1745639	7757-79-1	POTASSIUM NITRATE	500	Gram(GM)	11/29/22
1745640	7757-79-1	POTASSIUM NITRATE	500	Gram(GM)	11/29/22
1745641	7631-99-4	SODIUM NITRATE	2.5	Kilograms(KG)	11/29/22
1745642	68478-92-2	PLATINUM-DIVINYLTETRAMETHYLDISILOXANE COMPLEX	5	Gram(GM)	11/29/22
1745643	-	Hydranal - Coulomat A	500	Milliliter(ML)	11/29/22
1745633	7647-14-5	SODIUM CHLORIDE	500	Gram(GM)	11/29/22
1745629	67-56-1	Methanol 99.8% for electronic use residue free	2.5	Liters(L)	11/29/22
1745630	64-19-7	ACETIC ACID GLACIAL	250	Milliliter(ML)	11/29/22
1745631	108-88-3	Toluene HPLC	1	Liters(L)	11/29/22
1745632	-	VIGON PE 190A Concentrate	25	Liters(L)	11/29/22
1745332	75-09-2	Dichloromethane Environmental Grade 99.8+% stab. with amylene	4	Liters(L)	11/29/22
1745335	75-09-2	Dichloromethane Environmental Grade 99.8+% stab. with amylene	4	Liters(L)	11/29/22
1745334	75-09-2	Dichloromethane Environmental Grade 99.8+% stab. with amylene	4	Liters(L)	11/29/22
1745333	75-09-2	Dichloromethane Environmental Grade 99.8+% stab. with amylene	4	Liters(L)	11/29/22
1745731	75-12-7	Hydranal - Formamide dry Solvent for KF titration	1	Liters(L)	11/29/22
1745732	75-12-7	Hydranal - Formamide dry Solvent for KF titration	1	Liters(L)	11/29/22
1745736	75-12-7	Hydranal - Formamide dry Solvent for KF titration	1	Liters(L)	11/29/22
1745735	75-12-7	Hydranal - Formamide dry Solvent for KF titration	1	Liters(L)	11/29/22
1745733	75-12-7	Hydranal - Formamide dry Solvent for KF titration	1	Liters(L)	11/29/22
1745734	75-12-7	Hydranal - Formamide dry Solvent for KF titration	1	Liters(L)	11/29/22
1745737	-	Hardness 1 Buffer Solution	100	Milliliter(ML)	11/29/22
1745746	-	Hardness 1 Buffer Solution	100	Milliliter(ML)	11/29/22
1745745	-	Hardness 1 Buffer Solution	100	Milliliter(ML)	11/29/22
1745744	-	Hardness 1 Buffer Solution	100	Milliliter(ML)	11/29/22
1745743	-	Hardness 1 Buffer Solution	100	Milliliter(ML)	11/29/22
1745742	-	Hardness 1 Buffer Solution	100	Milliliter(ML)	11/29/22
1745741	-	Hardness 1 Buffer Solution	100	Milliliter(ML)	11/29/22
1745740	-	Hardness 1 Buffer Solution	100	Milliliter(ML)	11/29/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1745739	-	Hardness 1 Buffer Solution	100	Milliliter(ML)	11/29/22
1745738	-	Hardness 1 Buffer Solution	100	Milliliter(ML)	11/29/22
1745747	-	Bromcresol Green-Methyl Red Indicator Powder Pillows	100	Milliliter(ML)	11/29/22
1745751	-	Bromcresol Green-Methyl Red Indicator Powder Pillows	100	Milliliter(ML)	11/29/22
1745750	-	Bromcresol Green-Methyl Red Indicator Powder Pillows	100	Milliliter(ML)	11/29/22
1745749	-	Bromcresol Green-Methyl Red Indicator Powder Pillows	100	Milliliter(ML)	11/29/22
1745748	-	Bromcresol Green-Methyl Red Indicator Powder Pillows	100	Milliliter(ML)	11/29/22
1745752	-	FerroVer Iron Reagent	10	Milliliter(ML)	11/29/22
1745756	-	FerroVer Iron Reagent	10	Milliliter(ML)	11/29/22
1745753	-	FerroVer Iron Reagent	10	Milliliter(ML)	11/29/22
1745754	-	FerroVer Iron Reagent	10	Milliliter(ML)	11/29/22
1745755	-	FerroVer Iron Reagent	10	Milliliter(ML)	11/29/22
1745757	7791-18-6	MAGNESIUM CHLORIDE HEXAHYDRATE	3	Kilograms(KG)	11/29/22
1745764	7791-18-6	MAGNESIUM CHLORIDE HEXAHYDRATE	3	Kilograms(KG)	11/29/22
1745761	7791-18-6	MAGNESIUM CHLORIDE HEXAHYDRATE	3	Kilograms(KG)	11/29/22
1745758	7791-18-6	MAGNESIUM CHLORIDE HEXAHYDRATE	3	Kilograms(KG)	11/29/22
1745759	7791-18-6	MAGNESIUM CHLORIDE HEXAHYDRATE	3	Kilograms(KG)	11/29/22
1745766	7791-18-6	MAGNESIUM CHLORIDE HEXAHYDRATE	3	Kilograms(KG)	11/29/22
1745762	7791-18-6	MAGNESIUM CHLORIDE HEXAHYDRATE	3	Kilograms(KG)	11/29/22
1745765	7791-18-6	MAGNESIUM CHLORIDE HEXAHYDRATE	3	Kilograms(KG)	11/29/22
1745760	7791-18-6	MAGNESIUM CHLORIDE HEXAHYDRATE	3	Kilograms(KG)	11/29/22
1745763	7791-18-6	MAGNESIUM CHLORIDE HEXAHYDRATE	3	Kilograms(KG)	11/29/22
1745772	7791-18-6	MAGNESIUM CHLORIDE HEXAHYDRATE	3	Kilograms(KG)	11/29/22
1745769	7791-18-6	MAGNESIUM CHLORIDE HEXAHYDRATE	3	Kilograms(KG)	11/29/22
1745770	7791-18-6	MAGNESIUM CHLORIDE HEXAHYDRATE	3	Kilograms(KG)	11/29/22
1745771	7791-18-6	MAGNESIUM CHLORIDE HEXAHYDRATE	3	Kilograms(KG)	11/29/22
1745767	7791-18-6	MAGNESIUM CHLORIDE HEXAHYDRATE	3	Kilograms(KG)	11/29/22
1745768	7791-18-6	MAGNESIUM CHLORIDE HEXAHYDRATE	3	Kilograms(KG)	11/29/22
1745773	-	InLab Storage Solution	250	Milliliter(ML)	11/29/22
1745774	56-89-3	L-CYSTINE	100	Gram(GM)	11/29/22
1745775	554-13-2	LITHIUM CARBONATE	1	Kilograms(KG)	11/29/22
1745776	-	BENZENE-D6 (D 99.5%)	25	Gram(GM)	11/29/22
1745777	-	Hydranal-Coulomat CG Reagent for Coulo-Metric KF Titration Catholyte	50	Milliliter(ML)	11/29/22
1745646	-	HYDRANAL WATER STD 1.0	40	Milliliter(ML)	11/29/22
1745683	-	10 ppm 43 Element ICP Calibration/Quality Control Standard	125	Milliliter(ML)	11/29/22
1745684	108-88-3	Toluene anhydrous 99.8%	1	Liters(L)	11/29/22
1745685	108-88-3	Toluene anhydrous 99.8%	1	Liters(L)	11/29/22
1745727	12054-48-7	NICKEL(II) HYDROXIDE	250	Gram(GM)	11/29/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1745728	298-14-6	POTASSIUM BICARBONATE	500	Gram(GM)	11/29/22
1745729	112-80-1	OLEIC ACID	25	Gram(GM)	11/29/22
1745726	-	1000 ug/ml Calcium	125	Milliliter(ML)	11/29/22
1745730	107-06-2	1 2-Dichloroethane 99+% ACS reagent	4	Liters(L)	11/29/22
1745690	64-17-5	Ethyl alcohol Pure 200 proof anhydrous	1	Liters(L)	11/29/22
1745694	64-17-5	Ethyl alcohol Pure 200 proof anhydrous	1	Liters(L)	11/29/22
1745693	64-17-5	Ethyl alcohol Pure 200 proof anhydrous	1	Liters(L)	11/29/22
1745692	64-17-5	Ethyl alcohol Pure 200 proof anhydrous	1	Liters(L)	11/29/22
1745691	64-17-5	Ethyl alcohol Pure 200 proof anhydrous	1	Liters(L)	11/29/22
1745791	7722-84-1	HYDROGEN PEROXIDE 30%	500	Milliliter(ML)	11/29/22
1745793	7722-84-1	HYDROGEN PEROXIDE 30%	500	Milliliter(ML)	11/29/22
1745792	7722-84-1	HYDROGEN PEROXIDE 30%	500	Milliliter(ML)	11/29/22
1745794	7722-84-1	HYDROGEN PEROXIDE 30%	500	Milliliter(ML)	11/29/22
1745800	1336-21-6	Ammonium hydroxide solution ACS reagent 28.0-30.0%	1	Liters(L)	11/29/22
1745801	1336-21-6	Ammonium hydroxide solution ACS reagent 28.0-30.0%	1	Liters(L)	11/29/22
1745802	1336-21-6	Ammonium hydroxide solution ACS reagent 28.0-30.0%	1	Liters(L)	11/29/22
1745803	1336-21-6	Ammonium hydroxide solution ACS reagent 28.0-30.0%	1	Liters(L)	11/29/22
1745336	1633-05-2	STRONTIUM CARBONATE	12	Kilograms(KG)	11/29/22
1745337	141-78-6	Ethyl Acetate (Certified ACS)	4	Liters(L)	11/29/22
1745689	67-56-1	Methanol 99.8% ACS reagent	4	Liters(L)	11/29/22
1745795	326-91-0	2-Thenoyltrifluoroacetone	100	Gram(GM)	11/29/22
1745796	5/1/8068	LIGNIN	100	Gram(GM)	11/29/22
1745797	3387-36-8	URIDINE 5-MONOPHOSPHATE DISODIUM SALT	1	Gram(GM)	11/29/22
1745798	68-94-0	HYPOXANTHINE (6-HYDROXYPURINE)	5	Gram(GM)	11/29/22
1745799	83-88-5	(-)-RIBOFLAVIN (VITAMIN B2)	5	Gram(GM)	11/29/22
1692244	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/29/22
1692245	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	11/29/22
1692246	7782-39-0	DEUTERIUM	0.1	Kilograms(KG)	11/29/22
1692247	7440-59-7	HELIUM GAS	2.4	Gram(GM)	11/29/22
1692248	-	DISINFECTANT SPRAY	19	Ounces(OZ)	11/29/22
1692342	-	HYDROGEN GAS	3.6	Cubic Feet(CF)	11/29/22
1692343	-	HYDROGEN GAS	3.6	Cubic Feet(CF)	11/29/22
1692344	-	OXYGEN COMPRESSED GAS	2.5	Cubic Feet(CF)	11/29/22
1692345	-	49.5PPM AMMONIA/BAL. AIR	2.05	Cubic Feet(CF)	11/29/22
1692249	7664-39-3	HYDROGEN FLUORIDE	0.5	Pounds(LB)	11/29/22
1692250	7664-39-3	HYDROGEN FLUORIDE	0.5	Pounds(LB)	11/29/22
1692951	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692265	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692272	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692273	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1692270	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692269	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692268	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692267	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692279	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692260	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692280	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692271	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692266	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692275	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692252	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692257	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692259	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692258	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692261	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692262	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692276	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692277	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692274	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692278	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692253	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692263	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692264	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692256	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692255	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692254	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692281	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692285	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692282	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692283	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692290	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692286	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692284	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692294	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692295	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692293	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692291	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692289	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692288	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692287	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692292	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	11/29/22
1692296	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692337	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692334	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692335	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1692332	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692336	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692319	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692313	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692326	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692331	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692329	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692328	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692315	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692316	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692327	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692318	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692312	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692320	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692321	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692322	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692323	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692338	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692324	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692330	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692325	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692317	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692305	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692339	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692340	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692341	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692302	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692301	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692300	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692299	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692298	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692297	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692314	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692304	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692311	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692333	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692306	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692307	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692308	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692309	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692310	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1692303	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	11/29/22
1649983	-	770736 GRAY PRIMER	1	Gallon(GAL)	11/29/22
1649985	-	770736 GRAY PRIMER	1	Gallon(GAL)	11/29/22
1649984	-	770736 GRAY PRIMER	1	Gallon(GAL)	11/29/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1650001	-	770736 GRAY PRIMER	1	Gallon(GAL)	11/29/22
1649989	-	770736 GRAY PRIMER	1	Gallon(GAL)	11/29/22
1650002	-	770736 GRAY PRIMER	1	Gallon(GAL)	11/29/22
1649986	-	770736 GRAY PRIMER	1	Gallon(GAL)	11/29/22
1650000	-	770736 GRAY PRIMER	1	Gallon(GAL)	11/29/22
1649999	-	770736 GRAY PRIMER	1	Gallon(GAL)	11/29/22
1649998	-	770736 GRAY PRIMER	1	Gallon(GAL)	11/29/22
1649997	-	770736 GRAY PRIMER	1	Gallon(GAL)	11/29/22
1649996	-	770736 GRAY PRIMER	1	Gallon(GAL)	11/29/22
1649994	-	770736 GRAY PRIMER	1	Gallon(GAL)	11/29/22
1649993	-	770736 GRAY PRIMER	1	Gallon(GAL)	11/29/22
1649992	-	770736 GRAY PRIMER	1	Gallon(GAL)	11/29/22
1649991	-	770736 GRAY PRIMER	1	Gallon(GAL)	11/29/22
1649990	-	770736 GRAY PRIMER	1	Gallon(GAL)	11/29/22
1649988	-	770736 GRAY PRIMER	1	Gallon(GAL)	11/29/22
1649987	-	770736 GRAY PRIMER	1	Gallon(GAL)	11/29/22
1649995	-	770736 GRAY PRIMER	1	Gallon(GAL)	11/29/22
1650003	-	SAFETY YELLOW PAINT	1	Gallon(GAL)	11/29/22
1745338	7440-67-7	ZIRCONIUM POWDER	500	Gram(GM)	11/29/22
1745339	105-57-7	Acetaldehyde diethyl acetal 99%	100	Milliliter(ML)	11/29/22
1745340	7664-38-2	Phosphoric acid ACS reagent 85+ wt. % in H2O	500	Milliliter(ML)	11/29/22
1745341	7664-38-2	Phosphoric acid ACS reagent 85+ wt. % in H2O	500	Milliliter(ML)	11/29/22
1745342	7664-38-2	Phosphoric acid ACS reagent 85+ wt. % in H2O	500	Milliliter(ML)	11/29/22
1745343	7664-38-2	Phosphoric acid ACS reagent 85+ wt. % in H2O	500	Milliliter(ML)	11/29/22
1745695	67-56-1	Methanol 99.8% ACS reagent	4	Liters(L)	11/29/22
1745696	67-56-1	Methanol 99.8% ACS reagent	4	Liters(L)	11/29/22
1745697	1693-74-9	TETRAHYDROFURAN-D8	25	Milliliter(ML)	11/29/22
1745698	7440-50-8	Copper nanopowder 25 nm particle size	5	Gram(GM)	11/29/22
1745699	7440-50-8	Copper nanopowder 40-60 nm particle size	5	Gram(GM)	11/29/22
1745700	7440-50-8	Copper nanopowder 60-80 nm particle size	5	Gram(GM)	11/29/22
1745701	1317-38-0	Copper(II) oxide nanopowder	25	Gram(GM)	11/29/22
1745702	1066-45-1	TRIMETHYLTIN CHLORIDE	5	Gram(GM)	11/29/22
1745703	67-56-1	Methanol 99.8% ACS reagent	1	Liters(L)	11/29/22
1650005	-	SAFETY YELLOW PAINT	1	Gallon(GAL)	11/29/22
1650006	-	SAFETY YELLOW PAINT	1	Gallon(GAL)	11/29/22
1650004	-	SAFETY YELLOW PAINT	1	Gallon(GAL)	11/29/22
1650007	-	SAFETY YELLOW PAINT	1	Gallon(GAL)	11/29/22
1650008	-	MARKING PAINT	1	Gallon(GAL)	11/29/22
1650013	-	MARKING PAINT	1	Gallon(GAL)	11/29/22
1650009	-	MARKING PAINT	1	Gallon(GAL)	11/29/22
1650010	-	MARKING PAINT	1	Gallon(GAL)	11/29/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1650011	-	MARKING PAINT	1	Gallon(GAL)	11/29/22
1650012	-	MARKING PAINT	1	Gallon(GAL)	11/29/22
1719912	-	PSX 700 NEUTRAL TINT RESIN	0.64	Gallon(GAL)	11/29/22
1745704	67-64-1	Acetone Reagent ACS Grade	4	Liters(L)	11/29/22
1745705	67-64-1	Acetone Reagent ACS Grade	4	Liters(L)	11/29/22
1745706	108-88-3	Toluene ACS reagent 99.5%	4	Liters(L)	11/29/22
1745707	108-88-3	Toluene ACS reagent 99.5%	4	Liters(L)	11/29/22
1719913	-	PSX 700 CURE	0.2	Gallon(GAL)	11/29/22
1745708	68-12-2	N N-DIMETHYLFORMAMIDE ANHYDROUS 99.8%	2	Liters(L)	11/29/22
1745710	68-12-2	N N-DIMETHYLFORMAMIDE ANHYDROUS 99.8%	2	Liters(L)	11/29/22
1745709	68-12-2	N N-DIMETHYLFORMAMIDE ANHYDROUS 99.8%	2	Liters(L)	11/29/22
1745711	68-12-2	N N-DIMETHYLFORMAMIDE ANHYDROUS 99.8%	2	Liters(L)	11/29/22
1745712	64-19-7	ACETIC ACID GLACIAL	2.5	Liters(L)	11/29/22
1745713	67-68-5	METHYL SULFOXIDE	1	Liters(L)	11/29/22
1745714	100-42-5	STYRENE	1	Liters(L)	11/29/22
1745716	2807-30-9	Ethylene glycol monopropyl ether ReagentPlus 99.4%	1	Liters(L)	11/29/22
1743465	9002-93-1	TRITON X-100	100	Milliliter(ML)	11/29/22
1743475	9002-93-1	TRITON X-100	100	Milliliter(ML)	11/29/22
1743484	9002-93-1	TRITON X-100	100	Milliliter(ML)	11/29/22
1743483	9002-93-1	TRITON X-100	100	Milliliter(ML)	11/29/22
1743482	9002-93-1	TRITON X-100	100	Milliliter(ML)	11/29/22
1743470	9002-93-1	TRITON X-100	100	Milliliter(ML)	11/29/22
1743469	9002-93-1	TRITON X-100	100	Milliliter(ML)	11/29/22
1743468	9002-93-1	TRITON X-100	100	Milliliter(ML)	11/29/22
1743467	9002-93-1	TRITON X-100	100	Milliliter(ML)	11/29/22
1743480	9002-93-1	TRITON X-100	100	Milliliter(ML)	11/29/22
1743479	9002-93-1	TRITON X-100	100	Milliliter(ML)	11/29/22
1743473	9002-93-1	TRITON X-100	100	Milliliter(ML)	11/29/22
1743478	9002-93-1	TRITON X-100	100	Milliliter(ML)	11/29/22
1743466	9002-93-1	TRITON X-100	100	Milliliter(ML)	11/29/22
1743481	9002-93-1	TRITON X-100	100	Milliliter(ML)	11/29/22
1743477	9002-93-1	TRITON X-100	100	Milliliter(ML)	11/29/22
1743476	9002-93-1	TRITON X-100	100	Milliliter(ML)	11/29/22
1743474	9002-93-1	TRITON X-100	100	Milliliter(ML)	11/29/22
1743472	9002-93-1	TRITON X-100	100	Milliliter(ML)	11/29/22
1743471	9002-93-1	TRITON X-100	100	Milliliter(ML)	11/29/22
1745935	1310-73-2	SODIUM HYDROXIDE SOLUTION 50%	4	Liters(L)	11/29/22
1745956	1310-73-2	SODIUM HYDROXIDE SOLUTION 50%	4	Liters(L)	11/29/22
1745947	1310-73-2	SODIUM HYDROXIDE SOLUTION 50%	4	Liters(L)	11/29/22
1745959	1310-73-2	SODIUM HYDROXIDE SOLUTION 50%	4	Liters(L)	11/29/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1745958	1310-73-2	SODIUM HYDROXIDE SOLUTION 50%	4	Liters(L)	11/29/22
1745957	1310-73-2	SODIUM HYDROXIDE SOLUTION 50%	4	Liters(L)	11/29/22
1745936	1310-73-2	SODIUM HYDROXIDE SOLUTION 50%	4	Liters(L)	11/29/22
1745942	1310-73-2	SODIUM HYDROXIDE SOLUTION 50%	4	Liters(L)	11/29/22
1745941	1310-73-2	SODIUM HYDROXIDE SOLUTION 50%	4	Liters(L)	11/29/22
1745940	1310-73-2	SODIUM HYDROXIDE SOLUTION 50%	4	Liters(L)	11/29/22
1745939	1310-73-2	SODIUM HYDROXIDE SOLUTION 50%	4	Liters(L)	11/29/22
1745949	1310-73-2	SODIUM HYDROXIDE SOLUTION 50%	4	Liters(L)	11/29/22
1745938	1310-73-2	SODIUM HYDROXIDE SOLUTION 50%	4	Liters(L)	11/29/22
1745955	1310-73-2	SODIUM HYDROXIDE SOLUTION 50%	4	Liters(L)	11/29/22
1745944	1310-73-2	SODIUM HYDROXIDE SOLUTION 50%	4	Liters(L)	11/29/22
1745945	1310-73-2	SODIUM HYDROXIDE SOLUTION 50%	4	Liters(L)	11/29/22
1745946	1310-73-2	SODIUM HYDROXIDE SOLUTION 50%	4	Liters(L)	11/29/22
1745943	1310-73-2	SODIUM HYDROXIDE SOLUTION 50%	4	Liters(L)	11/29/22
1745948	1310-73-2	SODIUM HYDROXIDE SOLUTION 50%	4	Liters(L)	11/29/22
1745954	1310-73-2	SODIUM HYDROXIDE SOLUTION 50%	4	Liters(L)	11/29/22
1745951	1310-73-2	SODIUM HYDROXIDE SOLUTION 50%	4	Liters(L)	11/29/22
1745953	1310-73-2	SODIUM HYDROXIDE SOLUTION 50%	4	Liters(L)	11/29/22
1745952	1310-73-2	SODIUM HYDROXIDE SOLUTION 50%	4	Liters(L)	11/29/22
1745950	1310-73-2	SODIUM HYDROXIDE SOLUTION 50%	4	Liters(L)	11/29/22
1745937	1310-73-2	SODIUM HYDROXIDE SOLUTION 50%	4	Liters(L)	11/29/22
1745960	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	1	Liters(L)	11/29/22
1745969	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	1	Liters(L)	11/29/22
1745961	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	1	Liters(L)	11/29/22
1745962	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	1	Liters(L)	11/29/22
1745963	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	1	Liters(L)	11/29/22
1745968	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	1	Liters(L)	11/29/22
1745964	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	1	Liters(L)	11/29/22
1745965	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	1	Liters(L)	11/29/22
1745966	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	1	Liters(L)	11/29/22
1745967	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	1	Liters(L)	11/29/22
1746007	7664-93-9	Sulfuric Acid (Certified ACS Plus)	2.5	Liters(L)	11/29/22
1746008	7664-93-9	Sulfuric Acid (Certified ACS Plus)	2.5	Liters(L)	11/29/22
1746009	7664-93-9	Sulfuric Acid (Certified ACS Plus)	2.5	Liters(L)	11/29/22
1746015	7664-93-9	Sulfuric Acid (Certified ACS Plus)	2.5	Liters(L)	11/29/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1746014	7664-93-9	Sulfuric Acid (Certified ACS Plus)	2.5	Liters(L)	11/29/22
1746013	7664-93-9	Sulfuric Acid (Certified ACS Plus)	2.5	Liters(L)	11/29/22
1746012	7664-93-9	Sulfuric Acid (Certified ACS Plus)	2.5	Liters(L)	11/29/22
1746011	7664-93-9	Sulfuric Acid (Certified ACS Plus)	2.5	Liters(L)	11/29/22
1746016	7664-93-9	Sulfuric Acid (Certified ACS Plus)	2.5	Liters(L)	11/29/22
1746010	7664-93-9	Sulfuric Acid (Certified ACS Plus)	2.5	Liters(L)	11/29/22
1746032	1310-73-2	SODIUM HYDROXIDE 50% SOLUTION (W/W)	100	Liters(L)	11/29/22
1746036	1310-73-2	SODIUM HYDROXIDE 50% SOLUTION (W/W)	100	Liters(L)	11/29/22
1746037	1310-73-2	SODIUM HYDROXIDE 50% SOLUTION (W/W)	100	Liters(L)	11/29/22
1746038	1310-73-2	SODIUM HYDROXIDE 50% SOLUTION (W/W)	100	Liters(L)	11/29/22
1746039	1310-73-2	SODIUM HYDROXIDE 50% SOLUTION (W/W)	100	Liters(L)	11/29/22
1746040	1310-73-2	SODIUM HYDROXIDE 50% SOLUTION (W/W)	100	Liters(L)	11/29/22
1746041	1310-73-2	SODIUM HYDROXIDE 50% SOLUTION (W/W)	100	Liters(L)	11/29/22
1746043	1310-73-2	SODIUM HYDROXIDE 50% SOLUTION (W/W)	100	Liters(L)	11/29/22
1746033	1310-73-2	SODIUM HYDROXIDE 50% SOLUTION (W/W)	100	Liters(L)	11/29/22
1746042	1310-73-2	SODIUM HYDROXIDE 50% SOLUTION (W/W)	100	Liters(L)	11/29/22
1746035	1310-73-2	SODIUM HYDROXIDE 50% SOLUTION (W/W)	100	Liters(L)	11/29/22
1746034	1310-73-2	SODIUM HYDROXIDE 50% SOLUTION (W/W)	100	Liters(L)	11/29/22
1733088	-	VALVOLINE AW-32 HYDRAULIC	5	Gallon(GAL)	11/30/22
1746044	12007-60-2	Lithium tetraborate Puratronic 99.998% (metals basis)	1	Kilograms(KG)	11/30/22
1746051	12007-60-2	Lithium tetraborate Puratronic 99.998% (metals basis)	1	Kilograms(KG)	11/30/22
1746050	12007-60-2	Lithium tetraborate Puratronic 99.998% (metals basis)	1	Kilograms(KG)	11/30/22
1746049	12007-60-2	Lithium tetraborate Puratronic 99.998% (metals basis)	1	Kilograms(KG)	11/30/22
1746048	12007-60-2	Lithium tetraborate Puratronic 99.998% (metals basis)	1	Kilograms(KG)	11/30/22
1746047	12007-60-2	Lithium tetraborate Puratronic 99.998% (metals basis)	1	Kilograms(KG)	11/30/22
1746046	12007-60-2	Lithium tetraborate Puratronic 99.998% (metals basis)	1	Kilograms(KG)	11/30/22
1746052	12007-60-2	Lithium tetraborate Puratronic 99.998% (metals basis)	1	Kilograms(KG)	11/30/22
1746045	12007-60-2	Lithium tetraborate Puratronic 99.998% (metals basis)	1	Kilograms(KG)	11/30/22
1746017	7647-01-0	Hydrochloric acid (NF/FCC)	2.5	Liters(L)	11/30/22
1746023	7647-01-0	Hydrochloric acid (NF/FCC)	2.5	Liters(L)	11/30/22
1746022	7647-01-0	Hydrochloric acid (NF/FCC)	2.5	Liters(L)	11/30/22
1746021	7647-01-0	Hydrochloric acid (NF/FCC)	2.5	Liters(L)	11/30/22
1746020	7647-01-0	Hydrochloric acid (NF/FCC)	2.5	Liters(L)	11/30/22
1746019	7647-01-0	Hydrochloric acid (NF/FCC)	2.5	Liters(L)	11/30/22
1746018	7647-01-0	Hydrochloric acid (NF/FCC)	2.5	Liters(L)	11/30/22
1746024	7647-01-0	Hydrochloric acid (NF/FCC)	2.5	Liters(L)	11/30/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1746031	7647-01-0	Hydrochloric acid (NF/FCC)	2.5	Liters(L)	11/30/22
1746030	7647-01-0	Hydrochloric acid (NF/FCC)	2.5	Liters(L)	11/30/22
1746029	7647-01-0	Hydrochloric acid (NF/FCC)	2.5	Liters(L)	11/30/22
1746025	7647-01-0	Hydrochloric acid (NF/FCC)	2.5	Liters(L)	11/30/22
1746028	7647-01-0	Hydrochloric acid (NF/FCC)	2.5	Liters(L)	11/30/22
1746027	7647-01-0	Hydrochloric acid (NF/FCC)	2.5	Liters(L)	11/30/22
1746026	7647-01-0	Hydrochloric acid (NF/FCC)	2.5	Liters(L)	11/30/22
1745782	14044-65-6	BORANE-TETRAHYDROFURAN COMPLEX	800	Milliliter(ML)	11/30/22
1745783	14044-65-6	BORANE-TETRAHYDROFURAN COMPLEX	800	Milliliter(ML)	11/30/22
1745784	14044-65-6	BORANE-TETRAHYDROFURAN COMPLEX	800	Milliliter(ML)	11/30/22
1745785	326-91-0	THENOYLTRIFLUOROACETONE	100	Gram(GM)	11/30/22
1745786	326-91-0	THENOYLTRIFLUOROACETONE	100	Gram(GM)	11/30/22
1745787	-	AvistaClean MF 3000	350	Pounds(LB)	11/30/22
1745788	-	AvistaClean MF 3000	350	Pounds(LB)	11/30/22
1745872	-	LIVE/DEAD BacLight Bacterial Viability Kit	200	Milliliter(ML)	11/30/22
1745873	-	LIVE/DEAD BacLight Bacterial Viability Kit	200	Milliliter(ML)	11/30/22
1745874	-	LIVE/DEAD BacLight Bacterial Viability Kit	200	Milliliter(ML)	11/30/22
1745875	9011-14-7	POLY(METHYL METHACRYLATE)	500	Milligram(MG)	11/30/22
1745876	68-12-2	N N-Dimethylformamide ACS Reagent 99.8%	4	Liters(L)	11/30/22
1745868	90076-65-6	BIS(TRIFLUOROMETHANE)SULFONIMIDE LITHIUM SALT	100	Gram(GM)	11/30/22
1745869	90076-65-6	BIS(TRIFLUOROMETHANE)SULFONIMIDE LITHIUM SALT	100	Gram(GM)	11/30/22
1745778	7440-02-0	NICKEL FOIL	0.1	Milliliter(ML)	11/30/22
1745779	7440-02-0	NICKEL FOIL	0.1	Milliliter(ML)	11/30/22
1418908	-	MICROSET 101 FLUID REPLICATING COMPOUNDS	50	Milliliter(ML)	11/30/22
1418909	-	MICROSET 101 FLUID REPLICATING COMPOUNDS	50	Milliliter(ML)	11/30/22
1745812	129365-93-1	4 5-Diaminophthalonitrile	200	Milligram(MG)	11/30/22
1745865	7447-40-7	Potassium chloride 0.00017M Conductivity Standard	1	Liters(L)	11/30/22
1745866	7447-40-7	Potassium chloride 0.00017M Conductivity Standard	1	Liters(L)	11/30/22
1745867	10025-69-1	TIN(II) CHLORIDE DIHYDRATE	100	Gram(GM)	11/30/22
1745870	2935-90-2	Methyl 3-mercaptopropionate	25	Gram(GM)	11/30/22
1745871	7440-02-0	NICKEL FOIL	0.25	Gram(GM)	11/30/22
1745780	-	DOWANOL PM Glycol Ether	5	Gallon(GAL)	11/30/22
1745781	-	DOWANOL PM Glycol Ether	5	Gallon(GAL)	11/30/22
1745813	50-00-0	PARAFORMALDEHYE 4% IN 0.2M PHOSPHATE BUFFER	500	Milliliter(ML)	11/30/22
1745789	99-09-2	3-NITROANILINE	500	Gram(GM)	11/30/22
1745790	99-09-2	3-NITROANILINE	500	Gram(GM)	11/30/22
1745877	64-17-5	Molecular Biology Grade Ethanol (200 Proof)	4	Liters(L)	11/30/22
1745878	77-58-7	Dibutyltin dilaurate 95%	100	Gram(GM)	11/30/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1745880	16940-66-2	SODIUM BOROHYDRIDE	100	Gram(GM)	11/30/22
1745882	110-63-4	1 4-BUTANEDIOL	100	Gram(GM)	11/30/22
1745883	207683-19-0	SODIUM HYDROSULFIDE HYDRATE	1	Kilograms(KG)	11/30/22
V00000CEDA	-	Avalon Premium 100% Acrylic Interior Flat W/B	3.6	Liters(L)	11/30/22
V00000CEDB	-	Avalon Premium 100% Acrylic Interior Flat W/B	3.6	Liters(L)	11/30/22
V00000CEDC	-	Avalon Premium 100% Acrylic Interior Flat W/B	3.6	Liters(L)	11/30/22
1732716	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	11/30/22
1732737	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	11/30/22
1732732	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	11/30/22
1732718	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	11/30/22
1732719	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	11/30/22
1732720	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	11/30/22
1732721	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	11/30/22
1732722	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	11/30/22
1732723	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	11/30/22
1732724	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	11/30/22
1732725	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	11/30/22
1732726	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	11/30/22
1732727	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	11/30/22
1732728	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	11/30/22
1732729	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	11/30/22
1732717	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	11/30/22
1732731	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	11/30/22
1732733	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	11/30/22
1732734	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	11/30/22
1732735	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	11/30/22
1732736	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	11/30/22
1732738	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	11/30/22
1732739	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	11/30/22
1732730	-	Ultra Screwloose Super Penetrant (Aerosol)	11	Ounces(OZ)	11/30/22
V00000CEDD	-	Zinsser BULLS EYE 1-2-3	1	Gallon(GAL)	11/30/22
V00000CEDF	-	BIN PRIMER SEALER	1	Gallon(GAL)	11/30/22
V00000CEDE	-	BIN PRIMER SEALER	1	Gallon(GAL)	11/30/22
1757860	108-88-3	Toluene ACS reagent 99.5%	1	Liters(L)	11/30/22
1757852	108-88-3	Toluene ACS reagent 99.5%	1	Liters(L)	11/30/22
1757853	108-88-3	Toluene ACS reagent 99.5%	1	Liters(L)	11/30/22
1757851	108-88-3	Toluene ACS reagent 99.5%	1	Liters(L)	11/30/22
1757854	9005-00-9	BRIJ 78	500	Gram(GM)	11/30/22
1757855	1338-43-8	SORBITAN MONOLEATE (SPAN 80)	500	Gram(GM)	11/30/22
1757856	92112-69-1	Hexanes mixed isomers ACS	1	Liters(L)	11/30/22
1757857	92112-69-1	Hexanes mixed isomers ACS	1	Liters(L)	11/30/22
1732707	-	PSX 700 WHITE RESIN	0.8	Gallon(GAL)	11/30/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1732708	-	PSX 700 WHITE RESIN	0.8	Gallon(GAL)	11/30/22
1732709	-	Vers-Acryl 222 S/G Finish Midtone Base	3.5	Liters(L)	11/30/22
1732713	-	Vers-Acryl 222 S/G Finish Midtone Base	3.5	Liters(L)	11/30/22
1732712	-	Vers-Acryl 222 S/G Finish Midtone Base	3.5	Liters(L)	11/30/22
1732711	-	Vers-Acryl 222 S/G Finish Midtone Base	3.5	Liters(L)	11/30/22
1732710	-	Vers-Acryl 222 S/G Finish Midtone Base	3.5	Liters(L)	11/30/22
1732714	-	Paramount Ext. 100% Acrylic Flat M/B	3.6	Liters(L)	11/30/22
1732715	-	Paramount Ext. 100% Acrylic Flat M/B	3.6	Liters(L)	11/30/22
V00000CEE1	-	Zinsser BULLS EYE 1-2-3	1	Gallon(GAL)	11/30/22
V00000CEE7	-	Zinsser BULLS EYE 1-2-3	1	Gallon(GAL)	11/30/22
V00000CEE6	-	Zinsser BULLS EYE 1-2-3	1	Gallon(GAL)	11/30/22
V00000CEE5	-	Zinsser BULLS EYE 1-2-3	1	Gallon(GAL)	11/30/22
V00000CEE4	-	Zinsser BULLS EYE 1-2-3	1	Gallon(GAL)	11/30/22
V00000CEE2	-	Zinsser BULLS EYE 1-2-3	1	Gallon(GAL)	11/30/22
V00000CEE0	-	Zinsser BULLS EYE 1-2-3	1	Gallon(GAL)	11/30/22
V00000CEE3	-	Zinsser BULLS EYE 1-2-3	1	Gallon(GAL)	11/30/22
1732585	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732625	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732632	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732631	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732630	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732629	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732628	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732626	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732635	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732624	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732623	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732622	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732621	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732620	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1732619	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732627	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732647	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732641	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732618	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732642	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732643	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732644	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732633	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732646	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732634	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732640	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732639	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732638	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732637	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732636	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732601	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732645	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732592	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732599	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732598	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732597	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1732596	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732595	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732603	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732593	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732602	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732591	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732590	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732589	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732588	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732587	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732586	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732594	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732608	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732616	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732615	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732614	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732613	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732612	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732611	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732600	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732609	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732665	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1732607	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732606	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732605	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732604	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732648	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732617	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732610	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732669	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732663	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732649	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732674	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732673	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732672	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732670	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732668	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732667	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732666	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732664	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732662	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732654	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732650	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732671	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1732661	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732652	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732651	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732653	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732655	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732656	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732657	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732658	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732659	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732660	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	11/30/22
1732675	-	ORANGE PEEL SPRAY TEXTURE OIL BASED	25	Ounces(OZ)	11/30/22
1732693	-	ORANGE PEEL SPRAY TEXTURE OIL BASED	25	Ounces(OZ)	11/30/22
1732692	-	ORANGE PEEL SPRAY TEXTURE OIL BASED	25	Ounces(OZ)	11/30/22
1732695	-	ORANGE PEEL SPRAY TEXTURE OIL BASED	25	Ounces(OZ)	11/30/22
1732696	-	ORANGE PEEL SPRAY TEXTURE OIL BASED	25	Ounces(OZ)	11/30/22
1732697	-	ORANGE PEEL SPRAY TEXTURE OIL BASED	25	Ounces(OZ)	11/30/22
1732694	-	ORANGE PEEL SPRAY TEXTURE OIL BASED	25	Ounces(OZ)	11/30/22
1732698	-	ORANGE PEEL SPRAY TEXTURE OIL BASED	25	Ounces(OZ)	11/30/22
1732699	-	ORANGE PEEL SPRAY TEXTURE OIL BASED	25	Ounces(OZ)	11/30/22
1732700	-	ORANGE PEEL SPRAY TEXTURE OIL BASED	25	Ounces(OZ)	11/30/22
1732701	-	ORANGE PEEL SPRAY TEXTURE OIL BASED	25	Ounces(OZ)	11/30/22
1732703	-	ORANGE PEEL SPRAY TEXTURE OIL BASED	25	Ounces(OZ)	11/30/22
1732691	-	ORANGE PEEL SPRAY TEXTURE OIL BASED	25	Ounces(OZ)	11/30/22
1732682	-	ORANGE PEEL SPRAY TEXTURE OIL BASED	25	Ounces(OZ)	11/30/22
1732704	-	ORANGE PEEL SPRAY TEXTURE OIL BASED	25	Ounces(OZ)	11/30/22
1732702	-	ORANGE PEEL SPRAY TEXTURE OIL BASED	25	Ounces(OZ)	11/30/22
1732677	-	ORANGE PEEL SPRAY TEXTURE OIL BASED	25	Ounces(OZ)	11/30/22
1732684	-	ORANGE PEEL SPRAY TEXTURE OIL BASED	25	Ounces(OZ)	11/30/22
1732676	-	ORANGE PEEL SPRAY TEXTURE OIL BASED	25	Ounces(OZ)	11/30/22
1732690	-	ORANGE PEEL SPRAY TEXTURE OIL BASED	25	Ounces(OZ)	11/30/22
1732678	-	ORANGE PEEL SPRAY TEXTURE OIL BASED	25	Ounces(OZ)	11/30/22
1732679	-	ORANGE PEEL SPRAY TEXTURE OIL BASED	25	Ounces(OZ)	11/30/22
1732680	-	ORANGE PEEL SPRAY TEXTURE OIL BASED	25	Ounces(OZ)	11/30/22
1732683	-	ORANGE PEEL SPRAY TEXTURE OIL BASED	25	Ounces(OZ)	11/30/22
1732685	-	ORANGE PEEL SPRAY TEXTURE OIL BASED	25	Ounces(OZ)	11/30/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1732686	-	ORANGE PEEL SPRAY TEXTURE OIL BASED	25	Ounces(OZ)	11/30/22
1732687	-	ORANGE PEEL SPRAY TEXTURE OIL BASED	25	Ounces(OZ)	11/30/22
1732688	-	ORANGE PEEL SPRAY TEXTURE OIL BASED	25	Ounces(OZ)	11/30/22
1732689	-	ORANGE PEEL SPRAY TEXTURE OIL BASED	25	Ounces(OZ)	11/30/22
1732681	-	ORANGE PEEL SPRAY TEXTURE OIL BASED	25	Ounces(OZ)	11/30/22
1732705	-	Paramount Ext. 100% Acrylic Flat M/B	17.8	Liters(L)	11/30/22
1732706	-	PSX 700 CURE	0.2	Gallon(GAL)	11/30/22
1746053	1321-74-0	Divinylbenzene technical grade 80%	1	Liters(L)	11/30/22
1746054	13880-05-2	N-[Tris(hydroxymethyl)methyl]acrylamide	25	Gram(GM)	11/30/22
1746055	13880-05-2	N-[Tris(hydroxymethyl)methyl]acrylamide	25	Gram(GM)	11/30/22
1746056	106797-53-9	2-Hydroxy-4'-(2-hydroxyethoxy)-2-methylpropiophenone	10	Gram(GM)	11/30/22
1746058	311-45-5	Paraoxon-ethyl	1	Gram(GM)	11/30/22
1746059	389-08-2	NALIDIXIC ACID	25	Gram(GM)	11/30/22
1746061	1313-99-1	NICKEL OXIDE GREEN	100	Gram(GM)	11/30/22
1746062	1310-73-2	Sodium hydroxide solution c(NaOH) = 0.25 mol/l (0.25 N) Titripur	1	Liters(L)	11/30/22
1746066	1310-73-2	Sodium hydroxide solution c(NaOH) = 0.25 mol/l (0.25 N) Titripur	1	Liters(L)	11/30/22
1746065	1310-73-2	Sodium hydroxide solution c(NaOH) = 0.25 mol/l (0.25 N) Titripur	1	Liters(L)	11/30/22
1746063	1310-73-2	Sodium hydroxide solution c(NaOH) = 0.25 mol/l (0.25 N) Titripur	1	Liters(L)	11/30/22
1746064	1310-73-2	Sodium hydroxide solution c(NaOH) = 0.25 mol/l (0.25 N) Titripur	1	Liters(L)	11/30/22
1746069	6131-90-4	SODIUM ACETATE TRIHYDRATE	1	Kilograms(KG)	11/30/22
1732741	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	12/01/22
V00000CF29	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF1D	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF1E	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF1F	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF20	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF21	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF22	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF23	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF24	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF25	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF26	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF28	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF2A	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF2B	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF1C	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF14	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF2C	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF2D	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CF2E	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CEED	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF2F	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF27	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF08	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CEEA	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF01	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF02	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF03	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF04	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF05	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF00	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF07	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CEFF	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CEEE	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF09	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CEE8	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF0A	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF0B	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CEE9	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF06	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CEF4	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF16	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF1B	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CEF9	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CEFA	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CEF8	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CEF7	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CEEF	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CEF5	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CEFC	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CEF3	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CEF2	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CEF1	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CEFB	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CEFD	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CEFE	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CEF6	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF0E	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF18	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CEF0	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CEEB	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF17	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF15	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF13	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CF12	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF11	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF10	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF0F	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF0D	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF0C	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CEEC	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF1A	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
V00000CF19	-	GE Silicone II Window and Door Sealant	10.1	Ounces(OZ)	12/01/22
1732742	-	ALL-PURPOSE JOINT COMPOUND	4.5	Gallon(GAL)	12/01/22
1732743	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/01/22
1732744	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/01/22
1732745	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/01/22
1732746	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/01/22
1732747	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/01/22
1732748	-	John Deere Hy-Gard Transmission/Hydraulic Oil	5	Gallon(GAL)	12/01/22
1732749	-	Castrol Transynd Allison Transmission Fluid	50	Gallon(GAL)	12/01/22
V00000CF30	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/01/22
1732750	-	Zerex DEX-COOL Orange OAT Formula RTU Antifreeze Coolant	1	Gallon(GAL)	12/01/22
1732752	-	Zerex DEX-COOL Orange OAT Formula RTU Antifreeze Coolant	1	Gallon(GAL)	12/01/22
1732753	-	Zerex DEX-COOL Orange OAT Formula RTU Antifreeze Coolant	1	Gallon(GAL)	12/01/22
1732754	-	Zerex DEX-COOL Orange OAT Formula RTU Antifreeze Coolant	1	Gallon(GAL)	12/01/22
1732755	-	Zerex DEX-COOL Orange OAT Formula RTU Antifreeze Coolant	1	Gallon(GAL)	12/01/22
1732751	-	Zerex DEX-COOL Orange OAT Formula RTU Antifreeze Coolant	1	Gallon(GAL)	12/01/22
V00000CF31	-	Battery Cleaner (aerosol)	11	Ounces(OZ)	12/01/22
1732756	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	12/01/22
1732757	-	PARTS PLUS ANTIFREEZE & COOLANT	11	Gallon(GAL)	12/01/22
1732760	-	PARTS PLUS ANTIFREEZE & COOLANT	11	Gallon(GAL)	12/01/22
1732758	-	PARTS PLUS ANTIFREEZE & COOLANT	11	Gallon(GAL)	12/01/22
1732759	-	PARTS PLUS ANTIFREEZE & COOLANT	11	Gallon(GAL)	12/01/22
V00000CF48	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF80	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF7E	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF7D	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF7F	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF7B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CF7A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF79	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF78	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF77	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF7C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF6E	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF52	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF53	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF54	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF55	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF50	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF49	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF81	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF51	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF4E	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF76	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF4D	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF4C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF4B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF4A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF4F	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF62	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF70	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF5C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF5D	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF5E	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF5F	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF5A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF61	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF59	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF63	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF64	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF65	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF66	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF67	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF68	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF60	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF6B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF74	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF73	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF72	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF71	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF6F	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF5B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF6C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CF75	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF6A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF69	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF57	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF58	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF47	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF42	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF6D	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF34	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF44	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF46	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF33	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF35	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF36	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF37	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF38	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF39	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF3A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF3B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF45	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF43	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF56	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF32	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF41	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF3C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF3F	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF3E	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF3D	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
V00000CF40	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/01/22
1745804	29162-73-0	5 10 15 20-(tetra-4-bromophenyl)porphyrin	1	Gram(GM)	12/01/22
1745805	318488-01-6	5 15-(di-4-bromophenyl)porphyrin	250	Milligram(MG)	12/01/22
1745806	67066-09-5	5-(bromo)-10 15 20-(triphenyl)porphyrin	100	Milligram(MG)	12/01/22
1745807	-	zinc(II) 2 9 16 23-tetra(carboxy)phthalocyanine	500	Milligram(MG)	12/01/22
1745808	14654-63-8	copper(II) 2 9 16 23-tetra(amino)phthalocyanine	250	Milligram(MG)	12/01/22
1746104	64-18-6	Formic Acid 99% Optima LC/MS	1	Milliliter(ML)	12/01/22
1746105	64-18-6	Formic Acid 99% Optima LC/MS	1	Milliliter(ML)	12/01/22
1746106	64-18-6	Formic Acid 99% Optima LC/MS	1	Milliliter(ML)	12/01/22
1745886	75-05-8	ACETONITRILE HPLC	1	Liters(L)	12/01/22
1745887	-	Ethylbenzene 99%	1	Liters(L)	12/01/22
1758422	-	EYESALINE	34	Pounds(LB)	12/01/22
1758423	-	EYESALINE	34	Pounds(LB)	12/01/22
1758424	-	EYESALINE	34	Pounds(LB)	12/01/22
1758425	-	EYESALINE	34	Pounds(LB)	12/01/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1745888	107-43-7	BETAINE ANHYDROUS	500	Gram(GM)	12/01/22
1745889	6/1/3128	4-ACETYLBUTYRIC ACID	100	Gram(GM)	12/01/22
1745891	1460-02-2	1 3 5-TRI-TERT-BUTYLBENZENE	50	Gram(GM)	12/01/22
1745881	-	Urease Activity Assay Kit	0.2	Gram(GM)	12/01/22
1745892	7631-86-9	SILICA	2	Gram(GM)	12/01/22
1745893	7631-86-9	SILICA	2	Gram(GM)	12/01/22
1746057	2114-39-8	2-Bromo-1-phenylpropane 96%	5	Gram(GM)	12/01/22
1746060	10034-88-5	Sodium hydrogen sulfate monohydrate	500	Gram(GM)	12/01/22
1746067	7647-14-5	Sodium Chloride 99.999% trace metals basis	100	Gram(GM)	12/01/22
1746068	7647-14-5	Sodium Chloride 99.999% trace metals basis	100	Gram(GM)	12/01/22
1745879	299-28-5	Calcium Gluconate Monohydrate	1	Kilograms(KG)	12/01/22
1539556	-	Loctite Threadlocker 271	1	Ounces(OZ)	12/01/22
1746087	61551-69-7	2 2'-Azobis[2-methyl-N-(2-hydroxyethyl)propionamide]	100	Gram(GM)	12/01/22
1746088	61551-69-7	2 2'-Azobis[2-methyl-N-(2-hydroxyethyl)propionamide]	100	Gram(GM)	12/01/22
1746089	61551-69-7	2 2'-Azobis[2-methyl-N-(2-hydroxyethyl)propionamide]	100	Gram(GM)	12/01/22
1746091	7440-70-2	CALCIUM TURNINGS	25	Gram(GM)	12/01/22
1746094	7440-70-2	CALCIUM TURNINGS	25	Gram(GM)	12/01/22
1746092	7440-70-2	CALCIUM TURNINGS	25	Gram(GM)	12/01/22
1746093	7440-70-2	CALCIUM TURNINGS	25	Gram(GM)	12/01/22
1716226	13463-67-7	TITANIUM DIOXIDE	50	Pounds(LB)	12/01/22
1720237	-	POLYAMIDE RESIN CURING AGENT	1	Pint(PT)	12/01/22
1720242	-	POLYAMIDE RESIN CURING AGENT	1	Pint(PT)	12/01/22
1720241	-	POLYAMIDE RESIN CURING AGENT	1	Pint(PT)	12/01/22
1720240	-	POLYAMIDE RESIN CURING AGENT	1	Pint(PT)	12/01/22
1720239	-	POLYAMIDE RESIN CURING AGENT	1	Pint(PT)	12/01/22
1720238	-	POLYAMIDE RESIN CURING AGENT	1	Pint(PT)	12/01/22
1040684	-	Eichrom TRU Resin Eichrom TRU Resin Cartridge	2	Milliliter(ML)	12/01/22
1745903	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	12/01/22
1745904	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	12/01/22
1732769	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/01/22
1732770	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/01/22
1732774	-	Prime Guard -50 RV & Marine Antifreeze	10	Gallon(GAL)	12/01/22
1732776	-	Prime Guard -50 RV & Marine Antifreeze	10	Gallon(GAL)	12/01/22
1732779	-	Prime Guard -50 RV & Marine Antifreeze	10	Gallon(GAL)	12/01/22
1732780	-	Prime Guard -50 RV & Marine Antifreeze	10	Gallon(GAL)	12/01/22
1732781	-	Prime Guard -50 RV & Marine Antifreeze	10	Gallon(GAL)	12/01/22
1732782	-	Prime Guard -50 RV & Marine Antifreeze	10	Gallon(GAL)	12/01/22
1732783	-	Prime Guard -50 RV & Marine Antifreeze	10	Gallon(GAL)	12/01/22
1732784	-	Prime Guard -50 RV & Marine Antifreeze	10	Gallon(GAL)	12/01/22
1732785	-	Prime Guard -50 RV & Marine Antifreeze	10	Gallon(GAL)	12/01/22
1732786	-	Prime Guard -50 RV & Marine Antifreeze	10	Gallon(GAL)	12/01/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1732787	-	Prime Guard -50 RV & Marine Antifreeze	10	Gallon(GAL)	12/01/22
1732788	-	Prime Guard -50 RV & Marine Antifreeze	10	Gallon(GAL)	12/01/22
1732778	-	Prime Guard -50 RV & Marine Antifreeze	10	Gallon(GAL)	12/01/22
1732775	-	Prime Guard -50 RV & Marine Antifreeze	10	Gallon(GAL)	12/01/22
1732789	-	Prime Guard -50 RV & Marine Antifreeze	10	Gallon(GAL)	12/01/22
1732777	-	Prime Guard -50 RV & Marine Antifreeze	10	Gallon(GAL)	12/01/22
1420472	7740-50-8	COPPER METAL	20	Gram(GM)	12/02/22
1420473	7740-50-8	COPPER METAL	20	Gram(GM)	12/02/22
1420474	-	Palladium powder	5	Gram(GM)	12/02/22
1420475	7440-48-4	COBALT POWDER	5	Gram(GM)	12/02/22
1420476	7440-48-4	COBALT POWDER	5	Gram(GM)	12/02/22
1420477	-	IRIDIUM POWDER	15	Gram(GM)	12/02/22
1420478	7440-43-9	CADMIUM METAL	10	Gram(GM)	12/02/22
1420479	7440-18-8	RUTHENIUM POWDER	5	Gram(GM)	12/02/22
1420480	7440-18-8	Ruthenium pellet	10	Gram(GM)	12/02/22
1420481	7440-19-9	SAMARIUM METAL	40	Gram(GM)	12/02/22
1420482	7440-55-3	GALLIUM METAL	20	Gram(GM)	12/02/22
1420483	7439-89-6	IRON METAL	5	Gram(GM)	12/02/22
1420484	7439-89-6	IRON POWDER	1	Gram(GM)	12/02/22
1420485	-	CALCIUM METAL PIECES	15	Gram(GM)	12/02/22
1420486	6/4/7440	PLATINUM POWDER	2	Gram(GM)	12/02/22
1745894	1041483-94-6	2 2'-Azobis[N-(2-carboxyethyl)-2-methylpropionamidine] n-Hydrate	25	Gram(GM)	12/05/22
1745895	1041483-94-6	2 2'-Azobis[N-(2-carboxyethyl)-2-methylpropionamidine] n-Hydrate	25	Gram(GM)	12/05/22
1745884	67-68-5	Dimethyl sulfoxide suitable for HPLC 99.7+%	2	Liters(L)	12/05/22
1745885	67-68-5	Dimethyl sulfoxide suitable for HPLC 99.7+%	2	Liters(L)	12/05/22
1745896	16941-12-1	Hydrogen hexachloroplatinate(IV) solution 8 wt. % in H2O	5	Milliliter(ML)	12/05/22
1745897	7775-27-1	SODIUM PERSULFATE	250	Gram(GM)	12/05/22
1745898	7488-55-3	TIN(II) SULFATE	100	Gram(GM)	12/05/22
1745899	25979-07-1	TERT-BUTYLDICHLOROPHOSPHINE	10	Gram(GM)	12/05/22
1745900	9048-46-8	BOVINE SERUM ALBUMIN	10	Gram(GM)	12/05/22
1745905	121-33-5	Vanillin ReagentPlus 99%	100	Gram(GM)	12/05/22
1718071	-	100% SILICONE SEALANT	10.3	Ounces(OZ)	12/05/22
1745902	7439-95-4	MAGNESIUM POWDER	100	Gram(GM)	12/05/22
1746072	-	ULTRALANE THINNER	1	Quarts(QT)	12/05/22
1746073	-	ULTRALANE THINNER	1	Quarts(QT)	12/05/22
1732793	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1746074	111-92-2	DIBUTYLAMINE	100	Milliliter(ML)	12/05/22
1746075	111-92-2	DIBUTYLAMINE	100	Milliliter(ML)	12/05/22
1732798	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732804	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732800	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732812	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1732811	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732810	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732809	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732808	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732807	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732814	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732805	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732815	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732803	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732802	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732801	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732799	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732797	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732796	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732795	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732794	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732806	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732825	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732834	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732833	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732832	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732831	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732830	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732829	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732828	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732813	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732826	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732824	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732823	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732822	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732821	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732820	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732819	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732818	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732817	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732816	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1732827	-	RUST COAT ENAMEL GLOSS WHITE 780220	12	Ounces(OZ)	12/05/22
1746078	-	DPD FREE CHLORINE REAGENT	2	Milliliter(ML)	12/05/22
V00000CF8E	-	Titebond GREENchoice Acoustical Ceiling Tile Adhesive	1	Gallon(GAL)	12/05/22
V00000CF8F	-	Titebond GREENchoice Acoustical Ceiling Tile Adhesive	1	Gallon(GAL)	12/05/22
V00000CF90	-	Titebond GREENchoice Acoustical Ceiling Tile Adhesive	1	Gallon(GAL)	12/05/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CF91	-	Titebond GREENchoice Acoustical Ceiling Tile Adhesive	1	Gallon(GAL)	12/05/22
V00000CF92	-	Titebond GREENchoice Acoustical Ceiling Tile Adhesive	1	Gallon(GAL)	12/05/22
V00000CF93	-	Titebond GREENchoice Acoustical Ceiling Tile Adhesive	1	Gallon(GAL)	12/05/22
V00000CF94	-	Titebond GREENchoice Acoustical Ceiling Tile Adhesive	1	Gallon(GAL)	12/05/22
V00000CF95	-	Titebond GREENchoice Acoustical Ceiling Tile Adhesive	1	Gallon(GAL)	12/05/22
1732835	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732898	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732874	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732865	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732884	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732883	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732882	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732881	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732880	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732879	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732886	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732875	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732887	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732873	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732872	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732871	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732870	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732869	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732868	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732867	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732866	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732877	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732896	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732900	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732906	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732905	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732904	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732903	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732902	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732901	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732885	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732897	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732876	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732895	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732894	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1732893	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732892	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732891	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732890	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732889	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732888	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732899	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732842	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732849	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732848	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732847	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732846	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732845	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732850	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732843	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732838	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732841	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732840	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732839	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732864	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732837	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732878	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732844	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732857	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732851	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732863	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732862	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732861	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732860	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732836	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732858	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732856	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732855	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732853	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732852	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732854	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1732859	-	NAPA ANTIFREEZE	1	Quarts(QT)	12/05/22
1746079	-	Master Bond EP42HT-2LO	50	Milliliter(ML)	12/05/22
1746081	-	Master Bond EP42HT-2LO	50	Milliliter(ML)	12/05/22
1746080	-	Master Bond EP42HT-2LO	50	Milliliter(ML)	12/05/22
1746082	-	Master Bond EP42HT-2LO	50	Milliliter(ML)	12/05/22
1746076	-	DROPEXPLUS EXPLOSIVE DETECTION KIT	0.5	Pounds(LB)	12/05/22
1746077	-	DROPEXPLUS EXPLOSIVE DETECTION KIT	0.5	Pounds(LB)	12/05/22
V00000CF96	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	12/05/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CF97	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	12/05/22
1746084	335-67-1	Perfluorooctanoic acid 95%	5	Gram(GM)	12/05/22
1746085	141-43-5	Ethanolamine ACS reagent 99.0+%	500	Milliliter(ML)	12/05/22
1746086	156-87-6	3-AMINO-1-PROPANOL	500	Gram(GM)	12/05/22
1746090	-	68 Component ICP-MS Standard	100	Milliliter(ML)	12/05/22
1746097	13601-08-6	TETRAAMINE PALLADIUM(II)	10	Gram(GM)	12/05/22
1732790	-	Pyroil Non-Chlorinated Brake Parts Cleaner PY4003	13	Ounces(OZ)	12/05/22
1732791	-	Pyroil Non-Chlorinated Brake Parts Cleaner PY4003	13	Ounces(OZ)	12/05/22
1746099	504-63-2	1 3-PROPANEDIOL	100	Gram(GM)	12/05/22
V00000CF98	811-97-2	CRC QD CONTACT CLEANER AEROSOL	11	Ounces(OZ)	12/05/22
V00000CFA0	811-97-2	CRC QD CONTACT CLEANER AEROSOL	11	Ounces(OZ)	12/05/22
V00000CFA3	811-97-2	CRC QD CONTACT CLEANER AEROSOL	11	Ounces(OZ)	12/05/22
V00000CFA2	811-97-2	CRC QD CONTACT CLEANER AEROSOL	11	Ounces(OZ)	12/05/22
V00000CFA1	811-97-2	CRC QD CONTACT CLEANER AEROSOL	11	Ounces(OZ)	12/05/22
V00000CF9F	811-97-2	CRC QD CONTACT CLEANER AEROSOL	11	Ounces(OZ)	12/05/22
V00000CF9E	811-97-2	CRC QD CONTACT CLEANER AEROSOL	11	Ounces(OZ)	12/05/22
V00000CF9D	811-97-2	CRC QD CONTACT CLEANER AEROSOL	11	Ounces(OZ)	12/05/22
V00000CF9C	811-97-2	CRC QD CONTACT CLEANER AEROSOL	11	Ounces(OZ)	12/05/22
V00000CF9B	811-97-2	CRC QD CONTACT CLEANER AEROSOL	11	Ounces(OZ)	12/05/22
V00000CF99	811-97-2	CRC QD CONTACT CLEANER AEROSOL	11	Ounces(OZ)	12/05/22
V00000CF9A	811-97-2	CRC QD CONTACT CLEANER AEROSOL	11	Ounces(OZ)	12/05/22
V00000CFA4	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/05/22
V00000CFA5	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/05/22
1745901	9003-69-4	HayeSep Porous Polymer Adsorbent	75	Milliliter(ML)	12/05/22
1746083	70024-90-7	Albumin human	1	Gram(GM)	12/05/22
1746095	7647-01-0	Hydrochloric acid solution 32 wt. % in H2O FCC	1	Kilograms(KG)	12/05/22
1746096	7647-01-0	Hydrochloric acid solution 32 wt. % in H2O FCC	1	Kilograms(KG)	12/05/22
1746098	3886-69-9	(R)-(+)-1-Phenylethylamine	25	Milliliter(ML)	12/05/22
1715257	-	HIT-HY 270	11.1	Ounces(OZ)	12/05/22
1715258	-	HIT-HY 270	11.1	Ounces(OZ)	12/05/22
1719914	-	PSX 700 pearl gray resin	1	Gallon(GAL)	12/05/22
1719915	-	PSX 700 pearl gray resin	1	Gallon(GAL)	12/05/22
1719917	-	PSX 700 pearl gray resin	1	Gallon(GAL)	12/05/22
1719916	-	PSX 700 pearl gray resin	1	Gallon(GAL)	12/05/22
1732974	-	SHERWIN-WILLIAMS SAFETY YELLOW	1	Gallon(GAL)	12/05/22
1732976	-	SHERWIN-WILLIAMS SAFETY YELLOW	1	Gallon(GAL)	12/05/22
1732975	-	SHERWIN-WILLIAMS SAFETY YELLOW	1	Gallon(GAL)	12/05/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1732977	-	PRO INDUSTRIAL DTM Acrylic Semi-Gloss Ultradeep Base	1	Gallon(GAL)	12/05/22
1715259	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1715262	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1715261	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1715260	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1732907	65997-15-1	Concrete	60	Pounds(LB)	12/05/22
1732912	65997-15-1	Concrete	60	Pounds(LB)	12/05/22
1732908	65997-15-1	Concrete	60	Pounds(LB)	12/05/22
1732909	65997-15-1	Concrete	60	Pounds(LB)	12/05/22
1732910	65997-15-1	Concrete	60	Pounds(LB)	12/05/22
1732911	65997-15-1	Concrete	60	Pounds(LB)	12/05/22
1732913	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732921	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732924	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732923	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732916	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732922	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732926	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732925	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732934	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732920	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732919	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732917	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732915	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732914	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732918	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732963	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732932	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732954	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732955	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732956	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732957	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732958	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732959	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732960	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732952	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732962	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732951	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732964	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732965	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732966	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732967	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732968	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732969	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1732970	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732971	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732927	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732961	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732941	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732928	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732929	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732930	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732931	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732933	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732935	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732936	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732937	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732938	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732953	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732940	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732942	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732943	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732944	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732945	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732946	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732947	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732948	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732949	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732950	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732939	-	Quikrete Portland Cement	80	Pounds(LB)	12/05/22
1732982	-	ARMSTRONG S-202	1	Gallon(GAL)	12/05/22
1732983	-	SBS FLASHING CEMENT MATRIX 202	5	Gallon(GAL)	12/05/22
1732986	-	SBS FLASHING CEMENT MATRIX 202	5	Gallon(GAL)	12/05/22
1732984	-	SBS FLASHING CEMENT MATRIX 202	5	Gallon(GAL)	12/05/22
1732985	-	SBS FLASHING CEMENT MATRIX 202	5	Gallon(GAL)	12/05/22
1732987	-	STA-BIL FUEL STABILIZER	8	Ounces(OZ)	12/05/22
1732988	-	STA-BIL FUEL STABILIZER	8	Ounces(OZ)	12/05/22
1733004	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733032	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733023	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733025	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733026	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733027	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733028	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733029	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733021	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733031	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733022	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733033	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1733034	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733035	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733036	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733037	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733030	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733009	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733005	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733006	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733024	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733008	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733020	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733010	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733011	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733019	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733013	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733014	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733015	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733016	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733017	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733018	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733012	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
1733007	-	PSX 700 CURE	0.2	Gallon(GAL)	12/05/22
744438	-	FERRIC NITRATE 9 H2O	2.5	Kilograms(KG)	12/05/22
1733069	-	Zerex DEX-COOL Orange OAT Formula RTU Antifreeze Coolant	1	Gallon(GAL)	12/05/22
744439	778-42-7	ALUMINUM NITRATE 9-HYDRATE	1	Kilograms(KG)	12/05/22
1733070	-	Zerex DEX-COOL Orange OAT Formula RTU Antifreeze Coolant	1	Gallon(GAL)	12/05/22
V00000CFAB	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	12/05/22
V00000CFA9	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	12/05/22
V00000CFA8	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	12/05/22
V00000CFA7	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	12/05/22
V00000CFAA	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	12/05/22
V00000CFA6	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	12/05/22
744440	5329-14-6	SULFAMIC ACID	500	Gram(GM)	12/05/22
V00000CFD2	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFD1	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFD0	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFCF	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CFD3	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFCD	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFD8	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFCC	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFCB	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFCA	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFCE	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFD4	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFD5	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFD9	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFD7	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFC9	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFC6	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFDA	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFDB	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFDC	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFDD	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFDE	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFD6	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFB7	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFAC	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFAD	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFAE	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFAF	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFB0	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFB1	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFB2	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFB3	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFB4	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFC8	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFB6	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFC7	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFB8	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFB9	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFC3	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFB5	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFC4	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFBA	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFC2	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFC1	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFC0	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFBF	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFBE	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFBD	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFBC	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CFBB	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
V00000CFC5	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/05/22
744441	7647-01-0	HYDROCHLORIC ACID (HCL HYDROGEN CHLORIDE) 36.5-38%	500	Milliliter(ML)	12/05/22
1733071	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Gallon(GAL)	12/05/22
1733073	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Gallon(GAL)	12/05/22
1733072	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Gallon(GAL)	12/05/22
1733074	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Gallon(GAL)	12/05/22
1733075	-	Prime Guard -50 RV & Marine Antifreeze	10	Gallon(GAL)	12/05/22
744442	7647-01-0	HYDROCHLORIC ACID (HCL HYDROGEN CHLORIDE) 36.5-38%	500	Milliliter(ML)	12/05/22
1733076	-	JOHNSEN'S STARTING FLUID	10.7	Ounces(OZ)	12/05/22
1733077	-	Pyroil Non-Chlorinated Brake Parts Cleaner PY4003	13	Ounces(OZ)	12/05/22
1733078	-	Pyroil Non-Chlorinated Brake Parts Cleaner PY4003	13	Ounces(OZ)	12/05/22
1733079	-	Pyroil Non-Chlorinated Brake Parts Cleaner PY4003	13	Ounces(OZ)	12/05/22
1733080	-	Pyroil Non-Chlorinated Brake Parts Cleaner PY4003	13	Ounces(OZ)	12/05/22
1692370	74-98-6	PROPANE	11	Gallon(GAL)	12/06/22
1692371	74-98-6	PROPANE	11	Gallon(GAL)	12/06/22
1692372	7440-59-7	HELIUM REFRIGERATED LIQUID (CRYOGENIC LIQUID)	100	Liters(L)	12/06/22
1692373	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/06/22
1692375	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/06/22
1692374	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/06/22
1692377	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/06/22
1692376	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/06/22
1733091	-	Parts Plus SAE 80W-90 GEAR OIL	5	Gallon(GAL)	12/06/22
V00000CFEA	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/06/22
V00000CFEB	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/06/22
V00000CFF2	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/06/22
V00000CFF1	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/06/22
V00000CFF0	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/06/22
V00000CFEF	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/06/22
V00000CFEE	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/06/22
V00000CFED	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/06/22
V00000CFE5	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/06/22
V00000CFE2	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/06/22
V00000CFE1	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/06/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CFE4	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/06/22
V00000CFE6	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/06/22
V00000CFE7	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/06/22
V00000CFE0	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/06/22
V00000CFE8	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/06/22
V00000CFDF	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/06/22
V00000CFEC	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/06/22
V00000CFE9	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/06/22
V00000CFE3	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/06/22
1733092	-	R-630	55	Gallon(GAL)	12/06/22
1733110	-	R-630	55	Gallon(GAL)	12/06/22
1733111	-	R-630	55	Gallon(GAL)	12/06/22
1733112	-	R-630	55	Gallon(GAL)	12/06/22
1733113	-	R-630	55	Gallon(GAL)	12/06/22
1733115	-	R-630	55	Gallon(GAL)	12/06/22
1733109	-	R-630	55	Gallon(GAL)	12/06/22
1733101	-	R-630	55	Gallon(GAL)	12/06/22
1733114	-	R-630	55	Gallon(GAL)	12/06/22
1733100	-	R-630	55	Gallon(GAL)	12/06/22
1733093	-	R-630	55	Gallon(GAL)	12/06/22
1733094	-	R-630	55	Gallon(GAL)	12/06/22
1733095	-	R-630	55	Gallon(GAL)	12/06/22
1733096	-	R-630	55	Gallon(GAL)	12/06/22
1733097	-	R-630	55	Gallon(GAL)	12/06/22
1733103	-	R-630	55	Gallon(GAL)	12/06/22
1733099	-	R-630	55	Gallon(GAL)	12/06/22
1733108	-	R-630	55	Gallon(GAL)	12/06/22
1733102	-	R-630	55	Gallon(GAL)	12/06/22
1733104	-	R-630	55	Gallon(GAL)	12/06/22
1733105	-	R-630	55	Gallon(GAL)	12/06/22
1733106	-	R-630	55	Gallon(GAL)	12/06/22
1733107	-	R-630	55	Gallon(GAL)	12/06/22
1733098	-	R-630	55	Gallon(GAL)	12/06/22
1420487	7440-16-6	RHODIUM POWDER	0.5	Gram(GM)	12/06/22
1420488	7440-16-6	RHODIUM POWDER	0.5	Gram(GM)	12/06/22
1420489	7440-16-6	RHODIUM POWDER	0.5	Gram(GM)	12/06/22
1733081	-	ULTRA LOW VOC BRAKLEEN	14	Ounces(OZ)	12/06/22
1733082	-	ULTRA LOW VOC BRAKLEEN	14	Ounces(OZ)	12/06/22
V00000CFF8	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/06/22
V00000D000	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/06/22
V00000CFFF	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/06/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000CFFE	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/06/22
V00000CFFD	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/06/22
V00000CFFC	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/06/22
V00000CFFB	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/06/22
V00000CFF7	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/06/22
V00000CFF6	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/06/22
V00000CFF5	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/06/22
V00000CFF4	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/06/22
V00000CFF3	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/06/22
V00000CFF9	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/06/22
V00000CFFA	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/06/22
1458696	-	AQUASTAR ® CombiTitrant 5	1	Liters(L)	12/06/22
1458687	-	ISOPROPYL ALCOHOL	1	Liters(L)	12/06/22
1458678	-	Water ultrapure HPLC Grade	1	Liters(L)	12/06/22
1458669	67-56-1	Methanol 99.9% (HPLC)	1	Liters(L)	12/06/22
1458762	507-19-7	TERT_BUTYL BROMIDE 98% STAB. WITH POTASSIUM CARBONATE	100	Gram(GM)	12/06/22
1458761	-	SILICA GEL 60 (70-230 MESH ASTM)	2500	Gram(GM)	12/06/22
1458760	308080-99-1	MOLECULAR SIEVES 3A 4-8 MESH	5	Kilograms(KG)	12/06/22
1458759	1076-43-3	BENZENE D-6	100	Gram(GM)	12/06/22
1458755	-	4570 Epoxy Hardener	2	Pounds(LB)	12/06/22
1458754	-	EPOXY HARDENER	2.2	Pounds(LB)	12/06/22
1458757	7704-34-9	SULFUR POWDER	50	Pounds(LB)	12/06/22
01458703-5	-	PHOSPHORUS (V) OXYCHLORIDE	500	Milliliter(ML)	12/06/22
1458706	-	ESI Negative Calibration Solution for the SCIEX X500 System	100	Milliliter(ML)	12/06/22
1458707	-	ESI Negative Calibration Solution for the SCIEX X500 System	100	Milliliter(ML)	12/06/22
1458708	-	ESI Positive Calibration Solution	100	Milliliter(ML)	12/06/22
1458709	631-61-8	AMMONIUM ACETATE	0.25	Kilograms(KG)	12/06/22
1458710	-	acetone	4	Liters(L)	12/06/22
1458758	67-56-1	Methanol (HPLC)	4	Liters(L)	12/06/22
1458712	67-63-0	Isopropyl Alcohol 99%	1	Gallon(GAL)	12/06/22
1458713	128-08-5	N-BROMOSUCCINIMIDE	500	Gram(GM)	12/06/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1458714	13826-86-3	NITRONIUM TETRAFLUOROBORATE	25	Milliliter(ML)	12/06/22
1458715	-	'Nitric Acid Fuming 90%	400	Milliliter(ML)	12/06/22
1458716	-	'Nitric Acid Fuming 90%	400	Milliliter(ML)	12/06/22
1458717	7087-68-5	N N-DIISOPROPYLETHYLAMINE	100	Milliliter(ML)	12/06/22
1458718	7646-69-7	SODIUM HYDRIDE	10	Gram(GM)	12/06/22
1458719	7429-90-5	ALUMINUM SHOT	50	Gram(GM)	12/06/22
1458721	97-00-7	1-CHLORO-2 4-DINITROBENZENE	500	Gram(GM)	12/06/22
1458722	546-68-9	TITANIUM (IV) ISOPROPOXIDE	500	Gram(GM)	12/06/22
1458723	-	MURIATIC ACID	1	Liters(L)	12/06/22
1458727	-	MURIATIC ACID	1	Liters(L)	12/06/22
1458724	-	MURIATIC ACID	1	Liters(L)	12/06/22
1458725	-	MURIATIC ACID	1	Liters(L)	12/06/22
1458726	-	MURIATIC ACID	1	Liters(L)	12/06/22
1458728	593-51-1	METHYLAMINE HYDROCHLORIDE	100	Gram(GM)	12/06/22
1458730	75-05-8	ACETONITRILE	4	Liters(L)	12/06/22
1458731	-	ISOPROPYL ALCOHOL	20	Liters(L)	12/06/22
1458732	-	HYDROGEN PEROXIDE	118	Milliliter(ML)	12/06/22
1458733	2418-52-2	D-Threitol	250	Milligram(MG)	12/06/22
1458734	7783-99-5	SILVER NITRITE	50	Gram(GM)	12/06/22
1458735	7783-99-5	SILVER NITRITE	10	Gram(GM)	12/06/22
1458736	-	JAGUAR 315	4	Ounces(OZ)	12/06/22
1458737	68989-21-9	MOLECULAR SIEVES 3A	1	Kilograms(KG)	12/06/22
1458739	52349-26-5	Trimethyl chitosan medium molecular weight	1	Gram(GM)	12/06/22
1458741	52349-26-5	Trimethyl chitosan medium molecular weight	1	Gram(GM)	12/06/22
1458742	52349-26-5	Trimethyl chitosan medium molecular weight	1	Gram(GM)	12/06/22
1458740	1464-53-5	1 3-Butadiene diepoxide	25	Gram(GM)	12/06/22
1719918	-	ALL-PURPOSE JOINT COMPOUND	5	Gallon(GAL)	12/06/22
1703826	-	VEROBLACKPLUS RGD875	3.6	Kilograms(KG)	12/06/22
1758426	-	15W-40 ENGINE OIL	1	Gallon(GAL)	12/06/22
1758437	-	15W-40 ENGINE OIL	1	Gallon(GAL)	12/06/22
1758435	-	15W-40 ENGINE OIL	1	Gallon(GAL)	12/06/22
1758438	-	15W-40 ENGINE OIL	1	Gallon(GAL)	12/06/22
1758436	-	15W-40 ENGINE OIL	1	Gallon(GAL)	12/06/22
1758439	-	15W-40 ENGINE OIL	1	Gallon(GAL)	12/06/22
1758440	-	15W-40 ENGINE OIL	1	Gallon(GAL)	12/06/22
1758442	-	15W-40 ENGINE OIL	1	Gallon(GAL)	12/06/22
1758441	-	15W-40 ENGINE OIL	1	Gallon(GAL)	12/06/22
1758443	-	15W-40 ENGINE OIL	1	Gallon(GAL)	12/06/22
1758434	-	15W-40 ENGINE OIL	1	Gallon(GAL)	12/06/22
1758433	-	15W-40 ENGINE OIL	1	Gallon(GAL)	12/06/22
1758432	-	15W-40 ENGINE OIL	1	Gallon(GAL)	12/06/22
1758431	-	15W-40 ENGINE OIL	1	Gallon(GAL)	12/06/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1758430	-	15W-40 ENGINE OIL	1	Gallon(GAL)	12/06/22
1758429	-	15W-40 ENGINE OIL	1	Gallon(GAL)	12/06/22
1758444	-	15W-40 ENGINE OIL	1	Gallon(GAL)	12/06/22
1758428	-	15W-40 ENGINE OIL	1	Gallon(GAL)	12/06/22
1758427	-	15W-40 ENGINE OIL	1	Gallon(GAL)	12/06/22
1758445	-	15W-40 ENGINE OIL	1	Gallon(GAL)	12/06/22
1437611	-	XIAMETER PMX-200 SILICONE FLUID 200 CS	1	Gallon(GAL)	12/06/22
1437610	-	XIAMETER PMX-200 SILICONE FLUID 200 CS	1	Gallon(GAL)	12/06/22
1437612	-	XIAMETER PMX-200 SILICONE FLUID 200 CS	1	Gallon(GAL)	12/06/22
1437614	-	XIAMETER PMX-200 SILICONE FLUID 200 CS	1	Gallon(GAL)	12/06/22
1437613	-	XIAMETER PMX-200 SILICONE FLUID 200 CS	1	Gallon(GAL)	12/06/22
1458743	937-14-4	3-CHLOROPEROXYBENZOIC ACID	25	Gram(GM)	12/06/22
1458744	937-14-4	3-CHLOROPEROXYBENZOIC ACID	25	Gram(GM)	12/06/22
1458745	1313-84-4	SODIUM SULFIDE NONAHYDRATE	5	Gram(GM)	12/06/22
1458746	73513-42-5	HEXANES	4	Liters(L)	12/06/22
1746247	103-30-0	trans-STILBENE	100	Gram(GM)	12/06/22
1458748	-	PHOSPHORUS (V) OXYCHLORIDE	250	Gram(GM)	12/06/22
1458749	88-89-1	PICRIC ACID	500	Gram(GM)	12/06/22
1746158	1145-73-9	4-(Dimethylamino)stilbene	5	Gram(GM)	12/06/22
1458750	110-89-4	PIPERIDINE	100	Milliliter(ML)	12/06/22
1458751	110-89-4	PIPERIDINE	100	Milliliter(ML)	12/06/22
1458752	2418-52-2	D-Threitol	250	Milligram(MG)	12/06/22
1746223	10043-52-4	Calcium chloride solution ~1 M in H2O	100	Milliliter(ML)	12/06/22
1458753	-	SYNTHETIC ENGINE OIL	1	Gallon(GAL)	12/06/22
1458343	-	APIEZON GREASE	500	Milliliter(ML)	12/06/22
1458344	-	APIEZON GREASE	500	Milliliter(ML)	12/06/22
1458345	-	LUBRICANT OIL	0.25	Liters(L)	12/06/22
1458346	-	HIGH VACUUM FLUID	1	Liters(L)	12/06/22
1458347	-	LEYBONOL LVO 100	1	Liters(L)	12/06/22
1458348	69991-67-9	LEYBONOL LVO 400	1	Liters(L)	12/06/22
1458349	-	DIFFUSION PUMP OIL	100	Milliliter(ML)	12/06/22
1458350	-	SANTOVAC 5	100	Milliliter(ML)	12/06/22
1458351	-	MONTEFLUOS FOMBLIN PERFLUORO POLYETHER Y VAC 25/5	1	Kilograms(KG)	12/06/22
1458352	-	LEYBONOL LVO 210 Oil	1	Liters(L)	12/06/22
1458353	-	LEYBOLD VACUUM PUMP OIL	1	Liters(L)	12/06/22
1458354	-	LEYBOLD HE-500 VACUUM PUMP OIL	1	Liters(L)	12/06/22
1458355	-	P3 OIL	1	Liters(L)	12/06/22
1458356	-	VACUUM PUMP FLUID	1	Liters(L)	12/06/22
1458357	-	VACUUM PUMP OIL	1	Liters(L)	12/06/22
1458358	-	VACUUM PUMP OIL	1	Liters(L)	12/06/22
1458359	-	VACUUM PUMP OIL	1	Liters(L)	12/06/22
1458360	-	VWR VACUUM PUMP OIL 20	1	Liters(L)	12/06/22
1458361	8012-95-1	mineral oil	1	Liters(L)	12/06/22
1458362	8012-95-1	mineral oil	1	Liters(L)	12/06/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1458363	-	LEYBOLD VACUUM PUMP OIL	1	Liters(L)	12/06/22
1458364	-	VACUUM PUMP OIL	1	Liters(L)	12/06/22
1458365	-	VACUUM PUMP OIL GOLD	1	Liters(L)	12/06/22
1458366	-	VACUUM OIL	1	Liters(L)	12/06/22
1458368	-	VACUUM OIL	1	Liters(L)	12/06/22
1458367	-	VACUUM PUMP OIL	1	Liters(L)	12/06/22
1458369	-	VALVOLINE MOTOR OIL	4.73	Liters(L)	12/06/22
1458371	-	PHOSPHORUS (V) OXYCHLORIDE	4	Kilograms(KG)	12/06/22
1458372	-	PHOSPHORUS (V) OXYCHLORIDE	40	Kilograms(KG)	12/06/22
1458373	141-78-6	ETHYL ACETATE	4	Liters(L)	12/06/22
1458374	141-78-6	ETHYL ACETATE	4	Liters(L)	12/06/22
1458375	-	Urethane acrylate methacrylate resin	500	Gram(GM)	12/06/22
1458376	1000	activated alumina	0.45	Kilograms(KG)	12/06/22
1458377	-	TAMOL 960 DISPERSING AGENT	0.4	Kilograms(KG)	12/06/22
1458378	-	SYLGARD(R) 182 SILICONE ELASTOMER	200	Gram(GM)	12/06/22
1458379	-	DOWSIL SE 1700 Clear	1	Kilograms(KG)	12/06/22
1458380	-	DOWSIL SE 1700 Clear	100	Gram(GM)	12/06/22
1458381	-	VACUUM GREASE	150	Gram(GM)	12/06/22
1458382	-	VACUUM GREASE	150	Gram(GM)	12/06/22
1458383	-	VARIAN TORR SEAL	118	Gram(GM)	12/06/22
1458384	-	LOCTITE 4310 LIGHT CURE ADHESIVE	20	Gram(GM)	12/06/22
1458385	-	LOCTITE 4310 LIGHT CURE ADHESIVE	20	Gram(GM)	12/06/22
1458386	-	LOCTITE 4310 LIGHT CURE ADHESIVE	20	Gram(GM)	12/06/22
1458387	-	5 minute epoxy	25	Milliliter(ML)	12/06/22
1745906	15687-27-1	IBUPROFEN	1	Gram(GM)	12/06/22
1458388	-	PTFE RELEASE AGENT/DRY LUBRICANT	14	Ounces(OZ)	12/06/22
1458389	-	PTFE RELEASE AGENT/DRY LUBRICANT	14	Ounces(OZ)	12/06/22
1458390	-	PTFE RELEASE AGENT/DRY LUBRICANT	14	Ounces(OZ)	12/06/22
1458391	-	PTFE RELEASE AGENT/DRY LUBRICANT	14	Ounces(OZ)	12/06/22
1458392	-	PTFE RELEASE AGENT/DRY LUBRICANT	14	Ounces(OZ)	12/06/22
1745907	70131-67-8	POLYDIMETHYLSILOXANE SILANOL TERMINATED	5	Kilograms(KG)	12/06/22
1745908	70131-67-8	Poly(dimethylsiloxane) hydroxy terminated	100	Milliliter(ML)	12/06/22
1745909	70131-67-8	Poly(dimethylsiloxane) hydroxy terminated	100	Milliliter(ML)	12/06/22
1745910	108-88-3	Toluene ACS Reagent 99.5%	1	Liters(L)	12/06/22
1458393	9004-34-6	CELLULOSE	500	Gram(GM)	12/06/22
1458394	-	tap magic cutting fluid	16	Ounces(OZ)	12/06/22
1458395	-	tap magic cutting fluid	16	Ounces(OZ)	12/06/22
1458397	-	tap magic cutting fluid	4	Ounces(OZ)	12/06/22
1746108	638-39-1	TIN(II) ACETATE	25	Gram(GM)	12/06/22
1458398	-	LOCTITE 4310 LIGHT CURE ADHESIVE	4	Gram(GM)	12/06/22
1458399	-	tap magic cutting fluid	12	Ounces(OZ)	12/06/22
1746110	-	2-[(Dimethylamino)methyl]phenol	500	Milligram(MG)	12/06/22
1458400	-	CURING ACCELERATOR	5	Ounces(OZ)	12/06/22
1458401	-	5 MINUTE EPOXY	25	Milliliter(ML)	12/06/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1746111	7647-01-0	Hydrogen chloride solution 2.0 M in diethyl ether	100	Milliliter(ML)	12/06/22
1746112	31098-20-1	3-Sulfopropyl acrylate potassium salt	100	Gram(GM)	12/06/22
1733083	-	MOLYKOTE High Vacuum Grease	5.3	Ounces(OZ)	12/06/22
1733084	-	MOLYKOTE High Vacuum Grease	5.3	Ounces(OZ)	12/06/22
1733086	-	MOLYKOTE High Vacuum Grease	5.3	Ounces(OZ)	12/06/22
1733085	-	MOLYKOTE High Vacuum Grease	5.3	Ounces(OZ)	12/06/22
1733087	-	Valvoline AW 32 HYDRAULIC OIL	50	Gallon(GAL)	12/06/22
1733089	-	Valvoline AW 32 HYDRAULIC OIL	50	Gallon(GAL)	12/06/22
1733090	-	Valvoline AW 32 HYDRAULIC OIL	50	Gallon(GAL)	12/06/22
1733038	-	STRIPE WHITE TRAFFIC MARKER	18	Ounces(OZ)	12/06/22
1733049	-	STRIPE WHITE TRAFFIC MARKER	18	Ounces(OZ)	12/06/22
1733043	-	STRIPE WHITE TRAFFIC MARKER	18	Ounces(OZ)	12/06/22
1733048	-	STRIPE WHITE TRAFFIC MARKER	18	Ounces(OZ)	12/06/22
1733044	-	STRIPE WHITE TRAFFIC MARKER	18	Ounces(OZ)	12/06/22
1733045	-	STRIPE WHITE TRAFFIC MARKER	18	Ounces(OZ)	12/06/22
1733042	-	STRIPE WHITE TRAFFIC MARKER	18	Ounces(OZ)	12/06/22
1733039	-	STRIPE WHITE TRAFFIC MARKER	18	Ounces(OZ)	12/06/22
1733040	-	STRIPE WHITE TRAFFIC MARKER	18	Ounces(OZ)	12/06/22
1733041	-	STRIPE WHITE TRAFFIC MARKER	18	Ounces(OZ)	12/06/22
1733047	-	STRIPE WHITE TRAFFIC MARKER	18	Ounces(OZ)	12/06/22
1733046	-	STRIPE WHITE TRAFFIC MARKER	18	Ounces(OZ)	12/06/22
V00000D00D	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/06/22
V00000D009	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/06/22
V00000D001	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/06/22
V00000D002	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/06/22
V00000D003	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/06/22
V00000D004	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/06/22
V00000D005	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/06/22
V00000D006	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/06/22
V00000D00F	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/06/22
V00000D008	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/06/22
V00000D014	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/06/22
V00000D00A	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/06/22
V00000D00B	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/06/22
V00000D00C	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/06/22
V00000D00E	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/06/22
V00000D010	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/06/22
V00000D011	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/06/22
V00000D012	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/06/22
V00000D013	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/06/22
V00000D007	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/06/22
V00000D01F	-	Cote All 340 J.D. (Safety) Yellow	1	Gallon(GAL)	12/06/22
V00000D015	-	Cote All 340 J.D. (Safety) Yellow	1	Gallon(GAL)	12/06/22
V00000D020	-	Cote All 340 J.D. (Safety) Yellow	1	Gallon(GAL)	12/06/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D01E	-	Cote All 340 J.D. (Safety) Yellow	1	Gallon(GAL)	12/06/22
V00000D01D	-	Cote All 340 J.D. (Safety) Yellow	1	Gallon(GAL)	12/06/22
V00000D01C	-	Cote All 340 J.D. (Safety) Yellow	1	Gallon(GAL)	12/06/22
V00000D01B	-	Cote All 340 J.D. (Safety) Yellow	1	Gallon(GAL)	12/06/22
V00000D01A	-	Cote All 340 J.D. (Safety) Yellow	1	Gallon(GAL)	12/06/22
V00000D019	-	Cote All 340 J.D. (Safety) Yellow	1	Gallon(GAL)	12/06/22
V00000D018	-	Cote All 340 J.D. (Safety) Yellow	1	Gallon(GAL)	12/06/22
V00000D017	-	Cote All 340 J.D. (Safety) Yellow	1	Gallon(GAL)	12/06/22
V00000D016	-	Cote All 340 J.D. (Safety) Yellow	1	Gallon(GAL)	12/06/22
1733050	-	PSX 700 WHITE RESIN	1	Gallon(GAL)	12/06/22
1733051	-	PSX 700 WHITE RESIN	1	Gallon(GAL)	12/06/22
1733052	-	PSX 700 WHITE RESIN	1	Gallon(GAL)	12/06/22
1733053	-	PSX 700 WHITE RESIN	1	Gallon(GAL)	12/06/22
1746113	7631-90-5	SODIUM BISULFITE (SODIUM HYDROGEN SULFITE)	500	Gram(GM)	12/07/22
1746114	-	Zirconia Powder TZ-3Y-SB-E	1	Kilograms(KG)	12/07/22
1746116	-	Zirconia Powder TZ-3Y-SB-E	1	Kilograms(KG)	12/07/22
1746115	-	Zirconia Powder TZ-3Y-SB-E	1	Kilograms(KG)	12/07/22
1746117	7439-95-4	Magnesium purum for Grignard reactions 99.5%	250	Gram(GM)	12/07/22
1746118	107-21-1	ETHYLENE GLYCOL (ETHYLENE GLYCOL ANHYDROUS)	100	Milliliter(ML)	12/07/22
1746119	2420-94-2	2-AMINOETHYL METHACRYLATE HYDROCHLORIDE	5	Gram(GM)	12/07/22
1746120	18490-38-5	N-(2 4-DINITROPHENYL)-2-NAPHTHALENAMINE	25	Milligram(MG)	12/07/22
1746121	18490-38-5	N-(2 4-DINITROPHENYL)-2-NAPHTHALENAMINE	25	Milligram(MG)	12/07/22
1746122	60-29-7	Ethyl Ether Laboratory Grade	1	Liters(L)	12/07/22
1746123	7757-82-6	SODIUM SULFATE ANHYDROUS	500	Gram(GM)	12/07/22
1746124	121-44-8	TRIETHYLAMINE	500	Milliliter(ML)	12/07/22
1746125	1301-96-8	SILVER (II) OXIDE	5	Gram(GM)	12/07/22
1745139	156-38-7	4-Hydroxyphenylacetic acid 98%	25	Gram(GM)	12/07/22
1745123	100125-12-0	3 8-Dibromo-1 10-phenanthroline	1	Gram(GM)	12/07/22
1745134	2563-26-0	4 5-Dibromobenzene-1 2-diol	5	Gram(GM)	12/07/22
1744899	-	Rustilo DWX 30	55	Gallon(GAL)	12/07/22
1744958	262297-13-2	1-BUTYL-3-METHYLIMIDAZOLIUM HYDROGEN SULFATE	100	Gram(GM)	12/07/22
1692573	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	12/07/22
1692575	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	12/07/22
1692578	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	12/07/22
1692581	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	12/07/22
1692577	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	12/07/22
1692579	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	12/07/22
1692580	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	12/07/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1692574	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	12/07/22
1692582	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	12/07/22
1692576	74-86-2	ACETYLENE STABILIZED	40	Cubic Feet(CF)	12/07/22
1692583	7440-59-7	HELIUM REFRIGERATED LIQUID (CRYOGENIC LIQUID)	100	Liters(L)	12/07/22
1692378	-	Sulfer Hexafluoride	150	Cubic Feet(CF)	12/07/22
1692379	-	Sulfer Hexafluoride	150	Cubic Feet(CF)	12/07/22
1692380	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/07/22
1692381	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/07/22
1692382	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/07/22
1692383	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692408	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692392	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692394	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692390	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692407	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692391	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692409	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692410	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692411	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692418	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692417	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692416	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692415	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692414	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692413	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692406	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692398	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692402	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692389	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692403	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692393	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692405	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692400	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692399	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692401	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692397	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692396	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692395	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692412	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692404	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692509	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692505	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692510	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692507	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1692513	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692506	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692512	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692508	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692504	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692511	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692517	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692514	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692515	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692516	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/07/22
1692384	-	HYDROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692385	-	HYDROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692386	-	HYDROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692387	-	ARGON 94% HYDROGEN 6%	220	Cubic Feet(CF)	12/07/22
1692388	-	ARGON 94% HYDROGEN 6%	220	Cubic Feet(CF)	12/07/22
1692419	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	12/07/22
1692420	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	12/07/22
1692421	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	12/07/22
1692422	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	12/07/22
1692423	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	12/07/22
1692424	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	12/07/22
1692425	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	12/07/22
1692426	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	12/07/22
1692427	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	12/07/22
1692428	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	12/07/22
1692429	-	OXYGEN COMPRESSED GAS	220	Cubic Feet(CF)	12/07/22
1692430	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692449	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692453	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692431	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692433	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692434	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692450	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692437	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692447	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692446	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692445	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692444	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692443	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692442	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692441	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692440	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692451	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692438	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692452	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1692436	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692435	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692458	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692457	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692456	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692455	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692454	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692448	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692439	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692432	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692475	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692459	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692485	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692484	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692483	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692482	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692480	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692478	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692460	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692476	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692481	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692474	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692473	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692472	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692471	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692470	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692469	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692477	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692487	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692465	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692464	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692463	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692461	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692479	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692466	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692488	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692467	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692468	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692486	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692462	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/07/22
1692489	-	Compressed Air	220	Cubic Feet(CF)	12/07/22
1692493	-	Compressed Air	220	Cubic Feet(CF)	12/07/22
1692498	-	Compressed Air	220	Cubic Feet(CF)	12/07/22
1692496	-	Compressed Air	220	Cubic Feet(CF)	12/07/22
1692494	-	Compressed Air	220	Cubic Feet(CF)	12/07/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1692492	-	Compressed Air	220	Cubic Feet(CF)	12/07/22
1692497	-	Compressed Air	220	Cubic Feet(CF)	12/07/22
1692501	-	Compressed Air	220	Cubic Feet(CF)	12/07/22
1692495	-	Compressed Air	220	Cubic Feet(CF)	12/07/22
1692500	-	Compressed Air	220	Cubic Feet(CF)	12/07/22
1692491	-	Compressed Air	220	Cubic Feet(CF)	12/07/22
1692502	-	Compressed Air	220	Cubic Feet(CF)	12/07/22
1692503	-	Compressed Air	220	Cubic Feet(CF)	12/07/22
1692490	-	Compressed Air	220	Cubic Feet(CF)	12/07/22
1692499	-	Compressed Air	220	Cubic Feet(CF)	12/07/22
1692518	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692538	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692547	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692546	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692545	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692544	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692543	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692537	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692539	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692534	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692548	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692542	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692536	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692533	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692535	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692541	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692549	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692562	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692561	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692560	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692559	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692558	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692540	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692557	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692550	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692555	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692554	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692553	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692552	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692551	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692556	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692529	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692528	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692527	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692526	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1692525	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692524	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692523	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692519	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692521	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692530	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692520	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692522	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692532	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692531	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/07/22
1692563	74-98-6	PROPANE	11	Gallon(GAL)	12/07/22
1692565	74-98-6	PROPANE	11	Gallon(GAL)	12/07/22
1692571	74-98-6	PROPANE	11	Gallon(GAL)	12/07/22
1692570	74-98-6	PROPANE	11	Gallon(GAL)	12/07/22
1692564	74-98-6	PROPANE	11	Gallon(GAL)	12/07/22
1692572	74-98-6	PROPANE	11	Gallon(GAL)	12/07/22
1692566	74-98-6	PROPANE	11	Gallon(GAL)	12/07/22
1692567	74-98-6	PROPANE	11	Gallon(GAL)	12/07/22
1692568	74-98-6	PROPANE	11	Gallon(GAL)	12/07/22
1692569	74-98-6	PROPANE	11	Gallon(GAL)	12/07/22
1745124	64741-88-4	Vacuum Pump Oil Viscosity 46	1	Liters(L)	12/07/22
1745125	64741-88-4	Vacuum Pump Oil Viscosity 68	1	Liters(L)	12/07/22
1745126	64741-88-4	Vacuum Pump Oil Viscosity 100	1	Liters(L)	12/07/22
1745127	64741-88-4	Vacuum Pump Oil Viscosity 150	1	Liters(L)	12/07/22
1711924	-	InstaCote CC Fix Vinyl Latex/modified Poly Acrylate Coating	5	Gallon(GAL)	12/08/22
1711925	-	InstaCote CC Fix Vinyl Latex/modified Poly Acrylate Coating	5	Gallon(GAL)	12/08/22
1711926	-	CC Wet Water Based Anti-dusting Media	5	Gallon(GAL)	12/08/22
1711927	-	CC Wet Water Based Anti-dusting Media	5	Gallon(GAL)	12/08/22
1745245	7697-37-2	NITRIC ACID 70%	500	Milliliter(ML)	12/08/22
1745814	-	AvistaClean MF 1000A	159	Kilograms(KG)	12/08/22
1745815	-	AvistaClean MF 1000A	159	Kilograms(KG)	12/08/22
1746163	-	IQ SYBR GREEN SUPERMIX	2.5	Milliliter(ML)	12/08/22
1746164	-	IQ SYBR GREEN SUPERMIX	2.5	Milliliter(ML)	12/08/22
1746169	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/08/22
1746173	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/08/22
1746174	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/08/22
1746183	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/08/22
1746175	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/08/22
1746181	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/08/22
1746180	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/08/22
1746179	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/08/22
1746178	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/08/22
1746177	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1746176	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/08/22
1746182	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/08/22
1746170	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/08/22
1746171	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/08/22
1746184	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/08/22
1746172	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/08/22
1746224	14516-54-2	BROMOPENTACARBONYLMANGANESE	5	Gram(GM)	12/08/22
1746225	7790-33-2	Manganese (II) iodide anhydrous	10	Gram(GM)	12/08/22
1746226	60-29-7	Diethyl ether Spectrophotometric Grade inhibitor free	1	Liters(L)	12/08/22
1746227	67-56-1	Methanol (HPLC)	4	Liters(L)	12/08/22
1746230	67-56-1	Methanol (HPLC)	4	Liters(L)	12/08/22
1746228	67-56-1	Methanol (HPLC)	4	Liters(L)	12/08/22
1746229	67-56-1	Methanol (HPLC)	4	Liters(L)	12/08/22
1746231	590-90-9	4-Hydroxy-2-butanone	100	Gram(GM)	12/08/22
1746232	10034-93-2	Hydrazine sulfate salt	500	Gram(GM)	12/08/22
1746233	109-99-9	Tetrahydrofuran anhydrous 99.9% inhibitor-free	2	Liters(L)	12/08/22
1746234	109-99-9	Tetrahydrofuran anhydrous 99.9% inhibitor-free	2	Liters(L)	12/08/22
1746235	-	pH 4.00 Standard BIOTECHNOLOGY GRADE	500	Milliliter(ML)	12/08/22
1746236	1317-61-9	COPPER(I) OXIDE	100	Gram(GM)	12/08/22
1746237	110-54-3	n-Hexane 96+% Extra Dry	1	Liters(L)	12/08/22
1746238	17998-59-3	(1-NAPHTHYLMETHYL)TRICHLOROSILANE	10	Gram(GM)	12/08/22
1746239	98-13-5	PHENYLTRICHLOROSILANE	25	Gram(GM)	12/08/22
1746240	78900-02-4	PENTAFLUOROPHENYLPROPYLTRICHLOROSILANE	2.5	Gram(GM)	12/08/22
1746241	18583-60-3	Potassium tri(1-pyrazolyl)borohydride	5	Gram(GM)	12/08/22
1746242	7647-14-5	SODIUM CHLORIDE	1	Kilograms(KG)	12/08/22
1746243	28923-39-9	Nickel(II) bromide ethylene glycol dimethyl ether complex	5	Gram(GM)	12/08/22
1746244	603-36-1	Triphenylantimony(III)	25	Gram(GM)	12/08/22
1746245	1070896-59-1	3-Fluoro-4-piperidone Hydrochloride	5	Gram(GM)	12/08/22
1746246	108-48-5	2 6-Lutidine 98%	100	Milliliter(ML)	12/08/22
1746100	-	Aerosol Coating Spray Black	12	Ounces(OZ)	12/08/22
1719449	-	CONCRETE REPAIR	50	Pounds(LB)	12/08/22
1746101	-	Aerosol Coating Spray Black	12	Ounces(OZ)	12/08/22
1746102	-	Aerosol Coating Spray Black	12	Ounces(OZ)	12/08/22
1746103	-	Aerosol Coating Spray Black	12	Ounces(OZ)	12/08/22
1719450	-	CONCRETE REPAIR	50	Pounds(LB)	12/08/22
1040707	-	P3 OIL	3	Liters(L)	12/08/22
1040716	-	Oil F4 for VV-Pump	1.2	Liters(L)	12/08/22
1733054	-	PSX 700 Black Resin	1	Gallon(GAL)	12/08/22
1733055	-	PSX 700 Black Resin	1	Gallon(GAL)	12/08/22
1733056	-	PSX 700 Black Resin	1	Gallon(GAL)	12/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1733057	-	PSX 700 Black Resin	1	Gallon(GAL)	12/08/22
1733058	-	PSX 700 NEUTRAL TINT RESIN	0.64	Gallon(GAL)	12/08/22
1733061	-	PSX 700 NEUTRAL TINT RESIN	0.64	Gallon(GAL)	12/08/22
1733060	-	PSX 700 NEUTRAL TINT RESIN	0.64	Gallon(GAL)	12/08/22
1733059	-	PSX 700 NEUTRAL TINT RESIN	0.64	Gallon(GAL)	12/08/22
1733116	-	SULLAIR SULLUBE	5	Gallon(GAL)	12/08/22
1733117	-	PARTS PLUS HD SAE 30 PREMIUM MOTOR OIL PP3371	1	Quarts(QT)	12/08/22
1733118	-	PARTS PLUS HD SAE 30 PREMIUM MOTOR OIL PP3371	1	Quarts(QT)	12/08/22
1733120	-	PARTS PLUS HD SAE 30 PREMIUM MOTOR OIL PP3371	1	Quarts(QT)	12/08/22
1733119	-	PARTS PLUS HD SAE 30 PREMIUM MOTOR OIL PP3371	1	Quarts(QT)	12/08/22
1733121	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	12/08/22
1733122	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	12/08/22
1733123	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	12/08/22
1733124	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	12/08/22
1733163	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	12/08/22
1733162	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	12/08/22
1733161	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	12/08/22
1733160	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	12/08/22
1733159	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	12/08/22
1733158	-	Premium Blue Heavy Duty SAE 5W-40 Engine Oil	1	Gallon(GAL)	12/08/22
1733125	-	AW-68 HYDRAULIC OIL	55	Gallon(GAL)	12/08/22
1733128	-	AW-68 HYDRAULIC OIL	55	Gallon(GAL)	12/08/22
1733127	-	AW-68 HYDRAULIC OIL	55	Gallon(GAL)	12/08/22
1733126	-	AW-68 HYDRAULIC OIL	55	Gallon(GAL)	12/08/22
1733142	-	AW-68 HYDRAULIC OIL	55	Gallon(GAL)	12/08/22
1733129	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Quarts(QT)	12/08/22
1733139	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Quarts(QT)	12/08/22
1733140	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Quarts(QT)	12/08/22
1733141	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Quarts(QT)	12/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1733138	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Quarts(QT)	12/08/22
1733137	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Quarts(QT)	12/08/22
1733136	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Quarts(QT)	12/08/22
1733135	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Quarts(QT)	12/08/22
1733134	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Quarts(QT)	12/08/22
1733132	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Quarts(QT)	12/08/22
1733131	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Quarts(QT)	12/08/22
1733130	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Quarts(QT)	12/08/22
1733133	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Quarts(QT)	12/08/22
V00000D021	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/08/22
V00000D024	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/08/22
V00000D025	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/08/22
V00000D026	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/08/22
V00000D023	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/08/22
V00000D022	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/08/22
1733143	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/08/22
1733148	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/08/22
1733152	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/08/22
1733151	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/08/22
1733149	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/08/22
1733147	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/08/22
1733146	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/08/22
1733145	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/08/22
1733150	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/08/22
1733144	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/08/22
1733178	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/08/22
1733174	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/08/22
1733175	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/08/22
1733176	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/08/22
1733177	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/08/22
1733173	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/08/22
1733153	-	JOHNSEN'S PREMIUM DOT 3 BRAKE FLUID 1 GALLON	1	Gallon(GAL)	12/08/22
1733154	-	JOHNSEN'S PREMIUM DOT 3 BRAKE FLUID 1 GALLON	1	Gallon(GAL)	12/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1733155	-	ULTRA LOW VOC BRAKLEEN	14	Ounces(OZ)	12/08/22
1733156	-	ULTRA LOW VOC BRAKLEEN	14	Ounces(OZ)	12/08/22
1733157	-	ULTRA LOW VOC BRAKLEEN	14	Ounces(OZ)	12/08/22
V00000D02D	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/08/22
V00000D032	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/08/22
V00000D031	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/08/22
V00000D030	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/08/22
V00000D02E	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/08/22
V00000D02C	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/08/22
V00000D02B	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/08/22
V00000D02A	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/08/22
V00000D029	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/08/22
V00000D028	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/08/22
V00000D027	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/08/22
V00000D033	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/08/22
V00000D02F	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/08/22
1733164	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/08/22
1733166	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/08/22
1733165	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/08/22
1733168	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/08/22
1733167	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/08/22
V00000D034	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	12/08/22
V00000D035	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	12/08/22
V00000D036	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	12/08/22
1733180	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/08/22
1733181	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/08/22
1733193	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/08/22
1733191	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/08/22
1733190	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/08/22
1733189	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/08/22
1733188	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/08/22
1733187	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/08/22
1733186	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/08/22
1733185	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/08/22
1733184	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/08/22
1733182	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/08/22
1733192	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/08/22
1733183	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/08/22
1733194	-	Zinsser BULLS EYE 1-2-3	5	Gallon(GAL)	12/08/22
1733195	-	Zinsser BULLS EYE 1-2-3	5	Gallon(GAL)	12/08/22
1733196	-	Zinsser BULLS EYE 1-2-3	5	Gallon(GAL)	12/08/22
V00000D042	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D03A	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/08/22
V00000D037	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/08/22
V00000D039	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/08/22
V00000D03B	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/08/22
V00000D03C	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/08/22
V00000D03D	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/08/22
V00000D03E	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/08/22
V00000D03F	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/08/22
V00000D041	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/08/22
V00000D040	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/08/22
V00000D038	-	PSX 700 pearl gray resin	0.8	Gallon(GAL)	12/08/22
1733197	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	12/08/22
1733202	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	12/08/22
1733198	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	12/08/22
1733199	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	12/08/22
1733201	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	12/08/22
1733203	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	12/08/22
1733204	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	12/08/22
1733206	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	12/08/22
1733208	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	12/08/22
1733205	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	12/08/22
1733200	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	12/08/22
1733207	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	25	Ounces(OZ)	12/08/22
V00000D043	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D044	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D045	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D046	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D047	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D048	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D049	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D04D	-	Avalon Premium 100% Acrylic Interior Flat W/B	3.6	Liters(L)	12/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D04A	-	Avalon Premium 100% Acrylic Interior Flat W/B	3.6	Liters(L)	12/08/22
V00000D04C	-	Avalon Premium 100% Acrylic Interior Flat W/B	3.6	Liters(L)	12/08/22
V00000D04E	-	Avalon Premium 100% Acrylic Interior Flat W/B	3.6	Liters(L)	12/08/22
V00000D04B	-	Avalon Premium 100% Acrylic Interior Flat W/B	3.6	Liters(L)	12/08/22
1733179	-	Vers-Acryl 222 S/G Finish Safety Red	1	Gallon(GAL)	12/08/22
1733209	-	PSX 700 CURE	0.2	Gallon(GAL)	12/08/22
1733214	-	PSX 700 CURE	0.2	Gallon(GAL)	12/08/22
1733213	-	PSX 700 CURE	0.2	Gallon(GAL)	12/08/22
1733212	-	PSX 700 CURE	0.2	Gallon(GAL)	12/08/22
1733211	-	PSX 700 CURE	0.2	Gallon(GAL)	12/08/22
1733210	-	PSX 700 CURE	0.2	Gallon(GAL)	12/08/22
1733215	-	PSX 700A CLEAR COAT CURE	0.17	Gallon(GAL)	12/08/22
1733216	-	PSX 700A CLEAR COAT CURE	0.17	Gallon(GAL)	12/08/22
1733218	-	PSX 700A CLEAR COAT CURE	0.17	Gallon(GAL)	12/08/22
1733219	-	PSX 700A CLEAR COAT CURE	0.17	Gallon(GAL)	12/08/22
1733220	-	PSX 700A CLEAR COAT CURE	0.17	Gallon(GAL)	12/08/22
1733217	-	PSX 700A CLEAR COAT CURE	0.17	Gallon(GAL)	12/08/22
1733221	-	Amerlock Sealer HRD	12	Gallon(GAL)	12/08/22
1733223	-	Amerlock Sealer HRD	12	Gallon(GAL)	12/08/22
1733224	-	Amerlock Sealer HRD	12	Gallon(GAL)	12/08/22
1733225	-	Amerlock Sealer HRD	12	Gallon(GAL)	12/08/22
1733226	-	Amerlock Sealer HRD	12	Gallon(GAL)	12/08/22
1733222	-	Amerlock Sealer HRD	12	Gallon(GAL)	12/08/22
1733227	-	AMERLOCK SEALER CLEAR BASE	12	Gallon(GAL)	12/08/22
1733232	-	AMERLOCK SEALER CLEAR BASE	12	Gallon(GAL)	12/08/22
1733228	-	AMERLOCK SEALER CLEAR BASE	12	Gallon(GAL)	12/08/22
1733229	-	AMERLOCK SEALER CLEAR BASE	12	Gallon(GAL)	12/08/22
1733230	-	AMERLOCK SEALER CLEAR BASE	12	Gallon(GAL)	12/08/22
1733231	-	AMERLOCK SEALER CLEAR BASE	12	Gallon(GAL)	12/08/22
V00000D078	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D077	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D076	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D075	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D074	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D073	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D069	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D071	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D07B	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D06F	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D067	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D06D	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D06C	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D06B	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D06A	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D072	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D082	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D08A	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D089	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D088	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D087	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D086	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D085	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D079	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D083	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D07A	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D081	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D080	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D07F	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D07E	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D07D	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D07C	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D06E	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D084	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D05E	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D066	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D065	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D064	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D063	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D062	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D061	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D070	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D04F	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D05F	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D05D	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D068	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D05C	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D05B	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D054	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D059	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D058	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D057	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D056	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D050	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D051	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D055	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D05A	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D052	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D060	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
V00000D053	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/08/22
1733233	-	Permacryl Interior Latex Satin M/B	3.6	Liters(L)	12/08/22
1733234	-	Permacryl Interior Latex Satin M/B	3.6	Liters(L)	12/08/22
1733235	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733258	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733248	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733249	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733250	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733251	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733252	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733253	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733254	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733255	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733256	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733246	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733257	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733245	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733259	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733260	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733261	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733262	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733263	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733264	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1733265	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733266	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733267	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733268	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733270	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733269	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733244	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733243	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733242	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733241	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733240	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733239	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733238	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733237	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733236	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
1733247	-	ORANGE PEEL SPRAY ON TEXTURE WATER BASED	20	Ounces(OZ)	12/08/22
V00000D0A5	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D09C	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D09D	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D0A4	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D0A3	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D0A1	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D0A0	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D09F	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D09E	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D0A6	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D0AD	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D0A2	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D0A7	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D0A8	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D0A9	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D0B2	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D0B1	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D0B0	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D0AE	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D0AC	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D0AB	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D0AA	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D09B	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D098	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D0AF	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D091	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D08B	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D08C	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D08D	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D08E	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D090	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D092	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D093	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D094	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D095	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D096	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D097	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D09A	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D099	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
V00000D08F	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/08/22
1733299	-	Vers-Acryl 222 S/G Finish White Base	18	Liters(L)	12/08/22
1733300	-	Vers-Acryl 222 S/G Finish White Base	18	Liters(L)	12/08/22
1733301	-	Vers-Acryl 222 S/G Finish White Base	18	Liters(L)	12/08/22
V00000D0B3	-	Avalon Premium 100% Acrylic Interior Flat W/B	3.6	Liters(L)	12/08/22
V00000D0B6	-	Avalon Premium 100% Acrylic Interior Flat W/B	3.6	Liters(L)	12/08/22
V00000D0B5	-	Avalon Premium 100% Acrylic Interior Flat W/B	3.6	Liters(L)	12/08/22
V00000D0B4	-	Avalon Premium 100% Acrylic Interior Flat W/B	3.6	Liters(L)	12/08/22
1733303	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/08/22
1733271	-	Vers-Acryl 222 S/G Finish Safety Red	1	Gallon(GAL)	12/08/22
1733285	-	Vers-Acryl 222 S/G Finish Safety Red	1	Gallon(GAL)	12/08/22
1733284	-	Vers-Acryl 222 S/G Finish Safety Red	1	Gallon(GAL)	12/08/22
1733280	-	Vers-Acryl 222 S/G Finish Safety Red	1	Gallon(GAL)	12/08/22
1733286	-	Vers-Acryl 222 S/G Finish Safety Red	1	Gallon(GAL)	12/08/22
1733282	-	Vers-Acryl 222 S/G Finish Safety Red	1	Gallon(GAL)	12/08/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1733278	-	Vers-Acryl 222 S/G Finish Safety Red	1	Gallon(GAL)	12/08/22
1733283	-	Vers-Acryl 222 S/G Finish Safety Red	1	Gallon(GAL)	12/08/22
1733279	-	Vers-Acryl 222 S/G Finish Safety Red	1	Gallon(GAL)	12/08/22
1733273	-	Vers-Acryl 222 S/G Finish Safety Red	1	Gallon(GAL)	12/08/22
1733281	-	Vers-Acryl 222 S/G Finish Safety Red	1	Gallon(GAL)	12/08/22
1733277	-	Vers-Acryl 222 S/G Finish Safety Red	1	Gallon(GAL)	12/08/22
1733274	-	Vers-Acryl 222 S/G Finish Safety Red	1	Gallon(GAL)	12/08/22
1733276	-	Vers-Acryl 222 S/G Finish Safety Red	1	Gallon(GAL)	12/08/22
1733275	-	Vers-Acryl 222 S/G Finish Safety Red	1	Gallon(GAL)	12/08/22
1733272	-	Vers-Acryl 222 S/G Finish Safety Red	1	Gallon(GAL)	12/08/22
1733287	-	Permacryl Interior Latex Satin M/B	3.6	Liters(L)	12/08/22
1733289	-	Permacryl Interior Latex Satin M/B	3.6	Liters(L)	12/08/22
1733290	-	Permacryl Interior Latex Satin M/B	3.6	Liters(L)	12/08/22
1733288	-	Permacryl Interior Latex Satin M/B	3.6	Liters(L)	12/08/22
1733291	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/08/22
1733292	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/08/22
1733293	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/08/22
1733294	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/08/22
1733307	-	Polaris Demand Drive	1	Quarts(QT)	12/08/22
1733308	-	Polaris Demand Drive	1	Quarts(QT)	12/08/22
1733309	-	Polaris Demand Drive	1	Quarts(QT)	12/08/22
1733310	-	Polaris Demand Drive	1	Quarts(QT)	12/08/22
1733312	-	Valvoline HIGH PERFORMANCE SAE 75W-90 GEAR OIL	1	Quarts(QT)	12/08/22
1733313	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/08/22
1733314	-	MOBIL 1 5W-50	1	Quarts(QT)	12/08/22
1733315	-	MOBIL 1 5W-50	1	Quarts(QT)	12/08/22
1733316	-	MOBIL 1 5W-50	1	Quarts(QT)	12/08/22
1733317	-	MOBIL 1 5W-50	1	Quarts(QT)	12/08/22
1733318	-	MOBIL 1 5W-50	1	Quarts(QT)	12/08/22
1733319	-	MOBIL 1 5W-50	1	Quarts(QT)	12/08/22
1733320	-	MOBIL 1 5W-50	1	Quarts(QT)	12/08/22
1733321	-	MOBIL 1 5W-50	1	Quarts(QT)	12/08/22
1733322	-	MOBIL 1 5W-50	1	Quarts(QT)	12/08/22
1733323	-	MOBIL 1 5W-50	1	Quarts(QT)	12/08/22
1733324	-	MOBIL 1 5W-50	1	Quarts(QT)	12/08/22
1733325	-	MOBIL 1 5W-50	1	Quarts(QT)	12/08/22
1733326	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/08/22
1733327	-	Vers-Acryl 222 S/G Finish Deep Base	3.5	Liters(L)	12/08/22
1733328	-	Vers-Acryl 222 S/G Finish Deep Base	3.5	Liters(L)	12/08/22
1746248	-	HYDRANAL Coulomat Oil	100	Milliliter(ML)	12/09/22
1746251	-	HYDRANAL Coulomat Oil	100	Milliliter(ML)	12/09/22
1746250	-	HYDRANAL Coulomat Oil	100	Milliliter(ML)	12/09/22
1746253	-	HYDRANAL Coulomat Oil	100	Milliliter(ML)	12/09/22
1746249	-	HYDRANAL Coulomat Oil	100	Milliliter(ML)	12/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1746254	-	HYDRANAL Coulomat Oil	100	Milliliter(ML)	12/09/22
1746252	-	HYDRANAL Coulomat Oil	100	Milliliter(ML)	12/09/22
1746255	64-17-5	ETHYL ALCOHOL ANHYDROUS	1	Liters(L)	12/09/22
1746256	-	BISMUTH (III) NITRATE PENTAHYDRATE	1	Kilograms(KG)	12/09/22
1733329	-	PSX 700 CURE	0.2	Gallon(GAL)	12/09/22
1733330	-	PSX 700 CURE	0.2	Gallon(GAL)	12/09/22
1733331	-	PSX 700 NEUTRAL TINT RESIN	0.64	Gallon(GAL)	12/09/22
1733332	-	PSX 700 NEUTRAL TINT RESIN	0.64	Gallon(GAL)	12/09/22
1692585	7440-59-7	HELIUM REFRIGERATED LIQUID (CRYOGENIC LIQUID)	100	Liters(L)	12/09/22
1733333	-	Amerlock Sealer HRD	1	Gallon(GAL)	12/09/22
1733334	-	Amerlock Sealer HRD	1	Gallon(GAL)	12/09/22
1733335	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	12/09/22
1733336	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	12/09/22
1733337	-	SHEETROCK Brand PLUS 3 Lightweight All Purpose Joint Compound Ready-Mixed	4.5	Gallon(GAL)	12/09/22
1733338	-	SHEETROCK Brand PLUS 3 Lightweight All Purpose Joint Compound Ready-Mixed	4.5	Gallon(GAL)	12/09/22
1733339	-	SHEETROCK LIGHTWEIGHT ALL PURPOSE JOINT COMPOUND	4.5	Gallon(GAL)	12/09/22
1733340	-	SHEETROCK LIGHTWEIGHT ALL PURPOSE JOINT COMPOUND	4.5	Gallon(GAL)	12/09/22
1733341	-	SBS FLASHING CEMENT MATRIX 202	5	Gallon(GAL)	12/09/22
1733345	-	SBS FLASHING CEMENT MATRIX 202	5	Gallon(GAL)	12/09/22
1733351	-	SBS FLASHING CEMENT MATRIX 202	5	Gallon(GAL)	12/09/22
1733357	-	SBS FLASHING CEMENT MATRIX 202	5	Gallon(GAL)	12/09/22
1733356	-	SBS FLASHING CEMENT MATRIX 202	5	Gallon(GAL)	12/09/22
1733358	-	SBS FLASHING CEMENT MATRIX 202	5	Gallon(GAL)	12/09/22
1733355	-	SBS FLASHING CEMENT MATRIX 202	5	Gallon(GAL)	12/09/22
1733354	-	SBS FLASHING CEMENT MATRIX 202	5	Gallon(GAL)	12/09/22
1733353	-	SBS FLASHING CEMENT MATRIX 202	5	Gallon(GAL)	12/09/22
1733359	-	SBS FLASHING CEMENT MATRIX 202	5	Gallon(GAL)	12/09/22
1733352	-	SBS FLASHING CEMENT MATRIX 202	5	Gallon(GAL)	12/09/22
1733347	-	SBS FLASHING CEMENT MATRIX 202	5	Gallon(GAL)	12/09/22
1733349	-	SBS FLASHING CEMENT MATRIX 202	5	Gallon(GAL)	12/09/22
1733346	-	SBS FLASHING CEMENT MATRIX 202	5	Gallon(GAL)	12/09/22
1733348	-	SBS FLASHING CEMENT MATRIX 202	5	Gallon(GAL)	12/09/22
1733344	-	SBS FLASHING CEMENT MATRIX 202	5	Gallon(GAL)	12/09/22
1733343	-	SBS FLASHING CEMENT MATRIX 202	5	Gallon(GAL)	12/09/22
1733342	-	SBS FLASHING CEMENT MATRIX 202	5	Gallon(GAL)	12/09/22
1733350	-	SBS FLASHING CEMENT MATRIX 202	5	Gallon(GAL)	12/09/22
1733360	-	QD-64 Fresh Scent	1	Gallon(GAL)	12/09/22
1733361	-	QD-64 Fresh Scent	1	Gallon(GAL)	12/09/22
1733362	-	QD-64 Fresh Scent	1	Gallon(GAL)	12/09/22
1733363	-	QD-64 Fresh Scent	1	Gallon(GAL)	12/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D0BB	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/09/22
V00000D0BE	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/09/22
V00000D0BC	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/09/22
V00000D0BA	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/09/22
V00000D0B8	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/09/22
V00000D0B7	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/09/22
V00000D0BD	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/09/22
V00000D0B9	-	Valvoline¿ HD 15W40	1	Gallon(GAL)	12/09/22
1733371	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733375	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733372	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733407	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733408	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733373	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733395	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733396	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733397	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733413	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733412	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733411	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733393	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733409	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733392	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733406	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733398	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733404	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1733399	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733400	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733401	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733402	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733410	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733384	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733403	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733376	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733377	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733378	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733379	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733380	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733381	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733394	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733383	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733374	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733385	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733386	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733387	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733388	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733389	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733390	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1733391	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733382	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733405	-	Pennzoil Ultra Platinum SAE 0W-40 Full Synthetic Motor Oil	1	Quarts(QT)	12/09/22
1733414	-	Titebond GREENchoice Fast Grab FRP Adhesive	4.75	Gallon(GAL)	12/09/22
1733415	-	Titebond GREENchoice Fast Grab FRP Adhesive	4.75	Gallon(GAL)	12/09/22
1733416	-	Titebond GREENchoice Fast Grab FRP Adhesive	4.75	Gallon(GAL)	12/09/22
1733417	-	Titebond GREENchoice Fast Grab FRP Adhesive	4.75	Gallon(GAL)	12/09/22
1733418	-	Titebond GREENchoice Fast Grab FRP Adhesive	4.75	Gallon(GAL)	12/09/22
1733419	-	Titebond GREENchoice Fast Grab FRP Adhesive	4.75	Gallon(GAL)	12/09/22
1733420	-	Titebond GREENchoice Fast Grab FRP Adhesive	4.75	Gallon(GAL)	12/09/22
1733421	-	Titebond GREENchoice Fast Grab FRP Adhesive	4.75	Gallon(GAL)	12/09/22
1733364	-	CAT HYDO ADVANCED 10	5	Gallon(GAL)	12/09/22
1733368	-	CAT HYDO ADVANCED 10	5	Gallon(GAL)	12/09/22
1733365	-	CAT HYDO ADVANCED 10	5	Gallon(GAL)	12/09/22
1733367	-	CAT HYDO ADVANCED 10	5	Gallon(GAL)	12/09/22
1733366	-	CAT HYDO ADVANCED 10	5	Gallon(GAL)	12/09/22
1733369	-	VALVOLINE AW-32 HYDRAULIC	5	Gallon(GAL)	12/09/22
V00000D0C1	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/09/22
V00000D0C4	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/09/22
V00000D0C2	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/09/22
V00000D0C0	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/09/22
V00000D0BF	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/09/22
V00000D0C3	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/09/22
1749530	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/09/22
1689099	7440-37-1	ARGON GAS	100	Liters(L)	12/09/22
1689101	7440-37-1	ARGON GAS	100	Liters(L)	12/09/22
1689100	7440-37-1	ARGON GAS	100	Liters(L)	12/09/22
1692584	-	Sulfer Hexafluoride	220	Cubic Feet(CF)	12/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1458370	-	Industrial Gear Lube 680	1	Gallon(GAL)	12/09/22
1458402	-	MOBIL VELOCITE OIL NO. 3	5	Gallon(GAL)	12/09/22
1458403	-	MOBIL VELOCITE OIL NO. 3	5	Milliliter(ML)	12/09/22
1458404	-	MOBIL VELOCITE OIL NO. 3	5	Milliliter(ML)	12/09/22
1733425	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733430	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733427	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733428	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733429	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733426	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733484	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733485	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733486	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733487	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733488	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733490	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733477	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733489	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733483	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733482	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733481	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733480	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733491	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733478	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733476	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733475	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733474	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733473	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733472	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733471	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733479	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733518	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733494	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733512	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733513	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733514	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733515	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733510	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733517	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733509	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733519	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733520	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733521	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733522	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733523	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1733524	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733516	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733502	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733493	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733495	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733497	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733496	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733498	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733511	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733501	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733492	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733503	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733504	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733505	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733506	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733507	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733508	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733500	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
1733499	-	Prime Guard Power Blast	1	Gallon(GAL)	12/09/22
V00000D0C9	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/09/22
V00000D0CA	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/09/22
V00000D0CE	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/09/22
V00000D0CD	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/09/22
V00000D0CC	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/09/22
V00000D0C8	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/09/22
V00000D0C7	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/09/22
V00000D0C6	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/09/22
V00000D0C5	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/09/22
V00000D0CB	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/09/22
1692346	-	BUTANE	0.617	Kilograms(KG)	12/09/22
1692347	-	BUTANE	0.617	Kilograms(KG)	12/09/22
1692348	-	BUTANE	0.617	Kilograms(KG)	12/09/22
1692349	-	BUTANE	0.617	Kilograms(KG)	12/09/22
1692351	-	BUTANE	0.617	Kilograms(KG)	12/09/22
1692353	-	BUTANE	0.617	Kilograms(KG)	12/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1692354	-	BUTANE	0.617	Kilograms(KG)	12/09/22
1692355	-	BUTANE	0.617	Kilograms(KG)	12/09/22
1692356	-	BUTANE	0.617	Kilograms(KG)	12/09/22
1692357	-	BUTANE	0.617	Kilograms(KG)	12/09/22
1692359	-	BUTANE	0.617	Kilograms(KG)	12/09/22
1692350	-	BUTANE	0.617	Kilograms(KG)	12/09/22
1692360	-	BUTANE	0.617	Kilograms(KG)	12/09/22
1692361	-	BUTANE	0.617	Kilograms(KG)	12/09/22
1692362	-	BUTANE	0.617	Kilograms(KG)	12/09/22
1692363	-	BUTANE	0.617	Kilograms(KG)	12/09/22
1692364	-	BUTANE	0.617	Kilograms(KG)	12/09/22
1692365	-	BUTANE	0.617	Kilograms(KG)	12/09/22
1692366	-	BUTANE	0.617	Kilograms(KG)	12/09/22
1692367	-	BUTANE	0.617	Kilograms(KG)	12/09/22
1692368	-	BUTANE	0.617	Kilograms(KG)	12/09/22
1692369	-	BUTANE	0.617	Kilograms(KG)	12/09/22
1692358	-	BUTANE	0.617	Kilograms(KG)	12/09/22
1692352	-	BUTANE	0.617	Kilograms(KG)	12/09/22
1692251	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/09/22
V00000D0CF	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	12/09/22
V00000D0D0	-	Zerex HD Extended Life 50/50 Antifreeze Coolant	1	Gallon(GAL)	12/09/22
V00000D0D9	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/09/22
V00000D0DA	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/09/22
V00000D0D8	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/09/22
V00000D0D7	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/09/22
V00000D0D6	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/09/22
V00000D0D4	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/09/22
V00000D0D3	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/09/22
V00000D0D2	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/09/22
V00000D0D5	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/09/22
V00000D0D1	-	Valvoline GM MULTIPURPOSE GREASE VV61510	14.1	Ounces(OZ)	12/09/22
1733431	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	12/09/22
1733447	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	12/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1733443	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	12/09/22
1733437	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	12/09/22
1733436	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	12/09/22
1733434	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	12/09/22
1733448	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	12/09/22
1733439	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	12/09/22
1733435	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	12/09/22
1733438	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	12/09/22
1733444	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	12/09/22
1733446	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	12/09/22
1733445	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	12/09/22
1733440	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	12/09/22
1733441	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	12/09/22
1733442	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	12/09/22
1733432	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	12/09/22
1733433	-	MOBIL 1 HIGH MILEAGE 0W-20	1	Quarts(QT)	12/09/22
1733470	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Gallon(GAL)	12/09/22
1733461	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Gallon(GAL)	12/09/22
1733454	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Gallon(GAL)	12/09/22
1733455	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Gallon(GAL)	12/09/22
1733456	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Gallon(GAL)	12/09/22
1733457	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Gallon(GAL)	12/09/22
1733458	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Gallon(GAL)	12/09/22
1733460	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Gallon(GAL)	12/09/22
1733452	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Gallon(GAL)	12/09/22
1733449	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Gallon(GAL)	12/09/22
1733451	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Gallon(GAL)	12/09/22
1733459	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Gallon(GAL)	12/09/22
1733450	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Gallon(GAL)	12/09/22
1733453	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Gallon(GAL)	12/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D0F4	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0EC	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0ED	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0EE	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0EF	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0F0	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0F1	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0F7	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0F3	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D100	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0F5	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0F6	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0EB	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0E1	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0F2	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0E2	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0DB	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0DC	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0DD	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0DE	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0DF	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0E3	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D0F8	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0EA	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0E4	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0E5	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0E6	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0E7	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0E8	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0E9	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0E0	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D124	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D11D	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D12D	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D12C	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D12B	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D12A	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D129	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D12F	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D126	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D130	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D123	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D122	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D121	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D120	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D11F	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D11E	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D128	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D137	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0F9	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0FE	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D13D	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D13C	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D13B	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D13A	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D12E	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D138	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D125	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D136	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D135	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D134	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D133	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D132	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D131	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D139	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D103	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D10B	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D10A	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D109	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D108	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D107	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D106	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D10C	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D11C	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D104	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D127	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D101	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0FF	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0FD	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0FC	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0FB	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D0FA	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D105	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D116	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D102	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D10D	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D119	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D118	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D11A	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D115	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D114	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D110	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D10E	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D117	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D10F	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D111	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D112	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D11B	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D113	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D15D	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D155	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D165	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D158	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D159	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D15A	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D15B	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D15C	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D157	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D15E	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D15F	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D160	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D161	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D162	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D164	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D166	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D167	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D154	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D153	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D163	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D143	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D152	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D156	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D13E	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D13F	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D140	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D142	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D144	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D145	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D146	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D147	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D150	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D141	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D151	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D148	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D14F	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D14E	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D14D	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D14C	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D14B	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D14A	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D149	-	Parts Plus SAE 5W-30 SYNTHETIC MOTOR OIL P3501	1	Quarts(QT)	12/09/22
V00000D18B	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D197	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D183	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D184	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D185	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D186	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D187	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D188	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D189	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D18A	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D181	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D18C	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D18D	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D18E	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D18F	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D190	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D191	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D192	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D193	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D194	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D196	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D180	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D195	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D173	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D17F	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D168	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D169	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D16A	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D16B	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D16C	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D16D	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D16E	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D16F	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D170	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D182	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D172	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D174	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D175	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D176	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D177	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D178	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D179	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D17A	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D17B	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D17C	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D17D	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D17E	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D171	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/09/22
V00000D198	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/09/22
V00000D199	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/09/22
1733525	-	STA-BIL FUEL STABILIZER	1	Quarts(QT)	12/09/22
1733526	-	PERMATEX ANTI-SEIZE LUBRICANT	1	Ounces(OZ)	12/09/22
1733527	-	PERMATEX ANTI-SEIZE LUBRICANT	1	Ounces(OZ)	12/09/22
V00000D1A6	-	WD-40 Multi-Use Product TRIGGER PRO 50 State Compliant	8	Ounces(OZ)	12/09/22
V00000D1B1	-	WD-40 Multi-Use Product TRIGGER PRO 50 State Compliant	8	Ounces(OZ)	12/09/22
V00000D1B0	-	WD-40 Multi-Use Product TRIGGER PRO 50 State Compliant	8	Ounces(OZ)	12/09/22
V00000D1AF	-	WD-40 Multi-Use Product TRIGGER PRO 50 State Compliant	8	Ounces(OZ)	12/09/22
V00000D1AE	-	WD-40 Multi-Use Product TRIGGER PRO 50 State Compliant	8	Ounces(OZ)	12/09/22
V00000D1AD	-	WD-40 Multi-Use Product TRIGGER PRO 50 State Compliant	8	Ounces(OZ)	12/09/22
V00000D1AC	-	WD-40 Multi-Use Product TRIGGER PRO 50 State Compliant	8	Ounces(OZ)	12/09/22
V00000D1AB	-	WD-40 Multi-Use Product TRIGGER PRO 50 State Compliant	8	Ounces(OZ)	12/09/22
V00000D1AA	-	WD-40 Multi-Use Product TRIGGER PRO 50 State Compliant	8	Ounces(OZ)	12/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D1A9	-	WD-40 Multi-Use Product TRIGGER PRO 50 State Compliant	8	Ounces(OZ)	12/09/22
V00000D19A	-	WD-40 Multi-Use Product TRIGGER PRO 50 State Compliant	8	Ounces(OZ)	12/09/22
V00000D1A7	-	WD-40 Multi-Use Product TRIGGER PRO 50 State Compliant	8	Ounces(OZ)	12/09/22
V00000D1A5	-	WD-40 Multi-Use Product TRIGGER PRO 50 State Compliant	8	Ounces(OZ)	12/09/22
V00000D1A4	-	WD-40 Multi-Use Product TRIGGER PRO 50 State Compliant	8	Ounces(OZ)	12/09/22
V00000D1A3	-	WD-40 Multi-Use Product TRIGGER PRO 50 State Compliant	8	Ounces(OZ)	12/09/22
V00000D1A2	-	WD-40 Multi-Use Product TRIGGER PRO 50 State Compliant	8	Ounces(OZ)	12/09/22
V00000D1A1	-	WD-40 Multi-Use Product TRIGGER PRO 50 State Compliant	8	Ounces(OZ)	12/09/22
V00000D1A0	-	WD-40 Multi-Use Product TRIGGER PRO 50 State Compliant	8	Ounces(OZ)	12/09/22
V00000D19F	-	WD-40 Multi-Use Product TRIGGER PRO 50 State Compliant	8	Ounces(OZ)	12/09/22
V00000D19E	-	WD-40 Multi-Use Product TRIGGER PRO 50 State Compliant	8	Ounces(OZ)	12/09/22
V00000D19D	-	WD-40 Multi-Use Product TRIGGER PRO 50 State Compliant	8	Ounces(OZ)	12/09/22
V00000D19B	-	WD-40 Multi-Use Product TRIGGER PRO 50 State Compliant	8	Ounces(OZ)	12/09/22
V00000D1A8	-	WD-40 Multi-Use Product TRIGGER PRO 50 State Compliant	8	Ounces(OZ)	12/09/22
V00000D19C	-	WD-40 Multi-Use Product TRIGGER PRO 50 State Compliant	8	Ounces(OZ)	12/09/22
1733528	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733568	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733557	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733558	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733559	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733560	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733561	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733540	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733539	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733562	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733563	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733564	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733565	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733556	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733532	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1733541	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733538	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733569	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733570	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733571	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733572	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733573	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733574	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733566	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733534	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733551	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733550	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733537	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733549	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733548	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733547	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733546	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733545	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733544	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733555	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733533	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733542	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733535	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733536	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733553	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733530	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733552	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733531	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733575	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733529	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733554	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733543	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733577	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733578	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733579	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733580	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733581	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733567	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733576	497-19-8	SODA ASH	50	Pounds(LB)	12/09/22
1733582	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733608	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733615	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733614	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733613	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733612	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1733611	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733616	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733609	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733623	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733607	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733606	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733610	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733617	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733618	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733605	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733621	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733620	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733624	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733625	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733626	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733627	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733628	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733629	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733619	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733588	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733583	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733584	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733585	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733586	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733622	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733587	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733604	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733589	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733590	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733591	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733592	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733593	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733603	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733602	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733601	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733600	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733595	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733594	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733596	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733599	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733598	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
1733597	-	alex painter's acrylic latex caulk	10.1	Ounces(OZ)	12/09/22
V00000D1E9	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D1F3	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1F2	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1F1	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1F0	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1EF	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1EE	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1ED	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1EC	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1B2	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1EA	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1F6	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1E8	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1E7	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1E6	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1E5	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1E4	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1E3	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1E2	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1E1	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1E0	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1EB	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1FF	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D20A	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D209	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D208	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D207	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D206	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D205	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D204	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D203	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D202	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1F4	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D200	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1F5	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1FE	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1FD	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1FC	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1FB	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1FA	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1F9	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1F8	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1F7	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1DD	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D201	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D1BC	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1C6	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1C5	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1C4	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1C3	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1C2	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1C1	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1C0	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1BF	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1DF	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1BD	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1C9	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1BB	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1BA	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1B9	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1B8	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1B7	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1B6	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1B5	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1B4	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1B3	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1BE	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D1D2	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D20D	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1DC	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1DB	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1DA	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1D9	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1D8	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1D7	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1D6	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1D5	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1C7	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1D3	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1C8	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1D1	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1D0	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1CF	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1CE	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1CD	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1CC	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1CB	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1CA	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D1DE	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D1D4	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D214	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D20E	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D20F	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D210	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D211	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D212	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D213	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D20B	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D20C	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D236	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D235	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D234	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D233	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D232	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D231	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D230	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D22E	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D22D	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D22F	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D237	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D239	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D22C	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D23C	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D238	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D23D	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D23E	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D23F	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D240	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D241	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D242	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D23B	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D21F	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D22B	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D23A	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D215	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D216	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D217	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D218	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D219	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D21A	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D21B	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D21C	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D21E	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D220	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D221	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D222	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D223	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D224	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D225	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D226	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D227	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D228	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D229	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D22A	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D21D	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/09/22
V00000D248	811-97-2	CRC QD CONTACT CLEANER AEROSOL	11	Ounces(OZ)	12/09/22
V00000D247	811-97-2	CRC QD CONTACT CLEANER AEROSOL	11	Ounces(OZ)	12/09/22
V00000D249	811-97-2	CRC QD CONTACT CLEANER AEROSOL	11	Ounces(OZ)	12/09/22
V00000D245	811-97-2	CRC QD CONTACT CLEANER AEROSOL	11	Ounces(OZ)	12/09/22
V00000D244	811-97-2	CRC QD CONTACT CLEANER AEROSOL	11	Ounces(OZ)	12/09/22
V00000D243	811-97-2	CRC QD CONTACT CLEANER AEROSOL	11	Ounces(OZ)	12/09/22
V00000D246	811-97-2	CRC QD CONTACT CLEANER AEROSOL	11	Ounces(OZ)	12/09/22
1757859	92112-69-1	Hexanes mixed isomers ACS	1	Liters(L)	12/09/22
1757858	92112-69-1	Hexanes mixed isomers ACS	1	Liters(L)	12/09/22
734308	-	YTTRIUM STANDARD	50	Milliliter(ML)	12/12/22
1040700	-	URANIUM STANDARD	125	Milliliter(ML)	12/12/22
1607965	-	Detection Solution	220	Milliliter(ML)	12/12/22
1607966	-	Detection Solution	220	Milliliter(ML)	12/12/22
1339433	-	201 CUSTOM CLARITAS STANDARD	100	Milliliter(ML)	12/12/22
1320312	-	201 CUSTOM CLARITAS STANDARD	100	Milliliter(ML)	12/12/22
1320313	-	201 CUSTOM CLARITAS STANDARD	100	Milliliter(ML)	12/12/22
1320314	-	201 CUSTOM CLARITAS STANDARD	100	Milliliter(ML)	12/12/22
1320315	-	201 CUSTOM CLARITAS STANDARD	100	Milliliter(ML)	12/12/22
1040701	-	10 ug/mL Mercury	125	Milliliter(ML)	12/12/22
1320323	-	LUBRICANT	11	Ounces(OZ)	12/12/22
1717934	67-64-1	ACETONE	500	Milliliter(ML)	12/12/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1717935	67-64-1	ACETONE	500	Milliliter(ML)	12/12/22
1718072	-	FS-One Max	10.1	Ounces(OZ)	12/13/22
1718073	-	FS-One Max	10.1	Ounces(OZ)	12/13/22
V00000D24B	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/13/22
V00000D24C	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/13/22
V00000D24D	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/13/22
V00000D24A	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/13/22
1733630	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733688	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733676	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733677	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733678	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733679	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733680	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733681	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733682	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733683	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733684	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733632	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733639	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733633	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733634	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733689	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733641	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733653	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733643	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733642	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733638	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733640	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733675	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733636	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733635	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733637	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733686	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733649	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733655	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733657	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733656	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733654	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733652	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733659	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733650	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733631	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733648	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733647	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1733646	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733645	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733644	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733687	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733651	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733666	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733673	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733672	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733671	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733670	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733669	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733658	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733667	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733674	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733665	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733664	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733663	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733662	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733661	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733660	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733668	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733685	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733873	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733867	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733896	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733868	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733869	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733870	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733897	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733872	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733854	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733874	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733875	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733876	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733895	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733894	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733893	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733871	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733860	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733862	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733863	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733839	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733864	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733865	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733866	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1733851	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733861	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733853	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733859	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733858	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733857	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733856	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733855	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733850	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733840	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733889	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733844	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733852	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733898	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733846	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733847	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733848	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733849	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733888	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733845	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733890	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733891	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733892	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733843	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733880	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733899	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733877	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733878	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733887	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733841	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733842	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733881	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733882	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733884	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733885	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733886	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733883	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733879	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733906	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733951	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733937	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733979	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733938	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733939	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733940	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1733941	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733942	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733943	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733945	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733946	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733950	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733918	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733947	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733948	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733949	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733936	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733944	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733923	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733919	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733967	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733907	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733920	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733921	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733922	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733999	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733925	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733926	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733935	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733927	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733928	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733929	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733930	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733931	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733932	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733933	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733934	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733924	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733900	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733983	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733965	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733985	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733986	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733987	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733988	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733989	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733990	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733991	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733992	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733993	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733994	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1733995	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733908	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733913	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733904	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733903	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733998	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733917	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733916	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733996	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733914	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733997	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733912	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733911	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733910	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733902	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733901	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733982	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733915	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733956	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733963	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733984	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733961	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733960	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733959	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733981	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733957	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733964	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733955	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733954	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733953	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733952	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733905	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733909	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733958	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733973	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733980	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733978	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733977	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733976	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733962	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733974	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733972	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733971	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733970	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733969	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1733968	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733966	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1733975	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734002	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734000	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734001	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734049	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734031	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734040	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734061	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734003	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734060	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734045	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734044	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734043	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734032	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734041	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734064	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734039	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734038	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734037	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734036	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734035	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734034	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734078	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734042	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734046	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734048	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734077	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734076	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734075	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734074	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734073	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734072	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734062	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734047	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734063	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734070	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734069	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734068	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734067	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734066	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734065	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734059	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734071	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734051	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734033	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734015	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734014	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734013	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734012	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734011	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734010	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734017	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734052	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734018	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734050	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734009	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734008	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734007	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734006	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734005	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734004	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734053	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734025	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734058	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734057	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734056	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734030	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734029	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734028	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734016	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734026	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734055	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734054	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734024	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734023	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734022	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734021	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734020	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734019	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734027	-	VULKEM 116 POLYURETHANE SEALANT	300	Milliliter(ML)	12/13/22
1734079	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/13/22
1734095	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/13/22
1734092	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/13/22
1734096	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/13/22
1734093	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/13/22
1734094	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/13/22
1734091	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/13/22
1734090	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734089	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/13/22
1734088	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/13/22
1734087	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/13/22
1734085	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/13/22
1734084	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/13/22
1734083	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/13/22
1734082	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/13/22
1734081	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/13/22
1734080	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/13/22
1734086	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/13/22
1733691	-	John Deere Hydraulic Fluid	5	Gallon(GAL)	12/13/22
1733692	-	John Deere Hydraulic Fluid	5	Gallon(GAL)	12/13/22
1734097	-	GacoFlex SeamSeal Solvent-Free Silicone Sealant	5	Gallon(GAL)	12/13/22
1734102	-	GacoFlex SeamSeal Solvent-Free Silicone Sealant	5	Gallon(GAL)	12/13/22
1734101	-	GacoFlex SeamSeal Solvent-Free Silicone Sealant	5	Gallon(GAL)	12/13/22
1734099	-	GacoFlex SeamSeal Solvent-Free Silicone Sealant	5	Gallon(GAL)	12/13/22
1734098	-	GacoFlex SeamSeal Solvent-Free Silicone Sealant	5	Gallon(GAL)	12/13/22
1734100	-	GacoFlex SeamSeal Solvent-Free Silicone Sealant	5	Gallon(GAL)	12/13/22
1734103	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734129	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734182	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734181	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734180	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734179	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734177	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734176	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734133	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734125	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734140	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734139	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734138	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734137	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734136	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734142	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734134	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734143	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734157	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734131	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734159	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734160	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734128	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734178	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734126	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734135	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734152	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734127	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734175	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734146	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734147	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734148	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734149	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734141	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734151	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734130	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734158	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734153	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734156	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734154	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734155	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734145	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734144	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734150	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734170	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734105	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734104	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734164	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734124	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734166	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734132	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734106	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734169	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734165	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734171	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734172	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734161	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734162	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734163	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734173	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734174	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734168	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734120	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734123	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734122	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734167	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734121	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734107	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734119	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734118	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734117	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734116	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734109	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734108	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734115	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734110	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734112	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734113	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734114	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734111	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/13/22
1734219	-	DAP ALL PURPOSE ADHESIVE	10.1	Ounces(OZ)	12/13/22
1734230	-	DAP ALL PURPOSE ADHESIVE	10.1	Ounces(OZ)	12/13/22
1734229	-	DAP ALL PURPOSE ADHESIVE	10.1	Ounces(OZ)	12/13/22
1734228	-	DAP ALL PURPOSE ADHESIVE	10.1	Ounces(OZ)	12/13/22
1734227	-	DAP ALL PURPOSE ADHESIVE	10.1	Ounces(OZ)	12/13/22
1734226	-	DAP ALL PURPOSE ADHESIVE	10.1	Ounces(OZ)	12/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734225	-	DAP ALL PURPOSE ADHESIVE	10.1	Ounces(OZ)	12/13/22
1734222	-	DAP ALL PURPOSE ADHESIVE	10.1	Ounces(OZ)	12/13/22
1734223	-	DAP ALL PURPOSE ADHESIVE	10.1	Ounces(OZ)	12/13/22
1734221	-	DAP ALL PURPOSE ADHESIVE	10.1	Ounces(OZ)	12/13/22
1734220	-	DAP ALL PURPOSE ADHESIVE	10.1	Ounces(OZ)	12/13/22
1734224	-	DAP ALL PURPOSE ADHESIVE	10.1	Ounces(OZ)	12/13/22
V00000D265	-	DAP 100% SILICONE RUBBER SEALANT CLEAR 8641	9.8	Ounces(OZ)	12/13/22
V00000D25E	-	DAP 100% SILICONE RUBBER SEALANT CLEAR 8641	9.8	Ounces(OZ)	12/13/22
V00000D25F	-	DAP 100% SILICONE RUBBER SEALANT CLEAR 8641	9.8	Ounces(OZ)	12/13/22
V00000D260	-	DAP 100% SILICONE RUBBER SEALANT CLEAR 8641	9.8	Ounces(OZ)	12/13/22
V00000D261	-	DAP 100% SILICONE RUBBER SEALANT CLEAR 8641	9.8	Ounces(OZ)	12/13/22
V00000D262	-	DAP 100% SILICONE RUBBER SEALANT CLEAR 8641	9.8	Ounces(OZ)	12/13/22
V00000D25D	-	DAP 100% SILICONE RUBBER SEALANT CLEAR 8641	9.8	Ounces(OZ)	12/13/22
V00000D264	-	DAP 100% SILICONE RUBBER SEALANT CLEAR 8641	9.8	Ounces(OZ)	12/13/22
V00000D255	-	DAP 100% SILICONE RUBBER SEALANT CLEAR 8641	9.8	Ounces(OZ)	12/13/22
V00000D263	-	DAP 100% SILICONE RUBBER SEALANT CLEAR 8641	9.8	Ounces(OZ)	12/13/22
V00000D25C	-	DAP 100% SILICONE RUBBER SEALANT CLEAR 8641	9.8	Ounces(OZ)	12/13/22
V00000D25B	-	DAP 100% SILICONE RUBBER SEALANT CLEAR 8641	9.8	Ounces(OZ)	12/13/22
V00000D25A	-	DAP 100% SILICONE RUBBER SEALANT CLEAR 8641	9.8	Ounces(OZ)	12/13/22
V00000D256	-	DAP 100% SILICONE RUBBER SEALANT CLEAR 8641	9.8	Ounces(OZ)	12/13/22
V00000D254	-	DAP 100% SILICONE RUBBER SEALANT CLEAR 8641	9.8	Ounces(OZ)	12/13/22
V00000D253	-	DAP 100% SILICONE RUBBER SEALANT CLEAR 8641	9.8	Ounces(OZ)	12/13/22
V00000D252	-	DAP 100% SILICONE RUBBER SEALANT CLEAR 8641	9.8	Ounces(OZ)	12/13/22
V00000D251	-	DAP 100% SILICONE RUBBER SEALANT CLEAR 8641	9.8	Ounces(OZ)	12/13/22
V00000D250	-	DAP 100% SILICONE RUBBER SEALANT CLEAR 8641	9.8	Ounces(OZ)	12/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D24F	-	DAP 100% SILICONE RUBBER SEALANT CLEAR 8641	9.8	Ounces(OZ)	12/13/22
V00000D24E	-	DAP 100% SILICONE RUBBER SEALANT CLEAR 8641	9.8	Ounces(OZ)	12/13/22
V00000D257	-	DAP 100% SILICONE RUBBER SEALANT CLEAR 8641	9.8	Ounces(OZ)	12/13/22
V00000D258	-	DAP 100% SILICONE RUBBER SEALANT CLEAR 8641	9.8	Ounces(OZ)	12/13/22
V00000D259	-	DAP 100% SILICONE RUBBER SEALANT CLEAR 8641	9.8	Ounces(OZ)	12/13/22
V00000D267	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/13/22
V00000D269	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/13/22
V00000D266	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/13/22
V00000D268	-	Contact Cleaner 2000 Precision Cleaner (aerosol)	13	Ounces(OZ)	12/13/22
1734183	-	Excelsior ASD-800	1	Gallon(GAL)	12/13/22
1734184	-	Excelsior ASD-800	1	Gallon(GAL)	12/13/22
1734186	-	Excelsior ASD-800	1	Gallon(GAL)	12/13/22
1734187	-	Excelsior ASD-800	1	Gallon(GAL)	12/13/22
1734185	-	Excelsior ASD-800	1	Gallon(GAL)	12/13/22
1734188	-	PAINT HARDENER	24	Pounds(LB)	12/13/22
1734189	-	PAINT HARDENER	24	Pounds(LB)	12/13/22
1734190	-	PAINT HARDENER	24	Pounds(LB)	12/13/22
1734195	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	12/13/22
1734213	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	12/13/22
1734212	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	12/13/22
1734211	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	12/13/22
1734210	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	12/13/22
1734215	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	12/13/22
1734196	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	12/13/22
1734216	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	12/13/22
1734197	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	12/13/22
1734202	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	12/13/22
1734209	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	12/13/22
1734208	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	12/13/22
1734207	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	12/13/22
1734206	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	12/13/22
1734205	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	12/13/22
1734214	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	12/13/22
1734203	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	12/13/22
1734201	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	12/13/22
1734200	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	12/13/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734199	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	12/13/22
1734198	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	12/13/22
1734218	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	12/13/22
1734217	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	12/13/22
1734204	-	LIQUID NAILS HEAVY DUTY	10	Ounces(OZ)	12/13/22
1734255	-	Spears Primer-70 Low VOC Primer for PVC and CPVC Plastic Pipe	1	Quarts(QT)	12/14/22
1734266	-	Spears Primer-70 Low VOC Primer for PVC and CPVC Plastic Pipe	1	Quarts(QT)	12/14/22
1734264	-	Spears Primer-70 Low VOC Primer for PVC and CPVC Plastic Pipe	1	Quarts(QT)	12/14/22
1734256	-	Spears Primer-70 Low VOC Primer for PVC and CPVC Plastic Pipe	1	Quarts(QT)	12/14/22
1734265	-	Spears Primer-70 Low VOC Primer for PVC and CPVC Plastic Pipe	1	Quarts(QT)	12/14/22
1734263	-	Spears Primer-70 Low VOC Primer for PVC and CPVC Plastic Pipe	1	Quarts(QT)	12/14/22
1734262	-	Spears Primer-70 Low VOC Primer for PVC and CPVC Plastic Pipe	1	Quarts(QT)	12/14/22
1734261	-	Spears Primer-70 Low VOC Primer for PVC and CPVC Plastic Pipe	1	Quarts(QT)	12/14/22
1734260	-	Spears Primer-70 Low VOC Primer for PVC and CPVC Plastic Pipe	1	Quarts(QT)	12/14/22
1734259	-	Spears Primer-70 Low VOC Primer for PVC and CPVC Plastic Pipe	1	Quarts(QT)	12/14/22
1734258	-	Spears Primer-70 Low VOC Primer for PVC and CPVC Plastic Pipe	1	Quarts(QT)	12/14/22
1734257	-	Spears Primer-70 Low VOC Primer for PVC and CPVC Plastic Pipe	1	Quarts(QT)	12/14/22
1734277	-	Vers-Acryl 222 S/G Finish Safety Red	1	Gallon(GAL)	12/14/22
V00000D26A	-	Avalon Premium 100% Acrylic Interior Flat W/B	121.6	Ounces(OZ)	12/14/22
V00000D26B	-	Avalon Premium 100% Acrylic Interior Flat W/B	121.6	Ounces(OZ)	12/14/22
V00000D26C	-	Avalon Premium 100% Acrylic Interior Semi-Gloss W/B	3.6	Liters(L)	12/14/22
V00000D26D	-	Avalon Premium 100% Acrylic Interior Semi-Gloss W/B	3.6	Liters(L)	12/14/22
V00000D26E	-	Avalon Premium 100% Acrylic Interior Semi-Gloss W/B	3.6	Liters(L)	12/14/22
V00000D26F	-	Avalon Premium 100% Acrylic Interior Semi-Gloss W/B	3.6	Liters(L)	12/14/22
V00000D273	-	Avalon Premium 100% Acrylic Interior Flat W/B	121.6	Ounces(OZ)	12/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D272	-	Avalon Premium 100% Acrylic Interior Flat W/B	121.6	Ounces(OZ)	12/14/22
V00000D271	-	Avalon Premium 100% Acrylic Interior Flat W/B	121.6	Ounces(OZ)	12/14/22
V00000D270	-	Avalon Premium 100% Acrylic Interior Flat W/B	121.6	Ounces(OZ)	12/14/22
V00000D27E	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D28E	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D286	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D284	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D289	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D283	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D282	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D281	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D280	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D27F	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D288	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D27D	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D27C	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D27B	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D27A	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D294	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D28A	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D279	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D287	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D278	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D277	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D276	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D275	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D274	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D28D	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D295	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D28C	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D293	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D292	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D291	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D290	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D285	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D28F	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
V00000D28B	-	SHEETROCK Brand Patching Compound EASY SAND 5	3	Pounds(LB)	12/14/22
1734278	-	PERMACRYL eggshell white INTERIOR ACRYLIC DE-1531	608	Ounces(OZ)	12/14/22
1734282	-	PERMACRYL eggshell white INTERIOR ACRYLIC DE-1531	608	Ounces(OZ)	12/14/22
1734288	-	PERMACRYL eggshell white INTERIOR ACRYLIC DE-1531	608	Ounces(OZ)	12/14/22
1734293	-	Paramount Ext. 100% Acrylic Flat W/B	18	Liters(L)	12/14/22
1734292	-	PERMACRYL eggshell white INTERIOR ACRYLIC DE-1531	608	Ounces(OZ)	12/14/22
1734291	-	PERMACRYL eggshell white INTERIOR ACRYLIC DE-1531	608	Ounces(OZ)	12/14/22
1734290	-	PERMACRYL eggshell white INTERIOR ACRYLIC DE-1531	608	Ounces(OZ)	12/14/22
1734289	-	PERMACRYL eggshell white INTERIOR ACRYLIC DE-1531	608	Ounces(OZ)	12/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734287	-	PERMACRYL eggshell white INTERIOR ACRYLIC DE-1531	608	Ounces(OZ)	12/14/22
1734286	-	PERMACRYL eggshell white INTERIOR ACRYLIC DE-1531	608	Ounces(OZ)	12/14/22
1734285	-	PERMACRYL eggshell white INTERIOR ACRYLIC DE-1531	608	Ounces(OZ)	12/14/22
1734283	-	PERMACRYL eggshell white INTERIOR ACRYLIC DE-1531	608	Ounces(OZ)	12/14/22
1734281	-	PERMACRYL eggshell white INTERIOR ACRYLIC DE-1531	608	Ounces(OZ)	12/14/22
1734280	-	PERMACRYL eggshell white INTERIOR ACRYLIC DE-1531	608	Ounces(OZ)	12/14/22
1734279	-	PERMACRYL eggshell white INTERIOR ACRYLIC DE-1531	608	Ounces(OZ)	12/14/22
1734284	-	PERMACRYL eggshell white INTERIOR ACRYLIC DE-1531	608	Ounces(OZ)	12/14/22
1692586	7440-59-7	HELIUM REFRIGERATED LIQUID (CRYOGENIC LIQUID)	100	Liters(L)	12/14/22
1692587	7440-59-7	HELIUM REFRIGERATED LIQUID (CRYOGENIC LIQUID)	59	Liters(L)	12/14/22
1692588	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/14/22
1692607	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/14/22
1692606	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/14/22
1692617	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/14/22
1692616	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/14/22
1692615	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/14/22
1692614	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/14/22
1692613	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/14/22
1692612	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/14/22
1692589	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/14/22
1692605	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/14/22
1692611	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/14/22
1692610	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/14/22
1692608	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/14/22
1692604	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/14/22
1692603	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/14/22
1692596	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/14/22
1692601	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/14/22
1692600	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/14/22
1692590	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/14/22
1692599	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/14/22
1692598	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/14/22
1692597	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/14/22
1692591	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/14/22
1692602	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1692592	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/14/22
1692609	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/14/22
1692593	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/14/22
1692595	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/14/22
1692594	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/14/22
1692618	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/14/22
1692621	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/14/22
1692623	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/14/22
1692624	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/14/22
1692620	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/14/22
1692626	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/14/22
1692622	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/14/22
1692619	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/14/22
1692625	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/14/22
1692627	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/14/22
1692694	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/14/22
1692693	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/14/22
1692700	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/14/22
1692695	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/14/22
1692696	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/14/22
1692697	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/14/22
1692699	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/14/22
1692692	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/14/22
1692702	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/14/22
1692703	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/14/22
1692704	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/14/22
1692705	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/14/22
1692706	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/14/22
1692701	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/14/22
1692698	7727-37-9	NITROGEN GAS	220	Cubic Feet(CF)	12/14/22
1692723	7727-37-9	NITROGEN GAS	300	Cubic Feet(CF)	12/14/22
1692724	7727-37-9	NITROGEN GAS	300	Cubic Feet(CF)	12/14/22
1692722	7727-37-9	NITROGEN GAS	300	Cubic Feet(CF)	12/14/22
1692721	7727-37-9	NITROGEN GAS	300	Cubic Feet(CF)	12/14/22
1692720	7727-37-9	NITROGEN GAS	300	Cubic Feet(CF)	12/14/22
1692725	7727-37-9	NITROGEN GAS	300	Cubic Feet(CF)	12/14/22
1692628	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	12/14/22
1692629	124-38-9	CARBON DIOXIDE	220	Cubic Feet(CF)	12/14/22
1692630	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/14/22
1692652	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/14/22
1692648	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/14/22
1692649	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/14/22
1692650	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/14/22
1692651	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/14/22
1692653	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1692654	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/14/22
1692655	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/14/22
1692656	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/14/22
1692659	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/14/22
1692647	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/14/22
1692657	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/14/22
1692639	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/14/22
1692658	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/14/22
1692636	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/14/22
1692631	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/14/22
1692632	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/14/22
1692633	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/14/22
1692641	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/14/22
1692635	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/14/22
1692646	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/14/22
1692637	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/14/22
1692638	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/14/22
1692640	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/14/22
1692642	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/14/22
1692643	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/14/22
1692644	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/14/22
1692645	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/14/22
1692634	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/14/22
1692660	74-98-6	PROPANE	11	Gallon(GAL)	12/14/22
1692661	74-98-6	PROPANE	11	Gallon(GAL)	12/14/22
1692662	2551-62-4	SULFUR HEXAFLUORIDE	220	Cubic Feet(CF)	12/14/22
1692669	2551-62-4	SULFUR HEXAFLUORIDE	220	Cubic Feet(CF)	12/14/22
1692672	2551-62-4	SULFUR HEXAFLUORIDE	220	Cubic Feet(CF)	12/14/22
1692673	2551-62-4	SULFUR HEXAFLUORIDE	220	Cubic Feet(CF)	12/14/22
1692675	2551-62-4	SULFUR HEXAFLUORIDE	220	Cubic Feet(CF)	12/14/22
1692676	2551-62-4	SULFUR HEXAFLUORIDE	220	Cubic Feet(CF)	12/14/22
1692671	2551-62-4	SULFUR HEXAFLUORIDE	220	Cubic Feet(CF)	12/14/22
1692670	2551-62-4	SULFUR HEXAFLUORIDE	220	Cubic Feet(CF)	12/14/22
1692674	2551-62-4	SULFUR HEXAFLUORIDE	220	Cubic Feet(CF)	12/14/22
1692663	2551-62-4	SULFUR HEXAFLUORIDE	220	Cubic Feet(CF)	12/14/22
1692664	2551-62-4	SULFUR HEXAFLUORIDE	220	Cubic Feet(CF)	12/14/22
1692665	2551-62-4	SULFUR HEXAFLUORIDE	220	Cubic Feet(CF)	12/14/22
1692667	2551-62-4	SULFUR HEXAFLUORIDE	220	Cubic Feet(CF)	12/14/22
1692666	2551-62-4	SULFUR HEXAFLUORIDE	220	Cubic Feet(CF)	12/14/22
1692668	2551-62-4	SULFUR HEXAFLUORIDE	220	Cubic Feet(CF)	12/14/22
1692677	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692685	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692678	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692679	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692680	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1692681	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692682	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692686	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692684	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692687	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692688	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692689	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692690	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692691	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692683	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692732	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692729	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692728	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692727	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692726	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692746	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692755	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692754	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692753	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692752	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692751	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692750	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692749	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692730	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692747	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692731	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692745	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692744	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692733	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692742	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692741	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692740	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692739	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692738	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692737	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692736	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692735	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692734	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692743	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692748	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/14/22
1692707	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/14/22
1692710	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/14/22
1692719	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/14/22
1692718	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/14/22
1692717	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1692715	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/14/22
1692713	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/14/22
1692712	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/14/22
1692711	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/14/22
1692714	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/14/22
1692716	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/14/22
1692708	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/14/22
1692709	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/14/22
1692756	-	HYDROGEN GAS	100	Liters(L)	12/14/22
1692757	-	HYDROGEN GAS	100	Liters(L)	12/14/22
1692758	7440-59-7	HELIUM REFRIGERATED LIQUID (CRYOGENIC LIQUID)	100	Liters(L)	12/14/22
1692759	7440-63-3	XENON	0.14	Kilograms(KG)	12/14/22
1734348	-	PSX 700 WHITE RESIN	4	Gallon(GAL)	12/14/22
1734349	-	PSX 700 WHITE RESIN	4	Gallon(GAL)	12/14/22
1734350	-	PSX 700 WHITE RESIN	4	Gallon(GAL)	12/14/22
1734354	-	PSX 700 WHITE RESIN	4	Gallon(GAL)	12/14/22
1734355	-	PSX 700 WHITE RESIN	4	Gallon(GAL)	12/14/22
1734353	-	PSX 700 WHITE RESIN	4	Gallon(GAL)	12/14/22
1734352	-	PSX 700 WHITE RESIN	4	Gallon(GAL)	12/14/22
1734351	-	PSX 700 WHITE RESIN	4	Gallon(GAL)	12/14/22
1734387	-	GacoFlex SeamSeal Solvent-Free Silicone Sealant	5	Gallon(GAL)	12/14/22
1734390	-	GacoFlex SeamSeal Solvent-Free Silicone Sealant	5	Gallon(GAL)	12/14/22
1734389	-	GacoFlex SeamSeal Solvent-Free Silicone Sealant	5	Gallon(GAL)	12/14/22
1734392	-	GacoFlex SeamSeal Solvent-Free Silicone Sealant	5	Gallon(GAL)	12/14/22
1734391	-	GacoFlex SeamSeal Solvent-Free Silicone Sealant	5	Gallon(GAL)	12/14/22
1734388	-	GacoFlex SeamSeal Solvent-Free Silicone Sealant	5	Gallon(GAL)	12/14/22
1734393	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734435	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734427	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734428	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734429	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734430	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734444	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734445	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734442	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734431	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734432	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734433	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734441	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734436	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734437	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734438	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734440	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734439	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734409	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734426	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734419	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734434	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734402	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734395	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734396	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734397	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734398	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734399	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734421	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734401	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734411	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734403	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734404	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734405	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734406	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734407	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734408	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734400	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734416	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734424	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734423	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734422	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734443	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734420	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734394	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734417	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734410	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734415	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734414	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734446	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734413	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734412	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734425	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734418	497-19-8	SODA ASH	50	Pounds(LB)	12/14/22
1734299	-	Paramount Ext. 100% Acrylic Flat W/B	18	Liters(L)	12/14/22
1734297	-	Paramount Ext. 100% Acrylic Flat W/B	18	Liters(L)	12/14/22
1734294	-	Paramount Ext. 100% Acrylic Flat W/B	18	Liters(L)	12/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734301	-	Paramount Ext. 100% Acrylic Flat W/B	18	Liters(L)	12/14/22
1734296	-	Paramount Ext. 100% Acrylic Flat W/B	18	Liters(L)	12/14/22
1734298	-	Paramount Ext. 100% Acrylic Flat W/B	18	Liters(L)	12/14/22
1734300	-	Paramount Ext. 100% Acrylic Flat W/B	18	Liters(L)	12/14/22
1734302	-	Paramount Ext. 100% Acrylic Flat W/B	18	Liters(L)	12/14/22
1734295	-	Paramount Ext. 100% Acrylic Flat W/B	18	Liters(L)	12/14/22
1734303	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	18	Liters(L)	12/14/22
1734306	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	18	Liters(L)	12/14/22
1734315	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	18	Liters(L)	12/14/22
1734310	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	18	Liters(L)	12/14/22
1734311	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	18	Liters(L)	12/14/22
1734308	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	18	Liters(L)	12/14/22
1734312	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	18	Liters(L)	12/14/22
1734313	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	18	Liters(L)	12/14/22
1734314	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	18	Liters(L)	12/14/22
1734305	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	18	Liters(L)	12/14/22
1734309	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	18	Liters(L)	12/14/22
1734307	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	18	Liters(L)	12/14/22
1734317	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	18	Liters(L)	12/14/22
1734316	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	18	Liters(L)	12/14/22
1734304	-	PERMACRYL INTERIOR SEMI-GLOSS WHITE BASE	18	Liters(L)	12/14/22
1734318	-	PERMACRYL INTERIOR FLAT WHITE BASE	18	Liters(L)	12/14/22
1734331	-	PERMACRYL INTERIOR FLAT WHITE BASE	18	Liters(L)	12/14/22
1734330	-	PERMACRYL INTERIOR FLAT WHITE BASE	18	Liters(L)	12/14/22
1734329	-	PERMACRYL INTERIOR FLAT WHITE BASE	18	Liters(L)	12/14/22
1734328	-	PERMACRYL INTERIOR FLAT WHITE BASE	18	Liters(L)	12/14/22
1734327	-	PERMACRYL INTERIOR FLAT WHITE BASE	18	Liters(L)	12/14/22
1734326	-	PERMACRYL INTERIOR FLAT WHITE BASE	18	Liters(L)	12/14/22
1734332	-	PERMACRYL INTERIOR FLAT WHITE BASE	18	Liters(L)	12/14/22
1734319	-	PERMACRYL INTERIOR FLAT WHITE BASE	18	Liters(L)	12/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734320	-	PERMACRYL INTERIOR FLAT WHITE BASE	18	Liters(L)	12/14/22
1734321	-	PERMACRYL INTERIOR FLAT WHITE BASE	18	Liters(L)	12/14/22
1734322	-	PERMACRYL INTERIOR FLAT WHITE BASE	18	Liters(L)	12/14/22
1734323	-	PERMACRYL INTERIOR FLAT WHITE BASE	18	Liters(L)	12/14/22
1734324	-	PERMACRYL INTERIOR FLAT WHITE BASE	18	Liters(L)	12/14/22
1734325	-	PERMACRYL INTERIOR FLAT WHITE BASE	18	Liters(L)	12/14/22
1734333	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/14/22
1734336	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/14/22
1734345	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/14/22
1734335	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/14/22
1734346	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/14/22
1734337	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/14/22
1734338	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/14/22
1734339	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/14/22
1734340	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/14/22
1734341	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/14/22
1734342	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/14/22
1734343	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/14/22
1734344	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/14/22
1734334	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/14/22
1734347	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/14/22
1733694	-	Prime Guard -50 RV & Marine Antifreeze	55	Gallon(GAL)	12/14/22
1733693	-	Prime Guard -50 RV & Marine Antifreeze	55	Gallon(GAL)	12/14/22
1734449	-	Polaris Demand Drive	1	Quarts(QT)	12/14/22
1734450	-	Polaris Demand Drive	1	Quarts(QT)	12/14/22
1734451	-	KRYLON Fusion Gloss Black	12	Ounces(OZ)	12/14/22
1734453	-	KRYLON Fusion Gloss Black	12	Ounces(OZ)	12/14/22
1734452	-	KRYLON Fusion Gloss Black	12	Ounces(OZ)	12/14/22
1734464	-	Vers-Acryl 222 S/G Finish Safety Yellow	1	Gallon(GAL)	12/14/22
1734473	-	Vers-Acryl 222 S/G Finish Safety Yellow	1	Gallon(GAL)	12/14/22
1734465	-	Vers-Acryl 222 S/G Finish Safety Yellow	1	Gallon(GAL)	12/14/22
1734470	-	Vers-Acryl 222 S/G Finish Safety Yellow	1	Gallon(GAL)	12/14/22
1734471	-	Vers-Acryl 222 S/G Finish Safety Yellow	1	Gallon(GAL)	12/14/22
1734472	-	Vers-Acryl 222 S/G Finish Safety Yellow	1	Gallon(GAL)	12/14/22
1734468	-	Vers-Acryl 222 S/G Finish Safety Yellow	1	Gallon(GAL)	12/14/22
1734469	-	Vers-Acryl 222 S/G Finish Safety Yellow	1	Gallon(GAL)	12/14/22
1734466	-	Vers-Acryl 222 S/G Finish Safety Yellow	1	Gallon(GAL)	12/14/22
1734467	-	Vers-Acryl 222 S/G Finish Safety Yellow	1	Gallon(GAL)	12/14/22
1734474	-	KRYLON RUST TOUGH 9202 BLACK GLOSS	12	Ounces(OZ)	12/14/22
1734480	-	KRYLON RUST TOUGH 9202 BLACK GLOSS	12	Ounces(OZ)	12/14/22
1734477	-	KRYLON RUST TOUGH 9202 BLACK GLOSS	12	Ounces(OZ)	12/14/22
1734476	-	KRYLON RUST TOUGH 9202 BLACK GLOSS	12	Ounces(OZ)	12/14/22
1734475	-	KRYLON RUST TOUGH 9202 BLACK GLOSS	12	Ounces(OZ)	12/14/22
1734478	-	KRYLON RUST TOUGH 9202 BLACK GLOSS	12	Ounces(OZ)	12/14/22
1734479	-	KRYLON RUST TOUGH 9202 BLACK GLOSS	12	Ounces(OZ)	12/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734481	-	KRYLON RUST TOUGH 9202 BLACK GLOSS	12	Ounces(OZ)	12/14/22
1734482	-	Brakleen Brake Parts Cleaner	14	Ounces(OZ)	12/14/22
1734488	-	Brakleen Brake Parts Cleaner	14	Ounces(OZ)	12/14/22
1734483	-	Brakleen Brake Parts Cleaner	14	Ounces(OZ)	12/14/22
1734493	-	Brakleen Brake Parts Cleaner	14	Ounces(OZ)	12/14/22
1734492	-	Brakleen Brake Parts Cleaner	14	Ounces(OZ)	12/14/22
1734491	-	Brakleen Brake Parts Cleaner	14	Ounces(OZ)	12/14/22
1734489	-	Brakleen Brake Parts Cleaner	14	Ounces(OZ)	12/14/22
1734487	-	Brakleen Brake Parts Cleaner	14	Ounces(OZ)	12/14/22
1734486	-	Brakleen Brake Parts Cleaner	14	Ounces(OZ)	12/14/22
1734485	-	Brakleen Brake Parts Cleaner	14	Ounces(OZ)	12/14/22
1734484	-	Brakleen Brake Parts Cleaner	14	Ounces(OZ)	12/14/22
1734490	-	Brakleen Brake Parts Cleaner	14	Ounces(OZ)	12/14/22
1734494	-	ES COMPLEAT OAT ETHYLENE GLYCOL	1	Gallon(GAL)	12/14/22
1734499	-	ES COMPLEAT OAT ETHYLENE GLYCOL	1	Gallon(GAL)	12/14/22
1734495	-	ES COMPLEAT OAT ETHYLENE GLYCOL	1	Gallon(GAL)	12/14/22
1734496	-	ES COMPLEAT OAT ETHYLENE GLYCOL	1	Gallon(GAL)	12/14/22
1734498	-	ES COMPLEAT OAT ETHYLENE GLYCOL	1	Gallon(GAL)	12/14/22
1734512	-	ES COMPLEAT OAT ETHYLENE GLYCOL	1	Gallon(GAL)	12/14/22
1734497	-	ES COMPLEAT OAT ETHYLENE GLYCOL	1	Gallon(GAL)	12/14/22
1734513	-	ES COMPLEAT OAT ETHYLENE GLYCOL	1	Gallon(GAL)	12/14/22
1734500	-	ES COMPLEAT OAT ETHYLENE GLYCOL	1	Gallon(GAL)	12/14/22
1734511	-	ES COMPLEAT OAT ETHYLENE GLYCOL	1	Gallon(GAL)	12/14/22
1734510	-	ES COMPLEAT OAT ETHYLENE GLYCOL	1	Gallon(GAL)	12/14/22
1734509	-	ES COMPLEAT OAT ETHYLENE GLYCOL	1	Gallon(GAL)	12/14/22
1734508	-	ES COMPLEAT OAT ETHYLENE GLYCOL	1	Gallon(GAL)	12/14/22
1734506	-	ES COMPLEAT OAT ETHYLENE GLYCOL	1	Gallon(GAL)	12/14/22
1734505	-	ES COMPLEAT OAT ETHYLENE GLYCOL	1	Gallon(GAL)	12/14/22
1734504	-	ES COMPLEAT OAT ETHYLENE GLYCOL	1	Gallon(GAL)	12/14/22
1734503	-	ES COMPLEAT OAT ETHYLENE GLYCOL	1	Gallon(GAL)	12/14/22
1734502	-	ES COMPLEAT OAT ETHYLENE GLYCOL	1	Gallon(GAL)	12/14/22
1734501	-	ES COMPLEAT OAT ETHYLENE GLYCOL	1	Gallon(GAL)	12/14/22
1734507	-	ES COMPLEAT OAT ETHYLENE GLYCOL	1	Gallon(GAL)	12/14/22
1734514	-	ES COMPLEAT OAT ETHYLENE GLYCOL	1	Gallon(GAL)	12/14/22
1734515	-	SULLAIR SULLUBE	5	Gallon(GAL)	12/14/22
V00000D29F	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/14/22
V00000D29E	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/14/22
V00000D29D	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/14/22
V00000D29C	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/14/22
V00000D29B	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D29A	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/14/22
V00000D299	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/14/22
V00000D298	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/14/22
V00000D296	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/14/22
V00000D297	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/14/22
V00000D2A1	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/14/22
V00000D2A0	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/14/22
1734516	-	SULLAIR SULLUBE	5	Gallon(GAL)	12/14/22
1734520	-	SULLAIR SULLUBE	5	Gallon(GAL)	12/14/22
1734519	-	SULLAIR SULLUBE	5	Gallon(GAL)	12/14/22
1734518	-	SULLAIR SULLUBE	5	Gallon(GAL)	12/14/22
1734517	-	SULLAIR SULLUBE	5	Gallon(GAL)	12/14/22
1734521	-	SULLAIR SULLUBE	5	Gallon(GAL)	12/14/22
1734522	-	SULLAIR SULLUBE	5	Gallon(GAL)	12/14/22
1734758	-	MAGNAFLUX SPOTCHECK SKC-S	0.3	Kilograms(KG)	12/14/22
1734768	-	MAGNAFLUX SPOTCHECK SKC-S	0.3	Kilograms(KG)	12/14/22
1734766	-	MAGNAFLUX SPOTCHECK SKC-S	0.3	Kilograms(KG)	12/14/22
1734769	-	MAGNAFLUX SPOTCHECK SKC-S	0.3	Kilograms(KG)	12/14/22
1734767	-	MAGNAFLUX SPOTCHECK SKC-S	0.3	Kilograms(KG)	12/14/22
1734759	-	MAGNAFLUX SPOTCHECK SKC-S	0.3	Kilograms(KG)	12/14/22
1734760	-	MAGNAFLUX SPOTCHECK SKC-S	0.3	Kilograms(KG)	12/14/22
1734761	-	MAGNAFLUX SPOTCHECK SKC-S	0.3	Kilograms(KG)	12/14/22
1734762	-	MAGNAFLUX SPOTCHECK SKC-S	0.3	Kilograms(KG)	12/14/22
1734763	-	MAGNAFLUX SPOTCHECK SKC-S	0.3	Kilograms(KG)	12/14/22
1734764	-	MAGNAFLUX SPOTCHECK SKC-S	0.3	Kilograms(KG)	12/14/22
1734765	-	MAGNAFLUX SPOTCHECK SKC-S	0.3	Kilograms(KG)	12/14/22
1734770	-	MAGNAFLUX SPOTCHECK SKC-S	0.3	Kilograms(KG)	12/14/22
1734771	-	MAGNAFLUX SPOTCHECK SKC-S	0.3	Kilograms(KG)	12/14/22
1734775	-	MAGNAFLUX SPOTCHECK SKC-S	0.3	Kilograms(KG)	12/14/22
1734774	-	MAGNAFLUX SPOTCHECK SKC-S	0.3	Kilograms(KG)	12/14/22
1734772	-	MAGNAFLUX SPOTCHECK SKC-S	0.3	Kilograms(KG)	12/14/22
1734773	-	MAGNAFLUX SPOTCHECK SKC-S	0.3	Kilograms(KG)	12/14/22
1734776	-	Valvoline AW 32 HYDRAULIC OIL	5	Gallon(GAL)	12/14/22
1734777	-	Valvoline AW 32 HYDRAULIC OIL	5	Gallon(GAL)	12/14/22
1734778	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/14/22
1734791	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/14/22
1734779	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/14/22
1734795	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734794	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/14/22
1734792	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/14/22
1734790	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/14/22
1734789	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/14/22
1734788	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/14/22
1734781	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/14/22
1734793	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/14/22
1734780	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/14/22
1734787	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/14/22
1734782	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/14/22
1734783	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/14/22
1734784	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/14/22
1734785	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/14/22
1734786	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/14/22
1734580	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734588	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734599	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734582	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734583	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734584	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734585	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734586	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734587	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734581	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734589	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734590	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734591	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734592	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734593	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734594	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734595	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734596	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734598	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734597	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734669	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734637	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734648	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734626	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734627	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734628	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734629	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734630	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734631	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734632	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734633	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734634	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734624	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734636	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734623	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734638	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734639	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734640	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734641	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734642	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734643	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734644	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734645	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734646	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734671	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734635	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734612	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734600	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734601	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734602	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734603	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734604	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734605	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734606	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734607	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734608	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734609	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734625	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734611	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734649	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734613	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734614	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734615	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734616	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734617	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734618	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734619	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734620	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734621	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734622	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734610	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734688	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734647	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734677	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734678	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734679	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734680	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734681	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734682	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734683	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734684	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734685	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734675	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734687	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734674	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734689	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734690	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734691	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734692	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734693	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734694	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734695	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734696	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734697	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734698	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734686	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734662	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734650	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734651	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734652	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734653	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734654	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734655	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734656	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734657	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734658	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734659	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734676	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734661	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734699	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734663	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734664	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734665	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734666	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734667	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734668	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734670	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734672	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734673	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734660	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734718	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734733	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734722	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734723	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734725	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734727	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734728	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734729	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734730	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734721	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734732	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734724	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734734	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734735	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734736	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734737	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734738	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734739	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734720	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734731	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734707	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734700	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734701	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734702	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734703	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734704	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734726	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734706	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734719	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734708	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734709	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734716	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734711	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734712	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734713	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734717	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734714	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734705	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734715	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22
1734710	-	SC JOHNSON PROFESSIONAL FANTASTIK MULTISURFACE DEGREASER-DISINFECTANT-SANITIZER	32	Ounces(OZ)	12/14/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734740	-	Clorox Total 360	1	Gallon(GAL)	12/14/22
1734749	-	Clorox Total 360	1	Gallon(GAL)	12/14/22
1734742	-	Clorox Total 360	1	Gallon(GAL)	12/14/22
1734743	-	Clorox Total 360	1	Gallon(GAL)	12/14/22
1734744	-	Clorox Total 360	1	Gallon(GAL)	12/14/22
1734745	-	Clorox Total 360	1	Gallon(GAL)	12/14/22
1734746	-	Clorox Total 360	1	Gallon(GAL)	12/14/22
1734748	-	Clorox Total 360	1	Gallon(GAL)	12/14/22
1734741	-	Clorox Total 360	1	Gallon(GAL)	12/14/22
1734750	-	Clorox Total 360	1	Gallon(GAL)	12/14/22
1734751	-	Clorox Total 360	1	Gallon(GAL)	12/14/22
1734752	-	Clorox Total 360	1	Gallon(GAL)	12/14/22
1734753	-	Clorox Total 360	1	Gallon(GAL)	12/14/22
1734754	-	Clorox Total 360	1	Gallon(GAL)	12/14/22
1734755	-	Clorox Total 360	1	Gallon(GAL)	12/14/22
1734747	-	Clorox Total 360	1	Gallon(GAL)	12/14/22
1734756	64-17-5	ETHANOL (ETHYL ALCOHOL)	1	Gallon(GAL)	12/14/22
1734757	64-17-5	ETHANOL (ETHYL ALCOHOL)	1	Gallon(GAL)	12/14/22
1040709	-	PUMP OIL VACUUM	500	Milliliter(ML)	12/14/22
1040710	-	EDWARDS 45 PUMP OIL	1	Liters(L)	12/14/22
1040718	-	EDWARDS VACUUM PUMP OIL	1	Liters(L)	12/14/22
1040719	-	EDWARDS VACUUM PUMP OIL	1	Liters(L)	12/14/22
1734808	-	PSX 700 WHITE RESIN	1	Gallon(GAL)	12/15/22
1734810	-	PSX 700 WHITE RESIN	1	Gallon(GAL)	12/15/22
1734809	-	PSX 700 WHITE RESIN	1	Gallon(GAL)	12/15/22
1734811	-	Diamond Spray Paint Gloss White	12	Ounces(OZ)	12/15/22
1734812	-	Diamond Spray Paint Gloss White	12	Ounces(OZ)	12/15/22
1734813	-	Diamond Spray Paint Gloss Black	12	Ounces(OZ)	12/15/22
1734796	-	Vers-Acryl 222 S/G Finish Safety Red	1	Gallon(GAL)	12/15/22
1734797	-	Vers-Acryl 222 S/G Finish Safety Red	1	Gallon(GAL)	12/15/22
1734799	-	Vers-Acryl 222 S/G Finish Safety Red	1	Gallon(GAL)	12/15/22
1734798	-	Vers-Acryl 222 S/G Finish Safety Red	1	Gallon(GAL)	12/15/22
1734802	-	Vers-Acryl 222 S/G Finish Safety Red	1	Gallon(GAL)	12/15/22
1734800	-	Vers-Acryl 222 S/G Finish Safety Red	1	Gallon(GAL)	12/15/22
1734801	-	Vers-Acryl 222 S/G Finish Safety Red	1	Gallon(GAL)	12/15/22
1734803	-	STARTEX PAINT THINNER	1	Gallon(GAL)	12/15/22
1734804	-	XIM Primer White 400	1	Gallon(GAL)	12/15/22
1734806	-	XIM Primer White 400	1	Gallon(GAL)	12/15/22
1734805	-	XIM Primer White 400	1	Gallon(GAL)	12/15/22
1734807	-	Cote All M/B	1	Gallon(GAL)	12/15/22
V00000D2B7	-	DIESEL EXHAUST FLUID	2.8	Gallon(GAL)	12/15/22
V00000D2B9	-	DIESEL EXHAUST FLUID	2.8	Gallon(GAL)	12/15/22
V00000D2AF	-	DIESEL EXHAUST FLUID	2.8	Gallon(GAL)	12/15/22
V00000D2B8	-	DIESEL EXHAUST FLUID	2.8	Gallon(GAL)	12/15/22
V00000D2AB	-	DIESEL EXHAUST FLUID	2.8	Gallon(GAL)	12/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D2A2	-	DIESEL EXHAUST FLUID	2.8	Gallon(GAL)	12/15/22
V00000D2A3	-	DIESEL EXHAUST FLUID	2.8	Gallon(GAL)	12/15/22
V00000D2A4	-	DIESEL EXHAUST FLUID	2.8	Gallon(GAL)	12/15/22
V00000D2A5	-	DIESEL EXHAUST FLUID	2.8	Gallon(GAL)	12/15/22
V00000D2A6	-	DIESEL EXHAUST FLUID	2.8	Gallon(GAL)	12/15/22
V00000D2A7	-	DIESEL EXHAUST FLUID	2.8	Gallon(GAL)	12/15/22
V00000D2A8	-	DIESEL EXHAUST FLUID	2.8	Gallon(GAL)	12/15/22
V00000D2B1	-	DIESEL EXHAUST FLUID	2.8	Gallon(GAL)	12/15/22
V00000D2AA	-	DIESEL EXHAUST FLUID	2.8	Gallon(GAL)	12/15/22
V00000D2B6	-	DIESEL EXHAUST FLUID	2.8	Gallon(GAL)	12/15/22
V00000D2AC	-	DIESEL EXHAUST FLUID	2.8	Gallon(GAL)	12/15/22
V00000D2AD	-	DIESEL EXHAUST FLUID	2.8	Gallon(GAL)	12/15/22
V00000D2AE	-	DIESEL EXHAUST FLUID	2.8	Gallon(GAL)	12/15/22
V00000D2B0	-	DIESEL EXHAUST FLUID	2.8	Gallon(GAL)	12/15/22
V00000D2B3	-	DIESEL EXHAUST FLUID	2.8	Gallon(GAL)	12/15/22
V00000D2B5	-	DIESEL EXHAUST FLUID	2.8	Gallon(GAL)	12/15/22
V00000D2B2	-	DIESEL EXHAUST FLUID	2.8	Gallon(GAL)	12/15/22
V00000D2A9	-	DIESEL EXHAUST FLUID	2.8	Gallon(GAL)	12/15/22
V00000D2B4	-	DIESEL EXHAUST FLUID	2.8	Gallon(GAL)	12/15/22
1660489	7647-14-5	SODIUM CHLORIDE	500	Milliliter(ML)	12/15/22
1734881	-	DYNALUBE TRAVINI OIL	5	Gallon(GAL)	12/15/22
1734884	-	DYNALUBE TRAVINI OIL	5	Gallon(GAL)	12/15/22
1734882	-	DYNALUBE TRAVINI OIL	5	Gallon(GAL)	12/15/22
1734883	-	DYNALUBE TRAVINI OIL	5	Gallon(GAL)	12/15/22
1746257	-	VINYL TERMINATED (3.0-3.5% DIPHENYLSILOXANE)-DIMETHYLSILOXANE COPOLYMER	100	Gram(GM)	12/15/22
1746260	-	VINYL TERMINATED (3.0-3.5% DIPHENYLSILOXANE)-DIMETHYLSILOXANE COPOLYMER	100	Gram(GM)	12/15/22
1746258	-	VINYL TERMINATED (3.0-3.5% DIPHENYLSILOXANE)-DIMETHYLSILOXANE COPOLYMER	100	Gram(GM)	12/15/22
1746259	-	VINYL TERMINATED (3.0-3.5% DIPHENYLSILOXANE)-DIMETHYLSILOXANE COPOLYMER	100	Gram(GM)	12/15/22
1746261	106-42-3	p-Xylene Anhydrous 99%	2	Liters(L)	12/15/22
1746262	106-42-3	p-Xylene Anhydrous 99%	2	Liters(L)	12/15/22
1746263	20208-23-5	Hexane-1 6-diammonium iodide	50	Gram(GM)	12/15/22
1746264	961-68-2	2 4-DINITRODIPHENYLAMINE	100	Gram(GM)	12/15/22
1746265	57-09-0	HEXADECYLTRIMETHYLAMMONIUM BROMIDE	25	Gram(GM)	12/15/22
1746266	-	1000 ug/mL Platinum	30	Milliliter(ML)	12/15/22
1746267	-	1000 ug/ml Cerium	30	Milliliter(ML)	12/15/22
1746268	7697-37-2	1000 ug/ml Ytterbium	30	Milliliter(ML)	12/15/22
1746269	-	1000 ug/ml Gold	30	Milliliter(ML)	12/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1746270	-	1000 ug/ml Molybdenum	30	Milliliter(ML)	12/15/22
1746201	7487-88-9	MAGNESIUM SULFATE ANHYDROUS	500	Gram(GM)	12/15/22
1746202	97-53-0	Eugenol	100	Gram(GM)	12/15/22
1746203	65-71-4	THYMINE	100	Gram(GM)	12/15/22
1746204	71-30-7	CYTOSINE	25	Gram(GM)	12/15/22
1746205	7790-94-5	Chlorosulfonic acid 99%	100	Gram(GM)	12/15/22
1746206	7550-45-0	Titanium(IV) chloride ReagentPlus 99.9%	200	Gram(GM)	12/15/22
1746577	71-36-3	1-Butanol for analysis EMSURE ACS ISO Reag.	4	Liters(L)	12/15/22
1746578	63517-29-3	XtalFluor-E	25	Gram(GM)	12/15/22
1746579	156327-07-0	Poly(dimethylsiloxane) bis(hydroxyalkyl) terminated	100	Milliliter(ML)	12/15/22
1746580	156327-07-0	Poly(dimethylsiloxane) bis(hydroxyalkyl) terminated	100	Milliliter(ML)	12/15/22
1746581	2638-94-0	4 4-AZOBIS(4-CYANOVALERIC ACID)	50	Gram(GM)	12/15/22
1734885	-	VERSACHEM SUPER CLEAR SILICONE GASKET MAKER 3 OZ	3	Ounces(OZ)	12/15/22
1734886	-	VERSACHEM SUPER CLEAR SILICONE GASKET MAKER 3 OZ	3	Ounces(OZ)	12/15/22
1746655	15658-60-3	Diethyl 2 6-Pyridinedicarboxylate 98%	25	Gram(GM)	12/15/22
1746656	-	ACTINIDE RESIN	100	Gram(GM)	12/15/22
1734887	-	Brakleen Brake Parts Cleaner	14	Ounces(OZ)	12/15/22
1734897	-	Brakleen Brake Parts Cleaner	14	Ounces(OZ)	12/15/22
1734893	-	Brakleen Brake Parts Cleaner	14	Ounces(OZ)	12/15/22
1734896	-	Brakleen Brake Parts Cleaner	14	Ounces(OZ)	12/15/22
1734892	-	Brakleen Brake Parts Cleaner	14	Ounces(OZ)	12/15/22
1734898	-	Brakleen Brake Parts Cleaner	14	Ounces(OZ)	12/15/22
1734888	-	Brakleen Brake Parts Cleaner	14	Ounces(OZ)	12/15/22
1734889	-	Brakleen Brake Parts Cleaner	14	Ounces(OZ)	12/15/22
1734890	-	Brakleen Brake Parts Cleaner	14	Ounces(OZ)	12/15/22
1734891	-	Brakleen Brake Parts Cleaner	14	Ounces(OZ)	12/15/22
1734894	-	Brakleen Brake Parts Cleaner	14	Ounces(OZ)	12/15/22
1734895	-	Brakleen Brake Parts Cleaner	14	Ounces(OZ)	12/15/22
1746657	-	CL Resin - B	100	Gram(GM)	12/15/22
1746658	-	SR RESIN	100	Gram(GM)	12/15/22
1734814	-	CHERRY RED DIAMOND SPRAY PAINT#DS550-013	12	Ounces(OZ)	12/15/22
00 1734815	-	XIM PRIMER 400 CLEAR	12	Ounces(OZ)	12/15/22
1734816	-	LACQUER THINNER	5	Gallon(GAL)	12/15/22
1734817	-	fast setting cement	50	Pounds(LB)	12/15/22
1734857	-	fast setting cement	50	Pounds(LB)	12/15/22
1734856	-	fast setting cement	50	Pounds(LB)	12/15/22
1734855	-	fast setting cement	50	Pounds(LB)	12/15/22
1734854	-	fast setting cement	50	Pounds(LB)	12/15/22
1734866	-	fast setting cement	50	Pounds(LB)	12/15/22
1734858	-	fast setting cement	50	Pounds(LB)	12/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734859	-	fast setting cement	50	Pounds(LB)	12/15/22
1734860	-	fast setting cement	50	Pounds(LB)	12/15/22
1734861	-	fast setting cement	50	Pounds(LB)	12/15/22
1734862	-	fast setting cement	50	Pounds(LB)	12/15/22
1734863	-	fast setting cement	50	Pounds(LB)	12/15/22
1734853	-	fast setting cement	50	Pounds(LB)	12/15/22
1734865	-	fast setting cement	50	Pounds(LB)	12/15/22
1734867	-	fast setting cement	50	Pounds(LB)	12/15/22
1734864	-	fast setting cement	50	Pounds(LB)	12/15/22
1734826	-	fast setting cement	50	Pounds(LB)	12/15/22
1734834	-	fast setting cement	50	Pounds(LB)	12/15/22
1734833	-	fast setting cement	50	Pounds(LB)	12/15/22
1734832	-	fast setting cement	50	Pounds(LB)	12/15/22
1734831	-	fast setting cement	50	Pounds(LB)	12/15/22
1734830	-	fast setting cement	50	Pounds(LB)	12/15/22
1734829	-	fast setting cement	50	Pounds(LB)	12/15/22
1734839	-	fast setting cement	50	Pounds(LB)	12/15/22
1734827	-	fast setting cement	50	Pounds(LB)	12/15/22
1734837	-	fast setting cement	50	Pounds(LB)	12/15/22
1734824	-	fast setting cement	50	Pounds(LB)	12/15/22
1734822	-	fast setting cement	50	Pounds(LB)	12/15/22
1734821	-	fast setting cement	50	Pounds(LB)	12/15/22
1734820	-	fast setting cement	50	Pounds(LB)	12/15/22
1734819	-	fast setting cement	50	Pounds(LB)	12/15/22
1734818	-	fast setting cement	50	Pounds(LB)	12/15/22
1734828	-	fast setting cement	50	Pounds(LB)	12/15/22
1734843	-	fast setting cement	50	Pounds(LB)	12/15/22
1734851	-	fast setting cement	50	Pounds(LB)	12/15/22
1734850	-	fast setting cement	50	Pounds(LB)	12/15/22
1734849	-	fast setting cement	50	Pounds(LB)	12/15/22
1734848	-	fast setting cement	50	Pounds(LB)	12/15/22
1734847	-	fast setting cement	50	Pounds(LB)	12/15/22
1734846	-	fast setting cement	50	Pounds(LB)	12/15/22
1734835	-	fast setting cement	50	Pounds(LB)	12/15/22
1734844	-	fast setting cement	50	Pounds(LB)	12/15/22
1734836	-	fast setting cement	50	Pounds(LB)	12/15/22
1734842	-	fast setting cement	50	Pounds(LB)	12/15/22
1734841	-	fast setting cement	50	Pounds(LB)	12/15/22
1734840	-	fast setting cement	50	Pounds(LB)	12/15/22
1734868	-	fast setting cement	50	Pounds(LB)	12/15/22
1734838	-	fast setting cement	50	Pounds(LB)	12/15/22
1734825	-	fast setting cement	50	Pounds(LB)	12/15/22
1734852	-	fast setting cement	50	Pounds(LB)	12/15/22
1734845	-	fast setting cement	50	Pounds(LB)	12/15/22
1734879	-	fast setting cement	50	Pounds(LB)	12/15/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734869	-	fast setting cement	50	Pounds(LB)	12/15/22
1734823	-	fast setting cement	50	Pounds(LB)	12/15/22
1734880	-	fast setting cement	50	Pounds(LB)	12/15/22
1734878	-	fast setting cement	50	Pounds(LB)	12/15/22
1734877	-	fast setting cement	50	Pounds(LB)	12/15/22
1734876	-	fast setting cement	50	Pounds(LB)	12/15/22
1734874	-	fast setting cement	50	Pounds(LB)	12/15/22
1734873	-	fast setting cement	50	Pounds(LB)	12/15/22
1734870	-	fast setting cement	50	Pounds(LB)	12/15/22
1734872	-	fast setting cement	50	Pounds(LB)	12/15/22
1734871	-	fast setting cement	50	Pounds(LB)	12/15/22
1734875	-	fast setting cement	50	Pounds(LB)	12/15/22
1602367	-	LANL-ICP-MS-1 STANDARD SOLUTION	125	Milliliter(ML)	12/15/22
1602368	-	LANL-ICP-MS-1 STANDARD SOLUTION	125	Milliliter(ML)	12/15/22
1692760	7727-37-9	LIQUID NITROGEN	160	Liters(L)	12/15/22
1692762	7727-37-9	LIQUID NITROGEN	160	Liters(L)	12/15/22
1692761	7727-37-9	LIQUID NITROGEN	160	Liters(L)	12/15/22
1692763	7440-59-7	HELIUM REFRIGERATED LIQUID (CRYOGENIC LIQUID)	100	Liters(L)	12/15/22
1692764	7440-59-7	HELIUM REFRIGERATED LIQUID (CRYOGENIC LIQUID)	100	Liters(L)	12/15/22
V00000D2BE	-	Avalon Premium 100% Acrylic Interior Satin UW/B	3.6	Liters(L)	12/15/22
V00000D2BA	-	Avalon Premium 100% Acrylic Interior Satin UW/B	3.6	Liters(L)	12/15/22
V00000D2BB	-	Avalon Premium 100% Acrylic Interior Satin UW/B	3.6	Liters(L)	12/15/22
V00000D2C0	-	Avalon Premium 100% Acrylic Interior Satin UW/B	3.6	Liters(L)	12/15/22
V00000D2C1	-	Avalon Premium 100% Acrylic Interior Satin UW/B	3.6	Liters(L)	12/15/22
V00000D2BD	-	Avalon Premium 100% Acrylic Interior Satin UW/B	3.6	Liters(L)	12/15/22
V00000D2BF	-	Avalon Premium 100% Acrylic Interior Satin UW/B	3.6	Liters(L)	12/15/22
V00000D2BC	-	Avalon Premium 100% Acrylic Interior Satin UW/B	3.6	Liters(L)	12/15/22
1746368	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746412	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746380	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746370	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746369	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746395	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746389	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746376	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1746396	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746397	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746410	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746372	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746386	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746385	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746384	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746383	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746411	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746382	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746391	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746371	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746394	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746373	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746388	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746377	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746390	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746398	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746392	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746393	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746379	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746414	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746404	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746405	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746399	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746407	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746401	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746374	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746403	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746413	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746406	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746415	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746416	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746417	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746418	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746419	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746381	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746420	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746409	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746400	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746387	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746375	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746408	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746402	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746378	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1746367	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1745920	-	4 4-METHYLENEBIS(PHENYLISOCYANATE)	500	Gram(GM)	12/16/22
1745925	-	4 4-METHYLENEBIS(PHENYLISOCYANATE)	500	Gram(GM)	12/16/22
1745924	-	4 4-METHYLENEBIS(PHENYLISOCYANATE)	500	Gram(GM)	12/16/22
1745923	-	4 4-METHYLENEBIS(PHENYLISOCYANATE)	500	Gram(GM)	12/16/22
1745922	-	4 4-METHYLENEBIS(PHENYLISOCYANATE)	500	Gram(GM)	12/16/22
1745921	-	4 4-METHYLENEBIS(PHENYLISOCYANATE)	500	Gram(GM)	12/16/22
1746185	-	Ultragell II	1	Gallon(GAL)	12/16/22
1746189	-	Ultragell II	1	Gallon(GAL)	12/16/22
1746190	-	Ultragell II	1	Gallon(GAL)	12/16/22
1746191	-	Ultragell II	1	Gallon(GAL)	12/16/22
1746192	-	Ultragell II	1	Gallon(GAL)	12/16/22
1746186	-	Ultragell II	1	Gallon(GAL)	12/16/22
1746193	-	Ultragell II	1	Gallon(GAL)	12/16/22
1746187	-	Ultragell II	1	Gallon(GAL)	12/16/22
1746194	-	Ultragell II	1	Gallon(GAL)	12/16/22
1746188	-	Ultragell II	1	Gallon(GAL)	12/16/22
1746195	-	Ultragell II	12	Ounces(OZ)	12/16/22
1746273	-	LOCTITE ABLESTIK 2902	2.65	Gram(GM)	12/16/22
1746279	-	LOCTITE ABLESTIK 2902	2.65	Gram(GM)	12/16/22
1746285	-	LOCTITE ABLESTIK 2902	2.65	Gram(GM)	12/16/22
1746291	-	LOCTITE ABLESTIK 2902	2.65	Gram(GM)	12/16/22
1746292	-	LOCTITE ABLESTIK 2902	2.65	Gram(GM)	12/16/22
1746290	-	LOCTITE ABLESTIK 2902	2.65	Gram(GM)	12/16/22
1746289	-	LOCTITE ABLESTIK 2902	2.65	Gram(GM)	12/16/22
1746288	-	LOCTITE ABLESTIK 2902	2.65	Gram(GM)	12/16/22
1746277	-	LOCTITE ABLESTIK 2902	2.65	Gram(GM)	12/16/22
1746286	-	LOCTITE ABLESTIK 2902	2.65	Gram(GM)	12/16/22
1746284	-	LOCTITE ABLESTIK 2902	2.65	Gram(GM)	12/16/22
1746283	-	LOCTITE ABLESTIK 2902	2.65	Gram(GM)	12/16/22
1746282	-	LOCTITE ABLESTIK 2902	2.65	Gram(GM)	12/16/22
1746281	-	LOCTITE ABLESTIK 2902	2.65	Gram(GM)	12/16/22
1746280	-	LOCTITE ABLESTIK 2902	2.65	Gram(GM)	12/16/22
1746276	-	LOCTITE ABLESTIK 2902	2.65	Gram(GM)	12/16/22
1746275	-	LOCTITE ABLESTIK 2902	2.65	Gram(GM)	12/16/22
1746274	-	LOCTITE ABLESTIK 2902	2.65	Gram(GM)	12/16/22
1746287	-	LOCTITE ABLESTIK 2902	2.65	Gram(GM)	12/16/22
1746278	-	LOCTITE ABLESTIK 2902	2.65	Gram(GM)	12/16/22
1746293	67-64-1	Acetone HPLC	4	Liters(L)	12/16/22
1746294	67-64-1	Acetone HPLC	4	Liters(L)	12/16/22
1746295	7085-85-0	Gorilla Super Glue	0.53	Ounces(OZ)	12/16/22
1746296	7085-85-0	Gorilla Super Glue	0.53	Ounces(OZ)	12/16/22
1746297	7085-85-0	Gorilla Super Glue	0.53	Ounces(OZ)	12/16/22
1746298	7085-85-0	Gorilla Super Glue	0.53	Ounces(OZ)	12/16/22
1746299	7085-85-0	Gorilla Super Glue	0.53	Ounces(OZ)	12/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1746303	7647-01-0	Hydrochloric acid ACS Reagent 37%	2.5	Milliliter(ML)	12/16/22
1746304	7647-01-0	Hydrochloric acid ACS Reagent 37%	2.5	Milliliter(ML)	12/16/22
1746305	7647-01-0	Hydrochloric acid ACS Reagent 37%	2.5	Milliliter(ML)	12/16/22
1746308	7647-01-0	Hydrochloric acid ACS Reagent 37%	2.5	Milliliter(ML)	12/16/22
1746307	7647-01-0	Hydrochloric acid ACS Reagent 37%	2.5	Milliliter(ML)	12/16/22
1746306	7647-01-0	Hydrochloric acid ACS Reagent 37%	2.5	Milliliter(ML)	12/16/22
1746300	-	BRASSO METAL POLISH	8	Ounces(OZ)	12/16/22
1746301	-	BRASSO METAL POLISH	8	Ounces(OZ)	12/16/22
1746302	-	BRASSO METAL POLISH	8	Ounces(OZ)	12/16/22
1746421	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	12/16/22
1746309	7440-21-3	732 RTV SILICONE MULTI-PURPOSE SEALANT	3	Ounces(OZ)	12/16/22
1746311	7440-21-3	732 RTV SILICONE MULTI-PURPOSE SEALANT	3	Ounces(OZ)	12/16/22
1746310	7440-21-3	732 RTV SILICONE MULTI-PURPOSE SEALANT	3	Ounces(OZ)	12/16/22
1746312	7440-21-3	732 RTV SILICONE MULTI-PURPOSE SEALANT	3	Ounces(OZ)	12/16/22
1746313	7440-21-3	732 RTV SILICONE MULTI-PURPOSE SEALANT	3	Ounces(OZ)	12/16/22
1746314	-	4226 Super Corona Dope	1	Liters(L)	12/16/22
1746271	Multi	Molecular Sieve Gas Purifier	55	Kilograms(KG)	12/16/22
1746272	-	COPPER CATALYST	4.5	Kilograms(KG)	12/16/22
1745919	150604-77-6	Dowex Marathon C Hydrogen form	1	Kilograms(KG)	12/16/22
1745926	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	12/16/22
1745931	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	12/16/22
1745933	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	12/16/22
1745932	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	12/16/22
1745927	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	12/16/22
1745928	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	12/16/22
1745929	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	12/16/22
1745930	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	12/16/22
1746315	-	HYDRANAL®-Coulomat AD	500	Milliliter(ML)	12/16/22
1746318	-	HYDRANAL®-Coulomat AD	500	Milliliter(ML)	12/16/22
1746320	-	HYDRANAL®-Coulomat AD	500	Milliliter(ML)	12/16/22
1746317	-	HYDRANAL®-Coulomat AD	500	Milliliter(ML)	12/16/22
1746316	-	HYDRANAL®-Coulomat AD	500	Milliliter(ML)	12/16/22
1746319	-	HYDRANAL®-Coulomat AD	500	Milliliter(ML)	12/16/22
1746328	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	12/16/22
1746330	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	12/16/22
1746331	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	12/16/22
1746329	67-63-0	2-Propanol ACS Reagent 99.5%	4	Liters(L)	12/16/22
1746424	7664-93-9	Sulfuric Acid 5.00 N	500	Milliliter(ML)	12/16/22
1746432	7664-93-9	Sulfuric Acid 5.00 N	500	Milliliter(ML)	12/16/22
1746431	7664-93-9	Sulfuric Acid 5.00 N	500	Milliliter(ML)	12/16/22
1746430	7664-93-9	Sulfuric Acid 5.00 N	500	Milliliter(ML)	12/16/22
1746429	7664-93-9	Sulfuric Acid 5.00 N	500	Milliliter(ML)	12/16/22
1746428	7664-93-9	Sulfuric Acid 5.00 N	500	Milliliter(ML)	12/16/22
1746427	7664-93-9	Sulfuric Acid 5.00 N	500	Milliliter(ML)	12/16/22
1746426	7664-93-9	Sulfuric Acid 5.00 N	500	Milliliter(ML)	12/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1746425	7664-93-9	Sulfuric Acid 5.00 N	500	Milliliter(ML)	12/16/22
1746433	7664-93-9	Sulfuric Acid 5.00 N	500	Milliliter(ML)	12/16/22
1746434	25583-20-4	TITANIUM NITRIDE	1	Kilograms(KG)	12/16/22
1746435	112-07-2	2-BUTOXYETHYL ACETATE	25	Milliliter(ML)	12/16/22
1746436	112-07-2	2-BUTOXYETHYL ACETATE	25	Milliliter(ML)	12/16/22
1746439	871-84-1	1 7-OCTADIYNE	10	Gram(GM)	12/16/22
1746440	871-84-1	1 7-OCTADIYNE	10	Gram(GM)	12/16/22
1746441	-	ETHYL ALCOHOL USP - 200 PROOF	1	Gallon(GAL)	12/16/22
1746444	-	ETHYL ALCOHOL USP - 200 PROOF	1	Gallon(GAL)	12/16/22
1746442	-	ETHYL ALCOHOL USP - 200 PROOF	1	Gallon(GAL)	12/16/22
1746443	-	ETHYL ALCOHOL USP - 200 PROOF	1	Gallon(GAL)	12/16/22
1746447	67-63-0	2-Propanol ACS Reagent 99.5%	2.5	Liters(L)	12/16/22
1746446	1477512-32-5	DMAC-DPS sublimed	250	Milligram(MG)	12/16/22
1746445	-	SILANOL TERMINATED POLYDIMETHYLSILOXANE	3	Kilograms(KG)	12/16/22
1746438	1310-73-2	SODIUM HYDROXIDE SOLUTION 0.1 N	1	Liters(L)	12/16/22
1746437	125541-22-2	tert-Butyl 4-(Phenylamino)piperidine-1-carboxylate	5	Gram(GM)	12/16/22
1746321	407-25-0	TRIFLUOROACETIC ANHYDRIDE	500	Gram(GM)	12/16/22
1746422	50-00-0	FORMALDEHYDE 16% METHANOL FREE	10	Milliliter(ML)	12/16/22
1746324	79-37-8	OXALYL CHLORIDE 99+%	25	Gram(GM)	12/16/22
1746325	1310-73-2	SODIUM HYDROXIDE SOLUTION 10N	1	Liters(L)	12/16/22
1746326	1310-73-2	SODIUM HYDROXIDE SOLUTION 10N	1	Liters(L)	12/16/22
1746327	101-68-8	4 4'-Methylenebis(phenyl isocyanate)	500	Gram(GM)	12/16/22
1746322	1333-82-6	CHROMIUM TRIOXIDE	125	Gram(GM)	12/16/22
1746323	100-47-0	Benzonitrile anhydrous 99+%	100	Milliliter(ML)	12/16/22
1746423	-	PLV 2050: 2500 cps viscosity black 2-part coating/adhesive	12	Ounces(OZ)	12/16/22
1746511	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	12/16/22
1746518	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	12/16/22
1746527	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	12/16/22
1746516	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	12/16/22
1746530	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	12/16/22
1746528	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	12/16/22
1746526	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	12/16/22
1746525	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	12/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1746524	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	12/16/22
1746523	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	12/16/22
1746522	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	12/16/22
1746521	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	12/16/22
1746520	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	12/16/22
1746519	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	12/16/22
1746517	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	12/16/22
1746515	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	12/16/22
1746513	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	12/16/22
1746529	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	12/16/22
1746512	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	12/16/22
1746514	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	2	Liters(L)	12/16/22
1746583	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746616	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746624	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746623	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746622	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746621	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746620	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746619	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746625	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746617	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746629	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746615	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746614	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746613	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746612	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746611	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746610	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746644	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746609	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746618	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746641	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1746633	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746632	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746634	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746635	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746636	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746637	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746638	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746627	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746640	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746626	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746604	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746642	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746608	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746643	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746631	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746630	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746628	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746639	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746586	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746645	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746605	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746607	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746585	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746587	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746588	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746589	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746590	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746591	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746592	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746593	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746594	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746603	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746596	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746597	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746598	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746599	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746600	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746601	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746602	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746606	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746584	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746646	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746595	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/16/22
1746334	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746346	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1746340	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746339	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746341	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746336	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746342	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746337	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746335	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746347	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746348	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746349	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746350	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746351	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746343	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746345	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746338	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746344	1336-21-6	Ammonium Hydroxide ACS Plus	2.5	Liters(L)	12/16/22
1746196	476-66-4	Ellagic Acid Dihydrate	500	Milligram(MG)	12/16/22
1746197	476-66-4	Ellagic Acid Dihydrate	500	Milligram(MG)	12/16/22
1746332	1129-30-2	2 6-DIACETYLPYRIDINE	25	Gram(GM)	12/16/22
1746333	-	DOW CORNING 340 SILICONE HEAT SINK COMPOUND	5	Ounces(OZ)	12/16/22
1746352	666-52-4	Acetone-d6 99.9 atom % D	25	Gram(GM)	12/16/22
1746452	67-64-1	ACETONE ACS	4	Liters(L)	12/16/22
1746455	67-64-1	ACETONE ACS	4	Liters(L)	12/16/22
1746453	67-64-1	ACETONE ACS	4	Liters(L)	12/16/22
1746454	67-64-1	ACETONE ACS	4	Liters(L)	12/16/22
1746456	60-00-4	ETHYLENEDIAMINETETRAACETIC ACID	1	Kilograms(KG)	12/16/22
1746457	1120-48-5	Dioctylamine 97%	25	Gram(GM)	12/16/22
1746458	67-56-1	Methanol (HPLC)	1	Liters(L)	12/16/22
1746459	67-56-1	Methanol 99.8% ACS reagent	1	Liters(L)	12/16/22
1746451	102-86-3	TRIHEXYLAMINE	25	Milliliter(ML)	12/16/22
1746448	-	DOW CORNING HIGH VACUUM GREASE	5.3	Ounces(OZ)	12/16/22
1746357	-	10 ppm 43 Element ICP Calibration/Quality Control Standard	500	Milliliter(ML)	12/16/22
1746353	-	10 ppm Refractory Element	500	Milliliter(ML)	12/16/22
1746354	-	10 ppm Precious Metal (Osmium)	500	Milliliter(ML)	12/16/22
1746355	-	10 ppm 6 Element ICP-MS Internal Standard	500	Milliliter(ML)	12/16/22
1746356	-	1000 µg/mL Iron	500	Milliliter(ML)	12/16/22
1420785	7782-42-5	COLLODIAL GRAPHITE	30	Gram(GM)	12/16/22
1607975	7440-41-7	BERYLLIUM STANDARD SOLUTI	125	Milliliter(ML)	12/16/22
1607976	7440-41-7	BERYLLIUM STANDARD SOLUTI	125	Milliliter(ML)	12/16/22
1706615	-	Black Resin	1	Liters(L)	12/19/22
1706616	-	Black Resin	1	Liters(L)	12/19/22
1706617	-	Durable Resin	1	Liters(L)	12/19/22
1706618	-	Durable Resin	1	Liters(L)	12/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1706620	-	Durable Resin	1	Liters(L)	12/19/22
1706621	-	Durable Resin	1	Liters(L)	12/19/22
1706619	-	Durable Resin	1	Liters(L)	12/19/22
1706622	-	Flexible 80A Resin	1	Liters(L)	12/19/22
1706623	-	Flexible 80A Resin	1	Liters(L)	12/19/22
1706624	-	Flexible Resin	1	Liters(L)	12/19/22
1706625	-	Flexible Resin	1	Liters(L)	12/19/22
1706626	-	Tough 2000 Resin	1	Liters(L)	12/19/22
1706630	-	Tough 2000 Resin	1	Liters(L)	12/19/22
1706627	-	Tough 2000 Resin	1	Liters(L)	12/19/22
1706628	-	Tough 2000 Resin	1	Liters(L)	12/19/22
1706629	-	Tough 2000 Resin	1	Liters(L)	12/19/22
1706631	-	White Resin	1	Liters(L)	12/19/22
1706633	-	White Resin	1	Liters(L)	12/19/22
1706632	-	White Resin	1	Liters(L)	12/19/22
1706640	-	HIGH VACUUM GREASE	150	Gram(GM)	12/19/22
1706641	-	HIGH VACUUM GREASE	150	Gram(GM)	12/19/22
1706642	10196-18-6	Zinc nitrate hexahydrate reagent grade 98%	100	Gram(GM)	12/19/22
1706643	10196-18-6	Zinc nitrate hexahydrate reagent grade 98%	100	Gram(GM)	12/19/22
1706644	10196-18-6	Zinc nitrate hexahydrate reagent grade 98%	100	Gram(GM)	12/19/22
1706645	10196-18-6	Zinc nitrate hexahydrate reagent grade 98%	100	Gram(GM)	12/19/22
1706646	10196-18-6	Zinc nitrate hexahydrate reagent grade 98%	100	Gram(GM)	12/19/22
1660370	63148-58-3	SILICONE OIL	2	Liters(L)	12/19/22
1706635	60-29-7	DIETHYL ETHER	1	Liters(L)	12/19/22
1706647	7790-99-0	Iodine monochloride	100	Gram(GM)	12/19/22
1706648	60-29-7	DIETHYL ETHER ANHYDROUS	1	Liters(L)	12/19/22
1706650	60-29-7	DIETHYL ETHER ANHYDROUS	1	Liters(L)	12/19/22
1706649	60-29-7	DIETHYL ETHER ANHYDROUS	1	Liters(L)	12/19/22
1706651	60-29-7	DIETHYL ETHER ANHYDROUS	1	Liters(L)	12/19/22
1721245	-	MicroC 2000	2700	Pounds(LB)	12/19/22
1721246	-	MicroC 2000	2700	Pounds(LB)	12/19/22
1746358	-	Contrex AW	4	Pounds(LB)	12/19/22
1746359	-	Contrex AW	4	Pounds(LB)	12/19/22
1746364	-	Contrex AW	4	Pounds(LB)	12/19/22
1746365	-	Contrex AW	4	Pounds(LB)	12/19/22
1746366	-	Contrex AW	4	Pounds(LB)	12/19/22
1746363	-	Contrex AW	4	Pounds(LB)	12/19/22
1746362	-	Contrex AW	4	Pounds(LB)	12/19/22
1746360	-	Contrex AW	4	Pounds(LB)	12/19/22
1746361	-	Contrex AW	4	Pounds(LB)	12/19/22
1746460	7681-57-4	Sodium metabisulfite 97%	10000	Gram(GM)	12/19/22
1746461	7681-57-4	Sodium metabisulfite 97%	10000	Gram(GM)	12/19/22
1746462	7681-57-4	Sodium metabisulfite 97%	10000	Gram(GM)	12/19/22
1746463	7681-57-4	Sodium metabisulfite 97%	10000	Gram(GM)	12/19/22
1746464	7681-57-4	Sodium metabisulfite 97%	10000	Gram(GM)	12/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1746531	7601-90-3	PERCHLORIC ACID 70%	500	Milliliter(ML)	12/19/22
1746532	7601-90-3	PERCHLORIC ACID 70%	500	Milliliter(ML)	12/19/22
1746533	68585-32-0	PLATINUM-CYCLOVINYLMETHYL- SILOXANE COMPLEX; 2% Pt in CYCLOMETHYLVINYLSILOXANES	2.5	Gram(GM)	12/19/22
1746534	60-29-7	Diethyl ether HPLC Grade 99%	4	Liters(L)	12/19/22
1746536	60-29-7	Diethyl ether HPLC Grade 99%	4	Liters(L)	12/19/22
1746535	60-29-7	Diethyl ether HPLC Grade 99%	4	Liters(L)	12/19/22
1746537	60-29-7	Diethyl ether HPLC Grade 99%	4	Liters(L)	12/19/22
1746538	-	VEROGRAY RGD850	1	Kilograms(KG)	12/19/22
1746539	12069-32-8	Boron Carbide Powder	2	Kilograms(KG)	12/19/22
1746540	12069-32-8	Boron Carbide Powder	2	Kilograms(KG)	12/19/22
1746541	12069-32-8	Boron Carbide Powder	2	Kilograms(KG)	12/19/22
1746542	2206-27-1	DIMETHYL SULFOXIDE-D6	100	Gram(GM)	12/19/22
1746543	108-88-3	Toluene HPLC	1	Liters(L)	12/19/22
1746544	108-88-3	Toluene HPLC	1	Liters(L)	12/19/22
1746545	108-88-3	Toluene HPLC	1	Liters(L)	12/19/22
1746547	-	BODIPY 505/515 (4 4-Difluoro-1 3 5 7-Tetramethyl-4-Bora-3a 4a-Diaza-s-Indacene)	10	Milligram(MG)	12/19/22
1746548	56-40-6	GLYCINE	250	Gram(GM)	12/19/22
1660371	109-99-9	TETRAHYDROFURAN	250	Milliliter(ML)	12/19/22
1660372	12069-32-8	BORON CARBIDE	250	Milliliter(ML)	12/19/22
1660373	-	CONDUCTIVITY STANDARD	500	Milliliter(ML)	12/19/22
1735030	-	LUBRIPLATE 140	1	Gallon(GAL)	12/19/22
1735031	-	LUBRIPLATE 140	1	Gallon(GAL)	12/19/22
1735032	-	LUBRIPLATE 140	1	Gallon(GAL)	12/19/22
1735033	-	LUBRIPLATE 140	1	Gallon(GAL)	12/19/22
1734899	-	NAPA MAC'S Starting Fluid	11	Ounces(OZ)	12/19/22
1734908	-	NAPA MAC'S Starting Fluid	11	Ounces(OZ)	12/19/22
1734909	-	NAPA MAC'S Starting Fluid	11	Ounces(OZ)	12/19/22
1734907	-	NAPA MAC'S Starting Fluid	11	Ounces(OZ)	12/19/22
1734906	-	NAPA MAC'S Starting Fluid	11	Ounces(OZ)	12/19/22
1734905	-	NAPA MAC'S Starting Fluid	11	Ounces(OZ)	12/19/22
1734904	-	NAPA MAC'S Starting Fluid	11	Ounces(OZ)	12/19/22
1734903	-	NAPA MAC'S Starting Fluid	11	Ounces(OZ)	12/19/22
1734902	-	NAPA MAC'S Starting Fluid	11	Ounces(OZ)	12/19/22
1734901	-	NAPA MAC'S Starting Fluid	11	Ounces(OZ)	12/19/22
1734900	-	NAPA MAC'S Starting Fluid	11	Ounces(OZ)	12/19/22
1734910	-	NAPA MAC'S Starting Fluid	11	Ounces(OZ)	12/19/22
1734911	-	fast setting cement	50	Pounds(LB)	12/19/22
1734957	-	fast setting cement	50	Pounds(LB)	12/19/22
1734918	-	fast setting cement	50	Pounds(LB)	12/19/22
1734956	-	fast setting cement	50	Pounds(LB)	12/19/22
1734935	-	fast setting cement	50	Pounds(LB)	12/19/22
1734955	-	fast setting cement	50	Pounds(LB)	12/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734954	-	fast setting cement	50	Pounds(LB)	12/19/22
1734924	-	fast setting cement	50	Pounds(LB)	12/19/22
1734923	-	fast setting cement	50	Pounds(LB)	12/19/22
1734922	-	fast setting cement	50	Pounds(LB)	12/19/22
1734921	-	fast setting cement	50	Pounds(LB)	12/19/22
1734919	-	fast setting cement	50	Pounds(LB)	12/19/22
1734963	-	fast setting cement	50	Pounds(LB)	12/19/22
1734917	-	fast setting cement	50	Pounds(LB)	12/19/22
1734916	-	fast setting cement	50	Pounds(LB)	12/19/22
1734920	-	fast setting cement	50	Pounds(LB)	12/19/22
1734972	-	fast setting cement	50	Pounds(LB)	12/19/22
1734965	-	fast setting cement	50	Pounds(LB)	12/19/22
1734966	-	fast setting cement	50	Pounds(LB)	12/19/22
1734967	-	fast setting cement	50	Pounds(LB)	12/19/22
1734968	-	fast setting cement	50	Pounds(LB)	12/19/22
1734969	-	fast setting cement	50	Pounds(LB)	12/19/22
1734961	-	fast setting cement	50	Pounds(LB)	12/19/22
1734971	-	fast setting cement	50	Pounds(LB)	12/19/22
1734958	-	fast setting cement	50	Pounds(LB)	12/19/22
1734973	-	fast setting cement	50	Pounds(LB)	12/19/22
1734974	-	fast setting cement	50	Pounds(LB)	12/19/22
1734962	-	fast setting cement	50	Pounds(LB)	12/19/22
1734915	-	fast setting cement	50	Pounds(LB)	12/19/22
1734960	-	fast setting cement	50	Pounds(LB)	12/19/22
1734959	-	fast setting cement	50	Pounds(LB)	12/19/22
1734970	-	fast setting cement	50	Pounds(LB)	12/19/22
1734940	-	fast setting cement	50	Pounds(LB)	12/19/22
1734933	-	fast setting cement	50	Pounds(LB)	12/19/22
1734946	-	fast setting cement	50	Pounds(LB)	12/19/22
1734945	-	fast setting cement	50	Pounds(LB)	12/19/22
1734944	-	fast setting cement	50	Pounds(LB)	12/19/22
1734943	-	fast setting cement	50	Pounds(LB)	12/19/22
1734948	-	fast setting cement	50	Pounds(LB)	12/19/22
1734941	-	fast setting cement	50	Pounds(LB)	12/19/22
1734949	-	fast setting cement	50	Pounds(LB)	12/19/22
1734939	-	fast setting cement	50	Pounds(LB)	12/19/22
1734938	-	fast setting cement	50	Pounds(LB)	12/19/22
1734937	-	fast setting cement	50	Pounds(LB)	12/19/22
1734936	-	fast setting cement	50	Pounds(LB)	12/19/22
1734913	-	fast setting cement	50	Pounds(LB)	12/19/22
1734912	-	fast setting cement	50	Pounds(LB)	12/19/22
1734942	-	fast setting cement	50	Pounds(LB)	12/19/22
1734929	-	fast setting cement	50	Pounds(LB)	12/19/22
1734952	-	fast setting cement	50	Pounds(LB)	12/19/22
1734951	-	fast setting cement	50	Pounds(LB)	12/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734950	-	fast setting cement	50	Pounds(LB)	12/19/22
1734925	-	fast setting cement	50	Pounds(LB)	12/19/22
1734914	-	fast setting cement	50	Pounds(LB)	12/19/22
1734926	-	fast setting cement	50	Pounds(LB)	12/19/22
1734947	-	fast setting cement	50	Pounds(LB)	12/19/22
1734928	-	fast setting cement	50	Pounds(LB)	12/19/22
1734953	-	fast setting cement	50	Pounds(LB)	12/19/22
1734930	-	fast setting cement	50	Pounds(LB)	12/19/22
1734931	-	fast setting cement	50	Pounds(LB)	12/19/22
1734932	-	fast setting cement	50	Pounds(LB)	12/19/22
1734964	-	fast setting cement	50	Pounds(LB)	12/19/22
1734934	-	fast setting cement	50	Pounds(LB)	12/19/22
1734927	-	fast setting cement	50	Pounds(LB)	12/19/22
1734975	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1734986	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735018	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735004	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735005	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735006	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735007	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735008	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735010	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735012	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735013	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735014	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735015	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1734984	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735017	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735001	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735019	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735020	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735021	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735022	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735023	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735024	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735025	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735026	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735027	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735028	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735016	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1734990	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1734977	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1734978	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1734979	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1734980	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1734981	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1734982	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1734983	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1734985	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735009	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1734987	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735003	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1734989	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735002	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1734991	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1734992	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1734993	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1734994	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1734995	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1734996	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1734997	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1734998	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1734999	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735000	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1734976	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1734988	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735011	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1746677	1145-73-9	4-(Dimethylamino)stilbene	5	Gram(GM)	12/19/22
1746676	1145-73-9	4-(Dimethylamino)stilbene	5	Gram(GM)	12/19/22
1746678	1145-73-9	4-(Dimethylamino)stilbene	5	Gram(GM)	12/19/22
1746680	1145-73-9	4-(Dimethylamino)stilbene	5	Gram(GM)	12/19/22
V00000D2C3	-	Permacryl Int Latex Satin W/B	1	Gallon(GAL)	12/19/22
V00000D2C4	-	Permacryl Int Latex Satin W/B	1	Gallon(GAL)	12/19/22
V00000D2C2	-	Permacryl Int Latex Satin W/B	1	Gallon(GAL)	12/19/22
1746549	7440-58-6	Hafnium pieces	250	Gram(GM)	12/19/22
1746551	7440-58-6	Hafnium pieces	250	Gram(GM)	12/19/22
1746553	7440-58-6	Hafnium pieces	250	Gram(GM)	12/19/22
1746550	7440-58-6	Hafnium pieces	250	Gram(GM)	12/19/22
1746552	7440-58-6	Hafnium pieces	250	Gram(GM)	12/19/22
1746554	-	HOLMIUM(III) OXIDE	10	Gram(GM)	12/19/22
1746555	1313-97-9	Neodymium(III) oxide 99.9% trace metals basis	25	Gram(GM)	12/19/22
1746556	119-61-9	BENZOPHENONE	250	Gram(GM)	12/19/22
1746647	75-09-2	Dichloromethane for HPLC	4	Liters(L)	12/19/22
1746650	75-09-2	Dichloromethane for HPLC	4	Liters(L)	12/19/22
1746648	75-09-2	Dichloromethane for HPLC	4	Liters(L)	12/19/22
1746649	75-09-2	Dichloromethane for HPLC	4	Liters(L)	12/19/22
1746651	-	INLAND 77	1	Gallon(GAL)	12/19/22
1746652	-	INLAND 77	1	Gallon(GAL)	12/19/22
1746653	-	INLAND 77	1	Gallon(GAL)	12/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1746654	67-63-0	ISOPROPYL ALCOHOL	20	Liters(L)	12/19/22
1735109	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	12/19/22
1735110	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	12/19/22
1735111	-	AMERLOCK SEALER CLEAR BASE	1	Gallon(GAL)	12/19/22
1735112	-	Amerlock Sealer HRD	12	Gallon(GAL)	12/19/22
1735113	-	Amerlock Sealer HRD	12	Gallon(GAL)	12/19/22
1735114	-	Amerlock Sealer HRD	12	Gallon(GAL)	12/19/22
1721247	7647-01-0	Hydrochloric Acid 30-31%	3000	Pounds(LB)	12/19/22
1721248	7647-01-0	Hydrochloric Acid 30-31%	3000	Pounds(LB)	12/19/22
1746198	93-58-3	METHYL BENZOATE	500	Milliliter(ML)	12/19/22
1746200	93-58-3	METHYL BENZOATE	500	Milliliter(ML)	12/19/22
1746199	93-58-3	METHYL BENZOATE	500	Milliliter(ML)	12/19/22
V00000D2C8	-	PSX 700 pearl gray resin	1	Gallon(GAL)	12/19/22
V00000D2C9	-	PSX 700 pearl gray resin	1	Gallon(GAL)	12/19/22
V00000D2C7	-	PSX 700 pearl gray resin	1	Gallon(GAL)	12/19/22
V00000D2C6	-	PSX 700 pearl gray resin	1	Gallon(GAL)	12/19/22
V00000D2C5	-	PSX 700 pearl gray resin	1	Gallon(GAL)	12/19/22
V00000D2CB	-	PSX 700 pearl gray resin	1	Gallon(GAL)	12/19/22
V00000D2CC	-	PSX 700 pearl gray resin	1	Gallon(GAL)	12/19/22
V00000D2CD	-	PSX 700 pearl gray resin	1	Gallon(GAL)	12/19/22
V00000D2CE	-	PSX 700 pearl gray resin	1	Gallon(GAL)	12/19/22
V00000D2CF	-	PSX 700 pearl gray resin	1	Gallon(GAL)	12/19/22
V00000D2CA	-	PSX 700 pearl gray resin	1	Gallon(GAL)	12/19/22
1746465	-	VITA-D-CHLOR SLO-TABS	35	Pounds(LB)	12/19/22
1746468	-	VITA-D-CHLOR SLO-TABS	35	Pounds(LB)	12/19/22
1746467	-	VITA-D-CHLOR SLO-TABS	35	Pounds(LB)	12/19/22
1746466	-	VITA-D-CHLOR SLO-TABS	35	Pounds(LB)	12/19/22
1735034	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735040	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735050	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735049	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735048	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735047	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735046	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735045	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735044	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735043	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735041	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735035	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735039	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735038	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735037	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735070	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735036	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735051	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1735042	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735079	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735068	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735072	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735073	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735074	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735075	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735076	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735083	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735078	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735069	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735080	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735081	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735082	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735084	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735086	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735087	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735077	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735061	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735053	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735054	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735055	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735056	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735057	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735058	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735071	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735060	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735052	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735062	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735063	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735064	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735065	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735066	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735067	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735059	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1735085	497-19-8	SODA ASH	50	Pounds(LB)	12/19/22
1746469	67-64-1	Acetone Macron Fine Chemicals	4	Liters(L)	12/19/22
1746470	67-64-1	Acetone Macron Fine Chemicals	4	Liters(L)	12/19/22
1746471	112-27-6	TRIETHYLENE GLYCOL	5	Gram(GM)	12/19/22
1746557	75-05-8	Acetonitrile anhydrous 99.8%	1	Liters(L)	12/19/22
1746559	75-05-8	Acetonitrile anhydrous 99.8%	1	Liters(L)	12/19/22
1746562	75-05-8	Acetonitrile anhydrous 99.8%	1	Liters(L)	12/19/22
1746560	75-05-8	Acetonitrile anhydrous 99.8%	1	Liters(L)	12/19/22
1746558	75-05-8	Acetonitrile anhydrous 99.8%	1	Liters(L)	12/19/22
1746561	75-05-8	Acetonitrile anhydrous 99.8%	1	Liters(L)	12/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1746563	1313-99-1	NICKEL OXIDE	100	Gram(GM)	12/19/22
17335098	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	12/19/22
1735098	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	12/19/22
1735101	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	12/19/22
1735103	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	12/19/22
1735102	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	12/19/22
1735100	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	12/19/22
1735099	-	PSX 700 A CLEAR COAT CURE	0.17	Gallon(GAL)	12/19/22
1736788	-	NITROGEN STANDARD	500	Milliliter(ML)	12/19/22
1746564	-	COOLI ADDITIVE	4	Liters(L)	12/19/22
1746565	-	UNITCLEAN	1	Liters(L)	12/19/22
1735104	-	PSX 700 CURE	0.2	Gallon(GAL)	12/19/22
1735108	-	PSX 700 CURE	0.2	Gallon(GAL)	12/19/22
1735105	-	PSX 700 CURE	0.2	Gallon(GAL)	12/19/22
1735106	-	PSX 700 CURE	0.2	Gallon(GAL)	12/19/22
1735107	-	PSX 700 CURE	0.2	Gallon(GAL)	12/19/22
1746566	11/1/5470	HYDROXYLAMINE HYDROCHLORIDE	5	Gram(GM)	12/19/22
1746139	64-17-5	Molecular Biology Grade Ethanol (200 Proof)	500	Milliliter(ML)	12/19/22
1746144	64-17-5	Molecular Biology Grade Ethanol (200 Proof)	500	Milliliter(ML)	12/19/22
1746143	64-17-5	Molecular Biology Grade Ethanol (200 Proof)	500	Milliliter(ML)	12/19/22
1746142	64-17-5	Molecular Biology Grade Ethanol (200 Proof)	500	Milliliter(ML)	12/19/22
1746141	64-17-5	Molecular Biology Grade Ethanol (200 Proof)	500	Milliliter(ML)	12/19/22
1746140	64-17-5	Molecular Biology Grade Ethanol (200 Proof)	500	Milliliter(ML)	12/19/22
V00000D2DA	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/19/22
V00000D2D0	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/19/22
V00000D2D1	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/19/22
V00000D2D2	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/19/22
V00000D2D3	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/19/22
V00000D2D4	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/19/22
V00000D2D5	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/19/22
V00000D2D9	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/19/22
V00000D2D6	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/19/22
V00000D2DB	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/19/22
V00000D2D7	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/19/22
V00000D2D8	-	BIG STRETCH CAULK	10.5	Ounces(OZ)	12/19/22
1746567	-	2-(Aminomethyl)-N1 N1-dimethylpropane-1 3-diamine trihydrochloride	5	Gram(GM)	12/19/22
1746129	67-56-1	Methanol 99.9% (HPLC)	4	Liters(L)	12/19/22
1746132	67-56-1	Methanol 99.9% (HPLC)	4	Liters(L)	12/19/22
1746131	67-56-1	Methanol 99.9% (HPLC)	4	Liters(L)	12/19/22
1746130	67-56-1	Methanol 99.9% (HPLC)	4	Liters(L)	12/19/22
1746151	-	ZIRCONIA POWDER	1	Kilograms(KG)	12/19/22
1746155	-	ZIRCONIA POWDER	1	Kilograms(KG)	12/19/22
1746154	-	ZIRCONIA POWDER	1	Kilograms(KG)	12/19/22
1746153	-	ZIRCONIA POWDER	1	Kilograms(KG)	12/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1746152	-	ZIRCONIA POWDER	1	Kilograms(KG)	12/19/22
1746156	7664-93-9	Sulfuric Acid (Optima)	250	Milliliter(ML)	12/19/22
1746157	7664-93-9	Sulfuric Acid (Optima)	250	Milliliter(ML)	12/19/22
1740099	75-07-0	Acetaldehyde 99.0+%	100	Milliliter(ML)	12/19/22
1740100	109-99-9	TETRAHYDROFURAN HPLC GRADE	4	Liters(L)	12/19/22
1746568	-	EPO-TEK 305A	8	Ounces(OZ)	12/19/22
1746569	-	EPO-TEK 305A	8	Ounces(OZ)	12/19/22
1746570	-	EPO-TEK 305A	8	Ounces(OZ)	12/19/22
1745911	92112-69-1	Hexanes mixed isomers ACS	4	Liters(L)	12/19/22
1735145	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	12/19/22
1745912	92112-69-1	Hexanes mixed isomers ACS	4	Liters(L)	12/19/22
1735156	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	12/19/22
1735148	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	12/19/22
1735159	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	12/19/22
1735149	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	12/19/22
1735146	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	12/19/22
1735150	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	12/19/22
1735151	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	12/19/22
1735157	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	12/19/22
1735155	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	12/19/22
1735154	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	12/19/22
1735153	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	12/19/22
1735152	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	12/19/22
1735162	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	12/19/22
1735161	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	12/19/22
1735160	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	12/19/22
1735158	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	12/19/22
1735147	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	12/19/22
1735167	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	12/19/22
1735169	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	12/19/22
1735171	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	12/19/22
1735172	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	12/19/22
1735173	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	12/19/22
1735174	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	12/19/22
1735175	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	12/19/22
1735176	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	12/19/22
1735170	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	12/19/22
1735168	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	12/19/22
1735166	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	12/19/22
1735165	-	Orange Peel Formula / Knock Down Formula	20	Ounces(OZ)	12/19/22
1746571	2206-27-1	Dimethyl sulfoxide-D6 with TMS (0.03 vol.%) deuteration degree min. 99.8% for NMR spectroscopy MagniSolv	10	Milliliter(ML)	12/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1746572	2206-27-1	Dimethyl sulfoxide-D6 with TMS (0.03 vol.%) deuteration degree min. 99.8% for NMR spectroscopy MagniSolv	10	Milliliter(ML)	12/19/22
V00000D2DF	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/19/22
V00000D2DE	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/19/22
V00000D2DD	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/19/22
V00000D2DC	-	BIN PRIMER SEALER	1	Gallon(GAL)	12/19/22
1735163	-	FIBERED ELASTOMERIC ROOF COATING	1	Gallon(GAL)	12/19/22
1735164	-	FIBERED ELASTOMERIC ROOF COATING	1	Gallon(GAL)	12/19/22
1746674	50-81-7	L-ASCORBIC ACID	25	Gram(GM)	12/19/22
1735116	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/19/22
1735117	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/19/22
1735118	-	Permacryl Int Latex Satin W/B	17.9	Liters(L)	12/19/22
1735119	-	Avalon Premium 100% Acrylic Interior Eggshell W/B - DE-1631	3.6	Liters(L)	12/19/22
1735121	-	Avalon Premium 100% Acrylic Interior Eggshell W/B - DE-1631	3.6	Liters(L)	12/19/22
1735122	-	Avalon Premium 100% Acrylic Interior Eggshell W/B - DE-1631	3.6	Liters(L)	12/19/22
1735120	-	Avalon Premium 100% Acrylic Interior Eggshell W/B - DE-1631	3.6	Liters(L)	12/19/22
1735123	-	Avalon Premium 100% Acrylic Interior Eggshell W/B - DE-1631	3.6	Liters(L)	12/19/22
1735124	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	12/19/22
1735125	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	12/19/22
1735134	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	12/19/22
1735139	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	12/19/22
1735138	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	12/19/22
1735137	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	12/19/22
1735136	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	12/19/22
1735135	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	12/19/22
1735133	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	12/19/22
1735131	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	12/19/22
1735129	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	12/19/22
1735128	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	12/19/22
1735140	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	12/19/22
1735126	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	12/19/22
1735132	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	12/19/22
1735127	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	12/19/22
1735130	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	12/19/22
1735144	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	12/19/22
1735143	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	12/19/22
1735142	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	12/19/22
1735141	-	Permacryl Int Latex Satin W/B	3.6	Liters(L)	12/19/22
V00000D2E2	-	Zinsser BULLS EYE 1-2-3	1	Gallon(GAL)	12/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D2E1	-	Zinsser BULLS EYE 1-2-3	1	Gallon(GAL)	12/19/22
V00000D2E0	-	Zinsser BULLS EYE 1-2-3	1	Gallon(GAL)	12/19/22
1746573	106214-84-0	POLY(DIMETHYLSILOXANE) BIS(3-AMINOPROPYL)TERMINATED	50	Milliliter(ML)	12/19/22
1746574	106214-84-0	POLY(DIMETHYLSILOXANE) BIS(3-AMINOPROPYL)TERMINATED	50	Milliliter(ML)	12/19/22
1746575	123-72-8	Butyraldehyde purified by redistillation =99.5%	100	Milliliter(ML)	12/19/22
1746576	123-72-8	Butyraldehyde purified by redistillation =99.5%	100	Milliliter(ML)	12/19/22
1746472	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	12/19/22
1746160	143-33-9	Sodium cyanide reagent grade 97%	100	Gram(GM)	12/19/22
1746490	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	12/19/22
1746491	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	12/19/22
1746486	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	12/19/22
1746481	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	12/19/22
1746485	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	12/19/22
1746484	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	12/19/22
1746480	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	12/19/22
1746487	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	12/19/22
1746489	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	12/19/22
1746483	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	12/19/22
1746482	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	12/19/22
1746473	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	12/19/22
1746479	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	12/19/22
1746478	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	12/19/22
1746477	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	12/19/22
1746476	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	12/19/22
1746475	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	12/19/22
1746474	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	12/19/22
1746488	7647-01-0	Hydrochloric Acid Optima	2	Liters(L)	12/19/22
1746161	143-33-9	Sodium cyanide reagent grade 97%	100	Gram(GM)	12/19/22
1746659	64-17-5	ETHANOL 200 PROOF	1	Gallon(GAL)	12/19/22
1746660	-	PELCO High Performance Ceramic Adhesive	50	Gram(GM)	12/19/22
1746661	-	PELCO High Temperature Carbon Paste	50	Gram(GM)	12/19/22
1746662	1310-73-2	SODIUM HYDROXIDE SOLUTION 0.1 N	1	Liters(L)	12/19/22
1746663	-	Multielement Standard Solution 6 for ICP	100	Milliliter(ML)	12/19/22
1746664	-	RESIN AG 1-X4 200-400 MESH	500	Gram(GM)	12/19/22
1746666	-	RESIN AG 1-X4 200-400 MESH	500	Gram(GM)	12/19/22
1746665	-	RESIN AG 1-X4 200-400 MESH	500	Gram(GM)	12/19/22
1746670	-	RESIN AG 1-X4 200-400 MESH	500	Gram(GM)	12/19/22
1746669	-	RESIN AG 1-X4 200-400 MESH	500	Gram(GM)	12/19/22
1746671	-	RESIN AG 1-X4 200-400 MESH	500	Gram(GM)	12/19/22
1746672	-	RESIN AG 1-X4 200-400 MESH	500	Gram(GM)	12/19/22
1746668	-	RESIN AG 1-X4 200-400 MESH	500	Gram(GM)	12/19/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1746667	-	RESIN AG 1-X4 200-400 MESH	500	Gram(GM)	12/19/22
1746673	67-68-5	Methyl sulfoxide 99.7 extra dry	1	Liters(L)	12/19/22
1746675	29046-78-4	Nickel(II) chloride dimethoxyethane adduct min. 97%	1	Gram(GM)	12/19/22
1746679	98-86-2	ACETOPHENONE	25	Gram(GM)	12/19/22
1746159	-	METADI II DIAMOND POLISHING COMPOUND 9 MICRON	20	Gram(GM)	12/19/22
1746149	1317-38-0	COPPER(II) OXIDE 99.999+%	5	Gram(GM)	12/19/22
1718310	-	FANTASTIK ALL PURPOSE CLEANER	32	Ounces(OZ)	12/20/22
1718315	-	FANTASTIK ALL PURPOSE CLEANER	32	Ounces(OZ)	12/20/22
1718314	-	FANTASTIK ALL PURPOSE CLEANER	32	Ounces(OZ)	12/20/22
1718313	-	FANTASTIK ALL PURPOSE CLEANER	32	Ounces(OZ)	12/20/22
1718312	-	FANTASTIK ALL PURPOSE CLEANER	32	Ounces(OZ)	12/20/22
1718311	-	FANTASTIK ALL PURPOSE CLEANER	32	Ounces(OZ)	12/20/22
1746128	583-55-1	1-BROMO-2-IODOBENZENE	1	Liters(L)	12/20/22
1746133	109-99-9	Tetrahydrofuran UV HPLC Grade 99.7+% min unstabilized	1	Liters(L)	12/20/22
1746134	109-99-9	Tetrahydrofuran UV HPLC Grade 99.7+% min unstabilized	1	Liters(L)	12/20/22
1746135	109-99-9	Tetrahydrofuran anhydrous 99.8+% unstabalized	1	Liters(L)	12/20/22
1746136	109-99-9	Tetrahydrofuran anhydrous 99.8+% unstabalized	1	Liters(L)	12/20/22
1746137	1493-13-6	Trifluoromethanesulfonic acid 99%	100	Gram(GM)	12/20/22
1746138	3637-26-1	[2-(Methacryloyloxy)ethyl]dimethyl-(3-sulfopropyl)ammonium hydroxide	50	Gram(GM)	12/20/22
1745914	7681-52-9	Sodium hypochlorite solution reagent grade available chlorine 10-15%	1	Liters(L)	12/20/22
1745916	1344-28-1	Aluminum oxide activated neutral gamma Brockmann Grade I	5	Kilograms(KG)	12/20/22
V00000D2E6	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D2EE	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D2F3	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D2F2	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D2F1	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D2F0	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D2EF	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D2ED	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D2EC	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D2EB	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D2EA	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D2E9	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D311	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D2E7	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D310	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D2E5	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D2E4	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D2E3	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D2E8	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D300	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D2F5	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D2F4	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D2F6	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D2F7	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D2F8	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D2F9	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D2FA	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D2FB	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D2FC	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D2FD	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D2FF	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D301	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D302	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D303	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D30D	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D30F	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D2FE	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D30E	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D304	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D30C	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D30B	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D30A	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D308	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D307	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D306	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D305	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
V00000D309	-	Valvoline MOTOR OIL SAE 15W-40 MOTOR OIL	1	Gallon(GAL)	12/20/22
1735213	-	ES COMPLEAT OAT ETHYLENE GLYCOL	1	Gallon(GAL)	12/20/22
1735215	-	ES COMPLEAT OAT ETHYLENE GLYCOL	1	Gallon(GAL)	12/20/22
1735214	-	ES COMPLEAT OAT ETHYLENE GLYCOL	1	Gallon(GAL)	12/20/22
1735222	-	ES COMPLEAT OAT ETHYLENE GLYCOL	1	Gallon(GAL)	12/20/22
1735223	-	ES COMPLEAT OAT ETHYLENE GLYCOL	1	Gallon(GAL)	12/20/22
1735216	-	Paramount Ext. 100% Acrylic Flat W/B	18	Liters(L)	12/20/22
1735217	-	Paramount Ext. 100% Acrylic Flat W/B	18	Liters(L)	12/20/22
1746727	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746740	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1746746	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746748	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746741	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746743	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746744	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746747	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746749	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746742	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746736	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746750	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746729	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746730	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746731	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746739	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746732	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746733	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746734	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746745	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746728	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746737	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746738	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746766	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746765	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746758	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746755	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746735	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746754	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746764	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746753	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746757	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746756	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746759	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746760	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746751	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746761	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746762	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746763	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
1746752	67-64-1	Acetone HPLC	4	Liters(L)	12/20/22
802433	-	SILICONE CAULK	9.8	Ounces(OZ)	12/20/22
1717767	-	Torr Seal Hardener Part A	82	Gram(GM)	12/20/22
1746207	-	DMEM WO GLUC & PHENOL RED	500	Milliliter(ML)	12/20/22
171776	-	Torr Seal Hardener Part B	36	Gram(GM)	12/20/22
1746492	1317-70-0	TITANIUM OXIDE	120	Gram(GM)	12/20/22
1717769	-	Torr Seal Hardener Part A	82	Gram(GM)	12/20/22
1746493	7447-41-8	LITHIUM CHLORIDE ANHYDROUS	100	Gram(GM)	12/20/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1717768	-	Torr Seal Hardener Part B	36	Gram(GM)	12/20/22
1746494	73-24-5	ADENINE	100	Gram(GM)	12/20/22
1746681	98-59-9	P-TOLUENESULFONYL CHLORIDE	500	Gram(GM)	12/20/22
1746682	24677-78-9	2 3-DIHYDROXYBENZALDEHYDE	25	Gram(GM)	12/20/22
1614642	-	HYDROIODIC ACID 57%	250	Milliliter(ML)	12/20/22
1746683	144-55-8	SODIUM BICARBONATE	3	Kilograms(KG)	12/20/22
1746684	64-17-5	ETHYL ALCOHOL-200 PROOF	500	Milliliter(ML)	12/20/22
V00000D312	-	Avalon Premium 100% Acrylic Interior Flat W/B	3.6	Liters(L)	12/20/22
V00000D313	-	Avalon Premium 100% Acrylic Interior Flat W/B	3.6	Liters(L)	12/20/22
1746685	64-17-5	ETHYL ALCOHOL-200 PROOF	500	Milliliter(ML)	12/20/22
1746686	101-84-8	PHENYL ETHER (DIPHENYL ETHER)	500	Gram(GM)	12/20/22
1746687	-	TRACE ELEMENTS IN WATER	250	Milliliter(ML)	12/20/22
V00000D314	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
1746688	78-67-1	2 2'-AZOBISISOBUTYRONITRILE	25	Gram(GM)	12/20/22
1746689	392-56-3	Hexafluorobenzene 99%	100	Gram(GM)	12/20/22
1746690	7647-01-0	Hydrochloric acid Trace Metal Grade	4	Liters(L)	12/20/22
1746691	7647-01-0	Hydrochloric acid Trace Metal Grade	4	Liters(L)	12/20/22
1746693	30525-89-4	PARAFORMALDEHYDE	500	Gram(GM)	12/20/22
1746127	-	NEODYMIUM(III) TRIFLUOROMETHANESULFONATE	25	Gram(GM)	12/20/22
1745915	121-69-7	N N-DIMETHYLANILINE	100	Milliliter(ML)	12/20/22
1745913	109-66-0	N-PENTANE	4	Liters(L)	12/20/22
1746692	-	Tetrafluoroboric acid ca 50% w/w aqueous solution	500	Gram(GM)	12/20/22
1746694	6/4/9084	SODIUM POLY(NAPHTHALENEFORMALDEHYDE) SULFONATE	500	Gram(GM)	12/20/22
1746145	141-78-6	Ethyl acetate ACS 99.5	1	Liters(L)	12/20/22
1746147	77-58-7	Dibutyltin dilaurate 95%	100	Gram(GM)	12/20/22
1746148	1317-38-0	COPPER(II) OXIDE	100	Gram(GM)	12/20/22
1746150	1317-38-0	COPPER OXIDE	100	Gram(GM)	12/20/22
1746168	-	Alizarin Red Staining Solution	50	Milliliter(ML)	12/20/22
1746495	101-84-8	PHENYL ETHER	1	Kilograms(KG)	12/20/22
1746496	113-24-6	sodium pyruvate	250	Gram(GM)	12/20/22
1746497	959-26-2	Bis(2-hydroxyethyl) terephthalate	500	Gram(GM)	12/20/22
1746498	818-61-1	2-HYDROXYETHYL ACRYLATE	250	Milliliter(ML)	12/20/22
1746499	1076-43-3	Benzene-d6 (D 99.96%)	50	Gram(GM)	12/20/22
1746500	1076-43-3	Benzene-d6 (D 99.96%)	50	Gram(GM)	12/20/22
1746501	1076-43-3	Benzene-d6 (D 99.96%)	50	Gram(GM)	12/20/22
1746695	-	Eichrom TEVA Resin Eichrom TEVA Resin Cartridge	2	Milliliter(ML)	12/20/22
1746696	-	Eichrom TEVA Resin Eichrom TEVA Resin Cartridge	2	Milliliter(ML)	12/20/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1746697	-	Eichrom TEVA Resin Eichrom TEVA Resin Cartridge	2	Milliliter(ML)	12/20/22
1746698	67-56-1	Methanol (HPLC)	4	Liters(L)	12/20/22
1746699	67-56-1	Methanol (HPLC)	4	Liters(L)	12/20/22
1746700	67-56-1	Methanol (HPLC)	4	Liters(L)	12/20/22
1746701	67-56-1	Methanol (HPLC)	4	Liters(L)	12/20/22
1746702	108-88-3	Toluene (Certified ACS)	4	Liters(L)	12/20/22
1746703	-	EPON RESIN 815C	1	Gallon(GAL)	12/20/22
1746708	-	EPON RESIN 815C	1	Gallon(GAL)	12/20/22
1746707	-	EPON RESIN 815C	1	Gallon(GAL)	12/20/22
1746706	-	EPON RESIN 815C	1	Gallon(GAL)	12/20/22
1746705	-	EPON RESIN 815C	1	Gallon(GAL)	12/20/22
1746704	-	EPON RESIN 815C	1	Gallon(GAL)	12/20/22
1746709	290-37-9	PYRAZINE	10	Gram(GM)	12/20/22
1746710	-	OBJET VEROBLUE RGD840	1	Kilograms(KG)	12/20/22
1746712	-	OBJET VEROBLUE RGD840	1	Kilograms(KG)	12/20/22
1746711	-	OBJET VEROBLUE RGD840	1	Kilograms(KG)	12/20/22
1746713	-	OBJET VEROBLUE RGD840	1	Kilograms(KG)	12/20/22
1746714	12007-60-2	Lithium tetraborate Puratronic 99.998% (metals basis)	1	Kilograms(KG)	12/20/22
1746146	68586-19-6	Ethylene glycol dicyclopentenyl ether methacrylate	250	Milliliter(ML)	12/20/22
1746162	98-59-9	4-Toluenesulfonyl chloride	1	Kilograms(KG)	12/20/22
1735235	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735249	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735257	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735237	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735256	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735255	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735254	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735253	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735252	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735251	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735250	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735258	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735238	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735248	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735239	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735236	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735240	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735241	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735242	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735243	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735244	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735245	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1735246	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735247	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735266	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735304	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735310	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735316	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735315	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735314	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735313	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735312	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735311	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735309	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735308	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735307	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735317	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735305	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735324	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735335	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735306	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735326	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735334	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735333	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735332	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735331	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735330	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735329	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735322	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735327	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735318	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735325	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735294	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735323	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735302	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735321	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735320	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735319	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735328	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735273	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735296	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735280	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735279	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735278	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735277	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735276	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735282	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1735274	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735283	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735272	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735271	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735270	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735269	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735268	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735267	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735275	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735290	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735300	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735299	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735298	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735297	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735295	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735293	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735281	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735291	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735303	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735289	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735288	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735287	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735286	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735285	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735284	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735292	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735352	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735336	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735301	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735360	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735359	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735358	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735357	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735356	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735355	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735353	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735351	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735350	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735349	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735340	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735337	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735338	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735354	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735339	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735348	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1735341	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735342	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735343	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735344	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735345	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735346	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735347	-	BROMICIDE TABLETS	50	Pounds(LB)	12/20/22
1735259	-	R-630	55	Gallon(GAL)	12/20/22
1735263	-	R-630	55	Gallon(GAL)	12/20/22
1735265	-	R-630	55	Gallon(GAL)	12/20/22
1735262	-	R-630	55	Gallon(GAL)	12/20/22
1735261	-	R-630	55	Gallon(GAL)	12/20/22
1735260	-	R-630	55	Gallon(GAL)	12/20/22
1735264	-	R-630	55	Gallon(GAL)	12/20/22
1735361	-	R-630	55	Gallon(GAL)	12/20/22
1735371	-	R-630	55	Gallon(GAL)	12/20/22
1735370	-	R-630	55	Gallon(GAL)	12/20/22
1735369	-	R-630	55	Gallon(GAL)	12/20/22
1735368	-	R-630	55	Gallon(GAL)	12/20/22
1735364	-	R-630	55	Gallon(GAL)	12/20/22
1735365	-	R-630	55	Gallon(GAL)	12/20/22
1735366	-	R-630	55	Gallon(GAL)	12/20/22
1735367	-	R-630	55	Gallon(GAL)	12/20/22
1735362	-	R-630	55	Gallon(GAL)	12/20/22
1735363	-	R-630	55	Gallon(GAL)	12/20/22
1735372	-	100ppm R134A/Balance Nitrogen	125	Pounds(LB)	12/20/22
1735218	-	PERMACRYL INTERIOR FLAT WHITE BASE	18	Liters(L)	12/20/22
1735221	-	PERMACRYL INTERIOR FLAT WHITE BASE	18	Liters(L)	12/20/22
1735220	-	PERMACRYL INTERIOR FLAT WHITE BASE	18	Liters(L)	12/20/22
1735219	-	PERMACRYL INTERIOR FLAT WHITE BASE	18	Liters(L)	12/20/22
1735224	-	PREMIUM HYDRAULIC FLUID AW-32	5	Gallon(GAL)	12/20/22
1735226	-	PREMIUM HYDRAULIC FLUID AW-32	5	Gallon(GAL)	12/20/22
1735227	-	PREMIUM HYDRAULIC FLUID AW-32	5	Gallon(GAL)	12/20/22
1735228	-	PREMIUM HYDRAULIC FLUID AW-32	5	Gallon(GAL)	12/20/22
1735225	-	PREMIUM HYDRAULIC FLUID AW-32	5	Gallon(GAL)	12/20/22
1735229	-	Rustoleum Red Spray Paint	15	Ounces(OZ)	12/20/22
1735230	-	Rustoleum Red Spray Paint	15	Ounces(OZ)	12/20/22
1735231	-	MICRO-BLAZE EMERGENCY LIQUID SPILL CONTROL	2	Gallon(GAL)	12/20/22
1735234	-	MICRO-BLAZE EMERGENCY LIQUID SPILL CONTROL	2	Gallon(GAL)	12/20/22
1735232	-	MICRO-BLAZE EMERGENCY LIQUID SPILL CONTROL	2	Gallon(GAL)	12/20/22
1735233	-	MICRO-BLAZE EMERGENCY LIQUID SPILL CONTROL	2	Gallon(GAL)	12/20/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1757668	-	Water ultrapure HPLC Grade	4	Liters(L)	12/20/22
1757669	-	Electrode Filling Solution Saturated KCL	100	Milliliter(ML)	12/20/22
1757866	1693-74-9	TETRAHYDROFURAN D8	5	Milliliter(ML)	12/20/22
1746715	62-31-7	DOPAMINE HYDROCHLORIDE	25	Gram(GM)	12/20/22
1746716	12069-32-8	BORON CARBIDE	250	Gram(GM)	12/20/22
1746717	12070-12-1	TUNGSTEN CARBIDE	250	Gram(GM)	12/20/22
1746718	694-59-7	PYRIDINE N-OXIDE	25	Gram(GM)	12/20/22
1746719	5593-70-4	Titanium(IV) n-butoxide	100	Gram(GM)	12/20/22
1746720	1344-28-1	ALUMINUM OXIDE	250	Gram(GM)	12/20/22
1746721	10043-11-5	BORON NITRIDE	500	Gram(GM)	12/20/22
1746722	10043-11-5	BORON NITRIDE	500	Gram(GM)	12/20/22
1746723	7440-70-2	Calcium granules	100	Gram(GM)	12/20/22
1746724	1310-58-3	POTASSIUM HYDROXIDE PELLETS	500	Gram(GM)	12/20/22
1746725	-	HIGH TEMPERATURE CEMENT	8	Ounces(OZ)	12/20/22
1746799	-	TUNGSTEN FOIL	3	Gram(GM)	12/20/22
1735376	-	Valvoline Professional Series 75W-140 FULL SYNTHETIC GEAR OIL	1	Quarts(QT)	12/20/22
1735377	-	SYNPOWER 75W-90 SYNTHETIC GEAR OIL	1	Quarts(QT)	12/20/22
1735378	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/20/22
1735379	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/20/22
1735380	-	Zerex DEX-COOL Orange OAT Formula RTU Antifreeze Coolant	1	Gallon(GAL)	12/20/22
1738946	-	LOCTITE 222MS THREADLOCKER	50	Milliliter(ML)	12/20/22
1738948	-	LOCTITE 222MS THREADLOCKER	50	Milliliter(ML)	12/20/22
1738947	-	LOCTITE 222MS THREADLOCKER	50	Milliliter(ML)	12/20/22
V00000D35B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D364	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D358	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D359	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D35A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D357	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D35C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D35D	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D35E	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D35F	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D360	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D361	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D363	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D34E	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D365	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D316	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D318	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D362	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D33D	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D344	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D343	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D342	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D341	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D340	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D350	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D33E	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D347	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D33C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D33B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D33A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D339	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D338	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D337	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D33F	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D34D	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D355	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D354	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D353	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D352	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D351	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D319	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D345	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D317	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D346	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D34C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D34B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D34A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D349	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D348	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D356	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D34F	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D36C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D331	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D332	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D333	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D334	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D335	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D336	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D366	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D367	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D368	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D369	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D330	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D36B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D36E	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D36D	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D31A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D36F	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D315	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D371	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D372	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D373	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D374	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D375	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D376	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D377	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D36A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D31D	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D31B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D370	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D31C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D32F	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D31E	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D31F	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D320	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D321	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D322	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D323	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D324	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D325	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D32C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D326	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D32E	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D32D	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D32B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D328	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D327	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D329	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D32A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D378	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D379	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D37A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D37B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D37C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D37D	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D37E	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D37F	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D380	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D38B	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D383	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D38C	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D384	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D385	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D386	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D387	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D388	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D389	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D38A	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D382	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D38D	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
V00000D381	-	DIESEL EXHAUST FLUID	2.5	Gallon(GAL)	12/20/22
1735375	-	Prime Guard Power Blast	1	Gallon(GAL)	12/20/22
1745970	-	RTV11 SILICONE RUBBER COMPOUND Silicone Elastomer	1	Pounds(LB)	12/20/22
1745974	-	RTV11 SILICONE RUBBER COMPOUND Silicone Elastomer	1	Pounds(LB)	12/20/22
1745983	-	RTV11 SILICONE RUBBER COMPOUND Silicone Elastomer	1	Pounds(LB)	12/20/22
1745982	-	RTV11 SILICONE RUBBER COMPOUND Silicone Elastomer	1	Pounds(LB)	12/20/22
1745981	-	RTV11 SILICONE RUBBER COMPOUND Silicone Elastomer	1	Pounds(LB)	12/20/22
1745980	-	RTV11 SILICONE RUBBER COMPOUND Silicone Elastomer	1	Pounds(LB)	12/20/22
1745979	-	RTV11 SILICONE RUBBER COMPOUND Silicone Elastomer	1	Pounds(LB)	12/20/22
1745978	-	RTV11 SILICONE RUBBER COMPOUND Silicone Elastomer	1	Pounds(LB)	12/20/22
1745977	-	RTV11 SILICONE RUBBER COMPOUND Silicone Elastomer	1	Pounds(LB)	12/20/22
1745975	-	RTV11 SILICONE RUBBER COMPOUND Silicone Elastomer	1	Pounds(LB)	12/20/22
1745973	-	RTV11 SILICONE RUBBER COMPOUND Silicone Elastomer	1	Pounds(LB)	12/20/22
1745972	-	RTV11 SILICONE RUBBER COMPOUND Silicone Elastomer	1	Pounds(LB)	12/20/22
1745971	-	RTV11 SILICONE RUBBER COMPOUND Silicone Elastomer	1	Pounds(LB)	12/20/22
1745984	-	RTV11 SILICONE RUBBER COMPOUND Silicone Elastomer	1	Pounds(LB)	12/20/22
1745976	-	RTV11 SILICONE RUBBER COMPOUND Silicone Elastomer	1	Pounds(LB)	12/20/22
1746167	113-24-6	sodium pyruvate	100	Milliliter(ML)	12/20/22
1746502	2037-26-5	TOLUENE D8	25	Gram(GM)	12/20/22
1746503	2037-26-5	TOLUENE D8	25	Gram(GM)	12/20/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1746504	-	STARCH WHEAT	100	Gram(GM)	12/20/22
1746505	151-10-0	1 3-DIMETHOXYBENZENE	100	Gram(GM)	12/20/22
1746506	1116-76-3	TRIOCTYLAMINE	500	Milliliter(ML)	12/20/22
1746507	1313-97-9	Neodymium(III) oxide 99.9% trace metals basis	25	Gram(GM)	12/20/22
1746509	1313-97-9	Neodymium(III) oxide 99.9% trace metals basis	25	Gram(GM)	12/20/22
1746508	1313-97-9	Neodymium(III) oxide 99.9% trace metals basis	25	Gram(GM)	12/20/22
1746510	1762-95-4	AMMONIUM THIOCYANATE	100	Gram(GM)	12/20/22
1746801	-	EPON RESIN 825	5	Gallon(GAL)	12/20/22
1746802	-	EPON RESIN 825	5	Gallon(GAL)	12/20/22
1746803	-	Silica Reagent Set High Range	10	Milliliter(ML)	12/20/22
1746808	-	Silica Reagent Set High Range	10	Milliliter(ML)	12/20/22
1746812	-	Silica Reagent Set High Range	10	Milliliter(ML)	12/20/22
1746811	-	Silica Reagent Set High Range	10	Milliliter(ML)	12/20/22
1746809	-	Silica Reagent Set High Range	10	Milliliter(ML)	12/20/22
1746807	-	Silica Reagent Set High Range	10	Milliliter(ML)	12/20/22
1746806	-	Silica Reagent Set High Range	10	Milliliter(ML)	12/20/22
1746805	-	Silica Reagent Set High Range	10	Milliliter(ML)	12/20/22
1746804	-	Silica Reagent Set High Range	10	Milliliter(ML)	12/20/22
1746810	-	Silica Reagent Set High Range	10	Milliliter(ML)	12/20/22
1746813	1119-51-3	5-Bromo-1-pentene 95%	25	Gram(GM)	12/20/22
1746814	344-04-7	BROMOPENTAFLUOROBENZENE	10	Gram(GM)	12/20/22
1746815	-	UTEVA Resin; UTEVA Resin Cartridges; UTEVA Resin 10 13 or 15 mL 50-100(Micro)/PreFilter Resin 3 mL 100-150(Micro)	2	Milliliter(ML)	12/20/22
1746816	-	UTEVA Resin; UTEVA Resin Cartridges; UTEVA Resin 10 13 or 15 mL 50-100(Micro)/PreFilter Resin 3 mL 100-150(Micro)	2	Milliliter(ML)	12/20/22
1746817	108-88-3	TOLUENE	100	Milliliter(ML)	12/20/22
1746819	108-88-3	TOLUENE	100	Milliliter(ML)	12/20/22
1746818	108-88-3	TOLUENE	100	Milliliter(ML)	12/20/22
1746820	814-68-6	ACRYLOYL CHLORIDE	100	Gram(GM)	12/20/22
1746821	7782-40-3	Diamond Powder	1000	Gram(GM)	12/20/22
1746822	7647-01-0	Hydrochloric Acid	2.5	Liters(L)	12/20/22
1746823	1077-16-3	1-PHENYLHEXANE	25	Gram(GM)	12/20/22
1746824	53-84-9	B-Nicotinamide adenine dinucleotide	1	Gram(GM)	12/20/22
1746826	108-88-3	Toluene anhydrous 99.8%	1	Liters(L)	12/21/22
1746828	108-88-3	Toluene anhydrous 99.8%	1	Liters(L)	12/21/22
1746829	108-88-3	Toluene anhydrous 99.8%	1	Liters(L)	12/21/22
1746827	108-88-3	Toluene anhydrous 99.8%	1	Liters(L)	12/21/22
1746830	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	12/21/22
1746839	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	12/21/22
1746831	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	12/21/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1746832	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	12/21/22
1746833	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	12/21/22
1746834	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	12/21/22
1746835	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	12/21/22
1746836	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	12/21/22
1746837	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	12/21/22
1746838	64-17-5	ETHYL ALCOHOL-200 PROOF	1	Pint(PT)	12/21/22
1746840	56-86-0	L-GLUTAMIC ACID	100	Gram(GM)	12/21/22
1746841	144-62-7	Oxalic Acid 98%	250	Gram(GM)	12/21/22
1746871	-	Scotch-Weld DP8405NS Green	45	Milliliter(ML)	12/21/22
1746876	-	Scotch-Weld DP8405NS Green	45	Milliliter(ML)	12/21/22
1746872	-	Scotch-Weld DP8405NS Green	45	Milliliter(ML)	12/21/22
1746873	-	Scotch-Weld DP8405NS Green	45	Milliliter(ML)	12/21/22
1746875	-	Scotch-Weld DP8405NS Green	45	Milliliter(ML)	12/21/22
1746877	-	Scotch-Weld DP8405NS Green	45	Milliliter(ML)	12/21/22
1746878	-	Scotch-Weld DP8405NS Green	45	Milliliter(ML)	12/21/22
1746879	-	Scotch-Weld DP8405NS Green	45	Milliliter(ML)	12/21/22
1746880	-	Scotch-Weld DP8405NS Green	45	Milliliter(ML)	12/21/22
1746881	-	Scotch-Weld DP8405NS Green	45	Milliliter(ML)	12/21/22
1746882	-	Scotch-Weld DP8405NS Green	45	Milliliter(ML)	12/21/22
1746874	-	Scotch-Weld DP8405NS Green	45	Milliliter(ML)	12/21/22
1746883	6153-56-6	OXALIC ACID DIHYDRATE	100	Gram(GM)	12/21/22
1746884	59-23-4	D-GALACTOSE	100	Gram(GM)	12/21/22
1746800	-	TUNGSTEN FOIL	3	Gram(GM)	12/21/22
1746767	1344-28-1	ALUMINUM OXIDE POWDER 3.0 MICRON	1	Pounds(LB)	12/21/22
1746790	1344-28-1	ALUMINUM OXIDE POWDER 3.0 MICRON	1	Pounds(LB)	12/21/22
1746787	1344-28-1	ALUMINUM OXIDE POWDER 3.0 MICRON	1	Pounds(LB)	12/21/22
1746791	1344-28-1	ALUMINUM OXIDE POWDER 3.0 MICRON	1	Pounds(LB)	12/21/22
1746774	1344-28-1	ALUMINUM OXIDE POWDER 3.0 MICRON	1	Pounds(LB)	12/21/22
1746783	1344-28-1	ALUMINUM OXIDE POWDER 3.0 MICRON	1	Pounds(LB)	12/21/22
1746784	1344-28-1	ALUMINUM OXIDE POWDER 3.0 MICRON	1	Pounds(LB)	12/21/22
1746785	1344-28-1	ALUMINUM OXIDE POWDER 3.0 MICRON	1	Pounds(LB)	12/21/22
1746789	1344-28-1	ALUMINUM OXIDE POWDER 3.0 MICRON	1	Pounds(LB)	12/21/22
1746781	1344-28-1	ALUMINUM OXIDE POWDER 3.0 MICRON	1	Pounds(LB)	12/21/22
1746788	1344-28-1	ALUMINUM OXIDE POWDER 3.0 MICRON	1	Pounds(LB)	12/21/22
1746780	1344-28-1	ALUMINUM OXIDE POWDER 3.0 MICRON	1	Pounds(LB)	12/21/22
1746779	1344-28-1	ALUMINUM OXIDE POWDER 3.0 MICRON	1	Pounds(LB)	12/21/22
1746778	1344-28-1	ALUMINUM OXIDE POWDER 3.0 MICRON	1	Pounds(LB)	12/21/22
1746777	1344-28-1	ALUMINUM OXIDE POWDER 3.0 MICRON	1	Pounds(LB)	12/21/22
1746782	1344-28-1	ALUMINUM OXIDE POWDER 3.0 MICRON	1	Pounds(LB)	12/21/22
1746775	1344-28-1	ALUMINUM OXIDE POWDER 3.0 MICRON	1	Pounds(LB)	12/21/22
1746786	1344-28-1	ALUMINUM OXIDE POWDER 3.0 MICRON	1	Pounds(LB)	12/21/22
1746773	1344-28-1	ALUMINUM OXIDE POWDER 3.0 MICRON	1	Pounds(LB)	12/21/22
1746772	1344-28-1	ALUMINUM OXIDE POWDER 3.0 MICRON	1	Pounds(LB)	12/21/22
1746771	1344-28-1	ALUMINUM OXIDE POWDER 3.0 MICRON	1	Pounds(LB)	12/21/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1746770	1344-28-1	ALUMINUM OXIDE POWDER 3.0 MICRON	1	Pounds(LB)	12/21/22
1746769	1344-28-1	ALUMINUM OXIDE POWDER 3.0 MICRON	1	Pounds(LB)	12/21/22
1746768	1344-28-1	ALUMINUM OXIDE POWDER 3.0 MICRON	1	Pounds(LB)	12/21/22
1746776	1344-28-1	ALUMINUM OXIDE POWDER 3.0 MICRON	1	Pounds(LB)	12/21/22
1746866	10099-58-8	LANTHANUM (III) CHLORIDE ANHYDROUS	100	Gram(GM)	12/21/22
1746867	5329-14-6	SULFAMIC ACID	500	Gram(GM)	12/21/22
1746868	109-63-7	BORON TRIFULORIDE DIETHYLETHERATE	100	Milliliter(ML)	12/21/22
1746869	18542-42-2	2-(METHYLTHIO)ETHYLAMINE	1	Gram(GM)	12/21/22
1746870	7631-99-4	SODIUM NITRATE CRYSTAL	500	Gram(GM)	12/21/22
1746893	328-74-5	3 5-BIS(TRIFLUOROMETHYL)ANILINE	50	Gram(GM)	12/21/22
1746894	1313-99-1	NICKEL(II) OXIDE	25	Gram(GM)	12/21/22
1746895	127-18-4	TETRACHLOROETHYLENE	1	Liters(L)	12/21/22
1746896	127-18-4	TETRACHLOROETHYLENE	1	Liters(L)	12/21/22
1746897	127-18-4	TETRACHLOROETHYLENE	1	Liters(L)	12/21/22
1746898	-	Tetrahydrofuran 99.85% Extra Dry stabilized	2.5	Liters(L)	12/21/22
1746899	-	Tetrahydrofuran 99.85% Extra Dry stabilized	2.5	Liters(L)	12/21/22
1747015	6153-56-6	OXALIC ACID DIHYDRATE	500	Gram(GM)	12/21/22
1747018	6153-56-6	OXALIC ACID DIHYDRATE	500	Gram(GM)	12/21/22
1747019	6153-56-6	OXALIC ACID DIHYDRATE	500	Gram(GM)	12/21/22
1747017	6153-56-6	OXALIC ACID DIHYDRATE	500	Gram(GM)	12/21/22
1747016	6153-56-6	OXALIC ACID DIHYDRATE	500	Gram(GM)	12/21/22
1747020	6153-56-6	OXALIC ACID DIHYDRATE	500	Gram(GM)	12/21/22
1747021	15878-77-0	PRASEODYMIUM(III) NITRATE HEXHYDRATE	50	Gram(GM)	12/21/22
1747022	10294-41-4	CERIUM(III) NITRATE HEXAHYDRATE	100	Gram(GM)	12/21/22
1747023	13494-98-9	YTTRIUM (III) NITRATE HEXAHYDRATE	100	Gram(GM)	12/21/22
1747024	7697-37-2	NITRIC ACID TRACE METAL	500	Milliliter(ML)	12/21/22
1747027	7697-37-2	NITRIC ACID TRACE METAL	500	Milliliter(ML)	12/21/22
1747026	7697-37-2	NITRIC ACID TRACE METAL	500	Milliliter(ML)	12/21/22
1747025	7697-37-2	NITRIC ACID TRACE METAL	500	Milliliter(ML)	12/21/22
1747028	107-92-6	BUTYRIC ACID	500	Milliliter(ML)	12/21/22
1747029	75-09-2	DICHLOROMETHANE	4	Liters(L)	12/21/22
1747030	-	ULTIMA GOLD	10	Liters(L)	12/21/22
1747033	-	ULTIMA GOLD	10	Liters(L)	12/21/22
1747031	-	ULTIMA GOLD	10	Liters(L)	12/21/22
1747032	-	ULTIMA GOLD	10	Liters(L)	12/21/22
1747034	-	ULTIMA GOLD	10	Liters(L)	12/21/22
1747035	-	ULTIMA GOLD	10	Liters(L)	12/21/22
1747037	-	ULTIMA GOLD	10	Liters(L)	12/21/22
1747036	-	ULTIMA GOLD	10	Liters(L)	12/21/22
1539557	-	EPOXY HARDENER	16	Ounces(OZ)	12/21/22
1660374	-	TURBIDITY STANDARD	4	Liters(L)	12/21/22
1660375	-	TURBIDITY STANDARD	4	Liters(L)	12/21/22
1539558	-	EPOXY MOUNT RESIN	48	Ounces(OZ)	12/21/22
1746208	7664-39-3	Hydrofluoric Acid 47-51% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	12/21/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1746213	7664-39-3	Hydrofluoric Acid 47-51% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	12/21/22
1746210	7664-39-3	Hydrofluoric Acid 47-51% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	12/21/22
1746211	7664-39-3	Hydrofluoric Acid 47-51% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	12/21/22
1746209	7664-39-3	Hydrofluoric Acid 47-51% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	12/21/22
1746212	7664-39-3	Hydrofluoric Acid 47-51% Optima for Ultra Trace Elemental Analysis	500	Milliliter(ML)	12/21/22
1746219	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/21/22
1746220	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/21/22
1746221	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/21/22
1746222	7697-37-2	Nitric Acid (Certified ACS Plus)	2.5	Liters(L)	12/21/22
1692765	74-98-6	PROPANE	300	Pounds(LB)	12/21/22
1746853	7440-66-6	ZINC	1	Milligram(MG)	12/21/22
1692766	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/21/22
1746854	7440-66-6	ZINC POWDER	1	Milligram(MG)	12/21/22
1692791	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/21/22
1692792	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/21/22
1692770	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/21/22
1692794	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/21/22
1692774	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/21/22
1692771	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/21/22
1692775	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/21/22
1692769	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/21/22
1692793	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/21/22
1692768	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/21/22
1692767	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/21/22
1692776	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/21/22
1692772	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/21/22
1692783	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/21/22
1692778	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/21/22
1692779	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/21/22
1692780	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/21/22
1692781	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/21/22
1692795	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/21/22
1692773	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/21/22
1692777	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/21/22
1692784	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/21/22
1692789	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/21/22
1692785	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/21/22
1692786	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/21/22
1692787	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/21/22
1692788	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/21/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1692782	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/21/22
1692790	-	P-10 (90% ARGON 10% METHANE)	220	Cubic Feet(CF)	12/21/22
1692796	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/21/22
1692804	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/21/22
1692803	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/21/22
1692802	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/21/22
1692801	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/21/22
1692799	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/21/22
1692797	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/21/22
1692798	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/21/22
1692800	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/21/22
1692808	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/21/22
1692816	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/21/22
1692817	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/21/22
1692818	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/21/22
1692819	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/21/22
1692805	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/21/22
1692813	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/21/22
1692812	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/21/22
1692811	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/21/22
1692810	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/21/22
1692815	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/21/22
1692809	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/21/22
1692814	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/21/22
1692820	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/21/22
1692821	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/21/22
1692822	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/21/22
1692823	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/21/22
1692824	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/21/22
1692807	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/21/22
1692825	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/21/22
1692806	7440-37-1	ARGON GAS	220	Cubic Feet(CF)	12/21/22
1746855	140681-55-6	1-Chloromethyl-4-fluoro-1 4-diazoniabicyclo[2.2.2]octane bis(tetrafluoroborate)	5	Gram(GM)	12/21/22
1692826	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/21/22
1692839	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/21/22
1692838	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/21/22
1692840	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/21/22
1692827	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/21/22
1692828	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/21/22
1692829	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/21/22
1692832	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/21/22
1692836	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/21/22
1692837	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/21/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1692830	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/21/22
1692831	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/21/22
1692835	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/21/22
1692834	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/21/22
1692833	7440-59-7	HELIUM GAS	220	Cubic Feet(CF)	12/21/22
1692841	-	Compressed Air	220	Cubic Feet(CF)	12/21/22
1692849	-	Compressed Air	220	Cubic Feet(CF)	12/21/22
1692850	-	Compressed Air	220	Cubic Feet(CF)	12/21/22
1692848	-	Compressed Air	220	Cubic Feet(CF)	12/21/22
1692847	-	Compressed Air	220	Cubic Feet(CF)	12/21/22
1692846	-	Compressed Air	220	Cubic Feet(CF)	12/21/22
1692845	-	Compressed Air	220	Cubic Feet(CF)	12/21/22
1692844	-	Compressed Air	220	Cubic Feet(CF)	12/21/22
1692843	-	Compressed Air	220	Cubic Feet(CF)	12/21/22
1692842	-	Compressed Air	220	Cubic Feet(CF)	12/21/22
1692851	-	75% ARGON/25% CARBON DIOXIDE	220	Cubic Feet(CF)	12/21/22
1692852	-	75% ARGON/25% CARBON DIOXIDE	220	Cubic Feet(CF)	12/21/22
1692855	-	75% ARGON/25% CARBON DIOXIDE	220	Cubic Feet(CF)	12/21/22
1692853	-	75% ARGON/25% CARBON DIOXIDE	220	Cubic Feet(CF)	12/21/22
1692854	-	75% ARGON/25% CARBON DIOXIDE	220	Cubic Feet(CF)	12/21/22
1746856	115-86-6	TRIPHENYL PHOSPHATE	1	Gram(GM)	12/21/22
1746857	115-86-6	TRIPHENYL PHOSPHATE	1	Gram(GM)	12/21/22
1746860	7697-37-2	Nitric Acid (TraceMetal Grade)	500	Milliliter(ML)	12/21/22
1746862	7697-37-2	Nitric Acid (TraceMetal Grade)	500	Milliliter(ML)	12/21/22
1746861	7697-37-2	Nitric Acid (TraceMetal Grade)	500	Milliliter(ML)	12/21/22
1746863	7697-37-2	Nitric Acid (TraceMetal Grade)	500	Milliliter(ML)	12/21/22
1746864	35725-34-9	YTTERBIUM(III) NITRATE PENTAHYDRATE	50	Gram(GM)	12/21/22
1746865	111-96-6	Diethylene Glycol Dimethyl Ether 99+%	500	Milliliter(ML)	12/21/22
1746943	-	Henkel Loctite Hysol EA 9394 AERO Epoxy Adhesive Gray	50	Milliliter(ML)	12/21/22
1746952	-	Henkel Loctite Hysol EA 9394 AERO Epoxy Adhesive Gray	50	Milliliter(ML)	12/21/22
1746946	-	Henkel Loctite Hysol EA 9394 AERO Epoxy Adhesive Gray	50	Milliliter(ML)	12/21/22
1746945	-	Henkel Loctite Hysol EA 9394 AERO Epoxy Adhesive Gray	50	Milliliter(ML)	12/21/22
1746944	-	Henkel Loctite Hysol EA 9394 AERO Epoxy Adhesive Gray	50	Milliliter(ML)	12/21/22
1746951	-	Henkel Loctite Hysol EA 9394 AERO Epoxy Adhesive Gray	50	Milliliter(ML)	12/21/22
1746947	-	Henkel Loctite Hysol EA 9394 AERO Epoxy Adhesive Gray	50	Milliliter(ML)	12/21/22
1746948	-	Henkel Loctite Hysol EA 9394 AERO Epoxy Adhesive Gray	50	Milliliter(ML)	12/21/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1746949	-	Henkel Loctite Hysol EA 9394 AERO Epoxy Adhesive Gray	50	Milliliter(ML)	12/21/22
1746950	-	Henkel Loctite Hysol EA 9394 AERO Epoxy Adhesive Gray	50	Milliliter(ML)	12/21/22
1746859	59-30-3	FOLIC ACID	25	Gram(GM)	12/21/22
1746858	518-47-8	FLUORESCEIN SODIUM SALT	100	Gram(GM)	12/21/22
1746726	9/7/7719	THIONYL CHLORIDE 99+%	500	Milliliter(ML)	12/21/22
1746852	10026-11-6	ZIRCONIUM(IV) CHLORIDE	25	Gram(GM)	12/21/22
1692856	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/21/22
1692859	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/21/22
1692870	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/21/22
1692869	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/21/22
1692868	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/21/22
1692867	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/21/22
1692866	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/21/22
1692865	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/21/22
1692864	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/21/22
1692863	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/21/22
1692862	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/21/22
1692860	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/21/22
1692858	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/21/22
1692857	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/21/22
1692861	-	94% ARGON/6% HYDROGEN	220	Cubic Feet(CF)	12/21/22
1692871	74-98-6	PROPANE	11	Gallon(GAL)	12/21/22
1692872	74-98-6	PROPANE	11	Gallon(GAL)	12/21/22
1692876	74-98-6	PROPANE	11	Gallon(GAL)	12/21/22
1692879	74-98-6	PROPANE	11	Gallon(GAL)	12/21/22
1692880	74-98-6	PROPANE	11	Gallon(GAL)	12/21/22
1692881	74-98-6	PROPANE	11	Gallon(GAL)	12/21/22
1692882	74-98-6	PROPANE	11	Gallon(GAL)	12/21/22
1692883	74-98-6	PROPANE	11	Gallon(GAL)	12/21/22
1692874	74-98-6	PROPANE	11	Gallon(GAL)	12/21/22
1692877	74-98-6	PROPANE	11	Gallon(GAL)	12/21/22
1692878	74-98-6	PROPANE	11	Gallon(GAL)	12/21/22
1692873	74-98-6	PROPANE	11	Gallon(GAL)	12/21/22
1692875	74-98-6	PROPANE	11	Gallon(GAL)	12/21/22
1692884	74-98-6	PROPANE	25	Gallon(GAL)	12/21/22
1692885	74-98-6	PROPANE	25	Gallon(GAL)	12/21/22
1746846	1282-37-7	FERROCENIUM TETRAFLUOROBORATE	5	Gram(GM)	12/21/22
1692886	74-98-6	PROPANE	5	Gallon(GAL)	12/21/22
1692887	74-98-6	PROPANE	5	Gallon(GAL)	12/21/22
1692890	74-98-6	PROPANE	5	Gallon(GAL)	12/21/22
1692888	74-98-6	PROPANE	5	Gallon(GAL)	12/21/22
1692889	74-98-6	PROPANE	5	Gallon(GAL)	12/21/22
1746847	13477-34-4	CALCIUM NITRATE TETRAHYDRATE	500	Gram(GM)	12/21/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1746848	7757-82-6	SODIUM SULFATE	500	Gram(GM)	12/21/22
1746849	7558-80-7	SODIUM PHOSPHATE MONOBASIC	1	Kilograms(KG)	12/21/22
1746850	13759-83-6	SAMARIUM (III) NITRATE HEXAHYDRATE	25	Gram(GM)	12/21/22
1746851	68-41-7	D-CYCLOSERINE	5	Gram(GM)	12/21/22
1746825	-	POWDion - Powder made from Nafion PFSA	10	Gram(GM)	12/21/22
1746842	7440-33-7	TUNGSTEN POWDER	500	Gram(GM)	12/21/22
1746843	67-56-1	Methanol 99.9% (HPLC)	2	Liters(L)	12/21/22
1746845	56613-80-0	(R)-(-)-2-PHENYLGLYCINOL	25	Gram(GM)	12/21/22
1746844	1761-61-1	5-Bromosalicylaldehyde	25	Gram(GM)	12/21/22
1700901	7722-84-1	Hydrogen Peroxide 30% (w/w) ACS Reagent Grade	500	Milliliter(ML)	12/21/22
1040702	-	AG-MP1 (POLY PREPS)	300	Milliliter(ML)	12/21/22
1735444	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/21/22
1735446	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/21/22
1735445	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/21/22
1735453	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/21/22
1735455	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/21/22
1735454	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/21/22
1717648	10034-85-2	Hydriodic acid contains no stabilizer distilled 57 wt. % in H2O 99.99% trace metals basis	250	Milliliter(ML)	12/21/22
1717651	10034-85-2	Hydriodic acid contains no stabilizer distilled 57 wt. % in H2O 99.99% trace metals basis	250	Milliliter(ML)	12/21/22
1717650	10034-85-2	Hydriodic acid contains no stabilizer distilled 57 wt. % in H2O 99.99% trace metals basis	250	Milliliter(ML)	12/21/22
1717649	10034-85-2	Hydriodic acid contains no stabilizer distilled 57 wt. % in H2O 99.99% trace metals basis	250	Milliliter(ML)	12/21/22
1735449	-	Pyroil CARB & THROTTLE BODY CLEANER PYC16	13	Ounces(OZ)	12/21/22
1735456	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/21/22
1735460	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/21/22
1735461	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/21/22
1735458	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/21/22
1735457	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/21/22
1735459	-	Prime Guard -50 RV & Marine Antifreeze	1	Gallon(GAL)	12/21/22
V00000D3B8	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3B9	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3BA	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3BB	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3BC	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3BD	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3BE	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3C0	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3C1	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3C2	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3C3	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D3B7	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3B0	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3BF	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3A8	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3E3	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3A6	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3A5	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3A4	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3A3	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3A2	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3A1	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3A0	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D39F	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D39E	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3B2	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3A7	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3B6	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3A9	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3AA	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3AB	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3AC	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3AD	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3AE	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3AF	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3B1	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3B3	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3B4	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3B5	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D39D	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D39C	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3E1	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3DD	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3DE	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3DF	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3E0	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3E2	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3EF	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3E4	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3E5	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3DB	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3F0	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3DA	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D395	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3E7	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3E8	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D3E9	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3EA	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3EB	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3EC	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3ED	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3EE	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3E6	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3D0	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3C5	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3C6	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3C7	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3C8	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3C9	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3CA	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3CB	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3CC	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3CD	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3DC	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3CF	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3C4	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3D1	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3D2	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3D3	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3D4	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3D5	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3D6	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3D7	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3D8	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3D9	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3CE	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D392	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D39B	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D397	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D38F	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D391	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D38E	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D393	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D394	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D396	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D398	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D399	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D39A	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D390	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3FF	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D404	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D400	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D401	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D402	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D403	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D405	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D406	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D407	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D408	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D40A	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3F9	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D40B	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D409	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3FE	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3FD	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3FC	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D40C	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3FA	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D414	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3F8	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3F7	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3F6	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3F5	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3F4	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3F3	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3F2	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3FB	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D41A	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D429	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D428	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D427	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D426	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D425	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D424	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D423	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D422	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D421	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D420	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D41F	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D412	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D41C	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D40D	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D419	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D418	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D417	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D416	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D415	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D41B	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D413	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D3F1	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D411	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D410	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D40F	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D40E	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D41E	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D41D	-	PARTS PLUS SAE 5W-30 PREMIUM MOTOR OIL	1	Quarts(QT)	12/21/22
V00000D459	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D44F	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D450	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D451	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D452	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D453	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D454	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D455	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D456	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D462	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D458	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D44C	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D45A	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D45B	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D45C	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D45D	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D45E	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D45F	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D460	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D437	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D457	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D444	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D438	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D439	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D43A	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D43B	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D43C	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D43D	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D43F	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D441	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D44E	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D443	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D44D	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D445	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D446	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D447	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D448	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D449	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D44A	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D44B	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D463	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D442	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D484	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D47A	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D47B	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D47C	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D47D	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D47E	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D47F	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D480	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D481	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D461	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D483	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D477	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D485	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D486	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D487	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D488	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D489	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D48A	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D48B	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D48C	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D482	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D46E	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D464	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D465	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D466	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D467	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D468	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D469	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D46A	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D46B	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D479	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D46D	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D478	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D46F	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D470	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D471	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D472	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D473	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
V00000D474	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D475	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D476	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D43E	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D46C	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D42D	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D436	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D440	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D42A	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D42C	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D42E	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D42F	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D430	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D431	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D432	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D433	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D434	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D435	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D42B	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D48E	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D496	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D492	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D48D	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D49C	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D490	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D491	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D495	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D493	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D494	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D499	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D498	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D48F	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D497	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D49A	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
V00000D49B	-	Parts Plus 5W-20 Prem Semi Syn	1	Quarts(QT)	12/21/22
1735417	-	SAE 0W-20 Synthetic Motor Oil	1	Quarts(QT)	12/21/22
1735424	-	SAE 0W-20 Synthetic Motor Oil	1	Quarts(QT)	12/21/22
1735428	-	SAE 0W-20 Synthetic Motor Oil	1	Quarts(QT)	12/21/22
1735427	-	SAE 0W-20 Synthetic Motor Oil	1	Quarts(QT)	12/21/22
1735425	-	SAE 0W-20 Synthetic Motor Oil	1	Quarts(QT)	12/21/22
1735423	-	SAE 0W-20 Synthetic Motor Oil	1	Quarts(QT)	12/21/22
1735422	-	SAE 0W-20 Synthetic Motor Oil	1	Quarts(QT)	12/21/22
1735421	-	SAE 0W-20 Synthetic Motor Oil	1	Quarts(QT)	12/21/22
1735420	-	SAE 0W-20 Synthetic Motor Oil	1	Quarts(QT)	12/21/22
1735419	-	SAE 0W-20 Synthetic Motor Oil	1	Quarts(QT)	12/21/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1735418	-	SAE 0W-20 Synthetic Motor Oil	1	Quarts(QT)	12/21/22
1735426	-	SAE 0W-20 Synthetic Motor Oil	1	Quarts(QT)	12/21/22
1735441	-	SAE 0W-20 Synthetic Motor Oil	1	Quarts(QT)	12/21/22
1735442	-	SAE 0W-20 Synthetic Motor Oil	1	Quarts(QT)	12/21/22
1735443	-	SAE 0W-20 Synthetic Motor Oil	1	Quarts(QT)	12/21/22
1735429	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Gallon(GAL)	12/21/22
1735433	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Gallon(GAL)	12/21/22
1735432	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Gallon(GAL)	12/21/22
1735430	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Gallon(GAL)	12/21/22
1735435	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Gallon(GAL)	12/21/22
1735431	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Gallon(GAL)	12/21/22
1735440	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Gallon(GAL)	12/21/22
1735434	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Gallon(GAL)	12/21/22
1735436	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Gallon(GAL)	12/21/22
1735437	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Gallon(GAL)	12/21/22
1735438	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Gallon(GAL)	12/21/22
1735439	-	Valvoline EUROPEAN FULL SYN 5W-40 Synthetic Motor Oil	1	Gallon(GAL)	12/21/22
1040722	-	5% NITRIC ACID IN WATER	50	Milliliter(ML)	12/22/22
1040724	7647-01-0	HYDROCHLORIC ACID (HCL HYDROGEN CHLORIDE) 36.5-38%	1	Liters(L)	12/22/22
1040723	7647-01-0	HYDROCHLORIC ACID (HCL HYDROGEN CHLORIDE) 36.5-38.0%	1	Liters(L)	12/22/22
1747087	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22
1747094	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22
1747110	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22
1747090	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22
1747091	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1747092	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22
1747093	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22
1747088	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22
1747117	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22
1747112	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22
1747111	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22
1747109	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22
1747107	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22
1747106	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22
1747105	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22
1747104	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22
1747103	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22
1747108	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22
1747114	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22
1747095	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22
1747115	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22
1747113	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22
1747116	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22
1747102	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22
1747118	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22
1747089	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22
1747100	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22

Chemical Usage July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1747099	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22
1747098	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22
1747097	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22
1747096	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22
1747101	64-17-5	Ethyl Alcohol 200 Proof Absolute ACS/USP Grade	1	Gallon(GAL)	12/22/22
1746900	7722-84-1	HYDROGEN PEROXIDE 3%	4	Liters(L)	12/22/22
1746901	7722-84-1	HYDROGEN PEROXIDE 3%	4	Liters(L)	12/22/22
1746902	67-64-1	Acetone Semiconductor Grade 99.5%	4	Liters(L)	12/22/22
1746903	67-64-1	Acetone Semiconductor Grade 99.5%	4	Liters(L)	12/22/22
1746904	16454-60-7	Neodymium(III) nitrate hexahydrate	100	Gram(GM)	12/22/22
1747040	865-49-6	Chloroform-D 99.96 atom % D	500	Milliliter(ML)	12/22/22
1746907	7786-30-3	MAGNESIUM CHLORIDE ANHYDROUS	5	Kilograms(KG)	12/22/22
1746908	10024-93-8	Neodymium(III) chloride anhydrous (99.9% Nd) (REO)	100	Gram(GM)	12/22/22
1746909	4/4/5743	CADMIUM ACETATE DIHYDRATE	100	Gram(GM)	12/22/22
1747038	79-10-7	Acrylic acid (stabilised with hydroquinone monomethyl ether) for synthesis	100	Milliliter(ML)	12/22/22
1746905	526-95-4	GLUCONIC ACID	1	Liters(L)	12/22/22
1746906	1344-28-1	ALUMINUM OXIDE	5	Gallon(GAL)	12/22/22
1747039	-	Orion Star A325 pH/conductivity portable meter buffer pouches kit	0.5	Kilograms(KG)	12/22/22
1648949	-	H2SO4 PRESERVATION KIT FOR 250 ML CONTAINER	100	Milliliter(ML)	12/28/22
1648950	-	H2SO4 PRESERVATION KIT FOR 250 ML CONTAINER	100	Milliliter(ML)	12/28/22
1648951	-	H2SO4 PRESERVATION KIT FOR 250 ML CONTAINER	100	Milliliter(ML)	12/28/22
1648942	-	CHROMAVER 3	500	Milliliter(ML)	12/28/22
1648946	-	CHROMAVER 3	500	Milliliter(ML)	12/28/22
1648947	-	CHROMAVER 3	500	Milliliter(ML)	12/28/22
1648945	-	CHROMAVER 3	500	Milliliter(ML)	12/28/22
1648944	-	CHROMAVER 3	500	Milliliter(ML)	12/28/22
1648943	-	CHROMAVER 3	500	Milliliter(ML)	12/28/22
1648948	-	CHROMAVER 3	500	Milliliter(ML)	12/28/22

ATTACHMENT A907.B.a.

Chemical Usage

RLUOB-CHEM Chemical Purchases from ChemDB

RLUOB-CHEM Chemical Purchases July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1740655	10378-47-9	Ceric Ammonium Sulfate 0.100 Normal in 1 Normal Sulfuric Acid	2.5	Liters(L)	07/21/22
1740751	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	1	Liters(L)	07/21/22
1740752	7697-37-2	Nitric Acid 67-69% Optima for Ultra Trace Elemental Analysis	1	Liters(L)	07/21/22
1716343	7440-36-0	ANTIMONY METAL	10	Gram(GM)	07/22/22
1716344	7440-69-9	BISMUTH	10	Gram(GM)	07/22/22
1716345	7440-58-6	HAFNIUM	50	Gram(GM)	07/22/22
1716346	13494-80-9	TELLURIUM	50	Gram(GM)	07/22/22
1716347	7440-58-6	HAFNIUM	10	Gram(GM)	07/22/22
1716348	7440-44-0	CARBON RODS	5	Gram(GM)	07/22/22
1716349	7429-91-6	DYSPROSIUM	50	Gram(GM)	07/22/22
1716350	7440-65-5	YTTRIUM	20	Gram(GM)	07/22/22
1716351	7440-21-3	SILICON	5	Gram(GM)	07/22/22
1716352	7429-90-5	ALUMINUM METAL	5	Gram(GM)	07/22/22
1716353	7440-66-6	Zinc metal pieces	20	Gram(GM)	07/22/22
1716354	7440-74-6	INDIUM METAL	30	Gram(GM)	07/22/22
1716355	7429-91-6	DYSPROSIUM METAL	10	Gram(GM)	07/22/22
1716356	7440-31-5	TIN METAL	10	Gram(GM)	07/22/22
1716357	7439-92-1	LEAD METAL SHOT	10	Gram(GM)	07/22/22
1716358	7440-05-3	PALLADIUM METAL	5	Gram(GM)	07/22/22
1716359	7439-94-3	LUTETIUM	10	Gram(GM)	07/22/22
1716360	7440-06-4	PLATINUM	5	Gram(GM)	07/22/22
1716361	7440-16-6	RHODIUM POWDER	5	Gram(GM)	07/22/22
1716362	7440-31-5	TIN SHOT	10	Gram(GM)	07/22/22
1716363	7440-66-6	ZINC METAL	20	Gram(GM)	07/22/22
1716364	7440-31-5	TIN METAL	2	Gram(GM)	07/22/22
1716365	7440-69-9	BISMUTH PIECES	10	Gram(GM)	07/22/22
1716366	1312-81-8	LANTHANUM OXIDE	10	Gram(GM)	07/22/22
1716367	1344-28-1	ALUMINA POWDER	10	Gram(GM)	07/22/22
1716368	7440-69-9	BISMUTH	3	Gram(GM)	07/22/22
1716369	-	SILVER SOLDER; EASY-FLO	50	Gram(GM)	07/22/22
1716370	7440-02-0	NICKEL METAL	5	Gram(GM)	07/22/22
1713671	7429-90-5	ALUMINUM METAL	1	Gram(GM)	07/22/22
1716372	7440-16-6	RHODIUM POWDER	5	Gram(GM)	07/22/22
1716373	7439-94-3	LUTETIUM METAL	5	Gram(GM)	07/22/22
1716374	7440-53-1	EUROPIUM METAL	5	Gram(GM)	07/22/22
1716375	-	Cerium mixed metal	1	Gram(GM)	07/22/22
1716376	7440-33-7	TUNGSTEN METAL	30	Gram(GM)	07/22/22
1716377	7440-56-4	GERMANIUM POWDER	10	Gram(GM)	07/22/22
1716378	7440-42-8	BORON METAL	3	Gram(GM)	07/22/22
1716379	12069-32-8	Boron Carbide Powder	10	Gram(GM)	07/22/22
1716380	-	ALADDIN #450 SOFT SILVER SOLDER	50	Gram(GM)	07/22/22
1716381	7440-19-9	SAMARIUM FOIL	3	Gram(GM)	07/22/22

RLUOB-CHEM Chemical Purchases July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1716382	7440-64-4	YTTERBIUM FOIL	5	Gram(GM)	07/22/22
1716383	7440-62-2	VANADIUM METAL	5	Gram(GM)	07/22/22
1716384	7440-62-2	VANADIUM METAL	10	Gram(GM)	07/22/22
1716385	7439-94-3	LUTETIUM METAL	10	Gram(GM)	07/22/22
1716386	7439-94-3	LUTETIUM METAL	10	Gram(GM)	07/22/22
1716387	7440-65-5	YTTRIUM METAL	5	Gram(GM)	07/22/22
1716388	7440-74-6	INDIUM METAL	10	Gram(GM)	07/22/22
1716389	7440-25-7	TANTALUM METAL	10	Gram(GM)	07/22/22
1716390	7440-65-5	YTTRIUM METAL	10	Gram(GM)	07/22/22
1716391	7440-54-2	GADOLINIUM	10	Gram(GM)	07/22/22
1716392	7440-54-2	GADOLINIUM	10	Gram(GM)	07/22/22
1716393	7440-58-6	HAFNIUM METAL	20	Gram(GM)	07/22/22
1716394	7440-15-5	RHENIUM	10	Gram(GM)	07/22/22
1716395	7440-15-5	RHENIUM METAL	10	Gram(GM)	07/22/22
1716396	7440-15-5	RHENIUM METAL	10	Gram(GM)	07/22/22
1716397	7440-54-2	GADOLINIUM	20	Gram(GM)	07/22/22
1716398	7440-00-8	NEODYMIUM FOIL	5	Gram(GM)	07/22/22
1716399	7440-65-5	YTTRIUM METAL	10	Gram(GM)	07/22/22
1716400	7429-90-5	ALUMINUM METAL	5	Gram(GM)	07/22/22
1716401	7439-91-0	LANTHANUM	5	Gram(GM)	07/22/22
1716402	7439-94-3	LUTETIUM METAL	10	Gram(GM)	07/22/22
1716403	7429-91-6	DYSPROSIUM METAL	10	Gram(GM)	07/22/22
1716404	7429-91-6	DYSPROSIUM METAL	10	Gram(GM)	07/22/22
1716405	7439-98-7	MOLYBDENUM METAL	10	Gram(GM)	07/22/22
1716406	7440-58-6	HAFNIUM METAL	10	Gram(GM)	07/22/22
1716407	7439-98-7	MOLYBDENUM METAL	10	Gram(GM)	07/22/22
1716408	7440-58-6	HAFNIUM METAL	10	Gram(GM)	07/22/22
1716409	7439-98-7	MOLYBDENUM METAL	10	Gram(GM)	07/22/22
1716410	7440-33-7	TUNGSTEN METAL	10	Gram(GM)	07/22/22
1716411	7440-03-1	NIOBIUM METAL	5	Gram(GM)	07/22/22
1716412	7440-33-7	TUNGSTEN METAL	30	Gram(GM)	07/22/22
1716413	7440-67-7	ZIRCONIUM METAL	20	Gram(GM)	07/22/22
1716414	7440-25-7	TANTALUM METAL	5	Gram(GM)	07/22/22
1738879	7782-63-0	IRON (II) SULFATE HEPTAHYDRATE CRYSTALLINE	500	Gram(GM)	07/26/22
1381557	7440-25-7	TANTALUM FOIL	10	Gram(GM)	07/28/22
1381556	7440-65-5	YTTRIUM METAL	5	Gram(GM)	07/28/22
1420439	7440-25-7	TANTALUM METAL POWDER	5	Gram(GM)	07/28/22
1420440	1344-28-1	ALUMINUM OXIDE	3	Gram(GM)	07/28/22
1420441	7440-52-0	ERBIUM METAL	20	Gram(GM)	07/28/22
1420442	7440-52-0	ERBIUM METAL	10	Gram(GM)	07/28/22
1420443	7440-25-7	TANTALUM ROD	10	Gram(GM)	07/28/22
1420444	12008-21-8	Lanthanum Hexaboride	5	Gram(GM)	07/28/22
1420445	1305-62-0	CALCIUM HYDROXIDE POWDER	10	Gram(GM)	07/28/22
1420446	7440-56-4	GERMANIUM	5	Gram(GM)	07/28/22

RLUOB-CHEM Chemical Purchases July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1420448	7440-42-8	BORON POWDER	10	Gram(GM)	07/28/22
1420449	12008-21-8	Lanthanum Hexaboride	5	Gram(GM)	07/28/22
1420450	7553-56-2	IODINE	2.5	Gram(GM)	07/28/22
1420451	7440-33-7	TUNGSTEN METAL	5	Gram(GM)	07/28/22
1420452	7439-98-7	MOLYBDENUM METAL	20	Gram(GM)	07/28/22
1420453	7429-90-5	ALUMINUM METAL	5	Gram(GM)	07/28/22
1420454	7553-56-2	IODINE	2.5	Gram(GM)	07/28/22
1420455	12045-64-6	ZIRCONIUM BORIDE	10	Gram(GM)	07/28/22
1420456	7440-62-2	VANADIUM METAL	5	Gram(GM)	07/28/22
1420457	7440-25-7	TANTALUM FOIL	5	Gram(GM)	07/28/22
1420458	7440-25-7	TANTALUM FOIL	5	Gram(GM)	07/28/22
1420459	7440-65-5	YTTRIUM METAL	100	Gram(GM)	07/28/22
1420460	7440-33-7	TUNGSTEN METAL	500	Gram(GM)	07/28/22
1420461	7439-89-6	IRON ROD	10	Gram(GM)	07/28/22
1420462	7440-57-5	GOLD	3.17	Gram(GM)	07/28/22
1420463	7440-00-8	NEODYMIUM	5	Gram(GM)	07/28/22
1420464	7440-57-5	GOLD FOIL	5	Gram(GM)	07/28/22
1420465	7440-25-7	TANTALUM FOIL	20	Gram(GM)	07/28/22
1420466	7440-57-5	GOLD	10	Gram(GM)	07/28/22
1420467	7440-25-7	TANTALUM FOIL	10	Gram(GM)	07/28/22
1420468	7440-43-9	CADMIUM	5	Gram(GM)	07/28/22
1420469	7440-74-6	INDIUM SHOT	10	Gram(GM)	07/28/22
1420470	7440-05-3	PALLADIUM METAL	10	Gram(GM)	07/28/22
1420471	7440-05-3	PALLADIUM METAL	20	Gram(GM)	07/28/22
1320470	7664-38-2	PHOSPHORIC ACID 85%	2	Liters(L)	08/11/22
1320471	7664-38-2	PHOSPHORIC ACID 85%	2	Liters(L)	08/11/22
1738880	7664-38-2	Phosphoric acid ACS reagent 85+ wt. % in H2O	2.5	Liters(L)	08/16/22
1742200	7440-18-8	Ruthenium pellet	5	Gram(GM)	08/19/22
1742202	7440-18-8	Ruthenium pellet	5	Gram(GM)	08/19/22
1742201	7440-18-8	Ruthenium pellet	5	Gram(GM)	08/19/22
1741093	7440-55-3	GALLIUM INGOT	150	Milliliter(ML)	08/23/22
1741094	7440-55-3	GALLIUM INGOT	150	Milliliter(ML)	08/23/22
1741095	94442-22-5	Trimethyl(methylcyclopentadienyl)platinum(IV)	50	Milligram(MG)	08/23/22
1738905	7647-01-0	HYDROCHLORIC ACID OPTIMA-34%	1	Liters(L)	09/06/22
1738910	7647-01-0	HYDROCHLORIC ACID OPTIMA-34%	1	Liters(L)	09/06/22
1744160	-	EPO-TEK H20E Part A EPO-TEK H20E Part B - KIT	1	Ounces(OZ)	10/06/22
1744640	7440-74-6	INDIUM WIRE	2.8	Gram(GM)	10/19/22
1744641	7440-74-6	INDIUM WIRE	2.8	Gram(GM)	10/19/22
1744642	7440-74-6	INDIUM WIRE	2.8	Gram(GM)	10/19/22
1745429	-	RBS-35 CONCENTRATE	5	Kilograms(KG)	11/17/22
1759615	-	M-BOND 610 CURE	1	Ounces(OZ)	11/28/22
1759624	-	M-BOND 610 ADHESIVE	1	Ounces(OZ)	11/28/22

RLUOB-CHEM Chemical Purchases July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1759616	-	M-BOND 610 CURE	1	Ounces(OZ)	11/28/22
1759625	-	M-BOND 610 CURE	1	Ounces(OZ)	11/28/22
1759617	-	M-BOND 610 ADHESIVE	1	Ounces(OZ)	11/28/22
1759626	-	M-BOND 610 ADHESIVE	1	Ounces(OZ)	11/28/22
1759618	-	M-BOND 610 CURE	1	Ounces(OZ)	11/28/22
1759627	-	M-BOND 610 ADHESIVE	1	Ounces(OZ)	11/28/22
1759628	7085-85-0	Ethyl 2-cyanoacrylate	1	Ounces(OZ)	11/28/22
1759629	7085-85-0	Ethyl 2-cyanoacrylate	1	Ounces(OZ)	11/28/22
1759619	-	LOCTITE SUPER GLUE	1	Ounces(OZ)	11/28/22
1759620	-	Loctite Super Glue Control Liquid	1	Ounces(OZ)	11/28/22
1040684	-	Eichrom TRU Resin Eichrom TRU Resin Cartridge	2	Milliliter(ML)	12/01/22
1420472	7740-50-8	COPPER METAL	20	Gram(GM)	12/02/22
1420473	7740-50-8	COPPER METAL	20	Gram(GM)	12/02/22
1420474	-	Palladium powder	5	Gram(GM)	12/02/22
1420475	7440-48-4	COBALT POWDER	5	Gram(GM)	12/02/22
1420476	7440-48-4	COBALT POWDER	5	Gram(GM)	12/02/22
1420477	-	IRIDIUM POWDER	15	Gram(GM)	12/02/22
1420478	7440-43-9	CADMIUM METAL	10	Gram(GM)	12/02/22
1420479	7440-18-8	RUTHENIUM POWDER	5	Gram(GM)	12/02/22
1420480	7440-18-8	Ruthenium pellet	10	Gram(GM)	12/02/22
1420481	7440-19-9	SAMARIUM METAL	40	Gram(GM)	12/02/22
1420482	7440-55-3	GALLIUM METAL	20	Gram(GM)	12/02/22
1420483	7439-89-6	IRON METAL	5	Gram(GM)	12/02/22
1420484	7439-89-6	IRON POWDER	1	Gram(GM)	12/02/22
1420485	-	CALCIUM METAL PIECES	15	Gram(GM)	12/02/22
1420486	7440-06-4	PLATINUM POWDER	2	Gram(GM)	12/02/22
1420487	7440-16-6	RHODIUM POWDER	0.5	Gram(GM)	12/06/22
1420488	7440-16-6	RHODIUM POWDER	0.5	Gram(GM)	12/06/22
1420489	7440-16-6	RHODIUM POWDER	0.5	Gram(GM)	12/06/22
1040707	-	P3 OIL	3	Liters(L)	12/08/22
1040716	-	Oil F4 for VV-Pump	1.2	Liters(L)	12/08/22
734308	-	YTTRIUM STANDARD	50	Milliliter(ML)	12/12/22
1040700	-	URANIUM STANDARD	125	Milliliter(ML)	12/12/22
1607965	-	Detection Solution	220	Milliliter(ML)	12/12/22
1607966	-	Detection Solution	220	Milliliter(ML)	12/12/22
1339433	-	201 CUSTOM CLARITAS STANDARD	100	Milliliter(ML)	12/12/22
1320312	-	201 CUSTOM CLARITAS STANDARD	100	Milliliter(ML)	12/12/22
1320313	-	201 CUSTOM CLARITAS STANDARD	100	Milliliter(ML)	12/12/22
1320314	-	201 CUSTOM CLARITAS STANDARD	100	Milliliter(ML)	12/12/22
1320315	-	201 CUSTOM CLARITAS STANDARD	100	Milliliter(ML)	12/12/22
1040701	-	10 ug/mL Mercury	125	Milliliter(ML)	12/12/22
1040709	-	PUMP OIL VACUUM	500	Milliliter(ML)	12/14/22
1040710	-	EDWARDS 45 PUMP OIL	1	Liters(L)	12/14/22
1040718	-	EDWARDS VACUUM PUMP OIL	1	Liters(L)	12/14/22

RLUOB-CHEM Chemical Purchases July - December 2022

Barcode	CAS #	Chemical Name	Container Size	Unit of Measure	Date
1040719	-	EDWARDS VACUUM PUMP OIL	1	Liters(L)	12/14/22
1602367	-	LANL-ICP-MS-1 STANDARD SOLUTION	125	Milliliter(ML)	12/15/22
1602368	-	LANL-ICP-MS-1 STANDARD SOLUTION	125	Milliliter(ML)	12/15/22
1420785	7782-42-5	COLLODIAL GRAPHITE	30	Gram(GM)	12/16/22
1607975	7440-41-7	BERYLLIUM STANDARD SOLUTI	125	Milliliter(ML)	12/16/22
1607976	7440-41-7	BERYLLIUM STANDARD SOLUTI	125	Milliliter(ML)	12/16/22
1700901	7722-84-1	Hydrogen Peroxide 30% (w/w) ACS Reagent Grade	500	Milliliter(ML)	12/21/22
1040702	-	AG-MP1 (POLY PREPS)	300	Milliliter(ML)	12/21/22

ATTACHMENT A907.B.b.

Chemical Usage

RLUOB-CHEM Chemical Quantity Total

2022 CMRR-RLUOB HAPs Monthly Emission Rates (lb)

Cas Number	Chemical Name	January	February	March	April	May	June	July	August	September	October	November	December
107-21-1	Ethylene Glycol	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110-54-3	Hexane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7664-39-3	Hydrogen Fluoride	0.00	0.05	0.00	0.00	1.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7647-01-0	Hydrochloric Acid	0.00	0.00	6.94	4.62	5.79	2.31	0.00	0.00	4.63	0.00	0.00	0.00
67-56-1	Methyl Alcohol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75-09-2	Methylene Chloride	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100-42-5	Styrene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
108-88-3	Toluene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nickel	Nickel Compounds	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chromium	Chromium Compounds	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85-44-9	Phthalic Anhydride	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAPs Monthly Total		0.00	0.25	6.94	4.62	6.88	2.31	0.00	0.00	4.63	0.00	0.00	0.00

2022 CMRR-RLUOB HAPS 12-Month Rolling Total (lb)

Cas Number	Chemical Name	January	February	March	April	May	June	July	August	September	October	November	December
107-21-1	Ethylene Glycol	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
110-54-3	Hexane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7664-39-3	Hydrogen Fluoride	0.00	0.05	0.05	0.05	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
7647-01-0	Hydrochloric Acid	0.00	0.00	6.94	11.56	17.35	19.66	19.66	19.66	24.29	24.29	24.29	24.29
67-56-1	Methyl Alcohol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75-09-2	Methylene Chloride	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100-42-5	Styrene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
108-88-3	Toluene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nickel	Nickel Compounds	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chromium	Chromium Compounds	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85-44-9	Phthalic Anhydride	0.00	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
HAPs 12 Month Rolling Total		0.00	0.25	7.19	11.81	18.69	21.00	21.00	21.00	25.63	25.63	25.63	25.63

2022 CMRR-RLUOB TAPs Monthly Emission Rates (lb)

	January	February	March	April	May	June	July	August	September	October	November	December
Total TAPs	0.00	3.34	17.10	6.68	15.12	0.00	9.26	23.05	0.00	0.02	0.00	1.28
TAPs 12 Month Rolling Total	13.63	16.97	27.11	33.79	48.91	48.91	58.17	81.22	74.55	74.57	74.57	75.85

2022 CMRR-RLUOB VOC Monthly Emission Rates (lb)

	January	February	March	April	May	June	July	August	September	October	November	December
Total VOC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.00
VOC 12 Month Rolling Total	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.38

ATTACHMENT A1007.A.a.

Degreaser

Degreaser Solvent Usage from Tracking Database

Degreaser Solvent Usage
July – December 2022

Emission Unit	TA/Building	Type of Degreaser	Solvent
TA-55-DG-1	TA-55	Cold Batch	3M Novec Engineered Fluid 72DE

Date Measured	Initial Solvent Level (inches)	Volume Added (liters)	Level Added (inches)	Volume Removed (liters)	Level Removed (inches)
Jul-27-2022	7.00	0.00	0.00	0.00	0.00
Aug-30-2022	6.50	0.00	0.00	0.00	0.00
Sept-26-2022	6.50	3.93	2.00	0.00	0.00
Oct-26-2022	7.00	3.93	2.00	0.00	0.00
Nov-23-2022	7.00	3.93	2.00	0.00	0.00
Dec-21-2022	8.50	0.00	0.00	0.00	0.00

Reviewed by: Katelyn Mahoney, 1/11/2023

ATTACHMENT A1007.A.b.

Degreaser

Completed Work Practice Checklist

MONTHLY WORK PRACTICE CHECK LIST
TA-55-DG-1 DEGREASER

R 04/20/2015

Date of Action: 7-27-22	**Location of Source : (TA/BLDG/Room) TA-55-PF4-319**	
Monitoring Requirements(A1007.A[1]):	**Yes/No**	**Comments**
1. Does the operator monitor and record the amount of solvent added to the degreaser?	Y	
Recordkeeping Requirements (A1007.A[1])	**Yes/No**	**Comments**
1. Are the actual emissions rate (pounds/month) of VOC and HAPS based on the quantity of solvent lost to evaporation calculated on a monthly basis?	Yes	Emissions are calculated using the Degreaser Compliance Database by air quality compliance personnel.
2. Are the semi-annual emissions rate (tons/year) calculated for this source category and added to the facility-wide emissions rates in Table 106.B (Facility-wide Allowable Emissions)?	Yes	Emissions are calculated using the Degreaser Compliance Database by air quality compliance personnel.
3. Does the operator maintain records of the degreaser solvent content?	Y	
4. Does the operator maintain work practice checklists?	Y	
5. Does the operator maintain records in accordance with Section B109, General Recordkeeping Requirements?	Y	
Operational Requirements (A1007.A[1])	**Yes/No**	**Comments**
1. Does the operator ensure the degreaser is closed with a tight fitting cover whenever not in use?	Y	
2. Does the operator maintain a freeboard ratio of 0.75 or greater?	Y	Glove box is included in freeboard ratio determination.
3. Does the operator ensure that all collected and stored waste solvent and wipe rags are placed in closed containers?	Y	
4. Does the operator ensure that flushing is performed only within the freeboard area only?	Y	All rinsing is performed within the freeboard area.
5. Does the operator allow cleaned parts to drip for 15 seconds or until dripping stops (whichever is longer)?	Y	
6. Does the operator ensure that the solvent level does not exceed the fill line on the solvent level?	Y	
7. Does the operator ensure that all spills are wiped up immediately?	Y	
8. Does the operator ensure that there is no creation of observable splashing with agitation device?	N/A	An air or pump agitated solvent bath is not used.

MONTHLY WORK PRACTICE CHECK LIST
TA-55-DG-1 DEGREASER

R 04/20/2015

Operational Requirements (A1007.A[1]) continued	Yes/No	Comments
9. Does the operator ensure that the degreaser is not exposed to drafts greater than 40 meters per minute (132 feet per minute)?	Y	Glove box air flow rates based on system design descriptions average between 5 acfm (normal operating) up to 40 acfm maximum for a single glove box.
10. Does the operator ensure that no sponges, fabric, wood or paper products are cleaned in the degreaser?	Y	

Notification Requirements: If any of the boxes were checked with "No", please contact Air Quality Compliance Personnel at 665-1338.

Comments:

Form completed by:

Signature	Name (print)	Z number	Date
[signature]	Jake Montoya	334755	7-27-22

The permit section or condition noted at the end of each requirement is from the following reference:

[1] Title V Operating Permit No: P100-R2

All required documentation must be kept for a minimum of 5 years from the date it was gathered or from the date of the operating permit issuance (February 27, 2015).

At the end of each assessment period this form must be filed as an official record.

MONTHLY WORK PRACTICE CHECK LIST
TA-55-DG-1 DEGREASER

R 04/20/2015

Date of Action: 8-30-22	**Location of Source : (TA/BLDG/Room) TA-55-PF4-319**	
Monitoring Requirements(A1007.A[1]):	**Yes/No**	**Comments**
1. Does the operator monitor and record the amount of solvent added to the degreaser?	Y	
Recordkeeping Requirements (A1007.A[1])	**Yes/No**	**Comments**
1. Are the actual emissions rate (pounds/month) of VOC and HAPS based on the quantity of solvent lost to evaporation calculated on a monthly basis?	Yes	Emissions are calculated using the Degreaser Compliance Database by air quality compliance personnel.
2. Are the semi-annual emissions rate (tons/year) calculated for this source category and added to the facility-wide emissions rates in Table 106.B (Facility-wide Allowable Emissions)?	Yes	Emissions are calculated using the Degreaser Compliance Database by air quality compliance personnel.
3. Does the operator maintain records of the degreaser solvent content?	Y	
4. Does the operator maintain work practice checklists?	Y	
5. Does the operator maintain records in accordance with Section B109, General Recordkeeping Requirements?	Y	
Operational Requirements (A1007.A[1])	**Yes/No**	**Comments**
1. Does the operator ensure the degreaser is closed with a tight fitting cover whenever not in use?	Y	
2. Does the operator maintain a freeboard ratio of 0.75 or greater?	Y	Glove box is included in freeboard ratio determination.
3. Does the operator ensure that all collected and stored waste solvent and wipe rags are placed in closed containers?	Y	
4. Does the operator ensure that flushing is performed only within the freeboard area only?	Y	All rinsing is performed within the freeboard area.
5. Does the operator allow cleaned parts to drip for 15 seconds or until dripping stops (whichever is longer)?	Y	
6. Does the operator ensure that the solvent level does not exceed the fill line on the solvent level?	Y	
7. Does the operator ensure that all spills are wiped up immediately?	Y	
8. Does the operator ensure that there is no creation of observable splashing with agitation device?	N/A	An air or pump agitated solvent bath is not used.

MONTHLY WORK PRACTICE CHECK LIST
TA-55-DG-1 DEGREASER

R 04/20/2015

Operational Requirements (A1007.A[1]) continued	Yes/No	Comments
9. Does the operator ensure that the degreaser is not exposed to drafts greater than 40 meters per minute (132 feet per minute)?	Y	Glove box air flow rates based on system design descriptions average between 5 acfm (normal operating) up to 40 acfm maximum for a single glove box.
10. Does the operator ensure that no sponges, fabric, wood or paper products are cleaned in the degreaser?	Y	

Notification Requirements: If any of the boxes were checked with "No", please contact Air Quality Compliance Personnel at 665-1338.

Comments:

Form completed by:

Signature	Name (print)	Z number	Date
[signature]	Jake Montoya	334755	8-30-22

The permit section or condition noted at the end of each requirement is from the following reference:

[1] Title V Operating Permit No: P100-R2

All required documentation must be kept for a minimum of 5 years from the date it was gathered or from the date of the operating permit issuance (February 27, 2015).

At the end of each assessment period this form must be filed as an official record.

MONTHLY WORK PRACTICE CHECK LIST
TA-55-DG-1 DEGREASER

R 04/20/2015

Date of Action: 9-26-2022	**Location of Source : (TA/BLDG/Room) TA-55-PF4-319**	
Monitoring Requirements(A1007.A[1]):	**Yes/No**	**Comments**
1. Does the operator monitor and record the amount of solvent added to the degreaser?	Y	
Recordkeeping Requirements (A1007.A[1])	**Yes/No**	**Comments**
1. Are the actual emissions rate (pounds/month) of VOC and HAPS based on the quantity of solvent lost to evaporation calculated on a monthly basis?	Yes	Emissions are calculated using the Degreaser Compliance Database by air quality compliance personnel.
2. Are the semi-annual emissions rate (tons/year) calculated for this source category and added to the facility-wide emissions rates in Table 106.B (Facility-wide Allowable Emissions)?	Yes	Emissions are calculated using the Degreaser Compliance Database by air quality compliance personnel.
3. Does the operator maintain records of the degreaser solvent content?	Y	
4. Does the operator maintain work practice checklists?	Y	
5. Does the operator maintain records in accordance with Section B109, General Recordkeeping Requirements?	Y	
Operational Requirements (A1007.A[1])	**Yes/No**	**Comments**
1. Does the operator ensure the degreaser is closed with a tight fitting cover whenever not in use?	Y	
2. Does the operator maintain a freeboard ratio of 0.75 or greater?	Y	Glove box is included in freeboard ratio determination.
3. Does the operator ensure that all collected and stored waste solvent and wipe rags are placed in closed containers?	Y	
4. Does the operator ensure that flushing is performed only within the freeboard area only?	Y	All rinsing is performed within the freeboard area.
5. Does the operator allow cleaned parts to drip for 15 seconds or until dripping stops (whichever is longer)?	Y	
6. Does the operator ensure that the solvent level does not exceed the fill line on the solvent level?	Y	
7. Does the operator ensure that all spills are wiped up immediately?	Y	
8. Does the operator ensure that there is no creation of observable splashing with agitation device?	N/A	An air or pump agitated solvent bath is not used.

MONTHLY WORK PRACTICE CHECK LIST
TA-55-DG-1 DEGREASER

R 04/20/2015

Operational Requirements (A1007.A[1]) continued	Yes/No	Comments
9. Does the operator ensure that the degreaser is not exposed to drafts greater than 40 meters per minute (132 feet per minute)?	Y	Glove box air flow rates based on system design descriptions average between 5 acfm (normal operating) up to 40 acfm maximum for a single glove box.
10. Does the operator ensure that no sponges, fabric, wood or paper products are cleaned in the degreaser?	Y	

Notification Requirements: If any of the boxes were checked with "No", please contact Air Quality Compliance Personnel at 665-1338.

Comments:

Form completed by:

Signature	Name (print)	Z number	Date
	Jake Montoya	334755	9-26-2022

The permit section or condition noted at the end of each requirement is from the following reference:

[1] Title V Operating Permit No: P100-R2

All required documentation must be kept for a minimum of 5 years from the date it was gathered or from the date of the operating permit issuance (February 27, 2015).

At the end of each assessment period this form must be filed as an official record.

MONTHLY WORK PRACTICE CHECK LIST
TA-55-DG-1 DEGREASER

R 04/20/2015

Date of Action: 10-26-22	**Location of Source : (TA/BLDG/Room) TA-55-PF4-319**

Monitoring Requirements(A1007.A[1]):	**Yes/No**	**Comments**
1. Does the operator monitor and record the amount of solvent added to the degreaser?	Y	
Recordkeeping Requirements (A1007.A[1])	**Yes/No**	**Comments**
1. Are the actual emissions rate (pounds/month) of VOC and HAPS based on the quantity of solvent lost to evaporation calculated on a monthly basis?	Yes	Emissions are calculated using the Degreaser Compliance Database by air quality compliance personnel.
2. Are the semi-annual emissions rate (tons/year) calculated for this source category and added to the facility-wide emissions rates in Table 106.B (Facility-wide Allowable Emissions)?	Yes	Emissions are calculated using the Degreaser Compliance Database by air quality compliance personnel.
3. Does the operator maintain records of the degreaser solvent content?	Y	
4. Does the operator maintain work practice checklists?	Y	
5. Does the operator maintain records in accordance with Section B109, General Recordkeeping Requirements?	Y	
Operational Requirements (A1007.A[1])	**Yes/No**	**Comments**
1. Does the operator ensure the degreaser is closed with a tight fitting cover whenever not in use?	Y	
2. Does the operator maintain a freeboard ratio of 0.75 or greater?	Y	Glove box is included in freeboard ratio determination.
3. Does the operator ensure that all collected and stored waste solvent and wipe rags are placed in closed containers?	Y	
4. Does the operator ensure that flushing is performed only within the freeboard area only?	Y	All rinsing is performed within the freeboard area.
5. Does the operator allow cleaned parts to drip for 15 seconds or until dripping stops (whichever is longer)?	Y	
6. Does the operator ensure that the solvent level does not exceed the fill line on the solvent level?	Y	
7. Does the operator ensure that all spills are wiped up immediately?	Y	
8. Does the operator ensure that there is no creation of observable splashing with agitation device?	N/A	An air or pump agitated solvent bath is not used.

MONTHLY WORK PRACTICE CHECK LIST
TA-55-DG-1 DEGREASER

R 04/20/2015

Operational Requirements (A1007.A[1]) continued	Yes/No	Comments
9. Does the operator ensure that the degreaser is not exposed to drafts greater than 40 meters per minute (132 feet per minute)?	Y	Glove box air flow rates based on system design descriptions average between 5 acfm (normal operating) up to 40 acfm maximum for a single glove box.
10. Does the operator ensure that no sponges, fabric, wood or paper products are cleaned in the degreaser?	Y	

Notification Requirements: If any of the boxes were checked with "No", please contact Air Quality Compliance Personnel at 665-1338.

Comments:

Form completed by:

Signature	Name (print)	Z number	Date
[signature]	Jake Montoya	334785	10-26-22

The permit section or condition noted at the end of each requirement is from the following reference:

[1] Title V Operating Permit No: P100-R2

All required documentation must be kept for a minimum of 5 years from the date it was gathered or from the date of the operating permit issuance (February 27, 2015).

At the end of each assessment period this form must be filed as an official record.

MONTHLY WORK PRACTICE CHECK LIST
TA-55-DG-1 DEGREASER

R 04/20/2015

Date of Action: 11-23-22	**Location of Source : (TA/BLDG/Room) TA-55-PF4-319**	
Monitoring Requirements(A1007.A[1]):	**Yes/No**	**Comments**
1. Does the operator monitor and record the amount of solvent added to the degreaser?	Y	
Recordkeeping Requirements (A1007.A[1])	**Yes/No**	**Comments**
1. Are the actual emissions rate (pounds/month) of VOC and HAPS based on the quantity of solvent lost to evaporation calculated on a monthly basis?	Yes	Emissions are calculated using the Degreaser Compliance Database by air quality compliance personnel.
2. Are the semi-annual emissions rate (tons/year) calculated for this source category and added to the facility-wide emissions rates in Table 106.B (Facility-wide Allowable Emissions)?	Yes	Emissions are calculated using the Degreaser Compliance Database by air quality compliance personnel.
3. Does the operator maintain records of the degreaser solvent content?	Y	
4. Does the operator maintain work practice checklists?	Y	
5. Does the operator maintain records in accordance with Section B109, General Recordkeeping Requirements?	Y	
Operational Requirements (A1007.A[1])	**Yes/No**	**Comments**
1. Does the operator ensure the degreaser is closed with a tight fitting cover whenever not in use?	Y	
2. Does the operator maintain a freeboard ratio of 0.75 or greater?	Y	Glove box is included in freeboard ratio determination.
3. Does the operator ensure that all collected and stored waste solvent and wipe rags are placed in closed containers?	Y	
4. Does the operator ensure that flushing is performed only within the freeboard area only?	Y	All rinsing is performed within the freeboard area.
5. Does the operator allow cleaned parts to drip for 15 seconds or until dripping stops (whichever is longer)?	Y	
6. Does the operator ensure that the solvent level does not exceed the fill line on the solvent level?	Y	
7. Does the operator ensure that all spills are wiped up immediately?	Y	
8. Does the operator ensure that there is no creation of observable splashing with agitation device?	N/A	An air or pump agitated solvent bath is not used.

MONTHLY WORK PRACTICE CHECK LIST
TA-55-DG-1 DEGREASER

R 04/20/2015

Operational Requirements (A1007.A[1]) continued	Yes/No	Comments
9. Does the operator ensure that the degreaser is not exposed to drafts greater than 40 meters per minute (132 feet per minute)?	Y	Glove box air flow rates based on system design descriptions average between 5 acfm (normal operating) up to 40 acfm maximum for a single glove box.
10. Does the operator ensure that no sponges, fabric, wood or paper products are cleaned in the degreaser?	Y	

Notification Requirements: If any of the boxes were checked with "No", please contact Air Quality Compliance Personnel at 665-1338.

Comments:

Form completed by:

Signature	Name (print)	Z number	Date
Jake Montoya	Jake Montoya	334755	11-23-22

The permit section or condition noted at the end of each requirement is from the following reference:

[1] Title V Operating Permit No: P100-R2

All required documentation must be kept for a minimum of 5 years from the date it was gathered or from the date of the operating permit issuance (February 27, 2015).

At the end of each assessment period this form must be filed as an official record.

MONTHLY WORK PRACTICE CHECK LIST
TA-55-DG-1 DEGREASER

R 04/20/2015

Date of Action: 12-21-22	**Location of Source : (TA/BLDG/Room) TA-55-PF4-319**

Monitoring Requirements(A1007.A[1]):	**Yes/No**	**Comments**
1. Does the operator monitor and record the amount of solvent added to the degreaser?	Y	
Recordkeeping Requirements (A1007.A[1])	**Yes/No**	**Comments**
1. Are the actual emissions rate (pounds/month) of VOC and HAPS based on the quantity of solvent lost to evaporation calculated on a monthly basis?	Yes	Emissions are calculated using the Degreaser Compliance Database by air quality compliance personnel.
2. Are the semi-annual emissions rate (tons/year) calculated for this source category and added to the facility-wide emissions rates in Table 106.B (Facility-wide Allowable Emissions)?	Yes	Emissions are calculated using the Degreaser Compliance Database by air quality compliance personnel.
3. Does the operator maintain records of the degreaser solvent content?	Y	
4. Does the operator maintain work practice checklists?	Y	
5. Does the operator maintain records in accordance with Section B109, General Recordkeeping Requirements?	Y	
Operational Requirements (A1007.A[1])	**Yes/No**	**Comments**
1. Does the operator ensure the degreaser is closed with a tight fitting cover whenever not in use?	Y	
2. Does the operator maintain a freeboard ratio of 0.75 or greater?	Y	Glove box is included in freeboard ratio determination.
3. Does the operator ensure that all collected and stored waste solvent and wipe rags are placed in closed containers?	Y	
4. Does the operator ensure that flushing is performed only within the freeboard area only?	Y	All rinsing is performed within the freeboard area.
5. Does the operator allow cleaned parts to drip for 15 seconds or until dripping stops (whichever is longer)?	Y	
6. Does the operator ensure that the solvent level does not exceed the fill line on the solvent level?	Y	
7. Does the operator ensure that all spills are wiped up immediately?	Y	
8. Does the operator ensure that there is no creation of observable splashing with agitation device?	N/A	An air or pump agitated solvent bath is not used.

MONTHLY WORK PRACTICE CHECK LIST
TA-55-DG-1 DEGREASER

R 04/20/2015

Operational Requirements (A1007.A[1]) continued	Yes/No	Comments
9. Does the operator ensure that the degreaser is not exposed to drafts greater than 40 meters per minute (132 feet per minute)?	Y	Glove box air flow rates based on system design descriptions average between 5 acfm (normal operating) up to 40 acfm maximum for a single glove box.
10. Does the operator ensure that no sponges, fabric, wood or paper products are cleaned in the degreaser?	Y	

Notification Requirements: If any of the boxes were checked with "No", please contact Air Quality Compliance Personnel at 665-1338.

Comments:

Form completed by:

Signature	Name (print)	Z number	Date
[signature]	Jake Montoya	334755	12-21-22

The permit section or condition noted at the end of each requirement is from the following reference:

[1] Title V Operating Permit No: P100-R2

All required documentation must be kept for a minimum of 5 years from the date it was gathered or from the date of the operating permit issuance (February 27, 2015).

At the end of each assessment period this form must be filed as an official record.

ATTACHMENT A1104.A.

Internal Combustion

TA-33-G-1-P Daily Operating Logs

Daily TA-33-G-1-P Cummins/ONAN/DFHD 1000 kW Generator Hour Log

This generator has the following air quality permit requirements:

This generator engine is authorized to operate **no more than eight (8) hours per day**.

This unit can **operate only between the hours of 7:00 AM and 5:00 PM**

The permittee shall monitor the time(s) of operation each day.

The permittee shall monitor and keep records of the time(s) of operation each day, and the daily, monthly, and the monthly rolling 12-month total hours of operation of the genset (LANL EPC-CP will maintain this)

Date	Time of operation		Hour Meter Reading		Hours of operation	Purpose	Operator/User Name
	Start Time	End Time	Start Reading	End Reading			
3/17/2019	18:30	7:30 on 3/23/2019	712.9	845.3	132.4	Emergency Use, Power outage at TA-3-1698	Garry Schramm
5/29/2019	9:00	9:20	845.3	845.7	0.4	Maintenance	Randy Griego
12/17/2019	14:00	14:36	845.7	846.3	0.6	Maintenance	Ron Suazo
7/1/2020	11:00	11:00 on 7/14/2020	846.3	1148.0	301.7	Emergency Use, Power outage at TA-33 SCIF	Randy Griego
9/21/2020	9:00	10:35	1148.0	1149.6	1.6	Maintenance	Ron Vigil
1/28/2021	11:30	11:45	1149.6	1149.9	0.3	Maintenance	Brian Trujillo
5/12/2021	9:00	11:00	1149.9	1151.0	2	Test	Randy Griego
5/13/2021	11:30	14:30	1151.0	1154.0	3	Test	Randy Griego
5/14/2021	10:30	14:30	1154.0	1158.0	4	Test	Randy Griego
5/17/2021	7:30	14:30	1158.0	1165.0	7	Test	Randy Griego
5/19/2021	8:30	11:30	1165.0	1168.2	3	Test	Randy Griego
7/16/2021	9:20	9:37	1168.2	1168.5	0.3	PM Test	Randy Griego
7/16/2021	14:46	15:00	1168.5	1168.7	0.2	PM Test	Ronald Vigil
2/9/2022	12:50	13:05	1168.7	1169.0	0.3	PM Test	Ronald Vigil
7/28/2022	13:03	14:33	1169.0	1170.5	1.5	PM	Brian Trujillo
10/19/2022	16:00	16:05	1170.5	1170.5	0	PM	Brian Trujillo
10/20/2022	9:00	14:48	1170.5	1176.3	5.8	Research Project Test	Randy Griego

Version June 2021 | Air Quality Permit P100-R2M4, Section A1104

Asked operators to note time of operation.

ATTACHMENT A1104.B.

Internal Combustion

Permitted Generator Hours

YEAR **2022**

Permitted Generators

										First Half			Second Half			Annual
Permit ID	*Location*	*ID #*	*Engine Make*	*Engine Model*	*Engine Serial #*	*Generator Rating kWe*	*Engine Rating kWm*	*Reading 2nd half of previous year*		*6 Month Reading Date*	*Reading*	*Hours Run*	*12 Month Reading Date*	*Reading*	*Hours Run*	*Hours Run*
TA-33-G-1P	TA-33-Port	G-0053	Cummins	QST30-G5	37199764	1000	1111.5	Dec-21	1168.7	Jun-22	1169.0	0.3	Dec-22	1176.3	7.3	7.6
TA-33-G-2	TA-33-209	G-0008	Kohler/Yanmar	4TNE84T	52993	20	25	Dec-21	479.4	Jun-22	479.4	0.0	Dec-22	479.5	0.1	0.1
TA-33-G-3	TA-33-280	G-0010	Kohler/Yanmar	4TNE84T	52992	20	25	Dec-21	233.9	Jun-22	233.9	0.0	Dec-22	234.1	0.2	0.2
TA-33-G-4	TA-33-151	G-0007	Caterpillar	3306	8JJ00615	225	281.25	Dec-21	3988.0	Jun-22	3989.0	1.0	Dec-22	3990.0	1.0	2.0
RLUOB-GEN-1	TA-55-585	G-0058	Cummins	KTA50G9	25314401	1500	1656.1	Dec-21	222.2	Jun-22	222.2	0.0	Dec-22	222.2	0.0	0.0
RLUOB-GEN-2	TA-55-584	G-0059	Cummins	KTA50G9	25314399	1500	1656.1	Dec-21	348.5	Jun-22	360.6	12.1	Dec-22	366.7	6.1	18.2
RLUOB-GEN-3	TA-55-583	G-0060	Cummins	KTA50G9	33185566	1500	1656.1	Dec-21	289.3	Jun-22	302.6	13.3	Dec-22	304.2	1.6	14.9
TA-48-GEN-1	TA-48-1	G-0067	Cummins	QSB7-G3 NR3	73176927	150	186	Dec-21	0.0	Jun-22	0.0	0.0	Dec-22	0.0	0.0	0.0
TA-55-GEN-1	TA-55-PF10	G-0065	Isuzu	BZ-4LE2T	4LE2-298868	30	40.2	Dec-21	17.1	Jun-22	18.7	1.6	Dec-22	19.9	1.2	2.8
TA-55-GEN-2	TA-55-PF11	G-0066	Isuzu	BZ-4LE2T	4LE2-299432	30	40.2	Dec-21	30.6	Jun-22	32.2	1.6	Dec-22	33.4	1.2	2.8
TA-55-GEN-3	TA-55-371	G-0064	Caterpillar	C32	SYCO5263	900	1335	Dec-21	148.6	Jun-22	154.0	5.4	Dec-22	166.9	12.9	18.3

Notes: TA-48-GEN-1 has not started up as of December 2022.

The TA-33 225 kW & two 20 kW generators have limits of 500 hrs/yr.

RLUOB-GENs, TA-48 GEN, TA-55-GENs are subject to NSPS IIII regulation; nonemergency operation limited to 100 hrs/yr.

Reviewed by / Date: Katelyn Mahoney 1/11/2023

ATTACHMENT A1106.A.

Internal Combustion

Method 9 Opacity Reports

LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: #2025460
NSR Permit #2195-P Unit #1

Source Location:
Los Alamos National Laboratory TA-33

Type of Source	Type of Control Equipment
Diesel Generator	n/a

Describe Emission Point (Top of stack, etc.)
End of tail pipe

Height Above Ground Level	Height Relative to Observer
0.5 Feet	4.5 Feet

Distance From Observer	Direction of Source From Observer
0 Feet	SW

Description of Plume (stack exit only)
☒ Looping ☐ Trapping ☐ Looping ☐ Fanning ☐ Coning
☒ No Plume Present

Emission Color	Plume Type
grey/clear	☒ No Plume Present ☒ Continuous ☐ Fugitive ☐ Intermittent

Water Droplets Present?
☒ NO ☐ YES If YES, droplet plume is ☐ Attached ☐ Detached

At what point in the plume was opacity determined?
10" from end of pipe

Describe Background (i.e. blue sky, trees, etc.)
tan gravel

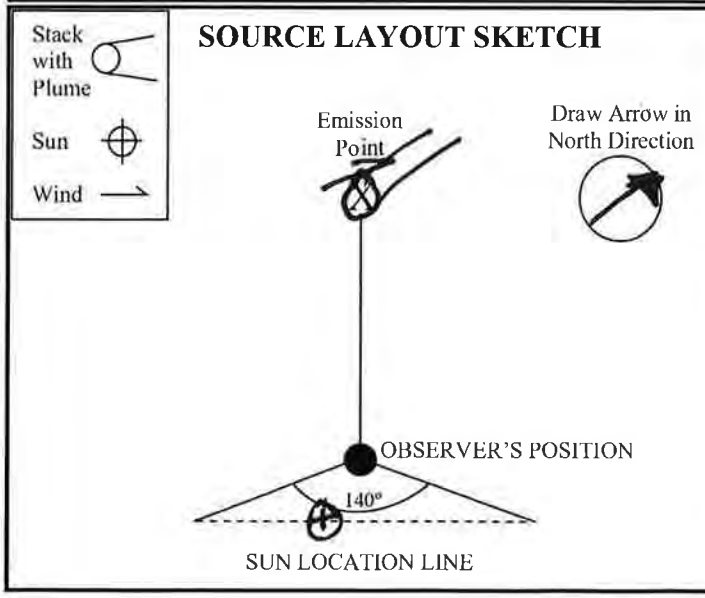
Background Color	Sky Conditions
tan	partly cloudy

Wind Speed	Wind Direction (provide from/to, i.e. from North to South)
5 mph	NE

Ambient Temperature	Relative Humidity
71 °F	53 %

Additional Comments/Information:

SOURCE LAYOUT SKETCH



Observation Date	Start Time	End Time
7/28/22	02:14pm	02:24pm

Min \ Sec	0	15	30	45	Comments
1	40	0	0	0	
2	0	0	0	0	
3	0	0	0	0	
4	0	0	0	0	
5	0	0	0	0	
6	0	0	0	0	
7	0	0	0	0	
8	0	0	0	0	
9	0	0	0	0	
10	0	0	0	0	
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

Average 10-Minute Opacity	Range of Opacity Readings
1	Min. 0 Max. 40

OBSERVER (please print)
Name: Lydia Martinez
Title: Environmental Professional 2

Signature: Lydia M
Date: 7/28/22

Observer Organization
Los Alamos National Laboratory

Certified by
Aeromet Engineering, Inc.
Certification Date: 04/07/22

LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: NSR Permit #2195-Unit #2 #2025461

Source Location: Los Alamos National Laboratory TA-33

Type of Source: Diesel Generator

Type of Control Equipment: N/A

Describe Emission Point (Top of stack, etc.): End of tail pipe

Height Above Ground Level: 0.5 Feet

Height Relative to Observer: 4.5 Feet

Distance From Observer: 13 Feet

Direction of Source From Observer: SE

Description of Plume (stack exit only)
☒ Looping ☐ Trapping ☐ Looping ☐ Fanning ☐ Coning
☒ No Plume Present

Emission Color: grey/clear

Plume Type: ☒ No Plume Present ☐ Continuous ☐ Fugitive ☐ Intermittent

Water Droplets Present?
☒ NO ☐ YES If YES, droplet plume is ☐ Attached ☐ Detached

At what point in the plume was opacity determined? 16" from end of pipe

Describe Background (i.e. blue sky, trees, etc.): green vegetation

Background Color: green

Sky Conditions: partly cloudy

Wind Speed: 13 mph

Wind Direction (provide from/to, i.e. from North to South): S

Ambient Temperature: 80 °F

Relative Humidity: 29 %

Additional Comments/Information:

Observation Date	Start Time	End Time
08/15/22	1:42pm	1:52pm

Min \ Sec	0	15	30	45	Comments
1	10	0	0	0	
2	0	0	0	0	
3	0	0	0	0	
4	0	0	0	0	
5	0	0	0	0	
6	0	0	0	0	
7	0	0	0	0	
8	0	0	0	0	
9	0	0	0	0	
10	0	0	0	0	
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

Average 10-Minute Opacity	Range of Opacity Readings
0.25	Min. 0 Max. 10

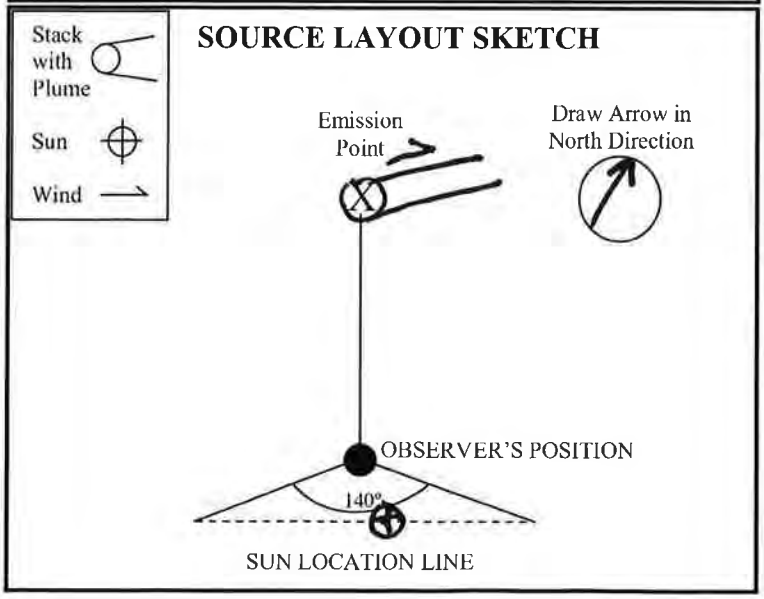
OBSERVER (please print)
Name: Lydia Martinez
Title: Environmental Professional 2

Signature: Lydia Martinez
Date: 8/15/22

Observer Organization: Los Alamos National Laboratory

Certified by: Aeronet Engineering, Inc.
Certification Date: 04/07/22

SOURCE LAYOUT SKETCH



Los Alamos NATIONAL LABORATORY

LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: #GPK01065
NSR Permit #2195-P Unit #3

Source Location:
Los Alamos National Laboratory TA-33

Type of Source	Type of Control Equipment
Diesel Generator	N/A

Describe Emission Point (Top of stack, etc.)
Top of diesel generator

Height Above Ground Level	Height Relative to Observer
12 Feet	6 Feet

Distance From Observer	Direction of Source From Observer
15 Feet	W

Description of Plume (stack exit only)
☒ Lofting ☐ Trapping ☐ Looping ☐ Fanning ☐ Coning
☐ No Plume Present

Emission Color	Plume Type
Black/Gray	☐ No Plume Present ☒ Continuous ☐ Fugitive ☐ Intermittent

Water Droplets Present?
☒ NO ☐ YES If YES, droplet plume is ☐ Attached ☐ Detached

At what point in the plume was opacity determined?
10" from top of diesel generator

Describe Background (i.e. blue sky, trees, etc.)
Blue sky

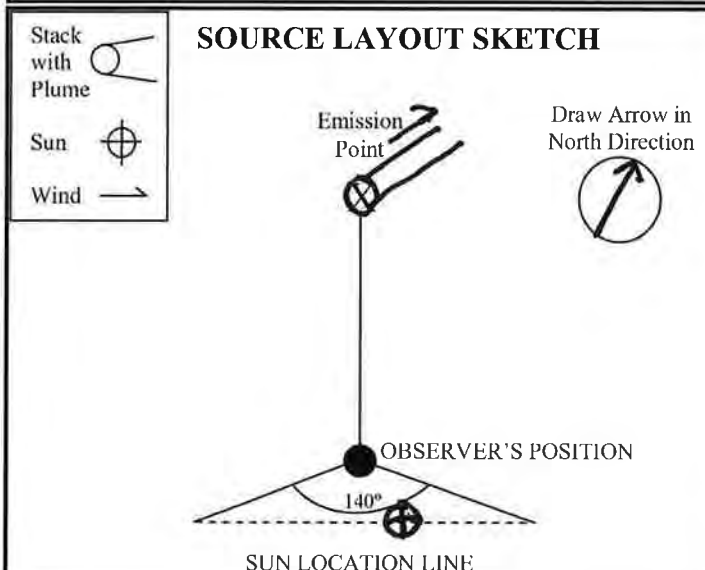
Background Color	Sky Conditions
Blue	clear

Wind Speed	Wind Direction (provide from/to, i.e. from North to South)
6 mph	S W

Ambient Temperature	Relative Humidity
68 °F	69 %

Additional Comments/Information:

SOURCE LAYOUT SKETCH



Observation Date	Start Time	End Time
7/27/22	16:06 am	16:16 am

Min \ Sec	0	15	30	45	Comments
1	60	5	5	5	
2	5	5	5	5	
3	5	6	5	5	
4	5	0	0	0	
5	0	0	0	0	
6	0	0	0	0	
7	0	0	0	0	
8	0	0	0	0	
9	0	0	0	0	
10	0	0	0	0	
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

Average 10-Minute Opacity	Range of Opacity Readings
3	Min. 0 Max. 60

OBSERVER (please print)
Name: Lydia Martinez Title: Environmental Professional 2

Signature	Date
Lydia Martinez	7/27/22

Observer Organization
Los Alamos National Laboratory

Certified by	Certification Date
Aeromet Engineering, Inc.	04/07/22

ATTACHMENT A1107.A.

Internal Combustion

Operating Records for RLUOB Generators

MISTRY & ALLURGY EARCH REPLACEMENT

Lo nos

CMRR/RLUOB Emergency Generator Operation Log

Manufacturer Cummings **Model** DFLE 5754172

Serial/Unit No. 10609766 10 South (A)

Name	Date	Start Time	End Time	Run Time	Reason*	Notes
Brian Trujillo	1-29-21	—	—	—	Monthly Run 222.2	
Brian Trujillo	2-23-21				Monthly Run 222.2	
Brian Trujillo	3-17-21				Monthly Run 222.2	
Brian Trujillo	4-20-21				Monthly Run 222.2	
Brian Trujillo	6/22/21				Monthly Run 222.2	
Brandon Salazar	7-20-21				monthly 222.2	
Brian Trujillo	08/12/21				Monthly Run 222.2	GENERATOR IS OUT-OF-SERVICE
Brandon Salazar	9-3-21	—	—	—	monthly 222.2	
Brian Trujillo	11-16-21				monthly Run 222.2	Generator is out of Service
Brian Trujillo	12-15-21				monthly Run 222.2	Generator is out-of-Service
Eddie Skonts	1-13-22				Monthly PM222.2	Generator is out of Service
Brian Trujillo	2/16/22				222.2 Monthly Run	GENERATOR IS out of Service
Brian Trujillo	3/15/22				222.2 monthly run	GENERATOR IS OUT-OF-Service
Brian Trujillo	4/27/22				222.2 Monthly Run	GENERATOR IS OUT-OF-SERVICE
Brian Trujillo	5/17/22				222.2 monthly run	GENERATOR IS OUT-OF-Service
Brian Trujillo	6/22/2022				222.2 Monthly Run	GENERATOR IS OUT-OF-SERVICE
Brian Trujillo	7/21/2022				222.2 Monthly Run	GENERATOR IS OUT-OF-SERVICE
Brian Trujillo	8/30/2022				222.2 Monthly Run	GENERATOR IS OUT-OF-SERVICE
Brian Trujillo	09/29/2022					GENERATOR IS OUT-OF-Service
Brian Trujillo						GENERATOR IS OUT-OF-SERVICE
Brian Trujillo	11/22/2022					GENERATOR IS OUT-OF-SERVICE
Brian Trujillo	12/06/2022					

*Reason for operation: Emergency Use, Maintenance, Repairs, Testing, etc.

Cummins Generator Cummins Serial # 1060976811 Gen B Model DFLE 5754172

Authorized Worker	Date	Start Time	End Time	Run Time	Run Time Accumulative	Reason/Notes
Stephen Mykael	7/09/21	1503	1550	0.75	329.3	ATS-FP
Brandon Salazar	7-20-21	9:06	1055	1.8	331.1	monthly
Brian Trujillo	08/12/21	0837 1239	0852 1408	3 hr 10 min ~~1hr 54 min~~	334.2 ~~334.5~~ @ 08/12/21	Monthly Pm
Brandon Salazar	8-26-21	10:39	12:10	2.1	336.6	Annual PM
Miguel Rizo	8/27/21	1920	1935	0.25	336.8	Power Bump
Brandon Salazar	9-8-21	10:27	11:22	2	338.8	monthly
Brian Trujillo	11-16-21	0917 1004	0942 1140	.25 1.36	342.1 / 344.1	monthly Pm
Brian Trujillo	12-15/12-16-21	0917	1210	4.4hrs	348.5	monthly Pm
@ Eddie Skeats	1-12-22 1-13-22	0930	11:40	1:05	350.4	monthly Pm
02/01/22 ~~Eric Quintana~~						
120321 Brian Trujillo	02/16/2022	0928	1404	3.4hrs	354.2	monthly Pm
Brian Trujillo	03/15/2022	0940	1151	1hr 55min	356.1	monthly Pm
Brian Trujillo	4/27/2022	0914	1430	2.7hrs	358.8	Monthly Pm
Brian Trujillo	5/17/22	0910	0913	.2hrs	359.2	Monthly Pm
Brian Trujillo	6/22/2022	1020	1046	.4hrs	360.6	monthly Pm
Brian Trujillo	7/21/2022	0900	0925	.5hrs	361.1	monthly Pm
Miguel Rizo	07/30/2022	1358	~~1700~~ 1700	2.9 hrs	364.0	Loss of utility power
BC 08/01/22 ~~Brian Gould~~						
Brian Trujillo	8/30/2022	0856	0922	.4hrs	364.4	Fire Pump ATS / GEN. Monthly Pm's
Brian Trujillo	09/29/22	0952	1017	.5hrs	364.9	Fire pump ATS / Gen. Monthly Pm
Brian Trujillo	10/18/2022	0919	0944	.4hrs	365.3	Fire pump ATS / GEN. Monthly
Brian Trujillo	11/22/2022	0920	0945	.4hrs	365.7	Fire Pump ATS / GEN. Monthly
Brian Trujillo	12/06/2022	1042	1107	.4hrs	366.1	Fire Pump ATS / GEN. Monthly
Brian Trujillo	12/19/22 - 12/21/22	1304	1309	.3hrs	366.4	Annual Pm GDE-B
Miguel Rizo	01/~~22~~ 01/23 0715 01/23	1125	1130	0.3 hrs	366.7	Power Bump

Cummins Generator	Cummins Serial # 1060976812 Gen C					Model DFLE 5754172
Authorized Worker	Date	Start Time	End Time	Run Time	Run Time Accumulative	Reason/Notes
Eric Quintana	01/06/21	1134	1154	0.2	246.3	ATS Trip During Fire Protection PM
Brian Trujillo	01/29/21	1340	1751	4.1	249.7	Monthly Pm
Brian Trujillo	02/23/21	0917/0927	1137	2.0	251.7	Monthly Pm
Brian Trujillo	03/17/21	1022	1155	1.5	255.0	monthly Pm
Brian Trujillo	03/26/21	0719	1523	2.7	BT ~~256.4~~ 257.7	5yr Pm
Brian Trujillo	3/27/21	0831	1513	2.7	260.4	5yr Pm
Brian Trujillo	3/28/21	0821	0942	1.3	261.7	5yr Pm
BT Brian Trujillo	3/29/21	1255	1416	1.4	263.1	5yr Pm
Brian Trujillo	3/30/21	1527	1659	1.3	264.6	5yr Pm
Brian Trujillo	3/31/21	1046	1216	1.5	266.1	5yr Pm
Brian Trujillo	4/20/21	0910	0922	12 min	266.3	Fire pump ATS monthly
Brian Trujillo	4/20/21	1011	1141	1hr. 42min	267.8	Monthly Pm
Brian Trujillo	06/22/21	0854	1107	1hr 33min	273.5	monthly Pm
Stephen McNeel	07/09/21	1503	1516	0.25	273.7	ATS-FP
Brandon Salazar	7-20-21	9:00	2:10	3	276.7	Monthly
Brian Trujillo	08-12-21	0827 0917	0839 1051	1hr 46min	278.5	Monthly Pm
Miguel Rizo	08/27/21	1920	1935	0.25	278.7	Power Bump
Brandon Salazar	9-8-21	10:27	2105	1.2	~~279.9~~ 281.9	monthly Scheduled maint (PM
Brian Trujillo	11-16-2021	~~0917-0929~~ 0917	0929	3.3	283.7/285.9 ~~285.5/287.0~~	BT Monthly Pm
" "	"	1004 1256	1140 1428		285.5/287.0	" "
Brian Trujillo	12-15-2021	0917	1418	2.6	289.3	Monthly Pm.
Eddie Skeet	1-13-22	12:55	1:55	1.2	292.5	Monthly PM
Brandon Salazar	2-1 to 2-4	10:19	12:00	2.1	294.6	Annual
Brian Trujillo	02/16/2022	0928	1151	1.7	296.3	Monthly Pm.
Brian Trujillo	03/15/2022	0940	1421	3hrs, 3min	299.5	Monthly Pm
Brian Trujillo	4/27/2022	0914	1430	2.7hrs	302.0	Monthly Pm
Brian Trujillo	5/17/2022	0910	0935	.4hrs	302.2	monthly Pm.
Brian Trujillo	6/22/2022	1020	1032	.2hrs	302.6	monthly Pm
Brian Trujillo	7/21/2022	0900	0912	.2hrs	302.8	monthly Pm
Miguel Rizo	07/30/2022	1358	1415	0.2 hrs	303.0	Loss of Utility Power
Brian Trujillo	08/30/2022	0856	0908	0.2hrs	303.2	Fire Pump ATS/GEN. Monthly Pms

MISTRY & ALLURGY EARCH REPLACEMENT

Lo... nos NATIO... ORATORY

CMRR/RLUOB Emergency Generator Operation Log

Gen C

Manufacturer _____ **Model** _____

Serial/Unit No. _____

Name	Date	Start Time	End Time	Run Time	Reason*	Notes
Brian Trujillo	09/29/2022	0952	1004	.2 hrs	Hours: 303.2/303.4	Fire pump ATS/GEN. Mo. Pu[illegible]
Brian Trujillo	10/18/2022	0919	0932	.2 hrs	HRS: 303.4/303.6	Fire pump ATS/GEN MO. Pu[illegible]
Brian Trujillo	11/22/2022	0920	0932	.2 hrs	HRS: 303.6/303.8	Fire Pump ATS/GEN. MO. Pu[illegible]
Brian Trujillo	12/06/2022	1042	1054	.2 hrs	HRS: 303.8/304.0	Fire Pump ATS/GEN. Monthly Pu[illegible]
~~Brian Tru~~						
Miguel Rizo	01/01/2023	~~1125~~ 1/2/23 2325	~~113~~ 1/2/23 2330	0.2 hrs	HRS: ~~304.2~~ 1/2/23 304.0/304.2	Power Bump

*Reason for operation: Emergency Use, Maintenance, Repairs, Testing, etc.

ATTACHMENT A1107.B.

Internal Combustion

Operating Records for Permitted Emergency Generators

TA-48-GEN-1 has been installed, but is not yet operating.

See Attachment A1104.B. for TA-55-GEN-1, TA-55-GEN-2 and TA-55-GEN-3 records.

ATTACHMENT A1207.A.

Data Disintegrator

Operating Logs

2022 TA-52 Data Disintegrator (EQPT 89)

Month	Data Entry Boxes[c] Shredded	Month	Data Entry Boxes[c] Shredded
January	598	July	741
February	474	August	880
March	334	September	344
April	1113	October	370
May	542	November	531
June	807	December	305
6 month Total	3,868	6 month Total	3,171

Annual Boxes: [g]	7,039

Reviewed By / Date: Vince Carretti 1/9/2023

TA-52 Data Disintegrator Destruction Log

July 2022

This log is for materials shredded in the Data Disintegrator described in section A1207 of the LANL Title -V Operating Permit. Record any maintenance performed

Date	Number of Boxes Destroyed				Comments
	CUI Paper	Classified Paper	CUI Media	Classified Media	
1-Jul-22	0	0	0	0	Friday-Destruction Off- Schedule 4/10
2-Jul-22	0	0	0	0	Saturday
3-Jul-22	0	0	0	0	Sunday
4-Jul-22	0	0	0	0	Holiday - Independence Day
5-Jul-22	0	0	0	0	Destruction Facility Closed
6-Jul-22	54	0	0	0	3 Pick-Ups
7-Jul-22	29	0	3	0	4 Pick-Ups
8-Jul-22	0	0	0	0	Friday-Destruction Off- Schedule 4/10
9-Jul-22	0	0	0	0	Saturday
10-Jul-22	0	0	0	0	Sunday
11-Jul-22	45	0	2	0	4 Pick-Ups
12-Jul-22	28	0	8	0	4 Pick-Ups
13-Jul-22	39	11	0	0	2 Pick-Ups
14-Jul-22	60	20	0	0	1 Pick-Up/SSO Shred Morning
15-Jul-22	0	0	0	0	Friday-Destruction Off- Schedule 4/10
16-Jul-22	0	0	0	0	Saturday
17-Jul-22	0	0	0	0	Sunday
18-Jul-22	80	0	0	0	Shred
19-Jul-22	70	0	0	0	5 Pick-Ups
20-Jul-22	40	0	0	0	6 Pick-Ups
21-Jul-22	20	0	3	0	Shred/Chaparral Replaced Blades
22-Jul-22	0	0	0	0	Friday-Destruction Off- Schedule 4/10
23-Jul-22	0	0	0	0	Saturday
24-Jul-22	0	0	0	0	Sunday
25-Jul-22	47	0	17	0	3 Pick-Ups
26-Jul-22	59	0	9	0	2 Pick-Ups
27-Jul-22	48	0	0	0	2 Pick-Ups
28-Jul-22	48	0	1	0	Shred
29-Jul-22	0	0	0	0	Friday-Destruction Off- Schedule 4/10
30-Jul-22	0	0	0	0	Saturday
31-Jul-22	0	0	0	0	Sunday
Total	667	31	43	0	
Grand Total	741				

TA-52 Data Disintegrator Destruction Log

August 2022

This log is for materials shredded in the Data Disintegrator described in section A1207 of the LANL Title -V Operating Permit. Record any maintenance performed

Date	Number of Boxes Destroyed				Comments
	CUI Paper	Classified Paper	CUI Media	Classified Media	
1-Aug-22	43	0	1	0	4 Pick-Ups
2-Aug-22	56	0	0	0	5 Pick-Ups
3-Aug-22	50	0	0	0	Shred
4-Aug-22	60	0	0	0	Shred
5-Aug-22	0	0	0	0	Friday-Destruction Off- Schedule 4/10
6-Aug-22	0	0	0	0	Saturday
7-Aug-22	0	0	0	0	Sunday
8-Aug-22	20	0	0	0	4 Pick-Ups
9-Aug-22	100	0	0	0	Shred
10-Aug-22	67	0	4	0	Shred
11-Aug-22	0	20	0	0	SSO Shred Morning/Media Tour
12-Aug-22	0	0	0	0	Friday-Destruction Off- Schedule 4/10
13-Aug-22	0	0	0	0	Saturday
14-Aug-22	0	0	0	0	Sunday
15-Aug-22	24	0	0	0	Shred
16-Aug-22	42	0	0	0	2 Pick-Ups
17-Aug-22	31	10	0	0	3 Pick-Ups
18-Aug-22	48	0	0	0	2 Pick-Ups
19-Aug-22	0	0	0	0	Friday-Destruction Off- Schedule 4/10
20-Aug-22	0	0	0	0	Saturday
21-Aug-22	0	0	0	0	Sunday
22-Aug-22	72	0	0	0	2 Pick-Ups
23-Aug-22	43	0	2	0	1 Pick-Up
24-Aug-22	49	0	2	0	4 Pick-Ups
25-Aug-22	25	20	0	0	2 Pick-Ups/SSO Shred Morning
26-Aug-22	0	0	0	0	Friday-Destruction Off- Schedule 4/10
27-Aug-22	0	0	0	0	Saturday
28-Aug-22	0	0	0	0	Sunday
29-Aug-22	17	27	0	0	2 Pick-Ups
30-Aug-22	22	13	0	0	4 Pick-Ups
31-Aug-22	12	0	0	0	2 Pick-Ups
Total	781	90	9	0	
Grand Total	880				

TA-52 Data Disintegrator Destruction Log

September 2022

This log is for materials shredded in the Data Disintegrator described in section A1207 of the LANL Title -V Operating Permit. Record any maintenance performed

Date	Number of Boxes Destroyed				Comments
	CUI Paper	Classified Paper	CUI Media	Classified Media	
1-Sep-22	33	0	0	0	1 Pick-Up
2-Sep-22	0	0	0	0	Friday-Destruction Off- Schedule 4/10
3-Sep-22	0	0	0	0	Saturday
4-Sep-22	0	0	0	0	Sunday
5-Sep-22	0	0	0	0	Holiday - Labor Day
6-Sep-22	0	0	0	0	
7-Sep-22	0	48	0	0	1 Pick-Up
8-Sep-22	0	0	0	0	
9-Sep-22	0	0	0	0	Friday-Destruction Off- Schedule 4/10
10-Sep-22	0	0	0	0	Saturday
11-Sep-22	0	0	0	0	Sunday
12-Sep-22	15	12	0	0	4 Pick-Ups
13-Sep-22	43	0	0	0	2 Pick-Ups
14-Sep-22	51	0	0	0	3 Pick-Ups
15-Sep-22	21	22	0	0	4 Pick-Ups
16-Sep-22	0	0	0	0	Friday-Destruction Off- Schedule 4/10
17-Sep-22	0	0	0	0	Saturday
18-Sep-22	0	0	0	0	Sunday
19-Sep-22	32	0	0	0	2 Pick-Ups
20-Sep-22	32	0	0	0	2 Pick-Ups; Shred Remainder of Pick-up from 9/19/22
21-Sep-22	25	0	0	0	3 Pick-Ups
22-Sep-22	10	0	0	0	
23-Sep-22	0	0	0	0	Friday-Destruction Off- Schedule 4/10
24-Sep-22	0	0	0	0	Saturday
25-Sep-22	0	0	0	0	Sunday
26-Sep-22	0	0	0	0	Closed for Painting
27-Sep-22	0	0	0	0	Closed for Painting
28-Sep-22	0	0	0	0	Closed for Painting
29-Sep-22	0	0	0	0	Closed for Painting
30-Sep-22	0	0	0	0	Friday-Destruction Off- Schedule 4/10
Total	262	82	0	0	
Grand Total	344				

TA-52 Data Disintegrator Destruction Log

October 2022

This log is for materials shredded in the Data Disintegrator described in section A1207 of the LANL Title -V Operating Permit. Record any maintenance performed

Date	Number of Boxes Destroyed				Comments
	CUI Paper	Classified Paper	CUI Media	Classified Media	
1-Oct-22	0	0	0	0	Saturday
2-Oct-22	0	0	0	0	Sunday
3-Oct-22	24	0	0	0	
4-Oct-22	40	0	0	0	2 Pick-Ups
5-Oct-22	25	0	0	0	3 Pick-Ups
6-Oct-22	52	0	0	0	2 Pick-Ups
7-Oct-22	0	0	0	0	Friday-Destruction Off- Schedule 4/10
8-Oct-22	0	0	0	0	Saturday
9-Oct-22	0	0	0	0	Sunday
10-Oct-22	17	0	0	0	1 Pick-Up
11-Oct-22	25	0	0	0	3 Pick-Ups
12-Oct-22	24	0	0	0	1 Pick-Up
13-Oct-22	0	0	0	0	Closed
14-Oct-22	0	0	0	0	Friday-Destruction Off- Schedule 4/10
15-Oct-22	0	0	0	0	Saturday
16-Oct-22	0	0	0	0	Sunday
17-Oct-22	0	0	0	0	Closed
18-Oct-22	0	0	0	0	Closed
19-Oct-22	25	0	0	0	1 Pick-Up
20-Oct-22	0	0	0	0	Closed
21-Oct-22	0	0	0	0	Friday-Destruction Off- Schedule 4/10
22-Oct-22	0	0	0	0	Saturday
23-Oct-22	0	0	0	0	Sunday
24-Oct-22	0	0	0	0	Closed
25-Oct-22	25	0	0	0	
26-Oct-22	50	0	0	0	3 Pick-Ups
27-Oct-22	32	0	0	0	
28-Oct-22	0	0	0	0	Friday-Destruction Off- Schedule 4/10
29-Oct-22	0	0	0	0	Saturday
30-Oct-22	0	0	0	0	Sunday
31-Oct-22	31	0	0	0	4 Pick-Ups
Total	370	0	0	0	
Grand Total	370				

TA-52 Data Disintegrator Destruction Log

November 2022

This log is for materials shredded in the Data Disintegrator described in section A1207 of the LANL Title -V Operating Permit. Record any maintenance performed

Date	Number of Boxes Destroyed				Comments
	CUI Paper	Classified Paper	CUI Media	Classified Media	
1-Nov-22	25	0	0	0	
2-Nov-22	1	0	0	48	
3-Nov-22	30	20	0	0	
4-Nov-22	0	0	0	0	Friday-Destruction Off- Schedule 4/10
5-Nov-22	0	0	0	0	Saturday
6-Nov-22	0	0	0	0	Sunday
7-Nov-22	56	0	0	0	
8-Nov-22	37	0	0	0	
9-Nov-22	0	0	0	0	
10-Nov-22	24	0	0	0	
11-Nov-22	0	0	0	0	Friday-Destruction Off- Schedule 4/10
12-Nov-22	0	0	0	0	Saturday
13-Nov-22	0	0	0	0	Sunday
14-Nov-22	25	0	0	0	
15-Nov-22	23	3	0	0	
16-Nov-22	36	0	0	0	
17-Nov-22	61	0	0	0	
18-Nov-22	0	0	0	0	Friday-Destruction Off- Schedule 4/10
19-Nov-22	0	0	0	0	Saturday
20-Nov-22	0	0	0	0	Sunday
21-Nov-22	0	0	0	0	Closed
22-Nov-22	0	0	0	0	Closed
23-Nov-22	0	0	0	0	Closed
24-Nov-22	61	0	0	0	Thursday - Thanksgiving Holiday
25-Nov-22	0	0	0	0	Friday-Destruction Off- Schedule 4/10 - Thanksgiving Holiday
26-Nov-22	0	0	0	0	Saturday
27-Nov-22	0	0	0	0	Sunday
28-Nov-22	34	0	0	0	
29-Nov-22	40	0	0	0	
30-Nov-22	7	0	0	0	
Total	460	23	0	48	
Grand Total	531				

TA-52 Data Disintegrator Destruction Log

December 2022

This log is for materials shredded in the Data Disintegrator described in section A1207 of the LANL Title -V Operating Permit. Record any maintenance

Date	Number of Boxes Destroyed				Comments
	CUI Paper	Classified Paper	CUI Media	Classified Media	
1-Dec-22	0	0	0	0	Closed
2-Dec-22	0	0	0	0	Friday-Destruction Off- Schedule 4/10
3-Dec-22	0	0	0	0	Saturday
4-Dec-22	0	0	0	0	Sunday
5-Dec-22	0	0	0	0	Shredder Walkdown
6-Dec-22	27	0	0	0	1 Pick-Up; Air Quality Inspection
7-Dec-22	40	0	0	0	1 Pick-Up; Video Production Tour
8-Dec-22	56	0	0	0	2 Pick-Ups
9-Dec-22	0	0	0	0	Friday-Destruction Off- Schedule 4/10
10-Dec-22	0	0	0	0	Saturday
11-Dec-22	0	0	0	0	Sunday
12-Dec-22	32	0	0	0	3 Pick-Ups
13-Dec-22	30	0	0	0	3 Pick-Ups
14-Dec-22	20	0	0	0	2 Pick-Ups
15-Dec-22	0	0	0	0	Dust Hazard Analysis Run
16-Dec-22	0	0	0	0	Friday-Destruction Off- Schedule 4/10
17-Dec-22	0	0	0	0	Saturday
18-Dec-22	0	0	0	0	Sunday
19-Dec-22	34	0	0	0	1 Pick-Up
20-Dec-22	34	0	0	0	1 Pick-Up
21-Dec-22	32	0	0	0	1 Pick-Up
22-Dec-22	0	0	0	0	Ready for Christmas Shutdown
23-Dec-22	0	0	0	0	Friday-Destruction Off- Schedule 4/10
24-Dec-22	0	0	0	0	Saturday
25-Dec-22	0	0	0	0	Sunday
26-Dec-22	0	0	0	0	Mandatory Vacation for Christmas Break
27-Dec-22	0	0	0	0	Mandatory Vacation for Christmas Break
28-Dec-22	0	0	0	0	Mandatory Vacation for Christmas Break
29-Dec-22	0	0	0	0	Mandatory Vacation for Christmas Break
30-Dec-22	0	0	0	0	Friday-Destruction Off- Schedule 4/10 & Mandatory Vacation for Christmas Break
31-Dec-22	0	0	0	0	Saturday
Total	305	0	0	0	
Grand Total	305				

ATTACHMENT A1207.B.

Data Disintegrator

Maintenance Performed

Facility: F07 Unit: 520011 Proj:
Task Title: 520011 3M SHREDDER/SEPERATOR/SHAKER PM - CHAPARRAL
W/O Type: PM W/O Group: 3PM MOD Task Priority: 4
Planner: 107145 TAFOYA
W/O Title: 520011 3M DOCUMENT SHREDDER/ HARD DRIVE PM - CHAPARRAL
Written To: DOCUMENT SHREDDER/ HARD DRIVE SHREDDER
Task Dspln: XOSC Due Date: 07/31/2022
Job Type: PM D-B Determination:N
Hazard Level: MODERATE IWD Requirement:TASK SPECIFC
Material Required?:

0072293001

Los Alamos NATIONAL LABORATORY EST. 1943

Work Order Task
00722930 01
MASTER

Date: 4/7/22

Work Order Task Written To

Facility: F07 Unit: 520011 Op Sys: BLDG
Room: Area: Sys/Cls: P
Equipment: Component:
DOCUMENT SHREDDER/ HARD DRIVE SHREDDER
Equipment Tag: Alternate Tag:
Work item: 520011SP Tech Surv Reqmt Rel: N
PEG Equip Group Type: PEG Equip Group ID:
Crit Safety Control: Property Group:
Maintenance Programs: 1: 2: 3: 4: 5:

Authorization

Start Permission	Carla Tafoya			Start Date	4/7/22		
Complete Notice				Complete Date	8/4/22		

NOTE:

* Refer to attached Form 2101 - Non-Tenant Activity Form - or Form 2102 - Tenant Activity Form - for a description of site specific training or escort and access requirements.

Work Order 00722930 Task 01

Work Order Task Instructions

PERFORM QUARTERLY PM - Outside Contractor Chaparral

.

52-0011 IS NOT A UI STANDARD INDUSTRIAL BUILDING, A 2101 IS REQUIRED.

.

1424 Disintegrator (paper)

1) Remove Dull Blades, Install sharp blades, sharpen dull blades (if possible), inspect conveyor belt adjust if necessary, grease all zerk.

2) Inspect Dust collector, Clear any clogs from underneath (not to include taking off side panel).

3) Replacement set of disintegrator blades (to keep stock of blades)

4) Remove side panel and inspect filter tubes replace filter tubes if necessary

5) Replacement filter tube set (as needed)

6) Installation of new conveyor belt (if needed)

2436 Disintegrator (Media)

1) Internal and external cleaning of disintegrator, inspection of disintegrator blades, Inspect fluid levels refill as needed, Grease zerks, inspect conveyor belt adjust if necessary.

2) Remove Dull Blades, Install sharp blades, Grease zerks, Inspect conveyor belt adjust if necessary.

3) Inspect filter tubes for tears and cracks replace as necessary, inspect HEPA filter replace as necessary.

4) Replacement disintegrator blades.

5) Replacement HEPA Filter (as needed)

6) Replacement filter tube set (as needed)

7) Installation of new conveyor belt (if needed)

.

CLEAN AREA AND DISPOSE OF DEBRIS

Rework Reason/Cause

		Y/N
CDSG	CUSTOMER DESIGN	☐
IMCW	IMPROPER CONSTRUCTION/WORKMANSHIP	☐
IMDN	IMPROPER DESIGN	☐
PDMS	PARTS/MATERIAL DID NOT MEET SPECIFICATIONS	☐
WR	WARRANTY REWORK/REPAIR	☐

N/A

Date: ☐ Hours: ☐ Crew: ☐ Shift: ☐

Comments: ☐

Work Order 00722930 **Task** 01

Rework/Approval

Deficiency Tag No: Location: Tag Removed:

Rework Job: N Comments:

Trouble Found/Work Performed

Completion Comments Required: N

REPLACED DRILL BLADES

Continue on additional sheets? _____

Calibrated Tools

Calibrated Tool Used? ☐ Y/N

File ID	Date Used	File ID	Date Used

Work Delay Reason

A	ACCESS	☐ Y/N
EQPT	EQUIPMENT	☐ Y/N
ESC	ESCORT AVAILABILITY	☐ Y/N
IWD	IWD WORKABILITY	☐ Y/N
LOTO	LOCK OUT/TAG OUT	☐ Y/N
MAT	MATERIAL	☐ Y/N
OPS	OPERATIONS	☐ Y/N
RCT	RCT AVAILABILTY	☐ Y/N
SP	SAFETY PAUSE	☐ Y/N
TEL	TOOLS/EQUIP/LIFTS	☐ Y/N
W	WEATHER	☐ Y/N

Work Date: Hours: Crew: Shift:

Comments:

Work Order 00722930 **Task** 01

Major Failure/Action Taken

Major Failure:		
Major Action Taken:		
Deficiency Tag Removed:		Y/N
Deficiency Tag Location:		
Deficiency Tag ID:		
Limited Condition of Operation:		Y/N

Work Completion Signatures

Name	Function/Department	Date
		7/21/22

Comments:
(Rework?)

Equipment List Exceptions

Equipment List	Revision	Equipment List Description
520011SP	000	520011SP

Seq	Fac	Unit	Op Sys	Division	Area	System	Class
	F07	520011	BLDG	BLDG		P	ML4
	Equipment:		UNIT	SHD			

Name: HARD DRIVE SHREDDER
Location: 52-0011
Exception Reason:
Comments:
Equipment Tag:

Seq	Fac	Unit	Op Sys	Division	Area	System	Class
	F07	520011	BLDG	BLDG		P	ML4
	Equipment:		UNIT	SHD	FILTER	FAB-001	

Name: HARD DRIVE SHREDDER - FILTER
Location: 52-0011
Exception Reason:
Comments:
Equipment Tag:

Seq	Fac	Unit	Op Sys	Division	Area	System	Class
	F07	520011	BLDG	BLDG		P	ML4
	Equipment:		UNIT	SHD	FILTER	FAH-001	

Name: HARD DRIVE SHREDDER - FILTER, HEPA (1 EA)
Location: 52-0011
Exception Reason:
Comments:
Equipment Tag:

Work Order 00722930 Task 01

Equipment List Exceptions

Equipment List	Revision	Equipment List Description
520011SP	000	520011SP

Seq	Fac	Unit	Op Sys	Division	Area	System	Class
	F07	520011	BLDG	BLDG		P	ML4
	Equipment:		UNIT	SP			

Name: SHREDDER-DOCMENT
Location: 52-0011 = INSIDE
Exception Reason: _____
Comments:
Equipment Tag:

Seq	Fac	Unit	Op Sys	Division	Area	System	Class
	F07	520011	BLDG	BLDG		P	ML4
	Equipment:		UNIT	SPP			

Name: CYCLONE SHAKER (SEPARATOR PARTICULATE) INDOOR/OUTDOOR)
Location: 52-0011
Exception Reason: _____
Comments:
Equipment Tag:

Seq	Fac	Unit	Op Sys	Division	Area	System	Class
	F07	520011	BLDG	BLDG		P	ML4
	Equipment:		UNIT	SPP	FILTER	FAB-001	

Name: PAPER SHREDDER - FILTER, AIR BAG (25 EA)
Location: 52-0011
Exception Reason: _____
Comments:
Equipment Tag:

Accounting

Percentage	Cost Center	Activity	Account No	Sub Account No
100.00	7C011C	640CL000	WL2300	00000000

* * * End of Report * * *

722930-01

Los Alamos NATIONAL LABORATORY

AP-WORK-004: Attachment 1
Maintenance & Site Services
Worker Engagement Questions

Worker engagement questions are intended to focus attention on the task and ensure uncertainties are addressed. Basic worker engagement questions are provided below. Additional worker engagement questions should be tailored to the situation.

Each of the questions listed below will be discussed at each Pre-Job Brief with all affected personnel.

Topic	Completed (X)
What permits, permissions, or support are required to safely start this work?	X
What is the most likely thing that could go wrong (not the worst thing) and what, specifically, will prevent it?	X
What can cause us to go beyond the scope of the work?	X
What hazards in the work area may not have been considered during planning of this job?	X

722930-01

Los Alamos NATIONAL LABORATORY

Form 2103

Integrated Work Document (IWD) Part 3, Validation and Work Release

IWD No: Revision No.:

By signing below, I verify that this activity is appropriate to be conducted in the facility and is within the scope of the facility safety basis; area/facility hazards have been identified and addressed; work meets applicable Laboratory environmental, safety, and security requirements, DOE Orders, and other applicable regulatory requirements; and that the appropriate Subject Matter Expert (SME) reviews have been completed.

FOD or FOD designee (e.g., Operations Manager)

Signature/Z-Number/Date **(If required by FOD)**: _____

By signing below, I have verified the following:

- I have verified authorization by ensuring approval signatures of the RLM and FOD.
- I have jointly conducted a validation walkdown with workers to review tasks and steps for workability and to ensure that the hazards and controls are described correctly and have not changed.
- The assigned workers are authorized and competent to perform the work in a safe, secure, and environmentally responsible manner.
- I have conducted the pre-job briefing, and all workers (including support workers) have been briefed.
- I have ensured coordination with any required FOD work-area representatives (e.g., area work coordinators).

PIC (Signature/Z Number/Date) **Required**: [signature] 198462 7/21/22

Alternate PIC signature **acknowledges** PIC authority is assumed for the first time. *(Note: Alternate PICs are required to sign only once, but formal handoff includes conferring with previous PIC to obtain all required information associated with the handoff and informing workers that they have a new PIC.)*

Alternate PIC (Signature/Z Number/Date) **Required**: _____

Alternate PIC (Signature/Z Number/Date) **Required**: _____

Pre-Job Brief Content

- Prerequisites, where applicable – things that must be staged, in place, or completed before the work starts
- Worker pause/stop work authority and obligation per P101-18, Procedure for Pause/Stop Work
- Scope of work and work activities including IWD/WCDs, procedures, work package documents, and drawings, as applicable
- Hazards and associated controls, including personal protective equipment, and the resolution of any related questions
- Critical steps* including where they are covered in the IWD/WCD and which HPI technique will be used for each critical step
- Permit and plan requirements and limitations (e.g., penetrations, spark flame) and how permit requirements will be met
- Applicable regulatory requirements [e.g., Technical Safety Requirements (TSR), Code of Federal Regulations (CFR)] including how these requirements can be inadvertently violated if the IWD/WCD is not followed
- Roles and responsibilities including person(s) responsible for making critical decisions (e.g., PIC)
- Handoffs and coordination requirements among workers and multiple PICs, if applicable
- Work site conditions including location of phone and emergency equipment (e.g., fire alarms, fire extinguisher, AED) and how to respond to alarms and emergencies
- Hold points and other notifications/signoffs (e.g., inspections, Industrial Hygiene, radiation protection)
- Applicable Lessons Learned (LL), especially from previous performance of the activity
- Any other information needed to perform this activity in a safe, secure, and environmentally responsible manner

Ask: Does everyone agree with the work tasks/steps and controls, and commit to follow them?

*Critical steps are when "a procedure step, series of steps, or action that, if performed improperly, will cause irreversible harm to equipment, people, or the environment" (DOE-HDBK-1028-2009, Volume 1).

IWD No:	Revision No.:

Pre-Job Brief Attendance Roster

By signing below **as required**, I agree to the following:

- I agree to follow the work steps and implement the controls as written, as applicable to my work assignments.
- I agree to pause/stop work when conditions or hazards change or when I encounter unexpected conditions during the execution of work, or when work cannot be performed as written, or instructions become unclear during execution.
- I confirm that I am authorized, qualified, and fit to perform the work.

Worker (Signature/Z Number/Date) [illegible] 199462 7/21/22	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date)
Worker (Signature/Z Number/Date)	**Worker** (Signature/Z Number/Date)

Los Alamos	Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)		
Subcontract # 310447			Company Name:
Revision #: 00			Activity/Task Title: Standing IWD Chaparral PM work (Temporary IWD.)
Work Document #: (WO # / Task)			Subcontractor Planner (Name/Z#/Date) Kirk David Hess/ 193462/ 6-20-19
			LANL Planner/Preparer (Name/Z#/Date) Nicholas Nelson/ 253914/ 6-19-19
TA: 52	Building: 0011	Room:	Additional Location Description:

1. Scope of Work

1.1. **TA-52-0011** Chaperlel Perform PMs on the Disintegrator (Paper shredder only.)

1424 DISINTEGRATOR (PAPER)

1.1.1. **REMOVE** Dull Blades, Install sharp blades, sharpen dull blades (if possible), inspect conveyor belt adjust if necessary, grease all zerk fittings Quarterly.
1.1.2. **INSPECT** Dust collector, Clear any clogs from underneath (not to include taking off side panel) Quarterly.
1.1.3. **REPLACEMENT** set of disintegrator blades (to keep stock of blades0.)
1.1.4. **REMOVE** side panel and inspect filter tubes replace filter tubes if necessary.
1.1.5. **REPLACEMENT** filter tube set (as needed).
1.1.6. **INSTALLATION** of new conveyor belt (if needed).

1.2. **THIS** IWD is temporary and will only be used for paper shredding! **NO MEDIA SHREDDING REPAIRS ALLOWED!**

Hazard Analysis (HA) Team: Nicholas Nelson, Kenny Chavez, Christopher Lockmer, Sunee Sandoval, Renee Pacheco. Date: 1-15-19

2. Precautions and Limitations

2.1. **IF** steps cannot be completed as described, or **IF** unforeseen situations occur, **THEN PAUSE WORK** and

[redacted]

STABILIZE the situation, **CONTACT** your supervisor, and **AWAIT** further instructions before proceeding.

2.1.1. **BARRICADE** the work execution area to keep un-authorized personnel out of the location. All entry personnel must have training and are required to wear the minimum PPE to enter the location.
2.1.2. **CLEAN** up areas using a wet-dry Hepa-Vac or using the wet method and cleaning towels.

Los Alamos	Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)		
Subcontract # 310447			Company Name:
Revision #: 00			Activity/Task Title: Standing IWD Chaparral PM work (Temporary IWD.)
Work Document #: (WO # / Task)			Subcontractor Planner (Name/Z#/Date) Kirk David Hess/ 198462/ 6-20-19
			LANL Planner/Preparer (Name/Z#/Date) Nicholas Nelson/ 253914/ 6-19-19
TA: 52	Building: 0011	Room:	Additional Location Description:

2.2. **Pest droppings**
2.2.1. **Pest Control** to support in cleaning of pest droppings. Avoid contact with any droppings found.

2.3. **Evacuation**
2.3.1. **During** the pre-job establish a muster zone and go over exit paths.

2.4. **Working from heights**
2.4.1. **WEAR** appropriate fall protection if working from a lift.

2.5. **Overhead work**
2.5.1. **BE** aware of overhead work, never work under another worker.

2.6. **Thermal stress**
2.6.1. **THERMAL** stress can be both hot and cold conditions.
2.6.2. **STAY** hydrated drink plenty of water.
2.6.3. **TAKE** breaks as needed to avoid becoming thermally stressed.

2.7. **THIS** IWD is temporary and will only be used for paper shredding! NO MEDIA SHREDDER REPAIRS ALLOWED!

Signatures, Initials and Place keeping blocks at the end of a step signifies the completion of that step or series of steps.

Action Steps from Section 6 on SHALL utilize Place Keeping and be signed/marked upon completion.

3. PREREQUISITES/INITIAL CONDITIONS

3.1. **NOTIFY** the OMC in advance of work execution.

3.2. **NOTIFY** local IH 48hr in advance before executing the PMs.

3.3. **IH** will attend the pre-job briefings and provide air monitoring during work execution.

3.4. **VERIFY** work is on the POD schedule and is not in conflict of other work activities.

3.5. **VERIFY** a daily pre-job is performed for all affected personnel.

Los Alamos NATIONAL LABORATORY	Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)		
Subcontract # 310447			Company Name:
Revision #: 00			Activity/Task Title: Standing IWD Chaparral PM work (Temporary IWD)
Work Document #: (WO # / Task)			Subcontractor Planner (Name/Z#/Date) Kirk David Hess/ 198462/ 6-20-19
			LANL Planner/Preparer (Name/Z#/Date) Nicholas Nelson/ 253914/ 6-19-19
TA: 52	Building: 0011	Room:	Additional Location Description:

3.6. **KNOW** where evacuation muster, shelter-in-place areas are located.

3.7. **IDENTIFY** individuals to Contact

3.7.1. **CONTACT** OMC prior to work beginning. **JOE ROMERO** @ 667-3662 or 699-6852. Contact Joe if a work change notice is needed or if details need clarification.

3.7.2. **CONTACT** IH **CHRIS LOCKMER** @ 412-0871 for any questions related to health or safety.

3.7.3. **CONTACT** Waste Management **SUNEE SANDOVAL** @ 667-2983 or 695-4345 for any questions with waste.

3.8. **VERIFY** that all tools and equipment are on location and in good condition.

3.8.1. **INSPECT** tools, equipment, and material prior to beginning work. Make sure all material is on site and in a safe location.

3.9. **CONDITIONS** are subject to change. Be sure and cover as much as you can during the pre-job.

3.10. **VERIFY** that support equipment (Arial lift) has been requested and available prior to beginning work (if required).

3.11. **AREA** should be placed in an un-cleared state before chaparral can enter location.

4 SPECIAL TRAINING/MEDICAL REQUIREMENTS

4.1. **CHAPARRAL TRAINING**

4.1.1. **REFERENCE LANL AP-MSS-004.2 SUBCONTRACTOR TRAINING MATRIX**

Los Alamos	Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)		
Subcontract # 310447			Company Name:
Revision #: 00			Activity/Task Title: Standing IWD Chaparral PM work (Temporary IWD.)
Work Document #: (WO # / Task)			Subcontractor Planner (Name/Z#/Date) Kirk David Hess/ 198462/ 6-20-19
			LANL Planner/Preparer (Name/Z#/Date) Nicholas Nelson/ 253914/ 6-19-19
TA: 52	Building: 0011	Room:	Additional Location Description:

5 SPECIAL TOOLS/EQUIPMENT

5.1. SPECIAL TOOLS

5.1.1. SCAFFOLD

5.1.2. HEPA-VAC

5.1.3. PERSONAL AIR MONITORING EQUIPMENT.

5.2. EQUIPMENT

5.2.1. STANDARD PPE TO BE USED WHEN WORKING OUTSIDE THE BUILDING.

5.2.1.1. Standard PPE per contract + Dust masks N-95. and (fall protection when working from lift.)

5.2.2. PPE TO BE WORN INSIDE THE BUILDING.

5.2.2.1. Standard PPE per contract + Dust masks N-95 and (Tyvek is optional.)

WORK INSTRUCTIONS

5.3. CHAPARRAL

5.3.1. CONTACT and verify OMC has sent notifications to affected personnel. ☐

HOLD POINT

Contact is CHRIS LOCKMER @ [redacted] to confirm notifications and verify that notified are prepared for begining work.

Initial/Signature _____ Z# _____ Date _____

5.3.2. LO/TO equipment to be worked on.

5.3.3. VERIFY the absence of hazardous energy.

5.3.4. PERFORM PM and Maintenance as per the contract and according to the temporary limitations set forth in this IWD.

5.3.5. PERFORM Minor repairs to paper shredder as needed following the Contract. If repairs are major note the deficiency's on the PM, and notify the STR & OMC, a new corrective WO may be needed.

5.3.6. THOROUGHLY clean the work execution area of all dust using a HEPA-Vac.

Los Alamos	Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)		
Subcontract # 318447			**Company Name:**
Revision #: 00			**Activity/Task Title:** Standing IWD Chaparral PM work (Temporary IWD)
Work Document #: (WO # / Task)			**Subcontractor Planner (Name/Z#/Date)** Kirk David Hess/ 198462/ 6-20-19
			LANL Planner/Preparer (Name/Z#/Date) Nicholas Nelson/ 253914/ 6-19-19
TA: 52	**Building:** 0011	**Room:**	**Additional Location Description:**

5.3.7. **REMOVE** LO/TO from equipment and place the equipment into operational state.

6. POST WORK ACTIVITIES

6.1. **CONTACT** Local IH to collect monitoring equipment. ☐

7. CLOSEOUT

7.1. **TAKE** the package to the **OMC.** Inform them of work completion and get close out signatures. ☐

7.2. **RETURN** the package to **WORK CONTROL** for final close out. ☐

Los Alamos

Facilities Maintenance IWD – (Facility Maintenance Activity Specific Information)

Subcontract # 318447			Company Name:
Revision #: 60			Activity/Task Title: Standing IWD Chaparral PM work (Temporary IWD.)
Work Document #: (WO # / Task)			Subcontractor Planner (Name/ZI#/Date) Kirk David Hess/ 198462/ 6-20-19
			LANL Planner/Preparer (Name/ZI#/Date) Nicholas Nelson/ 253914/ 6-19-19
TA: 52	Building: 0011	Room:	Additional Location Description:

Insert Rows above for additional Tasks/Steps or attach pages to clearly communicate ES&H/Q/S&S hazards and associated controls

IWD Type

- ☒ Moderate-Hazard
- ☐ High-Hazard /Complex
- ☐ Standing IWD

The Subcontractor line manager approves work based upon confidence that this IWD has been jointly prepared with the Contractor, the IWD clearly defines Subcontractor provided work tasks/steps linked to hazards and controls associated with the work to be performed, that the work will be performed within ES&H/S&S requirements and will be performed in accordance with this IWD.

Signature: _____ ZI# 198462

Date: 7/17/2019

Subcontractor PIC Signature: _____ ZI# 198462

Document Preparer Signature: Nicholas Nelson ZI# 253914

STR or Designee Signature: _____ ZI# 100459

LANL ES&H Rep Signature: _____ ZI# 329907

FOD Rep Signature: _____ ZI# 210153

LANL ESO Signature (if required): NA ZI# _____

Reviewed by SUBCONTRACTOR ES&H Representative

Signature: _____

ZI# 198462 Date: 7/17/2019

Los Alamos NATIONAL LABORATORY EST. 1943

AP-WORK-002: Attachment 11
Maintenance and Site Services
Work Completion Form

Work Order/Task: 722930-01

Start Date:	Completion Date:

SUMMARIZE THE WORK PERFORMED

Summarize the Work Performed/Materials Used:

Date	
7/21/22	REPLACED DULL BLADES

FOR CORRECTIVE WORK – WHAT FAILED AND WHAT WAS FIXED

	Failure Mode Root Cause Code (Circle Root Causes that Apply)	
Failure Mode	Circuit Breaker Tasks Digital Component Tasks Doors/Hatches Electrical Determinations Failed Surveillance Fastener Tasks FME Tasks I&C Calibration/Setpoints Mechanical Connections	System Restoration Issues Pump Related Tasks Procedure Use Rigging/Lifting Tasks Electrical Switches Troubleshooting Issues Valve Related Tasks Welding Work Instruction Issues
	Other (Specify Root Cause)	
Failure Mode Comments	(Add Details)	
	Rework Mode (Circle Rework Causes that Apply)	
Rework	Cause Indeterminate Design Deficiency Intentionally Abbreviated Maintenance Instructional Deficiency Knowledge Based Human Performance Error Deficiency Operational Deficiency	Life Cycle Management PM Deficiency Rule Base Human Performance Deficiency Skill Base Human Performance Deficiency Tools/Equipment/Lifts Vendor Deficiency Work Management Deficiency Weather
	Other (Specify Rework Mode)	
Comments		

N/A

N/A

FOR PMs – SUMMARIZE AS FOUND AND AS LEFT CONDITIONS BELOW		
	As Found Conditions (Circle Conditions that Apply)	
As found	Unanticipated Failure Failure Not Normal Wear Failure Normal Wear Outside of Tolerance Reliability Degraded	Within Tolerance Satisfactory Superior, Like New Not Applicable
	Other (Specify As Found Condition)	
Comments		
As left		
Parts/Repairs		
Read/meas.		
Post test info.		
Problems Encountered (delays, safety, etc.):		
	Delay Codes (Circle Codes that Apply)	
Delay	Access Equipment IWD Workability Material	Operations RCT Availability Safety Pause Weather # of Hours 1 Date(s) 7/21/22
*	Other (Specify Reason for Delay) LOTO TAG + LOCK	
Comments	THERE WAS NOONE AVAILABLE TO ISSUE	
Lessons Learned/Recommendations:	THE LOTO LOCK + TAG IT TOOK 1 HOUR FOR SOMEONE TO BECOME AVAILABLE	
Name: KIRK HESS	**Z#** 199462	**Signature:** [signature] **Date:** 7/21/22

PIC/SUPT

☒ PM has been completed in its entirety and ready for closure.

IF A PM COULD NOT BE COMPLETED:

☐ Percentage complete is _____%

☐ Sections that did not work and need to be rescheduled

_____

Reasons why:

MAINTENANCE COORDINATOR/AREA WORK COORDINATOR

Work Package is Complete and may be closed out: YES ☑ NO ☐

IF no: State Reason

GP 8/4/22

Additional Work Needed? ☐ YES ☑ NO

Document UP/WO/FSR Number:_____

ENGINEERING (FOR MD and CD Work Orders)

IF a configuration baseline has been changed, THEN indicate the changes are to be incorporated into the following documents and/or configuration baseline:

☐ Drawings ☐ FDD/SDD

☐ Procedures ☐ Master Equipment List

☐ Permits ☐ Checklists

SE Name: Signature: Date:

WORK CONTROL

Moderate/High Hazard – WMC/Planner reviewed for Lessons Learned/Feedback

☐ YES ☐ NO N/A ☐

☐ Review of the completed work package is complete per AP-WORK-005, and the work package is ready to be set to complete in CMMS.

Name: **Z#** **Signature:** **Date:**

Work Order/Task: _____

Start Date:	Completion Date:
ADITIONAL DETAILS ON WORK PERFORMED Summarize the Work Performed/Materials Used:	
Date	(Add details on As Found, Failure Mode, and Lessons Learned etc.)

Form 2101

Los Alamos NATIONAL LABORATORY

Integrated Work Document (IWD) Part 2
FOD Requirements and Approval for Entry and Area Hazards and Controls

Non-Tenant

IWD No./Work Request No: _____ Revision No.: _____

The Facility Operations Director (FOD) or designee must determine the facility entry and coordination requirements and identify the area environment, safety, health (ESH)/security and safeguards (S&S) hazards and controls associated with the specific activity location.

FOD	TA	Bldg.	Room	Other Location
07	52	0011	ALL	N/A
FOD Designated Facility Point-of-Contact	Name Richard Brandner	Phone 505-655-9724	Pager 505-667-7194	Email rbrandner@lanl.gov

General Requirement/Guidance:

- Workers in areas that have building or facility-specific training (FST) shall take the FST unless they are escorted by someone who is current in the training.
- Any abnormal event or condition, whether within or beyond the bounds of the assigned work area, must be reported to supervisors or first-line managers and the FOD.

Entry and Coordination Requirements (*check one or more of the following*):

- ☐ No entry/coordination requirements
- ☐ Schedule work with the FOD
- ☒ Attend Plan of the Day/Plan of the Week (POTD/POTW)
- ☐ Security clearance or escort required
- ☐ Other security requirements (e.g., no cellphone or foreign nationals)
- ☐ Review work under Authorization Basis / Safety Basis / Unreviewed Safety Question (USQ)
- ☐ FOD-designated facility point-of-contact must sign IWD Part 3
- ☐ Facility-specific or other work area training required
- ☒ Check in daily
- ☒ Check out daily
- ☐ Quality issues
- ☐ Non-security escort required
- ☐ Other bounding conditions: _____

Additional Comments:

Instructions: In the block below, identify work area hazards that could potentially affect the worker(s) or others. Avoid using the same Part 2, Form 2101 for multiple facilities. Ensure that work area hazards specific to the facility or work location are identified and controlled. Specify the facility controls and preventive measures that must be implemented by the worker(s) to protect against the work area hazards, including any unique or special training required because of work area conditions/hazards.

ESH/S&S WORK AREA HAZARDS AND CONTROLS

Work Area Hazards/Concerns Identify site hazards and concerns that could potentially affect the worker(s) or others.	**Work Area Hazard Present**	**Facility Controls/ Preventive Measures/ Bounding Conditions** Specify preventive measures, controls, and bounding conditions for each site hazard	**Reference Documents** List permits, operating manuals, and other procedures (if required in the field)	**Training and Qualification** (*special or unique to the area*)
☐ **No work area hazards**				
Ionizing Radiation Work in posted radiological areas, work with radioactive materials, or work on or near radiation producing devices. **Specify Hazard:**	☐ Yes ☒ No			

722930-01

IWD No./Work Request No.: _____ Revision No.: _____

ESH/S&S WORK AREA HAZARDS AND CONTROLS

Work Area Hazards/Concerns Identify site hazards and concerns that could potentially affect the worker(s) or others.	**Work Area Hazard Present**	**Facility Controls/ Preventive Measures/ Bounding Conditions** Specify preventive measures, controls, and bounding conditions for each site hazard	**Reference Documents** List permits, operating manuals, and other reference procedures	**Training and Qualification** List training requirements
Worker Exposure Working near non-ionizing radiation, beryllium, noise, chemicals, biological hazards, lead, asbestos, temperature/humidity extremes, nanoparticles, cryogens, or high explosives. **Specify Hazards:**	☐ Yes ☒ No			
Energized and Operative Systems Working near energized electrical parts, pressure systems, steam lines; unprotected belts, pulleys, chains, rotating equipment; fuel-fired equipment (other than vehicles); or spark/flame-producing operations. **Specify Hazards:**	☐ Yes ☒ No			
Confined Spaces Entry into tanks, manholes, cooling towers, sumps, or any other area with potentially low oxygen concentration or other hazards such as toxic vapors or engulfment. **Specify Hazards:**	☐ Yes ☒ No			
Elevated Work Surface Unprotected elevated work (e.g., conventional guardrails are not provided) requiring fall protection per P101-20, *Fall Protection Program*, or a surface not designed to support worker(s) and equipment.	☐ Yes ☒ No			
Environmental Activities conducted in areas containing potential release sites, contaminated soil, sensitive species, watercourse, wetlands, floodplains, historical/archeological sites, or other work area element that can impact, or be impacted by, the environment. **Specify Hazards:**	☐ Yes ☒ No			
Security Requirements **Specify: Contact Group for Coordination for Access**	☐ Yes ☒ No			
Other Hazards **Specify:** Bugs, Bites, Snakes, Rodents	☐ Yes ☒ No			

I have verified that the items indicated above adequately identify existing and potential area hazards associated with the work location and communicate facility-required controls that will enable safe, secure, and environmentally compliant work execution.

FOD or Representative (Signature/Z Number/Date) **Approval Required** Richard Brandner 329466

Digitally signed by Richard Brandner 329466
Date: 2021.09.23 06:36:15 -06'00'

Expires 12/31/22

Asset Suite / TIMM611 - WORK ORDER/TASK COST SUMMARY

Select to view audit detail. 'Recalculate' to recalculate percent complete.

Apply | Apply & Go Back | Apply & Clear | Go Back

Buttons

W/O No. 00722930 Task
W/O Status AWAITC W/O Type PM
Desc 520011 3M DOCUMENT SHREDDER/ HARD DRIVE PM - CHAPARRAL
%Complete

Recalculate

Loaded Cost

Export

Previous Next

Component	Est Hrs	Est Cost	Act Hrs	Act Cost
Comp Lbr	12.00	$ 744.00		
Cont Lbr				
In Svcs				
Out Svcs				
Stocked				
Direct				
Equip/Veh				
Misc				
Sub Total		$ 744.00		
Salvage				
Total		$ 744.00		

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PROD_UI

ATTACHMENT A1306.A.

TA-03 Power Plant

Opacity for Sources Combusting Natural Gas

No opacity readings were taken for this source while combusting natural gas during this reporting period. Per Section A1306.A – "Use of natural gas fuel meeting the requirement at Condition A1305.A or B constitutes compliance with 20.2.61 NMAC….."

ATTACHMENT A1306.B.

TA-03 Power Plant

Opacity for Sources Combusting No. 2 Fuel Oil

No fuel oil was burned in the TA-3 Power Plant boilers during this reporting period, therefore no opacity readings were taken.

ATTACHMENT A1307.A.

TA-03 Power Plant

Emission Rate Calculations

Monthly Emission Totals 2022 (tons)

Month		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals
All Three Boilers	NOx	1.340	1.297	1.261	0.766	0.477	0.343	0.204	0.069	0.386	0.764	1.225	1.376	**9.51**
	SOx	0.014	0.013	0.013	0.009	0.006	0.004	0.002	0.001	0.004	0.008	0.013	0.014	**0.10**
	TSP	0.176	0.170	0.165	0.101	0.063	0.045	0.027	0.009	0.051	0.100	0.161	0.180	**1.25**
	PM-10	0.176	0.170	0.165	0.101	0.063	0.045	0.027	0.009	0.051	0.100	0.161	0.180	**1.25**
	PM-2.5	0.176	0.170	0.165	0.100	0.062	0.045	0.027	0.009	0.051	0.100	0.161	0.180	**1.25**
	CO	0.924	0.895	0.870	0.528	0.329	0.236	0.141	0.048	0.266	0.527	0.845	0.949	**6.56**
	VOC	0.127	0.123	0.120	0.072	0.045	0.033	0.019	0.007	0.037	0.072	0.116	0.130	**0.90**

12 Month Rolling Emissions 2022 (tons)

Month		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
All Three Boilers	NOx	8.567	9.008	9.104	8.992	8.990	9.013	8.965	8.702	8.926	9.043	9.288	9.508
	SOx	0.108	0.102	0.097	0.095	0.095	0.096	0.095	0.092	0.095	0.096	0.098	0.101
	TSP	1.128	1.183	1.194	1.179	1.179	1.182	1.175	1.141	1.170	1.186	1.218	1.247
	PM-10	1.126	1.182	1.193	1.178	1.178	1.181	1.175	1.141	1.170	1.185	1.217	1.246
	PM-2.5	1.124	1.181	1.193	1.178	1.178	1.181	1.175	1.140	1.170	1.185	1.217	1.246
	CO	5.906	6.211	6.278	6.201	6.200	6.216	6.183	6.001	6.156	6.236	6.405	6.557
	VOC	0.811	0.853	0.863	0.853	0.852	0.855	0.850	0.825	0.846	0.857	0.881	0.901

(a) Meets permit condition A1307.A, Monitoring Condition 2 of Title V Permit P100-R2M4.

Average Hourly Emissions Calculation (Natural Gas) 2022

Month		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Allowable Emissions[(b)]
Boiler 1 TA-3-22-1 (pph)	NOx	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**10.2**
	SOx	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**1.1**
	PM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**1.3**
	PM-10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**1.3**
	PM-2.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**1.3**
	CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**7.0**
	VOC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**1.0**
Boiler 2 TA-3-22-2 (pph)	NOx	1.32	1.34	1.31	2.29	1.23	0.96	0.94	2.03	1.07	1.70	2.48	2.70	**10.2**
	SOx	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.02	0.01	0.02	0.03	0.03	**1.1**
	PM	0.17	0.18	0.17	0.30	0.16	0.13	0.12	0.27	0.14	0.22	0.32	0.35	**1.3**
	PM-10	0.17	0.18	0.17	0.30	0.16	0.13	0.12	0.27	0.14	0.22	0.32	0.35	**1.3**
	PM-2.5	0.17	0.18	0.17	0.30	0.16	0.13	0.12	0.27	0.14	0.22	0.32	0.35	**1.3**
	CO	0.91	0.93	0.90	1.58	0.85	0.66	0.65	1.40	0.74	1.17	1.71	1.87	**7.0**
	VOC	0.13	0.13	0.12	0.22	0.12	0.09	0.09	0.19	0.10	0.16	0.23	0.26	**1.0**
Boiler 3 TA-3-22-3 (pph)	NOx	3.41	3.61	3.10	1.76	1.46	0.00	0.00	1.14	0.99	2.56	2.42	1.79	**10.2**
	SOx	0.04	0.04	0.03	0.02	0.02	0.00	0.00	0.01	0.01	0.03	0.03	0.02	**1.1**
	PM	0.45	0.47	0.41	0.23	0.19	0.00	0.00	0.15	0.13	0.34	0.32	0.23	**1.3**
	PM-10	0.45	0.47	0.41	0.23	0.19	0.00	0.00	0.15	0.13	0.34	0.32	0.23	**1.3**
	PM-2.5	0.45	0.47	0.41	0.23	0.19	0.00	0.00	0.15	0.13	0.34	0.32	0.23	**1.3**
	CO	2.35	2.49	2.14	1.21	1.01	0.00	0.00	0.79	0.68	1.77	1.67	1.23	**7.0**
	VOC	0.32	0.34	0.29	0.17	0.14	0.00	0.00	0.11	0.09	0.24	0.23	0.17	**1.0**

(a) Meets condition A1307.A, monitoring condition 1, of Title V Permit P100-R2M4

(b) Allowable Emissions are from table A1302A of Permit P100-R2M4.

(c) Condition A1307.A, monitoring condition 3, can't be calculated because the units are based on the emission factor. The emission rates are based on the emission factor for NOx (lb/MMscf), which is 58 lb/MMscf, this emission factor is an average of source tests conducted on all 3 boilers in September 2002 burning natural gas after flue gas recirculation (FGR) installed. This factor is converted to lbs/MMBtu by dividing by the high heat value of natural gas (the number of Btu in a scf). As the HHV of natural gas ranges in value, the following emission range was calculated using the low and high values at LANL between 2011 and 2022, the lowest was 939.97 Btu/scf and the highest was 1079.3 Btu/scf, therefore the NOx emission rate will range from 0.0537 to 0.0617 lbs/MMBtu. These NOx emission rates are well below the 0.3 lb/MMBtu heat input limit in A1302.B.

Average Hourly Emissions Calculation (Fuel Oil) 2022

Month		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Allowable Emissions[(b)]
Boiler 1 TA-3-22-1 (pph)	NOx	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**11.3**
	SOx	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**9.6**
	PM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**4.3**
	PM-10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**3.0**
	PM-2.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**2.0**
	CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**6.5**
	VOC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.3**
Boiler 2 TA-3-22-2 (pph)	NOx	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**11.3**
	SOx	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**9.6**
	PM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**4.3**
	PM-10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**3.0**
	PM-2.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**2.0**
	CO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**6.5**
	VOC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.3**
Boiler 3 TA-3-22-3 (pph)	NOx	0.00	0.00	0.00	10.23	10.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**11.3**
	SOx	0.00	0.00	0.00	8.74	8.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**9.6**
	PM	0.00	0.00	0.00	3.91	3.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**4.3**
	PM-10	0.00	0.00	0.00	2.72	2.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**3.0**
	PM-2.5	0.00	0.00	0.00	1.84	1.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**2.0**
	CO	0.00	0.00	0.00	5.92	5.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**6.5**
	VOC	0.00	0.00	0.00	0.24	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.3**

(a) Each boilers uses 1303 gallons per hour at 110% or 178 MMbtu input (provided by Paul Parker on 9-12-12). Hour calculation uses 1184 gph as 100%.

(b) Allowable Emissions are from table A1302A of Permit P100-R2M4.

(c) Meets condition A1307.A, monitoring condition 1, of Title V Permit P100-R2M4

Monthly Average Hourly Emissions Rate 2022 (pph)
Unit TA-3-22-CT-1
(Required by Condition A1307.A of Title V Permit P100-R2M4)

Month		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Allowable Emissions
TA-3 Combustion Turbine	NOx	3.15	11.25	8.90	0.00	11.57	0.00	0.00	4.19	11.58	11.63	11.62	11.52	**23.8**
	SOx	0.22	0.78	0.62	0.00	0.80	0.00	0.00	0.29	0.80	0.81	0.81	0.80	**1.7**
	TSP	0.42	1.51	1.20	0.00	1.56	0.00	0.00	0.56	1.56	1.57	1.56	1.55	**1.9**
	PM-10	0.42	1.51	1.20	0.00	1.56	0.00	0.00	0.56	1.56	1.57	1.56	1.55	**1.9**
	PM-2.5	0.42	1.51	1.20	0.00	1.56	0.00	0.00	0.56	1.56	1.57	1.56	1.55	**1.9**
	CO	0.65	2.34	1.85	0.00	2.41	0.00	0.00	0.87	2.41	2.42	2.42	2.39	**29**
	VOC	0.14	0.49	0.39	0.00	0.50	0.00	0.00	0.18	0.50	0.51	0.51	0.50	**0.6**

(a) Meets permit condition A1307.A, Monitoring Condition 2 of Title V Permit P100-R2M4.

12-Month Rolling Emission Rate (tpy)

Month		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Allowable Emissions
TA-3 Combustion Turbine	NOx	20.113	20.433	19.161	18.816	22.082	21.994	18.538	15.240	15.553	16.644	16.581	16.873	**59.4**
	SOx	1.394	1.416	1.328	1.304	1.530	1.524	1.285	1.056	1.078	1.154	1.149	1.169	**4.2**
	TSP	2.708	2.751	2.580	2.534	2.973	2.962	2.496	2.052	2.094	2.241	2.233	2.272	**4.8**
	PM-10	2.708	2.751	2.580	2.534	2.973	2.962	2.496	2.052	2.094	2.241	2.233	2.272	**4.8**
	PM-2.5	2.708	2.751	2.580	2.534	2.973	2.962	2.496	2.052	2.094	2.241	2.233	2.272	**4.8**
	CO	4.182	4.248	3.984	3.912	4.591	4.573	3.854	3.169	3.234	3.461	3.448	3.508	**72.3**
	VOC	0.876	0.890	0.835	0.820	0.962	0.958	0.808	0.664	0.678	0.725	0.722	0.735	**1.5**

(a) Calculation uses rolling fuel use numbers.

ATTACHMENT A1307.B.

TA-03 Power Plant

Boiler Fuel Use and Hours of Operation

2022 TA-3 Power Plant Fuel Use Totals

Month	TA-3-22-1 Power Plant[b] Boiler # 1 (Edgemoor Iron Works, 210 mmBtu/hr)		TA-3-22-2 Power Plant[b] Boiler # 2 (Edgemoor Iron Works, 210 mmBtu/hr)		TA-3-22-3 Power Plant[b] Boiler # 3 (Union Iron Works, 210 mmBtu/hr)		Monthly Totals All Boilers	
	Natural Gas (mscf)[a]	Fuel Oil (gallons)[a]	Natural Gas (mscf)[a]	Fuel Oil (gallons)[a]	Natural Gas (mscf)[a]	Fuel Oil (gallons)[a]	Natural Gas (mmscf)[a]	Fuel Oil (gallons)[a]
January	0	0	2,544	0	43,678	0	46.22	0
February	0	0	3,203	0	41,537	0	44.74	0
March	0	0	2,493	0	41,002	0	43.49	0
April	0	0	22,055	0	4,286	407	26.34	407
May	0	0	12,538	0	3,862	223	16.40	223
June	0	0	11,822	0	0	0	11.82	0
July	0	0	7,032	0	0	0	7.03	0
August	0	0	213	0	2,165	0	2.38	0
September	0	0	13,070	0	243	0	13.31	0
October	0	0	15,477	0	10,857	0	26.33	0
November	0	0	20,999	0	21,257	0	42.26	0
December	0	0	30,180	0	17,267	0	47.45	0
Jan. - June	0	0	54,654	0	134,364	630	189	630
July - Dec.	0	0	86,971	0	51,789	0	139	0
Annual Totals:	0	0	141,625	0	186,153	630	328	630

TA-3 Power Plant Hours of Operation

Month	Hours Natural Gas			Hours Fuel Oil			12-Month Rolling Total Hours All Boilers
	Boiler 1	Boiler 2	Boiler 3	Boiler 1	Boiler 2	Boiler 3	
January	0.0	111.4	742.6	0.0	0.0	0.0	8020.8
February	0.0	138.4	667.7	0.0	0.0	0.0	8159.1
March	0.0	110.2	768.0	0.0	0.0	0.0	8289.0
April	0.0	557.7	141.4	0.0	0.0	0.3	8206.4
May	0.0	591.1	153.2	0.0	0.0	0.2	8254.9
June	0.0	715.1	0.1	0.0	0.0	0.0	8303.1
July	0.0	435.0	0.4	0.0	0.0	0.0	8151.4
August	0.0	6.1	110.3	0.0	0.0	0.0	7665.3
September	0.0	705.3	14.3	0.0	0.0	0.0	8114.0
October	0.0	527.2	245.9	0.0	0.0	0.0	8224.4
November	0.0	491.5	508.7	0.0	0.0	0.0	8504.7
December	0.0	647.2	559.8	0.0	0.0	0.0	8949.1

Data Reviewed By: Vince Carretti 1/13/2023

12 Month Rolling Fuel Totals For Each TA-3 Power Plant Boiler - 2022

Month	Boiler 1		Boiler 2		Boiler 3		All Boilers	
	Natural Gas (mmscf)	Fuel Oil (gal.)	Natural Gas (mmscf)	Fuel Oil (gal.)	Natural Gas (mmscf)	Fuel Oil (gal.)	Natural Gas (mmscf)	Fuel Oil (gal.)
January	0.00	0	41.56	0	253.08	5,304	294.63	5,304
February	0.00	0	39.35	0	270.91	2,489	310.26	2,489
March	0.00	0	40.98	0	272.82	855	313.80	855
April	0.00	0	60.88	0	249.11	407	309.99	407
May	0.00	0	73.42	0	236.49	630	309.90	630
June	0.00	0	85.24	0	225.47	630	310.71	630
July	0.00	0	91.38	0	217.68	630	309.06	630
August	0.00	0	80.12	0	219.85	630	299.97	630
September	0.00	0	87.61	0	220.09	630	307.70	630
October	0.00	0	91.22	0	220.52	630	311.74	630
November	0.00	0	112.21	0	207.96	630	320.17	630
December	0.00	0	141.63	0	186.15	630	327.78	630
						Permit Limits:	1000 MMscf	500,000 gal

ATTACHMENT A1307.C.

TA-03 Power Plant

Turbine Fuel Use and Hours of Operation

2022 Daily Turbine Gas Use (Mscf), 12 Month Rolling Total Gas Use, & Hours of Operation

Day	Jan		Feb		Mar		Apr		May		Jun		July		Aug		Sept		Oct		Nov		Dec	
	Gas Use	Hrs	Gas Use	Hrs	Gas Use	Hrs	Gas Use	Hrs	Gas Use	Hrs	Gas Use	Hrs	Gas Use	Hrs	Gas Use	Hrs	Gas Use	Hrs	Gas Use	Hrs	Gas Use	Hrs	Gas Use	Hrs
1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1390.4	6.8	5529.6	24.0	5529.44	24.0	5529.6	24.0
2	0	0.0	4637.1	21.0	0	0.0	0	0.0	2665.6	12.0	0	0.0	0	0.0	0	0.0	2302.35	10.7	5529.4	24.0	5529.56	24.0	5529.5	24.0
3	0	0.0	5529.5	24.0	0	0.0	0	0.0	5529.4	24.0	0	0.0	0	0.0	0	0.0	5029.71	24.0	5529.6	24.0	3688.44	16.0	5529.6	24.0
4	0	0.0	2531.2	12.0	0	0.0	0	0.0	5531	24.0	0	0.0	0	0.0	0	0.0	2894.91	10.4	5529.5	24.0	0	0.0	5529.5	24.0
5	70	1.0	0	0.0	0	0.0	0	0.0	5529.5	24.0	0	0.0	0	0.0	0	0.0	0	0.0	5529.6	24.0	955	4.4	5529.5	24.0
6	68	1.0	0	0.0	0	0.0	0	0.0	5526.6	24.0	0	0.0	0	0.0	0	0.0	3087.5	13.7	5529.4	24.0	0	0.0	5529.5	24.0
7	0	0	0	0.0	0	0.0	0	0.0	5522.8	24.0	0	0.0	0	0.0	0	0.0	2498.41	10.9	5529.4	24.0	2419.69	11.0	5529.4	24.0
8	2.2	0.3	0	0.0	0	0.0	0	0.0	5528.3	24.0	0	0.0	0	0.0	0	0.0	3671	16.7	5529.6	24.0	5540	24.0	5529.5	24.0
9	0	0.0	0	0.0	0	0.0	0	0.0	5529.5	24.0	0	0.0	0	0.0	0	0.0	5529.53	24.0	5529.4	24.0	5529.5	24.0	5529.6	24.0
10	0	0.0	0	0.0	0	0.0	0	0.0	5529.5	24.0	0	0.0	0	0.0	0	0.0	5529.59	24.0	5529.6	24.0	5529.5	24.0	5529.6	24.0
11	0	0.0	0	0.0	0	0.0	0	0.0	5529.5	24.0	0	0.0	0	0.0	0	0.0	5529.44	24.0	5529.6	24.0	5529.5	24.0	1497.4	6.5
12	0	0.0	0	0.0	0	0.0	0	0.0	5529.5	24.0	0	0.0	0	0.0	0	0.0	5529.53	24.0	5529.5	24.0	5529.5	24.0	0	0.0
13	0	0.0	0	0.0	0	0.0	0	0.0	5529.5	24.0	0	0.0	0	0.0	0	0.0	5528.07	24.0	5529.4	24.0	5529.56	24.0	0	0.0
14	0	0.0	0	0.0	0	0.0	0	0.0	5528.6	24.0	0	0.0	0	0.0	0	0.0	5529.53	24.0	5529.6	24.0	5529.5	24.0	0	0.3
15	0	0.0	0	0.0	0	0.0	0	0.0	2358.8	10.8	0	0.0	0	0.0	0	0.0	5449.56	24.0	5529.6	24.0	5529.62	24.0	0	1.4
16	0	0.0	0	0.0	0	0.0	0	0.0	34.25	0.6	0	0.0	0	0.0	0	0.0	5529.47	24.0	5529.5	24.0	4883.44	21.5	3243.7	15.1
17	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	5529.56	24.0	5529.6	24.0	5529.56	24.0	1520	6.6
18	0	0.0	0	0.0	0	0.0	0	0.0	1421.5	6.7	0	0.0	0	0.0	0	0.0	5529.5	24.0	5529.4	24.0	5529.44	24.0	0	0.0
19	0	0.0	0	0.0	0	0.0	0	0.0	5518.1	24.0	0	0.0	0	0.0	0	0.0	5529.44	24.0	5534.6	24.0	5529.56	24.0	0.06	0.0
20	0	0.0	0	0.0	0	0.0	0	0.0	5529.5	24.0	0	0.0	0	0.0	0	0.0	5529.62	24.0	5529.5	24.0	5529.57	24.0	3466.1	15.3
21	0	0.0	0	0.0	529	3.0	0	0.0	5529.5	24.0	0	0.0	0	0.0	0	0.0	5529.57	24.0	5529.6	24.0	5529.25	24.0	1850.6	8.0
22	0	0.0	0	0.0	0	0.0	0	0.0	5529.5	24.0	0	0.0	0	0.0	0	0.0	5529.43	24.0	5529.6	24.0	5529.43	24.0	0	0.0
23	0	0.0	0	0.0	0	0.0	0	0.0	5529.5	24.0	0	0.0	0	0.0	0	0.0	5530.82	24.0	5529.4	24.0	5529.63	24.0	0	0.0
24	0	0.0	0	0.0	0	0.0	0	0.0	5529.5	24.0	0	0.0	0	0.0	0	0.0	5529.5	24.0	5529.6	24.0	5529.37	24.0	0	0.0
25	0	0.0	0	0.0	0	0.0	0	0.0	5529.5	24.0	0	0.0	0	0.0	0	0.0	5529.62	24.0	5529.5	24.0	5529.57	24.0	0	0.0
26	0	0.0	0	0.0	0	0.0	0	0.0	5512	24.0	0	0.0	0	0.0	0	0.0	5529.5	24.0	5529.6	24.0	5529.56	24.0	0	0.0
27	0	0.0	0	0.0	0	0.0	0	0.0	5489.4	24.0	0	0.0	0	0.0	0	0.0	5529.5	24.0	5529.6	24.0	5529.5	24.0	0	0.0
28	0	0.0	0	0.0	0	0.0	0	0.0	5521.6	24.0	0	0.0	0	0.0	35.8	0.0	5529.56	24.0	5529.6	24.0	5529.56	24.0	0	0.0
29	0	0.0			0	0.0	0	0.0	1303.6	6.5	0	0.0	0	0.0	0	0.0	5529.44	24.0	5529.6	24.0	5529.44	24.0	0	0.0
30	0	0.0			0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	126	1.5	5529.5	24.0	5529.4	24.0	5529.56	24.0	0	0.0
31	0	0.0			0	0.0			0	0.0			0	0.0	496.8	6.5			4984.9	22.0			0	0.0
Sum	140.2	2.25	12698	57	529	3	0	0	129346	564	0	0	0	0	658.6	7.93	142443.6	621	170876	742	144665	629	66873	293
Mscf	796,544		809,230		758,852		745,176		874,522		871,031		734,174		603,547		615,968		659,166		656,679		668,229	
MMscf	**796.5**		**809.2**		**758.9**		**745.2**		**874.5**		**871.0**		**734.2**		**603.5**		**616.0**		**659.2**		**656.7**		**668.2**	
Hours	3,576		3,633		3,423		3,368		3,932		3,915		3,278		2,668		2,683		2,873		2,865		2,920	

First Half Gas Use:	**143 MMscf**	**2022 High Heat Value (HHV) for natural gas[k] =**	**0.0010585 MMBtu/scf**
Second Half Gas Use:	**526 MMscf**	**Total Annual Hours:**	**2919.92 Hours**
Annual Gas Use:	**668 MMscf**	**Percent of Year Run:**	**33%**
Permit Limit (12 mo rolling):	**1400 MMscf**		

Reviewed by/date: Vince Carretti 1/09/2023

ATTACHMENT A1307.D.

TA-03 Power Plant

Turbine Operating Logs

Utilities and Institutional Facilities

Date: 8.30.22

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling): 1549

Time of Turbine Online (Brkr Closed): 1613

Time Turbine Offline (Brkr Open): 1659

Time No Gas Flow: 1659

Notes: NEW ENGINE INSTALLED SIEMENS ES TESTING FOR OPERATIONAL & LATER DATE

CGTG HOURLY READING LOG

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√																											
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√																											
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120																								
4	Instrument Temperature	TI-001	deg C		20	50																								
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25																									
7	Coolant PLC Temperature	TI-002	deg F	100	110	120																								
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL																								
9	Coolant Return Differential from GG	FI-001	in WC		60	80																								
10	Coolant Return Differential from	FI-002	in WC		37	50																								
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85																								
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)																								
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)																								
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%																								
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%																								
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√																											
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427																								
23	Mw Output		MW			27																								
24	80% Base Load Minimum		MW																											
25	Running Hours (unit overview)																													
26	Ambient Temperature	T1 Inlet																												
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%																								
28	Total Fuel Flow		Mscf/h																											

Date: 8.30.22 Signature: Penny Vigil

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME	1450																												
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK																									
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY																								
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL																								
Oil Day Tank Level	LI-1562	GAL	10		FULL																								
Lubricator Bulls eye		LEVEL	1/2	FULL																									
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY																								
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY																								
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK																									
1st Stage Inlet Press.	PI-2100	psig		88	140																								
Stage Disch. Press	PI-2101	psig		238	285																								
2nd Stage Inlet Press	PI-2200	psig		267	285																								
2nd Stage Disch. Press	PI-2201	psig		575	600																								
Final Discharge Pressure	PI-2108	psig		575	600																								
Lube Oil Pressure	PI-1572	psig	40	60																									
Lube Oil Temp	TE-1584	deg		150	170																								
Final Discharge Temp	TE-2120	deg		110	150																								
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297																								
2ndStage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283																								
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297																								
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283																								
Motor Frame Vibration	VT-1015	IPS			0.15																								
Compresser Frame Vibration	VT-1512	IPS			0.35																								
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																								

DATE 8.30.22

SIGNATURE

Mid Shift

Days Shift

Notes NEW ENGINE INSTALLED REASON FOR SIEMENS TO TEST FOR OPERATIONS & LATER DATE

Utilities and Institutional Facilities

Date: AUG 31 2022

CGTG HOURLY READING LOG

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling): 0918, 0935, 1047

Time of Turbine Online (Brkr Closed): 1101, 1616

Time Turbine Offline (Brkr Open): 1228, 1629

Time No Gas Flow: 0920,

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V													✓	✓	✓												
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V													✓	✓	✓												
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120										108	110	110												
4	Instrument Temperature	TI-001	deg C		20	50										27	27	29												
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25											19	19	19												
7	Coolant PLC Temperature	TI-002	deg F	100	110	120										111	110	109												
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL										2/3	2/3	2/3												
9	Coolant Return Differential from GG	FI-001	In WC		60	80										63	63	63												
10	Coolant Return Differantial from	FI-002	In WC		37	50										36	36	36												
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85										79	79	79												
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)										Y	Y	Y												
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)										Y	Y	Y												
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%										54	54	54												
19	10 gal ges TG Drain Tank (Air Diagram page)	LI-230	%			70%										0	0	0												
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		V													✓	✓	✓												
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427										745	752	733												
23	Mw Output		MW			27										18.1	18.0	18												
24	80% Base Load Minimum		MW													18.1	17.8	17.6				20.4								
25	Running Hours (unit overview)															10086	10087	10088				16.8								
26	Ambient Temperature	T1 Inlet														70	73	76												
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%										51	52	51												
28	Total Fuel Flow		Mscf/h													189	187	190												

Date: AUG 31 2022 Signature: Gomer Mo

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME	0855																												
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK											B	B	B												
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY										E	E	E												
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL										1/2	1/2	1/2												
Oil Day Tank Level	LI-1562	GAL	10		FULL										41	41	41												
Lubricator Bulls eye		LEVEL	1/2	FULL											F	F	F												
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY										E	E	E												
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY										E	E	E												
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK											B	B	B												
1st Stage Inlet Press.	PI-2100	psig		88	140										91	91	91												
Stage Disch. Press	PI-2101	psig		238	285										267	268	269												
2nd Stage Inlet Press	PI-2200	psig		267	285										263	263	265												
2nd Stage Disch. Press	PI-2201	psig		575	600										565	565	565												
Final Discharge Pressure	PI-2108	psig		575	600										560	560	560												
Lube Oil Pressure	PI-1572	psig	40	60											60	60	59												
Lube Oil Temp	TE-1584	deg		150	170										163	164	165												
Final Discharge Temp	TE-2120	deg		110	150										111	113	118												
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297										230	229	230												
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283										229	230	235												
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297										229	228	227												
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283										230	232	236												
Motor Frame Vibration	VT-1015	IPS			0.15										.04	.04	.05												
Compresser Frame Vibration	VT-1512	IPS			0.35										.05	.05	.06												
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8										560														
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20										557														
															548														

DATE	AUG 31 2022
SIGNATURE	
Mid Shift	Gomez
Days Shift	

Notes

Utilities and Institutional Facilities

CGTG HOURLY READING LOG

Date: 9-1-22

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling): 1318

Time of Turbine Online (Brkr Closed): 1354

Time Turbine Offline (Brkr Open): 2000

Time No Gas Flow: 2003

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V																		✓	✓	✓	✓	✓					
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V																		✓	✓	✓	✓	✓					
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120															✓	✓	✓	✓	✓					
4	Instrument Temperature	TI-001	deg C		20	50															110	110	110	110	110					
5	Fin Fan Cooler		Units	Low	Norm	Max															31	31	31	31	31					
6	Coolant Pressure	PI-250	psig		25																									
7	Coolant PLC Temperature	TI-002	deg F	100	110	120															19	19	19	19	19					
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL															103	104	103	103	107					
9	Coolant Return Differential from GG	FI-001	In WC		60	80															2/3	2/3	2/3	2/3	2/3					
10	Coolant Return Differential from	FI-002	In WC		37	50															62	62	62	62	62					
11	Control Room		Units	Low	Norm	Max															38	38	36	36	36					
12	Room Temperature		deg F		72	85															74	74	74	74	74					
15	WECC Log		Operational?																		✓	✓	✓	✓	✓					
16	Operation of PSS/ on at 6.3MW		Yes (Y)			No (N)															✓	✓	✓	✓	✓					
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)															✓	✓	✓	✓	✓					
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%															54	53	53	53	53					
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%															0	0	0	0	0					
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A53GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		V																		✓	✓	✓	✓	✓					
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427															849	847	847	848	870					
23	Mw Output		MW			27															20.2	20.2	20.2	20.2	21.1					
24	80% Base Load Minimum		MW																		17.2	17.1	17.1	17.1	17.6					
25	Running Hours (unit overview)																				10094	10095	10096	10097	10098					
26	Ambient Temperature	T1 Inlet																			81	81	82	81	76					
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%															51	52	52	52	54					
28	Total Fuel Flow		Mscf/h																		198	198	196	199	204					

Date: 9-1-22 Signature: [signature] Bob [signature] (MM105)

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME	1302																												
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK																B	B	B	B	B					
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY															E	E	E	E	E					
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL															1/2	1/2	1/2	1/2	1/2					
Oil Day Tank Level	LI-1562	GAL	10		FULL															40	40	40	40	40					
Lubricator Bulls eye		LEVEL	1/2	FULL																F	F	F	F	F					
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY															E	E	E	E	E					
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY															E	E	E	E	E					
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK																B	B	B	B	B					
1st Stage Inlet Press.	PI-2100	psig		88	140															88	88	88	88	88					
Stage Disch. Press	PI-2101	psig		238	285															265	265	266	267	266					
2nd Stage Inlet Press	PI-2200	psig		267	285															261	261	262	262	262					
2nd Stage Disch. Press	PI-2201	psig		575	600															565	565	565	565	565					
Final Discharge Pressure	PI-2108	psig		575	600															559	559	559	559	559					
Lube Oil Pressure	PI-1572	psig	40	60																59	59	59	59	59					
Lube Oil Temp	TE-1584	deg		150	170															165	165	166	166	166					
Final Discharge Temp	TE-2120	deg		110	150															123	123	124	125	125					
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297															230	229	229	229	229					
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283															239	239	240	241	241					
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297															228	227	227	227	228					
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283															246	241	241	241	241					
Motor Frame Vibration	VT-1015	IPS			0.15															.06	.05	.05	.05	.05					
Compresser Frame Vibration	VT-1512	IPS			0.35															.05	.05	.05	.05	.05					
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																				560									
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8															556									
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20															546									

DATE 9-1-22

SIGNATURE

Mid Shift [signature]

Days Shift [signature]

Notes

Utilities and Institutional Facilities

Date: 9-2-22

CGTG HOURLY READING LOG

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling): 1311

Time of Turbine Online (Brkr Closed): 1354

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√																		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√																		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120															✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4	Instrument Temperature	TI-001	deg C		20	50															112	114	112	110	111	110	111	112	112	110
5	Fin Fan Cooler		Units	Low	Norm	Max															34	32	31	31	31	30	28	27	25	25
6	Coolant Pressure	PI-250	psig		25																									
7	Coolant PLC Temperature	TI-002	deg F	100	110	120															19	19	19	19	19	19	19	19	19	19
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL															106	100	102	104	105	106	107	103	105	107
9	Coolant Return Differential from GG	FI-001	In WC		60	80															2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
10	Coolant Return Differential from	FI-002	In WC		37	50															61	62	62	62	62	63	62	62	62	62
11	Control Room		Units	Low	Norm	Max															34	37	37	37	37	37	37	37	37	37
12	Room Temperature		deg F		72	85																								
15	WECC Log		Operational?																		74	74	74	74	74	74	74	74	74	74
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)															✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)															✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%															53	53	54	53	53	53	54	54	54	54
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%															0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	ASBGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√																		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Powar Management page)																													
22	Generator Current		Amps			1427															829	885	856	857	880	871	880	876	871	875
23	Mw Output		MW			27															17.7	20.9	20.3	20.3	20.9	21.0	21.1	21.0	20.9	20.9
24	80% Base Load Minimum		MW																		16.8	17.5	17.1	17.2	17.6	17.8	17.9	17.9	18.3	18.3
25	Running Hours (unit overview)																				10101	10102	10103	10104	10105	10106	10107	10108	10109	10110
26	Ambient Temperature	T1 Inlet																			84	77	81	81	76	74	72	71	68	67
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%																								
28	Total Fuel Flow		Mscf/h																		55	55	55	56	55	56	56	56	56	56
																					196	204	199	199	203	204	204	204	204	204

Date: 9-2-22 Signature: [signature] [signature] (MIOS)

#1 CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME	1259																												
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK																B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY															E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL															1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL															40	40	40	40	40	40	40	40	40	40
Lubricator Bulls eye		LEVEL	1/2	FULL																F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY															E	E	E	E	E	F	E	E	E	F
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY															E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK																B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140															89	88	87	87	88	88	89	89	89	89
Stage Disch. Press	PI-2101	psig		238	285															267	265	267	267	266	265	265	265	265	265
2nd Stage Inlet Press	PI-2200	psig		267	285															263	268	263	263	263	261	261	261	261	261
2nd Stage Disch. Press	PI-2201	psig		575	600															565	568	565	565	565	565	565	565	561	561
Final Discharge Pressure	PI-2108	psig		575	600															559	559	560	560	560	560	560	560	560	560
Lube Oil Pressure	PI-1572	psig	40	60																59	59	59	59	59	59	59	59	59	59
Lube Oil Temp	TE-1584	deg		150	170															166	165	165	165	165	164	164	164	164	164
Final Discharge Temp	TE-2120	deg		110	150															127	120	122	122	120	116	114	111	109	109
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297															234	227	227	227	226	225	223	222	224	224
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283															241	238	237	237	236	234	232	230	228	227
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297															231	226	227	226	225	225	223	221	226	220
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283															243	239	239	239	238	235	233	230	229	229
Motor Frame Vibration	VT-1015	IPS			0.15															.05	.05	.05	.05	.05	.05	.05	.03	.03	.03
Compresser Frame Vibration	VT-1512	IPS			0.35															.05	.05	.06	.05	.06	.06	.06	.05	.05	.07
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																									
Natural Gas Comp.Discharge Press.																					560								
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																556								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																545								

DATE 9-2-22

SIGNATURE

Mid Shift Bob Stacy

Days Shift

Notes

Utilities and Institutional Facilities

UI-LOG-033-R4
October 1, 2020

Date: 9-3-2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

CGTG HOURLY READING LOG

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	111	109	110	111	111	110	108	110	108	112	108	110	106	104	108	112	112	110	111	110	109	110	107	109
4	Instrument Temperature	TI-001	deg C		20	50	24	24	23	23	22	22	21	22	24	24	25	27	28	28	29	29	29	29	26	25	24	23	23	23
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	108	109	107	109	110	103	107	110	100	109	108	103	100	109	100	107	103	102	107	106	106	108	107	103
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	37	37	37	37	37	37	36	36	36	36	37	37	37	39	37	37	37	37	37	37	37	37	37	37
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74
15	WECC Log		Operational?				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
21	Acknowledge Alarms Hourly		v																											
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	879	881	879	880	881	875	878	887	875	879	879	881	884	878	881	882	872	880	882	870	875	878	875	874
23	Mw Output		MW			27	21.1	21.1	21.0	20.9	20.9	20.9	21.0	21.0	20.9	21.1	21.0	21.1	21.1	21.0	21.0	21.0	20.9	21.1	20.9	21.1	21.0	21.0	21.0	20.9
24	80% Base Load Minimum		MW				18.5	18.6	18.5	18.6	18.7	18.8	18.7	18.4	18.0	18.1	18.2	17.9	17.7	17.5	17.6	17.7	17.5	17.8	18.3	18.7	18.5	18.6	18.6	18.6
25	Running Hours (unit overview)						10111	10112	10113	10114	10115	10116	10117	10117	10118	10119	10120	10121	10122	10123	10124	10125	10126	10127	10128	10129	10130	10132	10133	10134
26	Ambient Temperature	T1 inlet					65	65	65	64	63	62	62	66	71	69	69	72	75	77	75	75	74	73	67	65	65	64	64	64
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	56	56	56	56	56	56	56	56	57	54	54	54	54	54	54	54	54	54	55	55	55	55	56	56
28	Total Fuel Flow		Mscf/h				203	204	204	203	204	204	203	204	205	203	204	205	205	205	205	205	204	205	204	204	203	204	203	204

Date: 9-3-2022

Signature: Bob Avery (MIOS)

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	O	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	40	40	40	40	39	39	39	39	39	39	39	39	39	39	39	39	38	38	38	38	38	38	38	38
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	89	89	89	89	89	89	89	84	88	88	89	84	88	89	84	89	89	89	89	89	87	89	89	89
Stage Disch. Press	PI-2101	psig		238	285	265	265	265	266	266	266	265	265	265	265	265	265	266	266	266	266	266	266	266	266	266	266	266	266
2nd Stage Inlet Press	PI-2200	psig		267	285	261	261	261	262	262	262	261	261	261	262	261	261	262	262	262	262	262	262	262	262	262	262	262	262
2nd Stage Disch. Press	PI-2201	psig		575	600	566	566	566	566	565	565	564	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565
Final Discharge Pressure	PI-2108	psig		575	600	560	560	560	560	560	559	559	560	560	560	560	560	560	560	560	560	559	560	560	560	560	560	560	560
Lube Oil Pressure	PI-1572	psig	40	60		59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59
Lube Oil Temp	TE-1584	deg		150	170	164	161	164	164	164	164	165	164	164	164	165	166	165	165	165	165	165	165	164	161	164	164	164	164
Final Discharge Temp	TE-2120	deg		110	150	108	107	106	103	102	102	103	106	112	110	110	114	117	117	117	117	117	113	109	107	105	105	104	
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	220	220	219	218	217	217	217	219	222	221	222	223	225	224	226	226	223	222	222	221	221	220	220	219
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	226	225	224	222	221	221	221	224	229	228	228	230	234	234	234	233	232	232	230	227	226	225	224	221
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	219	219	218	218	217	217	217	218	221	221	221	223	223	223	223	223	223	223	220	220	219	219	217	217
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	226	227	225	223	222	222	222	222	231	229	229	231	233	235	234	237	232	231	229	228	226	225	222	
Motor Frame Vibration	VT-1015	IPS			0.15	.03	.03	.04	.04	.04	.04	.04	.03	.03	.04	.03	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.01	.05	.05	.01	.05	.01	.05	.05	.05	.05	.05	.06	.06	.05	.05	.06	.06	.06	.06	.05	.05	.05	.05	.05	.05
Take Once per Shift / at Full Load				Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																								
Natural Gas Comp.Discharge Press.		psig					560								560														
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8		557								556														
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20		546								545														

DATE 9-3-2022

SIGNATURE

Mid Shift

Days Shift

Notes

Utilities and Institutional Facilities

Date: 9-4-2022

CGTG HOURLY READING LOG

MST / MDT (circle one)
Time Gas Introduced (Turbine Rolling):
Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open): 1023
Time No Gas Flow: 1023

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓														
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓														
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	110	111	112	109	110	111	112	110	108	104														
4	Instrument Temperature	TI-001	deg C		20	50	22	21	21	21	20	20	20	20	22	24														
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19														
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	103	107	106	108	109	104	103	104	109	104														
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3														
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	62	62	62	62														
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	37	37	37	37														
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	74	74	74	74	74	74	74	74	74	74														
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y														
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y														
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	54	54	54	54	54	54	54	54	54	54														
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0														
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓														
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	879	880	881	878	870	875	874	877	870	876														
23	Mw Output		MW			27	21.1	21.0	21.1	21.0	20.9	20.9	20.9	21.1	20.9	20.9														
24	80% Base Load Minimum		MW				18.7	18.7	18.9	19.0	19.0	19.1	19.1	18.9	18.5	18.2														
25	Running Hours (unit overview)						10134	10135	10136	10137	10138	10139	10140	10141	10142	10143														
26	Ambient Temperature	T1 inlet					63	62	61	60	59	59	57	59	65	68														
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	56	56	56	56	56	56	56	56	56	55														
28	Total Fuel Flow		Mscf/h				205	204	204	204	204	204	204	203	205	205														

Date: 9-4-2022 Signature: Bob Hay

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME	1312	/																											
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B														
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E														
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2														
Oil Day Tank Level	LI-1562	GAL	10		FULL	38	38	38	37	37	37	37	36	36	36														
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F														
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E														
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E														
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B														
1st Stage Inlet Press.	PI-2100	psig		88	140	89	89	89	89	89	89	89	89	88	88														
Stage Disch. Press	PI-2101	psig		238	285	266	266	266	266	266	266	264	264	264	264														
2nd Stage Inlet Press	PI-2200	psig		267	285	262	262	262	262	262	262	260	260	260	260														
2nd Stage Disch. Press	PI-2201	psig		575	600	565	565	565	565	565	565	565	564	565	565														
Final Discharge Pressure	PI-2108	psig		575	600	560	560	560	560	560	560	560	560	560	560														
Lube Oil Pressure	PI-1572	psig	40	60		59	59	59	59	59	59	59	59	59	59														
Lube Oil Temp	TE-1584	deg		150	170	164	164	164	164	165	165	165	166	165	165														
Final Discharge Temp	TE-2120	deg		110	150	104	102	101	100	99	99	100	101	105	108														
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	218	218	217	217	216	216	216	217	219	221														
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	222	221	221	220	219	219	220	219	223	227														
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	218	217	217	216	216	216	216	216	219	221														
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	222	222	221	221	220	220	220	220	224	228														
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.03	.03	.03	.03	.03	.04	.03	.03														
Compresser Frame Vibration	VT-1512	IPS			0.35	.01	.01	.01	.01	.01	.00	.01	.01	.01	.01														
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.									560																				
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8				556																				
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20				546																				

DATE	9-4-2022
SIGNATURE	
Mid Shift	Bob Hay
Days Shift	
Notes	Startup - no flow left

1341 Compressor

Utilities and Institutional Facilities

Date: 9-6-22

CGTG HOURLY READING LOG

DO TO TRIP

MST / MDT (circle one) 1135

Time Gas Introduced (Turbine Rolling): 0905

Time of Turbine Online (Brkr Closed): 0920 1149

Time Turbine Offline (Brkr Open): 1033

Time No Gas Flow: 1038

Notes: TURBINE TRIP DO TO Gas Comp @ 1037
~~BACK UP LINE~~ 1149

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√													√		√	√	√	√	√	√	√	√	√	√	√	√	√
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√													√		√	√	√	√	√	√	√	√	√	√	√	√	√
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120										112		100	110	104	109	103	108	110	108	110	113	108	110	113
4	Instrument Temperature	TI-001	deg C		20	50										28		31	31	31	32	32	32	32	30	30	28	27	26	24
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25											190		191	192	192	192	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120										100	TRIP	100	103	104	109	105	106	105	100	104	106	104	101	104
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL										5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8
9	Coolant Return Differential from GG	FI-001	In WC		60	80										60	60	60	62	63	64	63	63	63	63	63	63	63	63	63
10	Coolant Return Differential from	FI-002	In WC		37	50										36	36	36	38	39	39	38	38	38	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85										74	TURB	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)										Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)										Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%										55	TRIP	55	55	54	54	54	54	54	54	54	50	54	54	54
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%										0		0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√													Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427														855	883	835	833	834	878	879	878	883	877	883
23	Mw Output		MW			27										21.1		20.6	20.4	20.3	20.0	19.9	19.8	19.9	20.9	21.1	21.1	21.0	21.0	21.1
24	80% Base Load Minimum		MW													17.9	OFF	17.3	17.0	17.0	16.8	16.8	16.7	16.8	17.5	17.7	17.8	17.9	18.2	18.3
25	Running Hours (unit overview)															10145		10146	10147	10148	10149	10150	10151	10152	10153	10154	10155	10156	10157	10158
26	Ambient Temperature	T1 inlet														73.2		78.0	82.4	85.0	85.0	85.5	86.4	88.2	76.6	74.3	73.4	72.5	69.3	68.2
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%										57		57	57	57	57	57	58	58	59	59	60	59	59	59
28	Total Fuel Flow		Mscf/h													205		202	200	197	197	198	194	197	203	205	205	205	203	203

Date: 9-6-22 Signature: Randy Vigil

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME	0835																												
Combustible Gas Detector	AAH-303	%		0%	20%										B		B	B	B	D	B	B	B	B	B	B	B	B	B
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK											F		F	E	E	E	E	F	E	E	E	E	E	E	E
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY										1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL										35		35	35	35	35	35	35	35	34	34	34	34	34	34
Oil Day Tank Level	LI-1562	GAL	10		FULL										F		F	F	F	F	F	F	F	F	F	F	F	F	F
Lubricator Bulls eye		LEVEL	1/2	FULL											E		E	E	E	E	E	E	E	E	E	E	E	E	E
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY										E		E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY										B		B	B	B	B	B	B	B	B	B	B	B	B	B
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK											88		89	90	89	90	90	90	90	89	89	89	89	89	89
1st Stage Inlet Press.	PI-2100	psig		88	140										264		265	264	268	269	269	269	269	266	266	266	266	266	266
Stage Disch. Press	PI-2101	psig		238	285										254		261	265	264	265	265	265	265	262	262	262	263	263	263
2nd Stage Inlet Press	PI-2200	psig		267	285										564		565	564	565	565	565	565	565	565	565	565	565	564	564
2nd Stage Disch. Press	PI-2201	psig		575	600										559		560	568	560	560	560	560	560	560	560	560	560	559	559
Final Discharge Pressure	PI-2108	psig		575	600										60		59	56	58	58	59	59	59	59	59	59	59	59	59
Lube Oil Pressure	PI-1572	psig	40	60											163		164	167	167	167	167	167	167	166	164	162	164	164	163
Lube Oil Temp	TE-1584	deg		150	170										113		119	123	122	124	125	125	125	117	114	113	113	109	108
Final Discharge Temp	TE-2120	deg		110	150										226		232	230	230	231	232	232	232	228	226	225	224	223	223
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297										232		239	240	240	242	244	244	244	238	233	231	232	229	228
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283										226		231	229	229	230	230	232	230	227	225	223	223	223	223
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297										233		239	241	241	243	245	245	241	239	235	233	233	230	228
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283										.03		.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
Motor Frame Vibration	VT-1015	IPS			0.15										.08		.05	.07	.06	.06	.06	.06	.06	.05	.05	.05	.05	.05	.05
Compresser Frame Vibration	VT-1512	IPS			0.35																								
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.															560														
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8										556														
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20										545														

DATE	9.6.22
SIGNATURE	
Mid Shift	
Days Shift	

Notes CGTG TRIPPED OFF LINE 1033
GTG ON 1124

Utilities and Institutional Facilities

Date: 9-7-22

CGTG HOURLY READING LOG

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling): 1011

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow: 1012

Notes: TURBINE TRIPPED BUSY TRIPPED WITH TURBINE TRIPPED

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√				√	√	√	√	√	√	√	√	√															
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√				√	√	√	√	√	√	√	√	√															
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	112	113	108	113	110	107	101	108	106															
4	Instrument Temperature	TI-001	deg C		20	50	24	24	24	23	23	23	23	23	25															
5	Hn Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19															
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	100	106	103	100	107	103	108	110	109															
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8															
9	Coolant Return Differential from GG	FI-001	in WC		60	80	63	63	63	63	63	63	63	63	63															
10	Coolant Return Differential from	FI-002	in WC		37	50	36	36	36	36	36	36	34	36	36															
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70															
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y															
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y															
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	55	55	55	55	55	55	55	50	50															
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0															
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√				Y	Y	Y	Y	Y	Y	Y	Y	Y															
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	874	875	871	874	878	885	884	882	884															
23	Mw Output		MW			27	21.0	21.0	20.9	20.9	20.9	21.1	21.1	20.9	21.1															
24	80% Base Load Minimum		MW				18.3	18.4	18.5	18.5	18.5	18.6	18.4	18.3	18.0															
25	Running Hours (unit overview)						10159	10160	10161	10162	10163	10164	10165	10166	10167															
26	Ambient Temperature	T1 Inlet					67.6	66.7	66.1	65.4	64.8	64.2	63.9	67.6	71.4															
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	59	59	60	60	60	60	60	60	59															
28	Total Fuel Flow		Mscf/h				203	201	200	202	201	201	203	204	207															

Date: SEP 07 2022 Signature: A Wlan

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B															
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E															
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2															
Oil Day Tank Level	LI-1562	GAL	10		FULL	34	33	33	33	33	33	33	33	33															
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F															
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E															
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E															
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B															
1st Stage Inlet Press.	PI-2100	psig		88	140	89	89	89	89	89	89	89	89	89															
Stage Disch. Press	PI-2101	psig		238	285	266	266	266	266	266	266	266	264	266															
2nd Stage Inlet Press	PI-2200	psig		267	285	262	262	262	262	262	262	262	262	262															
2nd Stage Disch. Press	PI-2201	psig		575	600	565	565	564	565	565	565	565	565	565															
Final Discharge Pressure	PI-2108	psig		575	600	560	560	560	560	560	560	560	560	560															
Lube Oil Pressure	PI-1572	psig	40	60		59	59	59	59	59	59	59	59	59															
Lube Oil Temp	TE-1584	deg		150	170	164	163	163	164	164	164	164	164	164															
Final Discharge Temp	TE-2120	deg		110	150	106	104	104	104	104	104	104	104	112															
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	222	221	221	221	221	221	221	221	223															
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	226	224	226	225	224	223	223	223	228															
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	221	220	221	220	220	220	220	220	222															
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	228	226	227	226	225	225	225	228	229															
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04															
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.05	.05	.05	.06	.06	.06	.06	.04															
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																								

DATE SEP 07 2022

SIGNATURE

Mid Shift A Wall

Days Shift

Notes TURBINE TRIPPED

Utilities and Institutional Facilities

Date: 9-8-22

CGTG HOURLY READING LOG

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling): 0709

Time of Turbine Online (Brkr Closed): 0803

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√											√	√		√	√	√	√	√	√	√	√	√	√	√	√	√	√
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√											√	√		√	√	√	√	√	√	√	√	√	√	√	√	√	√
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120								111	110		104	100	101	102	105	104	110	102	108	104	110	113	113	112
4	Instrument Temperature	TI-001	deg C		20	50								22	23		29	29	29	30	30	30	31	30	30	29	28	28	27	26
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25									19	19		19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120								106	112		104	110	106	102	104	106	101	103	110	104	107	101	104	100
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL								5/8	5/8		5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8
9	Coolant Return Differential from GG	FI-001	In WC		60	80								60	60		63	63	63	63	63	63	63	63	62	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50								36	36	38	38	38	37	38	38	38	38	37	37	37	37	37	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85								70	70		70	70	70	70	70	70	70	70	70	70	70	70	70	70
13	WECS Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)								Yes	Yes		Yes	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)								Yes	Yes		Yes	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Electronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%								55	55		55	65	55	55	50	50	50	59	54	54	54	54	54	54
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%								0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√											√	√		√	√	√	√	√	√	√	√	√	√	√	√	√	√
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427								887	891		883	881	868	849	847	853	851	850	881	880	882	883	877	878
23	Mw Output		MW			27								21.0	21.2		21.0	20.9	20.5	20.2	20.1	20.3	20.3	20.2	21.0	21.0	21.0	21.1	21.0	21.0
24	80% Base Load Minimum		MW											18.6	18.3		17.5	17.4	17.2	17.6	17.0	17.1	17.1	17.1	17.6	17.7	17.8	18.0	18.0	18.1
25	Running Hours (unit overview)													10169	10170		10172	10173	10174	10176	10177	10178	10179	10180	10181	10182	10183	10184	10185	10186
26	Ambient Temperature	T1 inlet												64.4	67.5		77.5	77.7	88.8	82.8	83.7	81.7	81.7	81.5	75.6	74.5	73.6	71.6	71.2	70.1
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%								59	59		57	57	57	57	57	57	57	58	58	58	58	58	60	59
28	Total Fuel Flow		Mscf/h											203	203		204	204	201	199	197	199	199	199	204	204	204	204	204	204

Date: 9-8-22 Signature: Ray Vail

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME	0645																												
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK									B	B		B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY								E	E		E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL								1/2	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL								32	32	B	32	32	32	32	32	32	32	32	31	31	31	31	31	31
Lubricator Bulls eye		LEVEL	1/2	FULL									F	F	0954	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY								E	E		E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY								E	E		E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK									B	B		B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140								89	89		89	89	89	89	89	89	89	89	89	89	89	89	89	89
Stage Disch. Press	PI-2101	psig		238	285								264	264		266	267	267	268	268	269	269	269	267	267	267	267	267	267
2nd Stage Inlet Press	PI-2200	psig		267	285								259	260		262	263	261	264	264	265	265	265	263	263	263	262	263	260
2nd Stage Disch. Press	PI-2201	psig		575	600								565	565		565	565	565	565	564	563	563	563	565	565	565	565	565	565
Final Discharge Pressure	PI-2108	psig		575	600								560	560		560	560	560	560	560	560	560	560	560	560	560	560	560	560
Lube Oil Pressure	PI-1572	psig	40	60									59	59		59	59	59	59	59	59	59	59	59	59	59	59	59	59
Lube Oil Temp	TE-1584	deg		150	170								164	164		165	166	166	166	166	166	166	166	165	164	164	163	163	163
Final Discharge Temp	TE-2120	deg		110	150								106	109		118	119	119	124	125	127	127	127	119	117	115	112	112	112
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297								222	221		225	226	224	228	231	230	230	230	225	224	223	221	221	220
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283								224	226		235	235	235	240	242	243	243	243	235	233	232	231	231	228
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297								221	221		224	225	225	227	230	229	229	229	224	224	223	222	221	219
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283								226	227		236	236	236	240	243	243	243	243	236	235	233	231	231	227
Motor Frame Vibration	VT-1015	IPS			0.15								.04	.04		.04	.04	.04	.04	.04	.04	.04	.04	-.04	-.03	-.04	-.04	-.04	-.04
Compresser Frame Vibration	VT-1512	IPS			0.35								.05	.01		.00	.01	.01	.05	.01	.01	.01	.01	-.06	-.06	-.06	-.05	-.05	-.05
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.														560															
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8									556															
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20									545															

DATE	
SIGNATURE	
Mid Shift	
Days Shift	

Notes

Utilities and Institutional Facilities

CGTG HOURLY READING LOG

Date: 9-9-22

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	107	109	112	106	113	110	104	112	110	108	112	110	110	110	114	108	112	110	108	108	108	110	110	108
4	Instrument Temperature	TI-001	deg C		20	50	26	26	25	24	24	24	21	21	24	26	28	29	30	30	30	30	30	30	29	29	29	28	26	24
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	100	106	103	108	102	104	99	103	102	112	106	105	101	100	111	100	101	102	104	110	106	104	105	110
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	5/8	5/8	5/8	5/8	5/8	5/8	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	63	62	62	62	62	62	62	62	62	62	62	62	62	63	63	63	63	63	63
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	37	37	36	36	38	38	39	36	36	38	37	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	54	54	55	55	55	55	55	55	55	55	55	55	54	54	54	54	54	54	54	54	55	58	58	55
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	878	886	879	883	884	883	876	883	886	879	881	866	853	866	866	857	866	581	876	879	883	881	880	879
23	Mw Output		MW			27	20.9	21.0	21.0	20.9	21.1	21.1	20.9	21.0	21.1	20.8	21.0	20.6	20.3	20.6	20.5	20.3	20.6	21.0	20.9	21	20.9	21.1	21.1	21
24	80% Base Load Minimum		MW				18.2	18.2	18.5	18.5	18.5	18.5	18.7	18.5	18.3	18.0	17.6	17.7	17.1	17.4	17.6	17.3	17.5	17.7	18.1	18.1	19.1	19.1	19.1	19.1
25	Running Hours (unit overview)						10187	10188	10189	10190	10191	10192	10192	10193	10194	10195	10196	1019	10198	10199	10200	10201	10202	10203	10204	10205	10206	10207	10208	10209
26	Ambient Temperature	T1 inlet					68.5	69.3	65.8	65.3	65.1	64.9	62	64	67	71	75	78	81	77	77	88	77	75	71	70	59	58	58	58
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	58	58	59	59	59	59	59	57	58	57	57	56	57	57	57	57	57	57	56	58	59	59	59	59
28	Total Fuel Flow		Mscf/h				202	209	203	203	202	202	204	203	204	204	204	201	199	201	204	203	201	204	204	204	204	204	203	203

Date: 9-9-22 Signature: A Wier

day shift - Josh Rees

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	T	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
Oil Day Tank Level	LI-1562	GAL	10		FULL	31	31	31	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	29	29	29	29	29	29
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	90	90	91	91	90	90
Stage Disch. Press	PI-2101	psig		238	285	267	267	267	267	266	266	266	266	265	265	267	267	260	260	260	268	268	268	267	267	266	266	266	265
2nd Stage Inlet Press	PI-2200	psig		267	285	263	263	263	263	262	262	262	261	261	261	262	263	264	262	263	264	265	264	263	263	262	262	262	261
2nd Stage Disch. Press	PI-2201	psig		575	600	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565
Final Discharge Pressure	PI-2108	psig		575	600	560	560	560	560	560	560	559	559	559	559	560	560	559	559	560	559	560	560	560	560	560	560	560	560
Lube Oil Pressure	PI-1572	psig	40	60		59	59	59	59	59	59	59	59	59	59	59	58	59	59	59	59	59	59	60	59	59	59	59	59
Lube Oil Temp	TE-1584	deg		150	170	164	164	164	164	164	164	165	164	165	165	166	166	166	165	164	164	164	164	164	164	164	164	164	166
Final Discharge Temp	TE-2120	deg		110	150	111	112	110	110	108	107	107	107	109	112	117	120	123	122	119	121	121	121	121	109	108	109	112	100
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	221	222	220	219	219	219	220	219	221	222	225	227	229	227	226	227	226	226	227	220	219	219	219	218
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	228	228	226	224	224	224	222	223	225	229	234	235	240	230	235	237	237	236	227	226	224	224	219	218
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	221	221	219	218	218	218	218	218	220	222	224	226	227	226	225	226	225	225	222	224	224	218	220	218
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	229	230	228	226	225	224	223	225	226	230	235	237	241	240	240	239	239	234	229	230	226	224	219	219
Motor Frame Vibration	VT-1015	IPS			0.15	.03	.03	.03	.03	.03	.03	.03	.04	.03	.03	.04	.04	.04	.04	.04	.04	.04	.04	.03	.04	.04	.03	.03	.03
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.05	.15	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.05	.05	.04	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.													560								560								
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8								556								556								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20								546								546								

DATE 9-9-23

SIGNATURE

Mid Shift A Wan

Days Shift

Notes

Utilities and Institutional Facilities

Date: SEP 1 0 2022

CGTG HOURLY READING LOG

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	110	106	108	104	108	108	110	110	108	106	108	106	104	108	112	106	110	107	108	110	110	106	100	108
4	Instrument Temperature	TI-001	deg C		20	50	20	20	20	20	20	20	20	20	21	22	23	24	25	25	26	25	24	24	24	24	24	22	22	20
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	104	110	106	108	104	100	104	112	106	100	110	104	106	106	103	100	105	104	105	104	106	106	100	103
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	63	63	63	63	63	63	63	62	62	62	62	62	62	62	62	62	62	62	63	63	63	63	63	63
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	37	36	36	38	38	39	37	39	39	39	39	38	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/ on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	58
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	876	886	887	875	880	880	881	877	883	885	885	882	887	875	887	882	885	875	878	880	880	884	888	878
23	Mw Output		MW			27	20.9	21.1	21	20.9	21.0	21.0	20.9	21.0	21.1	21.1	21.0	21.0	21.1	20.8	21.0	21.0	21.0	20.9	21	21.1	21	21.1	21	20.9
24	80% Base Load Minimum		MW				19.1	19.0	19.0	19	19.0	19.0	19.0	18.9	18.8	18.8	18.4	18.3	18.0	17.9	17.7	18.8	18.8	18.3	18.4	18.7	18.8	18.9	19.1	19.1
25	Running Hours (unit overview)						10210	10211	10212	10213	10214	10215	10216	10217	10218	10219	10220	10221	10222	10223	10224	10225	10226	10227	10228	10229	10230	10231	10232	10235
26	Ambient Temperature	T1 inlet					57	59	59	58	59	59	58	59	59 61	64	66	68	70	72	74	61	66	68	66	63	62	61	57	57
	(27–28 found on Gas Fuel System page)						59																							
27	Waste Oil Tank	LI-120	%			70%	~~55~~	59	59	59	59	59	59	59	59	59	58	58	57	57	57	57	58	58	58	58	58	58	58	58
28	Total Fuel Flow		Mscf/h				204	204	205	205	205	205	205	204	203	205	204	204	205	204	204	203	204	204	205	204	203	204	204	202

Date: SEP 1 0 2022 Signature: GOMEZ dg shift

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	D	B	B	B	B	D	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	28	28	28	28	28	27	27	27	27	27	27	27	26	26	26	26	26	26	26	26	26	26	26	26
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	90	89	89	89	90	90	90	90	89	90	89	89	89	89	89	89	89	89	90	90	90	89	89	90
Stage Disch. Press	PI-2101	psig		238	285	265	267	267	267	266	266	267	266	266	267	266	267	267	267	267	266	267	267	267	266	266	265	265	266
2nd Stage Inlet Press	PI-2200	psig		267	285	261	263	263	263	262	262	262	262	262	263	262	263	263	263	261	262	263	263	263	264	265	265	265	262
2nd Stage Disch. Press	PI-2201	psig		575	600	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565
Final Discharge Pressure	PI-2108	psig		575	600	560	560	560	560	560	560	559	560	559	560	559	560	560	559	560	559	560	560	560	560	560	560	560	560
Lube Oil Pressure	PI-1572	psig	40	60		59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	60	59	59	59	59	60	59	59	59
Lube Oil Temp	TE-1584	deg		150	170	166	164	164	164	166	166	166	165	165	164	164	164	164	164	164	163	164	164	164	164	165	164	165	165
Final Discharge Temp	TE-2120	deg		110	150	100	112	112	100	99	99	101	101	103	106	110	110	113	113	112	102	107	108	106	106	105	105	105	100
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	218	222	220	219	217	217	216	217	218	219	220	220	222	222	223	218	219	220	220	220	220	220	220	216
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	218	218	216	219	218	218	216	219	224	224	226	227	230	230	231	221	224	224	224	224	225	224	225	218
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	218	224	219	218	216	216	216	216	217	218	219	219	221	221	222	217	219	219	219	220	220	219	220	215
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	219	230	228	226	220	220	220	221	223	225	225	228	228	232	234	224	225	225	225	224	225	224	225	219
Motor Frame Vibration	VT-1015	IPS			0.15	.03	.03	.03	.03	.04	.04	.03	.03	.03	.03	.04	.04	.04	.04	.04	.04	.03	.03	.03	.03	.03	.03	.03	.03
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.05	.05	.05	.05	.05	.05	.0	.05	.05	.06	.06	.06	.05	.05	.05	.05	.05	.05	.05	.05
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.						560							560								560				560				
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8	556							556								556				556				
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20	546							546								546				546				

DATE SEP 10 2022

SIGNATURE

Mid Shift

Days Shift

Notes

Utilities and Institutional Facilities

Date: SEP 1 1 2022

CGTG HOURLY READING LOG

MST / (MDT) (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	108	106	108	108	108	110	106	108	108	108	106	112	110	106	110	104	106	106	114	110	107	112	110	109
4	Instrument Temperature	TI-001	deg C		20	50	20	20	20	20	18	18	17	17	17	19	20	22	23	25	25	24	24	24	24	24	24	24	24	23
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	103	101	104	108	102	103	102	111	104	101	111	105	110	106	112	103	111	108	101	106	103	101	105	100
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	3/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	63	63	63	63	63	63	62	62	62	62	62	62	62	62	62	60	60	60	60	60	60	60	60	60
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	35	36	36	38	37	39	39	39	39	37	36	36	38	38	37	37	37	37
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	878	884	880	876	881	885	874	880	882	885	884	884	890	884	875	878	878	878	882	881	886	887	884	887
23	Mw Output		MW			27	20.9	21.1	21	21.1	21	21.1	20.9	20.9	21.1	21.1	21.1	21.1	20.9	21.0	20.9	20.9	21.0	20.9	20.9	21.0	21.2	21.2	21.1	21.1
24	80% Base Load Minimum		MW				19.1	19.2	19.2	19.3	19.5	19.5	19.6	19.5	19.5	19.1	18.8	19.5	18.2	18.2	18.2	18.2	18.2	18.1	18.4	18.7	18.7	18.8	18.6	18.6
25	Running Hours (unit overview)						10234	10235	10236	10237	10238	10239	10240	10241	10242	10243	10244	10245	10246	10247	10248	10249	10250	10251	10252	10253	10254	10255	10256	10257
26	Ambient Temperature	T1 inlet					57	56	55	54	52	52	51	52	52	57	62	64	68	69	68	69	64	64	67.1	63.3	62.4	62.7	64	64.1
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	58	58	58	58	58	58	58	58	58	58	57	57	57	57	57	58	58	58	58	58	58	58	58	58
28	Total Fuel Flow		Mscf/h				202	204	204	204	203	203	201	204	204	203	203	203	204	203	204	204	203	207	203	201	201	202	201	201

Date: SEP 1 1 2022

Signature: GOMEZ

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	25	25	25	25	25	25	25	25	25	25	25	25	25	25	24	24	24	24	24	24	24	24	23	23
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	90	89	89	90	90	90	90	90	90	90	90	90	89	89	90	89	89	89	90	90	90	90	90	90
Stage Disch. Press	PI-2101	psig		238	285	266	265	265	266	266	266	266	266	267	266	266	267	267	267	267	267	268	267	267	267	267	267	267	267
2nd Stage Inlet Press	PI-2200	psig		267	285	262	260	260	262	262	262	262	262	262	262	262	262	262	261	261	263	264	264	263	263	263	263	263	263
2nd Stage Disch. Press	PI-2201	psig		575	600	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565
Final Discharge Pressure	PI-2108	psig		575	600	560	560	560	560	560	560	560	560	560	560	559	559	559	562	560	559	559	559	560	560	560	560	560	560
Lube Oil Pressure	PI-1572	psig	40	60		59	59	59	59	59	59	58	58	58	58	54	59	59	59	59	59	59	54	59	59	59	59	59	59
Lube Oil Temp	TE-1584	deg		150	170	165	165	166	165	167	166	168	168	168	167	166	165	165	164	164	164	164	164	164	164	164	164	164	164
Final Discharge Temp	TE-2120	deg		110	150	100	100	101	100	95	95	93	94	94	98	103	108	109	111	110	110	111	110	111	109	106	106	108	105
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	216	217	216	216	213	214	212	213	213	215	218	220	220	221	221	221	221	221	220	219	218	218	220	218
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	218	219	218	218	214	217	212	213	213	216	221	225	227	226	226	228	228	224	224	222	223	221	220	221
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	215	215	215	215	212	213	211	212	212	215	217	219	219	220	220	220	220	220	220	219	217	217	219	217
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	219	219	219	219	215	215	215	214	215	218	222	226	226	229	229	229	229	229	226	224	223	223	224	223
Motor Frame Vibration	VT-1015	IPS			0.15	.03	.03	.03	.03	.04	.04	.04	.04	.04	.04	.03	.04	.04	.04	.04	.04	.04	.04	.04	.04	.03	.03	.03	.03
Compresser Frame Vibration	VT-1512	IPS			0.35	.05	.05	.05	.05	.06	.06	.05	.05	.05	.05	.05	.05	.05	.06	.06	.05	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.						560							560								560								
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8	556							556								556								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20	546							546								545								

DATE	SEP 11 2022
SIGNATURE	GOMEZ
Mid Shift	
Days Shift	

Notes

Utilities and Institutional Facilities

turbine

CGTG HOURLY READING LOG

Date: 9-12-22

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

		I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Instrument Air Compressor																													
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	110	113	107	112	105	113	112	110	106	100	104	108	102	108	101	105	105	108	101	108	108	105	110	108
4	Instrument Temperature	TI-001	deg C		20	50	23	23	22	21	21	21	22	22	22	23	25	25	26	28	29	28	27	27	27	27	27	26	26	26
5	**Fin Fan Cooler**		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	106	104	101	107	103	100	101	108	110	110	105	107	109	110	102	104	101	103	102	107	104	102	107	102
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60	60	60	60	60	60	60	61	61	61	61	61	61	61	63	63	60	60	60	60	60	60	60	60
10	Coolant Return Differential from	FI-002	In WC		37	50	37	37	36	36	36	36	36	36	36	36	36	36	36	36	36	36	35	35	35	35	35	35	35	35
11	**Control Room**		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	76	70	76	76	70	70	70	70	70	70	70	70	70
15	**WECC Log**		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	54	54	54	54	54	54	55	55
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
21	Acknowledge Alarms Hourly		V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	885	881	883	886	884	879	877	875	876	883	879	884	889	879	883	880	881	879	882	887	888	885	882	883
23	Mw Output		MW			27	20.9	21.0	21.1	21.1	21.1	21.0	21.0	21.0	20.9	21.0	21.0	20.9	20.9	20.8	20.9	20.9	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
24	80% Base Load Minimum		MW				18.7	19.0	19.1	19.3	19.2	19.2	19.1	20.9	18.5	18.3	18.0	17.7	17.6	17.9	17.4	17.5	17.8	17.8	17.8	18.1	18.1	18.1	18.4	18.4
25	Running Hours (unit overview)						10258	10259	10260	10261	10262	10263	10264	10265	10266	10267	10268	10269	10270	10271	10272	10273	10274	10275	10276	10277	10278	10279	10280	10281
26	Ambient Temperature	T1 inlet					62.8	58.5	58.3	58.4	56.5	56.5	52.6	41.9	45.1	47.5	51.6	54.5	54.1	57.2	57.2	57.4	73	73	73	72	72	70	68	66
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	58	58	59	58	59	59	59	59	58	59	57	56	56	57	57	57	58	58	58	58	58	58	59	59
28	Total Fuel Flow		Mscf/h				201	201	202	202	201	200	201	202	204	203	203	204	204	204	202	201	203	203	203	203	203	203	204	204

Date: 9-12-22 Signature: AWan

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	F	E	E	E	E	E	E	E	E	G	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	23	23	23	22	22	22	22	22	22	22	23	22	22	22	22	22	22	22	22	22	22	22	22	22
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	F	F	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	90	90	90	90	90	90	90	89	89	89	89	89	89	89	89	89	89	89	89	90	90	90	90	90
Stage Disch. Press	PI-2101	psig		238	285	267	266	266	266	266	266	265	265	265	265	267	267	267	268	268	269	268	268	268	268	268	268	268	268
2nd Stage Inlet Press	PI-2200	psig		267	285	262	262	262	262	262	262	262	261	261	261	263	263	263	264	264	264	264	264	264	264	264	264	264	264
2nd Stage Disch. Press	PI-2201	psig		575	600	565	564	564	565	565	565	565	564	564	564	565	565	565	565	565	565	565	565	585	565	565	565	565	565
Final Discharge Pressure	PI-2108	psig		575	600	560	559	559	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560
Lube Oil Pressure	PI-1572	psig	40	60		59	59	59	59	58	58	59	59	59	59	59	59	59	59	59	59	59	59	59	60	60	60	60	60
Lube Oil Temp	TE-1584	deg		150	170	164	165	165	166	167	167	167	167	167	167	166	164	164	166	166	166	166	166	166	164	164	164	163	163
Final Discharge Temp	TE-2120	deg		110	150	104	100	99	97	96	96	44	103	107	105	111	111	111	119	118	118	117	117	117	111	111	111	110	110
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	217	215	215	216	216	216	216	219	219	219	222	222	222	226	227	227	227	227	227	223	223	223	221	221
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	219	219	219	217	216	216	216	222	222	222	223	223	223	225	226	226	226	226	226	230	230	230	228	228
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	218	216	217	216	216	217	217	218	219	219	221	221	221	225	225	225	224	224	224	222	222	222	220	220
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	220	220	220	219	218	218	219	224	227	226	229	232	229	237	237	237	235	235	235	231	231	231	229	229
Motor Frame Vibration	VT-1015	IPS			0.15	.03	.03	.03	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.03	.03	.03	.03	.03
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.05	.06	.06	.04	.04	.04	.04	.04	.04	.04	.05	.05	.05	.07	.07	.07	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																								

DATE 9-12-22

SIGNATURE

Mid Shift A Wan

Days Shift

Notes

Utilities and Institutional Facilities

Date: SEPT 13 2022

CGTG HOURLY READING LOG

MST / (MDT) (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes: 265

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√				✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√				✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	108	106	108	104	108	110	100	105	101				110	106	102	105	102	101	108	112	104	108	110	106
4	Instrument Temperature	TI-001	deg C		20	50	26	26	24	24	22	22	21	20	21				28	28	28	28	28	27	26	26	26	24	24	24
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19				19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	111	104	100	107	102	106	104	107	104				100	103	111	104	109	106	103	100	102	108	105	102
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2						1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60	60	60	60	60	60	60	60	60				63	63	63	63	63	65	60	60	60	60	60	60
10	Coolant Return Differential from	FI-002	In WC		37	50	35	35	35	35	35	35	35	35	35				38	38	34	34	36	36	35	35	35	35	35	35
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70				UP70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/ on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	55	55	55	55	55	55	55	55	55				55	55	55	55	55	55	55	55	55	56	56	56
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0							0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√				✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	880	882	881	885	883	886	863	877	876	880	886	885	884	879	889	880	882	876	879	878	882	880	880	877
23	Mw Output		MW			27	21.0	21.0	21.0	21.0	21.0	21.0	21.0	20.9	20.8	20.9	21.2	21.1	21.0	20.9	21.1	20.9	21.1	20.9	20.9	21.1	21.1	21.0	21.1	21.1
24	80% Base Load Minimum		MW				18.7	18.7	18.7	18.7	19.0	19.0	19.0	18.8	18.8	18.1	18.1	17.9	17.9	17.7	17.8	18.2	18.0	18.0	18.6	19.0	19.0	19.1	19.3	19.3
25	Running Hours (unit overview)						10282	10283	10284	10285	10286	10287	10288	10289	10290	10291	10292	10293	10294	10.4	10296	10297	10298	10299	10301	10302	10303	10304	10305	10306
26	Ambient Temperature	T1 inlet					62	62	60	60	59	59	59	61.0	63.9	69.6	76.9	72.1	72.2	74.7	68.2	62.1	71.4	71.4	70	70	64	60	58	55
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	59	59	58	58	58	58	59	58	58	57	57	57	56	58	58	57	59	59	59	60	60	60	60	60
28	Total Fuel Flow		Mscf/h				203	203	203	204	204	204	201	203	204	204	204	204	204	204	202	202	202	202	202	202	202	202	203	203

Date:

Signature:

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B				B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	Busy			E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2				1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	20	20	20	20	20	20	20	20	20		WITH		20	20	19	19	19	19	19	19	19	19	19	19
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F		NEW		F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	F		GAS		E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	F		START	UP	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B		COMP.		B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	90	90	90	90	90	90	90	90	90				108	108	107	89	89	89	89	89	89	89	89	89
Stage Disch. Press	PI-2101	psig		238	285	268	268	267	267	267	267	267	266	266				233	233	232	266	266	266	266	266	266	266	266	264
2nd Stage Inlet Press	PI-2200	psig		267	285	264	264	263	263	263	263	262	262	262				225	225	225	262	262	262	262	262	262	262	262	260
2nd Stage Disch. Press	PI-2201	psig		575	600	565	565	565	565	565	565	565	564	564				213	213	213	565	565	565	565	565	565	565	565	565
Final Discharge Pressure	PI-2108	psig		575	600	560	560	560	560	560	560	560	559	559				200	200	200	560	560	556	560	560	560	560	560	560
Lube Oil Pressure	PI-1572	psig	40	60		60	60	60	59	59	59	58	59	59				58	58	59	59	59	59	59	59	59	59	59	58
Lube Oil Temp	TE-1584	deg		150	170	164	163	163	165	165	163	162	165	165				164	164	164	163	162	162	162	162	162	161	161	161
Final Discharge Temp	TE-2120	deg		110	150	111	110	108	106	106	102	102	102	102				86	85	83	111	111	84	104	104	104	104	102	102
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	223	221	218	218	217	217	216	217	217				204	204	203	223	223	223	223	223	223	223	223	223
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	228	228	225	225	220	220	220	219	219				125	125	123	230	236	236	236	236	235	226	226	224
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	220	220	218	218	217	217	216	216	216				203	203	203	222	222	222	222	222	222	220	220	220
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	229	229	220	220	220	220	220	220	220				126	120	124	236	236	238	280	280	280	228	228	228
Motor Frame Vibration	VT-1015	IPS			0.15	.03	.03	.03	.04	.04	.04	04	04	04				04	04	04	04	04	04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	04	04	04				07	07	07	06	06	04	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																		200		560									
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8													547		556									
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20													536		540									

DATE	SEPT 19 2022
SIGNATURE	
Mid Shift	
Days Shift	

Notes

Utilities and Institutional Facilities

CGTG HOURLY READING LOG

Date: SEPT 14 2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√				✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√				✓	✓	✓	✓	✓		✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	108	110	106	108	108	106	98			101	100	105	109	105	105	102	109	107	108	105	108	100	108	105
4	Instrument Temperature	TI-001	deg C		20	50	22	20	20	20	20	20	19			20	21	21	22	25	25	25	23	23	23	22	22	21	21	21
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19			19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	102	100	98	105	100	105	99			103	99	109	110	102	108	104	101	101	102	103	99	101	103	100
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2			1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60	60	60	60	60	60	60			60	60	60	60	62	62	62	62	62	60	60	60	60	60	60
10	Coolant Return Differential from	FI-002	In WC		37	50	35	35	35	35	35	35	32			32	32	32	32	36	36	36	36	36	35	35	35	35	35	35
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70			70	70	70	70	70	76	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	55	55	55	55	55	55	55			55	55	55	55	50	50	56	56	55	55	56	55	56	55	55
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0			0	0	0	0	0	0	0	6	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√				✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	878	879	882	886	881	878	882	879	882	879	880	880	879	881	876	884	888	880	881	882	880	875	876	877
23	Mw Output		MW			27	21.0	21.0	21.0	20.9	21.1	21.1	21.1	21.1	20.9	20.9	21.0	21.0	20.9	21.1	20.9	21.0	21.1	21.8	21.0	21.0	21.0	21.0	21.0	21.0
24	80% Base Load Minimum		MW				19.3	19.3	19.3	19.3	19.2	19.2	19.6	19.3	19.2	18.8	18.8	18.6	18.6	18.3	18.2	18.60	18.3	18.2	19.1	19.1	19.1	19.1	19.1	19.1
25	Running Hours (unit overview)						10306	10307	10308	10309	10310	10311	10312	10313	10314	10315	10316	10317	10318	10319	10320	10321	10322	10323	10324	10325	10326	10327	10328	10329
26	Ambient Temperature	T1 inlet					55	55	55	55	55	55	54	54.5	57.2	61.9	61.9	64.6	64.2	68.0	65.1	63.3	62.5	68.7	67	66	63	61	60	58
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	60	60	60	60	60	60	61	61	63	61	60	61	61	61	61	61	61	61	61	61	61	61	61	61
28	Total Fuel Flow		Mscf/h				204	204	204	204	203	203	201	202.8	204.	204	203	203	205	205	203	203.6	203	204	203	203	203	203	203	203

Date:

Signature:

224

35/8 220

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B								B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E								E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2								1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	18	18	18	18	18	18	17																	
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F								F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E								E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E								E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B								B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	90	90	90	90	90	90	89	89								89	89	89	89	89	89	89	89	89
Stage Disch. Press	PI-2101	psig		238	285	267	265	265	265	266	265	263									264	264	264	264	263	263	263	263	263
2nd Stage Inlet Press	PI-2200	psig		267	285	263	262	262	261	261	261	259									260	260	260	260	260	259	259	259	259
2nd Stage Disch. Press	PI-2201	psig		575	600	565	565	565	565	565	565	564									565	567	585	585	565	565	565	565	585
Final Discharge Pressure	PI-2108	psig		575	600	560	560	560	560	560	560	559									560	560	560	560	560	560	560	560	560
Lube Oil Pressure	PI-1572	psig	40	60		59	59	59	59	59	59	58									60	60	60	60	60	59	59	59	59
Lube Oil Temp	TE-1584	deg		150	170	165	166	166	167	167	167	167									155	155	155	158	168	168	160	160	160
Final Discharge Temp	TE-2120	deg		110	150	102	100	100	95	96	95	93									106	107	105	105	105	102	102	101	101
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	217	217	215	215	215	215	214									222	220	222	222	222	220	220	220	220
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	219	218	218	217	217	217	212									227	227	227	225	225	225	225	225	225
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	217	215	215	215	215	213	214									222	222	222	222	222	220	220	220	220
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	220	210	210	208	210	210	214									228	228	225	225	225	222	222	222	228
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.03	.03	.03	.03	.03	03									04	04	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	06									05	06	.05	.05	.05	.05	.05	.05	.05
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																								
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8										549	549	549	549		547									
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20										538	538	537	538		537									

DATE	SEPT 14 2022
SIGNATURE	
Mid Shift	
Days Shift	

Notes

Utilities and Institutional Facilities

Date: SEPT 15 2022

MST / (MDT) (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed): 1033

Time Turbine Offline (Brkr Open): 1016

Time No Gas Flow:

Notes:

CGTG HOURLY READING LOG

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	108	104	101	108	110	104	112		106	100		112	108	108	110	114	108	110	107	109	110	109	110	109
4	Instrument Temperature	TI-001	deg C		20	50	20	20	20	20	18	18	18		19	22		24	24	25	26	27	27	26	25	23	23	23	23	22
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19		19	19		19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	100	99	106	103	100	106	103		104	110		103	107	100	111	103	110	107	101	106	105	103	107	109
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	1/2	1/2	1/2	1/2	1/2	1/2	2/3		2/3	2/3		2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60	60	60	60	60	60	60		62	62		62	62	62	60	62	62	62	62	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	35	35	35	35	35	35	36		37	36		37	39	39	38	36	36	35	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70		70	70		70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?				✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	55	55	55	55	55	55	55		55	55		55	55	55	55	55	58	54	54	54	54	55	55	55
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0		0	0		0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		v				✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	879	881	883	878	872	875	882		876	882		885	881	889	889	885	882	879	884	881	870	820	891	885
23	Mw Output		MW			27	21.1	21.1	21.1	21.1	21.1	21.1	21.0		21.0	21.0		20.9	20.9	21.1	21.1	21.0	20.9	20.9	21.1	20.9	21.1	21	20.9	21.1
24	80% Base Load Minimum		MW				19.2	19.2	19.3	19.3	19.4	19.4	19.41		18.9	18.6		18.4	18.1	18.1	18.1	17.8	17.8	17.9	18.3	18.1	18.2	18.7	18.8	18.6
25	Running Hours (unit overview)						10330	10331	10332	10333	10334	10335	10336		10337	10338		10340	10341	10342	10343	10344	10345	10346	10347	10348	10349	10350	10351	10352
26	Ambient Temperature	T1 inlet					56	56	55	55	54	54	54		60	64		66	70	70	70	74	73	72	68	65	64	63	62	62
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	61	61	61	61	61	61	61		61	60		62	62	62	61	62	63	62	62	62	63	63	62	62
28	Total Fuel Flow		Mscf/h				203	203	203	203	203	203	203		204	203		204	204	204	205	204	203	206	203	205	204	204	204	204

Date:

Signature: day shift - [illegible] Bob Lang (MIDS)

CGTG TURBINE 1627 UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME	1026																												
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B		B	B			B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E		E	E			E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2		1/2	1/2			1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	16	16	16	16	16	16	16		16	16			15	15	15	15	15	15	15	15	15	15	15	14
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F		F	F			F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E		E	E			E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E		E	E			E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B		B	B			B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	90	90	90	90	90	90	90		89	89			88	89	89	89	89	89	89	89	89	89	89	89
Stage Disch. Press	PI-2101	psig		238	285	265	265	265	265	265	265	265		264	265			264	265	265	266	266	266	266	265	265	265	265	265
2nd Stage Inlet Press	PI-2200	psig		267	285	262	262	262	262	261	261	261		260	261			259	261	264	262	262	262	262	262	262	262	262	262
2nd Stage Disch. Press	PI-2201	psig		575	600	565	565	565	565	565	565	565		565	565			565	564	565	564	565	565	563	561	560	565	565	561
Final Discharge Pressure	PI-2108	psig		575	600	560	560	560	560	560	560	560		559	559			559	559	559	559	559	559	560	560	560	560	560	560
Lube Oil Pressure	PI-1572	psig	40	60		59	59	59	59	59	59	58		58	59			59	59	59	59	59	59	59	59	59	59	59	59
Lube Oil Temp	TE-1584	deg		150	170	167	167	167	168	168	168	167		166	166			162	164	165	164	164	164	164	164	164	164	164	164
Final Discharge Temp	TE-2120	deg		110	150	96	96	96	96	94	94	95		100	10			107	110	111	113	114	113	108	105	105	104	103	101
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	217	217	217	217	216	216	214		216	219			223	223	222	223	223	223	221	219	219	219	218	218
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	218	218	218	218	216	216	215		218	224			222	229	224	232	231	230	227	224	226	224	223	222
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	217	217	217	217	216	216	214		216	218			221	222	222	223	223	223	221	218	218	218	218	218
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	219	219	219	219	218	218	217		220	225			222	230	230	233	232	234	229	225	225	225	224	223
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04		.04	.03			.04	.04	.04	.04	.04	.04	.03	.03	.03	.03	.03	.03
Compresser Frame Vibration	VT-1512	IPS			0.35	.05	.05	.05	.05	.05	.05	.05		.05	.05			.05	.06	.03	.06	.06	.06	.06	.0	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.														560								560							
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8									556								556							
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20									545								546							

DATE	SEPT 15 2022
SIGNATURE	
Mid Shift	
Days Shift	
Notes	

Utilities and Institutional Facilities

UI-LOG-033-R4
October 1, 2020

CGTG HOURLY READING LOG

Date: 9-16-2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	109	110	104	109	111	109	108	106	106	106	110	106	108	106	108	108	110	108	111	110	105	109	109	107
4	Instrument Temperature	TI-001	deg C		20	50	22	21	20	20	20	20	19	20	22	23	25	25	27	27	28	28	29	29	27	24	23	23	23	23
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	107	104	103	107	109	107	106	99	105	99	105	103	101	100	102	106	100	103	104	104	103	102	107	106
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	62	60	62	60	60	62	62	62	62	62	62	62	62	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	30	36	36	30	36	36	36	39	39	39	37	39	39	39	37	37	37	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	55	55	55	55	55	55	55	55	55	55	55	55	55	54	54	54	54	54	54	54	54	54	54	54
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	886	881	887	886	884	886	889	878	890	880	887	883	890	875	885	880	889	881	883	883	884	884	884	878
23	Mw Output		MW			27	21.0	20.9	21.1	21.0	21.0	21.1	21.2	20.7	21.1	21.0	20.9	20.9	21.1	20.9	21.0	21.0	21.1	21.0	21.0	21.9	21.1	21.1	21.9	21.7
24	80% Base Load Minimum		MW				18.7	19.0	19.0	19.0	19.0	19.0	19.0	18.8	18.6	18.4	18.1	17.9	17.9	17.8	17.7	17.7	17.7	17.7	17.5	18.4	18.5	18.1	18.6	18.5
25	Running Hours (unit overview)						10353	10354	10355	10356	10357	10358	10359	10360	10361	10362	10363	10364	10365	10366	10367	10368	10369	10370	10371	10372	10373	10374	10375	10376
26	Ambient Temperature	T1 inlet					62	60	58	58	58	58	56	62	64	66	70	72	72	74	75	74	74	74	72	67	66	66	64	65
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	62	62	62	62	62	62	63	64	64	60	60	60	60	60	60	61	61	61	62	62	62	62	62	62
28	Total Fuel Flow		Mscf/h				204	204	204	204	203	203	204	203	204	204	205	203	205	205	204	204	203	202	204	204	203	202	204	203

Date: 9-16-2022 Signature: Bob Kay (m105) day shift - [illegible]

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil DayTank Level	LI-1562	GAL	30		FULL	14	14	14	14	14	14	14	14	14	14	45	45	45	45	45	45	45	45	45	44	44	44	44	44
Lubricator Bull's eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Discharge Pressure	PI-2100	psig		95	140	89	89	89	89	89	89	89	89	88	89	88	88	88	88	88	88	88	88	89	89	89	89	89	89
2nd Stage Discharge Press.	PI-2101	psig		238	285	265	265	265	265	265	265	264	265	264	265	265	266	266	266	265	265	265	265	266	266	265	265	265	265
2nd Stage Inlet Press.	PI-2200	psig		257	285	262	261	261	261	261	261	261	261	260	262	261	261	262	262	262	262	262	262	262	262	262	262	262	262
3rd Stage Discharge Press	PI-2201	psig		575	600	565	565	565	565	565	565	564	565	564	565	565	565	565	565	565	565	565	565	565	565	565	565	565	565
Final Discharge Pressure	PI-2108	psig		575	600	560	560	560	560	560	560	559	560	559	559	559	560	559	559	559	559	559	559	560	560	560	560	560	560
Lube Oil Pressure	PI-1572	psig	40	60		59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59
Lube Oil Temp	TE-1584	deg		150	170	164	164	164	164	164	165	166	165	165	165	164	164	164	164	165	164	164	164	164	164	164	164	164	164
Final Discharge Temp	TE-2120	deg		110	150	161	160	99	99	99	99	97	107	109	108	112	114	116	116	117	117	115	115	112	107	106	106	104	104
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		236	297	219	218	217	217	217	217	216	218	219	221	223	223	224	225	226	224	225	224	223	218	218	219	219	219
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	224	224	220	220	220	220	219	221	223	227	231	233	235	236	235	235	234	232	232	225	225	225	224	224
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		236	297	218	217	217	217	217	217	216	218	219	220	222	222	223	224	225	226	224	224	223	219	219	219	219	219
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	223	222	222	222	222	222	220	223	223	228	232	234	235	236	237	236	236	235	235	226	226	225	225	225
Motor Frame Vibration	VT-1015	IPS			0.15	.03	.03	.03	.03	.03	.03	.03	.04	.03	.03	.03	.04	.04	.04	.04	.04	.04	.04	.04	.03	.04	.04	.04	.04	.04
Compressor Frame Vibration	VT-1512	IPS			0.35	.06	.06	.05	.06	.06	.06	.06	.05	.05	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.05	.06	.06	.06	.06	.06
Take Once per Hour at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp Discharge Press.							560								560									560					
Backup Check and Bleed Pressure	A63FGDT	49-48=psid			8		556								556									556					
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20		546								546									546					

DATE 9-16-2022

SIGNATURE

Mid Shift Bob A-O

Days Shift

Notes

Utilities and Institutional Facilities

Date: 9-17-2022

CGTG HOURLY READING LOG

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	111	109	109	108	106	111	108	112	112	106	114	112	114	114	114	114	110	108	106	109	110	109	110	109
4	Instrument Temperature	TI-001	deg C		20	50	23	22	21	21	20	20	19	19	22	24	25	26	27	28	29	29	29	29	28	26	29	24	24	24
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	109	110	100	103	106	104	99	108	109	110	103	99	112	110	103	99	106	103	99	101	107	102	106	104
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	60	60	62	60	60	62	62	62	62	62	63	63	62	62	61	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	36	38	39	39	39	39	39	38	39	37	38	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	72	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	54	55	55	55	55	55	55	55	55	55	55	55	55	54	54	54	54	54	54	54	54	54	55	55
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	881	876	881	881	883	881	885	890	877	880	887	880	892	882	877	877	875	876	876	877	885	881	874	876
23	Mw Output		MW			27	21.0	21.0	20.4	20.4	21.0	21.0	21.6	21.1	20.9	21.0	21.2	20.9	21.1	21.0	20.9	20.9	20.8	20.8	20.9	20.9	21.0	21.1	20.9	21.0
24	80% Base Load Minimum		MW				18.6	18.7	18.4	18.4	19.0	19.0	19.1	18.8	18.4	18.2	18.1	17.9	17.8	17.7	17.5	17.5	17.5	17.6	17.9	17.7	17.3	18.4	18.3	18.3
25	Running Hours (unit overview)						10377	10378	10379	10380	10381	10382	10383	10384	10385	10386	10387	10388	10389	10390	10391	10392	10393	10394	10395	10396	10397	10398	10399	10400
26	Ambient Temperature	T1 inlet					65	61	60	59	58	59	57	61	66	69	72	72	73	76	77	76	77	76	72	68	67	67	68	68
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	62	62	62	62	62	62	62	62	62	61	60	61	61	61	61	61	62	62	62	62	62	62	62	62
28	Total Fuel Flow		Mscf/h				203	204	204	203	203	203	204	202	203	204	205	204	203	204	204	203	203	203	202	203	204	204	205	205

Date: 9-17-2022 Signature: (MIDS) Bob Avery

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	44	44	44	43	43	42	43	42	42	42	42	42	42	41	41	41	41	41	41	41	41	41	41	41
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	89	89	89	89	89	88	89	88	88	88	88	89	88	89	88	89	88	89	89	89	89	89	89	89
Stage Disch. Press	PI-2101	psig		238	285	265	265	265	265	265	265	264	264	264	264	265	266	265	266	267	267	267	267	267	264	266	265	266	266
2nd Stage Inlet Press	PI-2200	psig		267	285	262	261	261	261	261	261	260	260	260	261	262	262	262	262	263	263	263	263	263	263	262	262	262	262
2nd Stage Disch. Press	PI-2201	psig		575	600	565	565	565	565	565	565	565	564	564	565	565	568	565	565	565	565	564	565	565	565	565	565	565	565
Final Discharge Pressure	PI-2108	psig		575	600	560	560	560	560	560	560	560	559	559	559	559	559	559	559	559	559	559	559	560	560	560	560	560	560
Lube Oil Pressure	PI-1572	psig	40	60		59	59	59	59	59	59	50	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	60	60
Lube Oil Temp	TE-1584	deg		150	170	164	164	164	165	166	165	166	165	165	164	164	164	164	164	164	164	164	163	164	164	164	164	164	165
Final Discharge Temp	TE-2120	deg		110	150	104	102	100	99	98	98	98	102	106	110	113	115	116	118	119	110	118	118	114	108	108	107	108	109
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	219	219	216	217	217	217	216	218	221	220	224	225	225	226	226	226	226	226	226	222	219	218	219	221
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	224	223	221	220	219	219	219	222	226	230	233	235	236	237	238	237	237	236	233	229	226	225	226	229
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	219	218	217	217	217	217	216	218	220	222	223	224	224	225	225	225	225	225	223	222	220	219	220	221
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	225	224	222	222	221	221	221	223	227	231	234	235	236	236	238	239	238	239	238	230	229	226	227	230
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.03	.03	.04	.04	.04	.04	.04	.03	.03	.03	.03	.04	.04	.04	.04	.04	.04	.04	.03	.04	.04	.03	.03
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.05	.05	.05	.05	.05	.05	.06	.06	.06	.06	.06	.06	.06	.06	.05	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.										560								561											
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8					556								557											
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20					546								546											

DATE	9-17-2022
SIGNATURE	
Mid Shift	Bob Arag
Days Shift	

Notes

Utilities and Institutional Facilities

Date: 9-18-2022

CGTG HOURLY READING LOG

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	111	110	107	110	111	107	110	112	114	114	108	106	108	106	106	114	111	106	108	111	109	103	111	110
4	Instrument Temperature	TI-001	deg C		20	50	24	23	22	22	21	21	20	20	23	25	27	28	28	29	29	29	29	29	28	24	24	24	23	23
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	103	107	105	101	203	107	108	99	107	107	100	106	104	100	112	101	103	105	107	109	101	104	107	104
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	62	62	60	60	62	62	62	62	62	62	62	62	62	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	37	36	39	39	39	36	39	39	39	39	39	37	37	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	55	55	55	55	55	55	55	55	55	55	55	55	54	54	54	54	54	54	54	54	54	54	55	55
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	878	877	873	871	881	883	882	879	881	878	885	887	880	880	884	876	879	879	884	879	880	876	874	877
23	Mw Output		MW			27	21.0	21.0	21.1	20.8	20.9	21.1	21.1	21.1	20.9	20.9	21.1	21.2	21.0	20.9	21.0	20.8	20.9	20.9	21.1	20.9	20.9	20.9	20.9	20.9
24	80% Base Load Minimum		MW				18.3	18.4	18.6	18.7	18.8	18.8	17.0	18.1	19.3	18.0	17.8	17.7	17.6	17.5	17.6	17.7	17.5	17.5	17.7	18.2	18.5	18.2	18.3	18.4
25	Running Hours (unit overview)						10461	10462	10463	10464	10465	10466	10467	10468	10469	10470	10471	10472	10473	10474	10475	10476	10477	10478	10479	10420	10421	10422	10423	10424
26	Ambient Temperature	T1 inlet					68	67	64	63	61	62	59	63	67	71	73	75	76	77	75	78	77	77	75	69	68	69	67	66
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	62	62	62	62	62	62	62	63	62	61	61	61	61	61	61	61	62	62	62	63	63	62	62	62
28	Total Fuel Flow		Mscf/h				204	203	204	204	203	203	203	203	203	204	205	203	205	203	204	203	204	204	201	204	204	205	204	204

Date: 9-18-2022 Signature: Bob Hess (mins) / (days) John Ames

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	41	41	41	40	40	40	40	40	40	40	40	40	40	39	39	39	39	39	39	39	39	39	39	39
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	89	89	89	89	89	89	89	89	88	88	89	88	88	88	89	88	89	89	89	89	89	89	89	89
Stage Disch. Press	PI-2101	psig		238	285	266	266	266	265	265	265	264	265	265	265	265	266	266	266	267	267	267	267	267	266	266	266	265	266
2nd Stage Inlet Press	PI-2200	psig		267	285	262	262	261	261	261	261	261	261	261	261	262	262	262	262	263	263	263	263	263	263	262	263	263	263
2nd Stage Disch. Press	PI-2201	psig		575	600	565	565	565	565	565	565	565	565	564	565	566	565	565	565	565	565	565	565	565	565	565	565	565	565
Final Discharge Pressure	PI-2108	psig		575	600	560	560	560	560	560	560	560	559	559	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560
Lube Oil Pressure	PI-1572	psig	40	60		60	60	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59
Lube Oil Temp	TE-1584	deg		150	170	163	163	163	163	163	163	166	165	164	164	165	165	164	165	164	164	164	164	164	164	164	164	164	164
Final Discharge Temp	TE-2120	deg		110	150	109	108	104	102	102	102	98	102	98	112	116	116	116	116	110	119	119	118	116	113	108	108	108	108
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	221	220	219	218	218	218	217	218	221	223	224	226	226	222	225	226	226	225	224	223	222	222	221	221
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	224	223	224	222	222	222	219	223	228	231	232	236	238	236	237	238	238	237	234	232	228	228	228	226
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	221	220	219	218	218	218	216	218	221	223	224	225	225	225	224	225	221	225	224	222	221	221	221	221
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	230	229	225	224	224	224	221	224	229	232	234	234	237	238	237	238	238	237	236	233	229	229	229	229
Motor Frame Vibration	VT-1015	IPS			0.15	.03	.03	.03	.03	.03	.03	.04	.03	.03	.03	.03	.04	.04	.04	.04	.04	.04	.04	.05	.03	.03	.03	.03	.03
Compresser Frame Vibration	VT-1512	IPS			0.35	.04	.05	.06	.05	.01	.06	.05	.05	.05	.05	.05	.06	.06	.06	.05	.05	.05	.06	.06	.05	.05	.05	.05	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.										556							560												
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8					556							556												
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20					545							545												

DATE 9-18-2022

SIGNATURE

Mid Shift Bob Stang

Days Shift

Notes

Utilities and Institutional Facilities

Date: 9-19-2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

CGTG HOURLY READING LOG

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	111	109	108	111	112	109	106	102	101	102	105	108	107	105	102	105	110	103	108	102	108	102	110	108
4	Instrument Temperature	TI-001	deg C		20	50	21	21	21	21	21	20	20	20	20	20	22	28	29	29	29	29	28	28	26	26	26	24	24	24
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	104	107	101	107	106	109	105	100	104	109	102	102	101	102	107	102	107	103	106	104	112	106	104	101
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	62	62	62	62	64	63	63	63	63	63	63	63	60	60	60	60	60	CD
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	34	36	34	34	36	38	34	38	38	37	37	37	35	35	35	35	35	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	76	70	70	70	70	70	76	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	55	55	55	55	55	55	55	55	55	55	60	55	55	58	55	55	59	55	55	55	55	55	55	55
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	885	885	884	881	879	882	875	883	876	888	878	887	890	889	884	883	883	880	885	883	878	882	885	884
23	Mw Output		MW			27	21.2	21.1	21.1	21.1	21.0	20.9	20.9	21.1	20.8	21.1	21.0	21.1	21.1	21.0	21.1	21.0	21.0	20.9	20.8	20.8	20.8	21.1	21.1	21.1
24	80% Base Load Minimum		MW				18.9	18.9	18.9	18.9	18.8	19.0	19	18.9	18.5	18.1	18.1	17.9	17.6	17.8	17.6	17.7	17.6	17.5	17.9	17.9	17.9	18.7	18.7	18.7
25	Running Hours (unit overview)						10426	10426	10427	10428	10429	10430	10431	10432	10433	10434	10435	10436	10437	10438	10439	10440	10441	10442	10443	10444	10445	10446	10447	10448
26	Ambient Temperature	T1 inlet					61	61	60	61	61	59	59	60.8	63.1	69.6	71.1	72.5	75.6	73.8	74.3	74.8	76.1	77.0	72	72	70	70	68	68
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	62	62	62	62	62	62	63	62	64	61	61	61	61	61	61	62	62	62	64	64	64	64	63	63
28	Total Fuel Flow		Mscf/h				203	204	204	203	202	204	204	203	204	204	205	206	203	206	206	205	205	206	203	203	203	203	204	204

Date: 9-19-2022 Signature: Bob Hug (MIOS)

150690

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	39	39	39	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	F	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	89	89	89	89	89	89	89	89	89	89	88	89	89	89	89	89	89	89	89	89	89	89	90	90
Stage Disch. Press	PI-2101	psig		238	285	266	266	266	266	266	266	264	264	266	264	265	265	265	264	267	267	267	264	266	266	266	266	267	267
2nd Stage Inlet Press	PI-2200	psig		267	285	262	262	261	261	261	261	261	260	260	260	261	261	261	261	263	263	263	262	262	262	262	262	263	263
2nd Stage Disch. Press	PI-2201	psig		575	600	565	565	565	565	565	565	565	565	563	563	564	565	565	565	565	562	562	562	565	565	565	565	565	565
Final Discharge Pressure	PI-2108	psig		575	600	559	559	559	535	559	559	559	560	560	561	560	560	560	560	560	560	560	560	560	560	560	560	560	560
Lube Oil Pressure	PI-1572	psig	40	60		59	59	59	15	59	59	59	59	59	59	59	59	58	59	59	59	59	59	59	59	59	59	60	60
Lube Oil Temp	TE-1584	deg		150	170	163	164	164	165	164	165	165	165	166	166	165	165	165	165	164	164	164	164	164	164	164	164	164	164
Final Discharge Temp	TE-2120	deg		110	150	102	102	101	101	101	101	102	102	102	104	111	112	112	112	116	113	111	113	113	113	111	111	110	108
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	219	219	218	218	218	218	218	218	220	219	223	224	224	224	225	225	228	224	225	225	223	223	222	222
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	222	222	221	224	221	221	221	220	220	220	231	233	233	232	224	232	232	232	233	233	230	230	229	229
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	218	218	218	218	218	217	216	218	218	218	223	222	223	223	226	223	220	223	223	223	223	223	222	222
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	224	224	224	233	223	223	223	221	221	221	232	233	233	234	236	234	234	234	234	234	232	232	230	230
Motor Frame Vibration	VT-1015	IPS			0.15	.03	.03	.04	.04	.04	.04	.04	.04	.04	.04	.03	.04	.04	.04	.03	.04	.04	.04	.04	.04	.03	.03	.03	.03
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.03	.05	.03	.03	.03	.04	.04	.04	.04	.04	.04	.04	.04	.03	.04	.04	.04	.06	.06	.05	.05	.05	.05
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.										560																			
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8					554																			
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20					545																			

DATE 9-19-2022

SIGNATURE

Mid Shift Bob Aug

Days Shift

Notes

Utilities and Institutional Facilities

347 4 5/8 320
314

CGTG HOURLY READING LOG

Date: SEPT 20 2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	108	102	110	101	108	110	109	100	103	101	103	105	109	110	105	100	108	100	108	110	108	100	105	110
4	Instrument Temperature	TI-001	deg C		20	50	24	24	24	24	22	22	22	21	22	23	25	26	29	29	29	29	29	29	26	26	24	24	22	22
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	113	110	100	102	104	106	105	100	106	109	69	101	102	107	105	108	101	107	110	106	112	106	100	102
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60	60	60	60	60	60	60	63	63	63	63	63	63	63	63	63	63	63	60	60	60	60	60	60
10	Coolant Return Differential from	FI-002	In WC		37	50	35	35	35	35	35	35	35	36	38	38	34	34	38	38	38	38	37	37	35	35	35	35	35	35
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	55	55	55	55	55	55	55	55	55	50	55	50	25	55	55	55	55	55	55	55	55	55	55	55
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20								✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						
21	Acknowledge Alarms Hourly		√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	884	880	875	874	887	886	878	878	941	927	966	965	889	887	891	870	896	896	941	942	974	972	973	972
23	Mw Output		MW			27	20.9	20.9	20.9	20.9	21.1	21.1	20.1	20.9	22.4	22.1	21.5	21.5	21.1	21.0	21.0	20.6	21.2	21.2	22.3	22.3	23.1	23.1	23.1	23.1
24	80% Base Load Minimum		MW				18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.5	18.4	18.2	17.8	17.8	17.5	17.5	17.5	17.3	17.2	17.7	18.6	18.3	18.8	18.8	18.8	18.8
25	Running Hours (unit overview)						10449	10450	10451	10452	10453	10454	10455	10456	10458	10459	10460	10461	10462	10463	10464	10465	10466	10467	10468	10469	10470	10471	10472	10473
26	Ambient Temperature	T1 inlet					64	64	64	62	61	61	61	65.1	66.4	68.9	73.8	72.7	76.8	77.5	76.8	79.3	79.5	79.8	67	67	63	61	61	61
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	63	63	63	63	63	63	63	63	63	62	62	62	61	61	61	61	62	62	62	62	62	62	62	62
28	Total Fuel Flow		Mscf/h				204	204	204	204	205	205	205	204	214	213	209	209	205	205	205	202	202	206	215	215	220	220	220	220

Date: SEPT 20 2022 Signature:

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	37	37	37	37	37	37	35	35	35	35	35	35	34	34	34	34	34	34	34	34	34	34	34	34
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	F	F	F	F	F	E	F	F	F	E	F	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	B	E	E	E	F	E	E	F	F	F	F	E	F	F	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	90	90	90	90	90	90	90	89	88	89	89	89	89	89	89	89	89	89	89	89	88	88	88	88
Stage Disch. Press	PI-2101	psig		238	285	267	267	267	267	267	267	267	265	263	263	266	266	267	267	267	267	266	266	266	266	264	264	263	263
2nd Stage Inlet Press	PI-2200	psig		267	285	265	265	263	263	263	263	263	261	260	260	261	261	263	263	263	260	262	262	262	262	260	260	259	259
2nd Stage Disch. Press	PI-2201	psig		575	600	585	586	586	585	585	585	536	564	565	565	564	564	564	564	564	563	565	565	565	565	565	565	565	565
Final Discharge Pressure	PI-2108	psig		575	600	560	560	560	560	560	560	540	560	560	560	559	559	559	559	559	548	560	560	560	560	560	560	560	560
Lube Oil Pressure	PI-1572	psig	40	60		60	60	60	60	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	60	60	60	60
Lube Oil Temp	TE-1584	deg		150	170	164	164	164	164	165	165	165	165	164	164	164	164	165	165	165	164	163	163	163	163	164	164	164	164
Final Discharge Temp	TE-2120	deg		110	150	108	108	108	108	105	105	105	106	106	106	114	114	119	119	119	119	116	116	116	116	113	113	110	110
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	222	222	222	222	219	219	219	221	219	219	224	224	226	226	226	226	224	224	224	224	220	220	218	218
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	229	229	229	229	225	225	224	225	226	226	233	233	237	237	237	237	235	235	235	235	230	222	222	222
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	222	222	222	222	219	219	219	220	219	219	223	223	226	226	226	226	224	223	224	224	220	220	218	218
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	230	230	230	230	225	225	223	226	227	227	235	238	236	239	238	234	236	234	236	236	232	230	230	225
Motor Frame Vibration	VT-1015	IPS			0.15	.03	.03	.03	.03	.03	.03	04	03	03	03	03	04	04	04	04	04	04	04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.05	.06	.05	.05	.05	.05	04	05	05	05	04	04	04	04	04	04	05	04	.05	.05	.05	.05	.05	.05
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																								

DATE	SEPT 20 2022
SIGNATURE	
Mid Shift	JC
Days Shift	

Notes

Utilities and Institutional Facilities

150

CGTG HOURLY READING LOG

Date: SEPT 21 2022

MST / (MDT) (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	108	100	108	110	104	108	98	112	101	109	108	111	112	110	102	110	101	107	110	108	110	110	108	106
4	Instrument Temperature	TI-001	deg C		20	50	22	22	22	20	20	20	20	20	21	21	23	24	25	26	28	28	28	28	26	26	26	26	22	22
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	102	100	112	106	99	102	112	100	109	110	102	100	102	101	100	110	101	106	104	102	111	100	102	106
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60	60	60	60	60	60	60	62	63	63	63	63	63	63	65	64	65	65	60	60	60	60	60	60
10	Coolant Return Differential from	FI-002	In WC		37	50	35	35	35	35	35	35	35	35	36	36	36	36	36	36	36	36	36	36	35	35	35	35	35	35
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	55	55	55	55	55	56	56	56	56	56	56	56	56	56	56	56	54	54	55	55	55	55	55	55
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√				✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	975	972	974	975	979	977	979	974	965	959	923	921	964	913	904	900	904	913	925	926	959	960	961	960
23	Mw Output		MW			27	23.0	23.0	23.0	23.0	23.1	23.1	23.2	23.1	22.9	22.7	21.9	21.9	21.4	21.5	21.4	21.4	21.4	21.9	21.9	21.9	22.7	22.7	22.7	22.7
24	80% Base Load Minimum		MW				18.8	18.8	18.8	18.8	18.9	18.9	18.9	18.8	18.7	18.4	18.0	18.0	17.8	17.9	17.8	17.7	17.8	17.9	18.1	18.1	18.6	18.6	18.6	18.6
25	Running Hours (unit overview)						10475	10475	10476	10477	10478	10479	10480	10481	10482	10483	10484	10485	10486	10487	10488	10489	10490	10491	10491	10492	10493	10494	10495	10496
26	Ambient Temperature	T1 inlet					61	61	61	60	60	60	60.3	61.0	62.8	63.9	70.7	70.7	74.1	73.2	74.1	74.5	74.1	71.8	69	69	68	64	64	64
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	62	62	62	62	62	62	63	63	63	62	65	65	65	65	67	67	67	67	66	66	66	66	66	66
28	Total Fuel Flow		Mscf/h				220	220	220	220	221	221	220	220	219	218	211	211	208	208	207	207	208	209	212	212	218	218	218	218

Date: SEPT 21 2022 Signature:

279 281

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	33	33	33	33	33	33	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	88	88	88	88	88	88	88	87	88	88	88	88	88	88	88	88	88	88	88	88	89	89	89	89
Stage Disch. Press	PI-2101	psig		238	285	263	263	263	263	263	263	262	261	262	263	265	265	266	266	266	265	266	268	266	266	266	266	266	266
2nd Stage Inlet Press	PI-2200	psig		267	285	259	259	259	258	258	258	258	257	258	257	261	261	262	262	262	262	262	262	262	262	262	262	262	262
2nd Stage Disch. Press	PI-2201	psig		575	600	565	565	565	565	565	566	564	564	565	571	564	564	565	565	566	565	564	564	565	565	565	565	565	563
Final Discharge Pressure	PI-2108	psig		575	600	560	560	560	560	560	560	560	559	560	558	560	560	560	560	560	556	560	560	560	560	560	560	560	560
Lube Oil Pressure	PI-1572	psig	40	60		60	60	60	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	60	60	60	60
Lube Oil Temp	TE-1584	deg		150	170	164	164	164	165	166	165	165	165	165	165	164	164	164	164	164	164	163	167	167	167	164	164	164	164
Final Discharge Temp	TE-2120	deg		110	150	101	101	101	100	100	100	101	101	102	104	111	111	115	114	114	114	114	114	114	114	112	112	110	110
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	217	217	217	217	217	217	216	216	218	218	222	222	224	224	224	224	223	223	223	223	220	220	220	220
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	222	222	222	222	222	223	222	221	223	225	230	230	234	234	234	234	233	233	233	233	228	228	228	228
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	217	217	217	217	217	217	216	216	217	218	221	221	223	223	223	223	223	223	223	223	220	220	220	220
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	223	223	223	224	224	224	223	223	224	227	231	231	235	235	233	233	235	237	235	235	230	230	230	230
Motor Frame Vibration	VT-1015	IPS			0.15	.03	.03	.03	.03	.03	.03	03	03	03	03	03	03	03	03	03	04	04	04	.03	.03	.04	.04	.04	.06
Compresser Frame Vibration	VT-1512	IPS			0.35	.05	.05	.05	.05	.05	.05	05	04	05	01	05	05	03	03	04	04	05	04	.05	.05	.06	.06	.06	.06
Take Once per Shift /at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																560													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8											556													
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20											544													

DATE	SEPT 21 2022
SIGNATURE	
Mid Shift	
Days Shift	

Notes

Utilities and Institutional Facilities

Date: SEPT 22 2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

CGTG HOURLY READING LOG

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	108	110	105	108	110	108	110	106	105	111	110		105	111	110	108	109	105	108	110	108	102	110	108
4	Instrument Temperature	TI-001	deg C		20	50	22	22	20	20	20	20	20	20	20	21	21		24	26	26	28	28	27	26	24	24	22	22	20
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19		19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	100	102	99	112	100	102	103	99	101	100	103		103	102	101	105	107	106	112	100	103	110	100	101
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3		2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60	60	60	60	60	60	60	60	60	63	63		63	63	63	63	63	63	60	60	60	60	60	60
10	Coolant Return Differential from	FI-002	In WC		37	50	35	35	35	35	35	35	38	35	38	36	34		34	36	36	36	36	36	35	35	35	35	35	35
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70		70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	55	55	55	55	55	55	55	58	58	55	58		55	58	55	55	55	55	55	55	55	55	55	53
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0								0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	999	1,000	1001	1002	995	996	1001	993	973	955	921	901	913	775	879	898	938	941	962	986	994	993	996	994
23	Mw Output		MW			27	23.6	23.6	23.7	23.7	23.8	23.8	23.9	23.7	23.2	22.8	22.0	21.7	21.7	21.4	21.0	21.2	22.4	22.5	23.0	23.5	23.7	23.7	23.7	23.7
24	80% Base Load Minimum		MW				19.1	19.1	19.1	19.2	19.2	19.2	19.3	19.2	18.9	18.6	18.1	17.9	18.0	17.8	17.5	17.5	18.1	18.5	18.8	19.1	19.2	19.2	19.2	19.2
25	Running Hours (unit overview)						10497	10498	10499	10500	10501	10502	10503	10504	10505	10506	10507	10508	10509	10510	10511	10512	10513	10513	10515	10516	10517	10518	10519	10520
26	Ambient Temperature	T1 inlet					57	57	57	56	56	56	55.4	56.3	60.4	64.0	70.2	72.0	71.4	73.5	76.8	74.2	66.2	65.3	61	57	57	56	56	56
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	66	66	66	70	69	69	69	69	68	68	69	69	69	0	69	69	68	0	68	68	68	68	68	68
28	Total Fuel Flow		Mscf/h				224	225	225	226	225	225	221	224	217	214	209	207	210	208	209	211	214	215	219	222	222	222	222	222

Date: SEPT 22 2022 Signature:

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B		B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	F	E	E		F	E	E	E	F	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	½	½	½	½	½	½	½	½	½	½	½		½	½	½	½	½	½	½	½	½	½	½	½
Oil Day Tank Level	LI-1562	GAL	10		FULL	31	31	31	31	31	31	30	29	29	29	29		29	28	28	28	28	28	28	28	28	28	28	28
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F		F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	F	E	E		E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	F	F	F	E	F		F	F	E	E	E	F	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B		B	B	B	O	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	89	89	89	89	86	86	86	88	88	88	88		88	98	97	97	97	97	97	97	97	97	97	97
Stage Disch. Press	PI-2101	psig		238	285	266	266	266	266	258	258	255	262	264	264	266		260	281	279	279	278	279	275	277	277	277	277	277
2nd Stage Inlet Press	PI-2200	psig		267	285	262	262	262	262	253	263	257	258	258	260	262		256	276	275	275	275	275	275	272	272	272	272	272
2nd Stage Disch. Press	PI-2201	psig		575	600	565	565	565	565	565	565	565	564	564	565	565		505	506	506	506	504	504	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	560	560	560	580	560	580	580	579	579	560	560		560	580	580	580	580	579	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		60	60	60	60	60	60	60	59	59	59	59		59	59	59	59	59	59	59	60	60	60	60	60
Lube Oil Temp	TE-1584	deg		150	170	164	164	164	164	163	164	164	165	165	164			163	163	164	164	164	164	164	162	162	162	162	162
Final Discharge Temp	TE-2120	deg		110	150	110	110	110	110	93	98	98	97	107	107			110	114	107	107	107	107	107	96	96	96	96	96
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	220	220	220	220	208	208	208	215	215	219			218	219	219	219	218	219	219	210	210	210	210	210
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	228	228	228	228	202	202	202	219	219	227			217	213	208	208	208	209	208	198	198	198	198	198
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	220	220	220	220	208	208	208	214	214	219			216	221	218	218	217	217	210	210	210	210	210	210
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	230	230	230	230	208	208	208	221	221	228			218	218	210	210	210	212	216	199	199	199	199	198
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.03	.03	.03	.03	.01	.03			.03	.03	.05	.05	.01	.04	.04	.04	.04	.04	.06	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.05	.05	.05	.05	.01	.05			.01	.06	.04	.04	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.															561														
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8										556														
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20										544														

DATE	SEPT 22 2022
SIGNATURE	
Mid Shift	
Days Shift	

TRIP @ 0433
BACK ON @ 0508

Notes

Utilities and Institutional Facilities

Date: SEPT 23 2022

MST / (MDT) (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

CGTG HOURLY READING LOG

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	110	108	102	106	110	108	110	108	112	106	114	110	108	106	112	112	110	108	111	110	112	109	110	109
4	Instrument Temperature	TI-001	deg C		20	50	22	20	20	20	18	18	17	18	19	22	23	24	25	25	27	27	26	25	25	24	23	21	21	21
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	101	106	102	99	106	103	106	106	110	112	99	109	110	105	102	99	103	104	105	101	104	105	107	106
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60	60	60	60	60	60	62	62	62	63	63	62	64	64	62	62	62	62	62	62	64	62	62	61
10	Coolant Return Differential from	FI-002	In WC		37	50	35	35	35	35	35	35	36	36	37	38	39	39	39	39	39	39	39	39	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	55	55	55	55	55	55	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	997	996	998	997	1006	1004	1008	996	969	950	941	936	932	917	907	903	915	919	923	945	961	975	973	970
23	Mw Output		MW			27	23.8	23.8	23.9	23.8	24.0	24.0	24.0	23.7	23.1	22.6	22.3	22.2	22.1	21.8	21.3	21.4	21.7	21.8	22.0	22.5	22.9	23.2	23.2	23.1
24	80% Base Load Minimum		MW				19.2	19.3	19.3	19.3	19.4	19.4	19.0	19.2	18.9	18.6	18.4	18.2	18.2	18.1	17.7	17.8	18.1	18.1	18.3	18.6	18.6	18.9	18.9	18.9
25	Running Hours (unit overview)						10521	10522	10523	10524	10525	10526	10527	10528	10529	10530	10531	10532	10533	10534	10535	10536	10537	10538	10539	10540	10541	10542	10543	10544
26	Ambient Temperature	T1 inlet					55	55	55	54	53	53	52	56	60	64	66	68	68	70	74	73	70	69	68	65	62	60	60	60
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	68	68	68	68	68	68	68	68	68	68	67	67	67	67	67	67	68	68	69	69	69	70	70	70
28	Total Fuel Flow		Mscf/h				225	225	226	227	227	227	227	225	219	213	211	209	204	201	203	204	208	208	210	214	217	219	218	219

Date: SEPT 23 2022 Signature:

CGTG TURBINE

Natural Gas Compressor																														
GAS COMPRESSOR START TIME		**Units**	**Low**	**Norm**	**Max**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	28	28	28	28	28	28	28	27	27	27	27	27	27	26	26	26	26	26	26	26	25	25	25	25
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	97	97	97	97	97	97	96	96	96	97	97	97	97	97	98	97	97	97	96	97	97	97	97	97
Stage Disch. Press	PI-2101	psig		238	285	277	277	277	276	276	276	275	275	276	278	278	278	279	279	281	280	280	279	279	279	278	278	278	278
2nd Stage Inlet Press	PI-2200	psig		267	285	272	272	272	271	271	271	271	270	271	273	273	274	274	273	273	276	275	274	274	274	273	273	273	273
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	506	500	500	500	500	500	499	499	500	500	500	500	500	502	502	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		60	60	59	59	58	58	58	58	58	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59
Lube Oil Temp	TE-1584	deg		150	170	162	162	164	164	167	167	167	164	165	165	165	164	165	164	165	165	164	164	164	164	164	164	164	164
Final Discharge Temp	TE-2120	deg		110	150	96	96	94	94	93	93	92	95	98	101	103	105	107	108	112	111	109	108	108	108	98	97	97	97
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	210	210	210	210	208	208	207	209	212	215	217	218	219	220	222	222	220	221	217	216	215	212	212	212
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	198	198	196	196	194	194	194	196	198	202	205	206	208	209	212	212	209	208	206	204	201	200	200	200
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	210	210	210	208	208	208	207	209	212	215	216	217	215	214	217	216	214	213	213	211	211	210	210	210
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	199	199	196	196	195	195	196	197	199	204	206	208	209	211	213	213	211	211	210	209	206	205	204	204
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.03	.04	.05	.05	.05	.05	.05	.05	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.05	.05	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																								
Natural Gas Comp.Discharge Press.	A63FGDT	49-48=psid			8							506								500									
Double Block and Bleed Pressure	A63FTGST	50-49=psid			20							493								496									
Fuel Gas Supply Pressure												482								484									

DATE SEPT 23 2022

SIGNATURE

Mid Shift

Days Shift

Notes

Utilities and Institutional Facilities

CGTG HOURLY READING LOG

Date: 9-24-22

MST (MDT) (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	108	111	110	109	108	111	114	114	114	110	108	112	108	106	114	107	112	110	111	110	111	107	108	110
4	Instrument Temperature	TI-001	deg C		20	50	21	21	20	20	20	20	18	18	20	21	24	25	26	27	29	28	28	28	26	23	23	23	23	22
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	107	108	110	103	107	101	106	107	104	99	100	107	104	107	103	101	104	107	105	106	102	105	107	108
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	62	62	62	62	63	64	64	64	64	64	64	64	64	64	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	36	39	39	39	39	39	39	39	39	39	39	37	36	36	36	30	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	55	56	56	56	56	56
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	965	969	976	975	960	981	977	979	971	953	927	909	902	891	887	888	887	886	914	942	944	945	952	954
23	Mw Output		MW			27	23.0	23.1	23.3	23.2	23.0	23.4	23.8	23.4	23.2	22.7	22.1	21.6	21.4	21.2	21.1	21.1	21.1	21.1	21.8	22.4	22.5	22.6	22.7	22.8
24	80% Base Load Minimum		MW				18.9	19.0	19.1	19.1	18.9	19.2	19.3	19.1	19.0	18.7	18.2	17.9	17.8	17.7	17.6	17.6	17.6	17.7	18.1	18.5	18.6	18.6	18.7	18.7
25	Running Hours (unit overview)						10546	10546	10547	10548	10549	10550	10551	10552	10553	10554	10555	10556	10557	10558	10559	10560	10561	10562	10563	10564	10565	10566	10567	10568
26	Ambient Temperature	T1 inlet					60	60	58	60	60	58	54	57	58	63	68	72	74	75	75	75	75	75	70	65	64	64	63	62
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	70	70	70	70	71	71	70	70	70	70	69	69	69	69	70	70	71	72	72	71	71	71	71	71
28	Total Fuel Flow		Mscf/h				219	219	218	217	219	221	224	220	217	213	208	204	203	204	202	201	201	208	213	214	216	217	217	

Date: 9-24-2022 Signature: dry slip

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	25	25	25	25	25	25	25	25	25	25	24	24	24	24	24	24	24	24	24	24	24	24	23	23
Lubricator Bulls eye		LEVEL	1/2	FULL		E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	97	97	97	97	97	97	96	96	96	97	97	97	97	98	98	98	98	98	98	97	97	97	97	97
Stage Disch. Press	PI-2101	psig		238	285	278	278	277	277	277	277	276	276	277	276	278	279	280	281	282	282	282	282	280	279	279	279	279	279
2nd Stage Inlet Press	PI-2200	psig		267	285	273	273	272	272	272	272	271	271	271	272	273	273	276	277	278	278	277	276	276	275	276	277	276	276
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	507	506	507	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	500	499	500	500	500	500	499	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		57	59	59	59	59	58	58	58	58	59	59	59	58	58	59	59	59	59	59	59	59	59	59	59
Lube Oil Temp	TE-1584	deg		150	170	164	164	164	164	164	164	166	165	165	165	165	165	165	165	165	165	164	164	164	164	163	163	164	164
Final Discharge Temp	TE-2120	deg		110	150	97	97	96	96	96	96	94	98	97	100	106	108	111	112	114	114	113	112	109	105	102	102	101	102
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	212	212	212	212	212	212	209	211	214	216	214	224	222	222	223	223	222	222	219	216	215	215	214	213
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	200	200	199	199	199	199	196	197	200	201	206	209	212	212	214	215	217	217	209	205	204	204	205	202
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	212	212	212	212	212	212	209	210	213	215	218	220	221	221	222	222	222	222	219	216	215	215	214	213
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	201	201	201	201	201	201	199	201	201	203	207	213	214	214	215	214	214	215	206	206	205	205	204	204
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.05	.05	.04	.05	.04	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.									500								500												
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8				495								496												
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20				483								484												

DATE 9-24-2022

SIGNATURE

Mid Shift Bob Hoag

Days Shift

Notes

Utilities and Institutional Facilities

CGTG HOURLY READING LOG

Date: 9-25-2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	112	111	108	109	110	111	110	105	112	108	112	110	110	106	110	110	110	109	111	109	109	111	107	109
4	Instrument Temperature	TI-001	deg C		20	50	21	20	19	19	19	18	18	19	21	23	25	26	27	27	25	27	26	20	24	22	20	20	20	20
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	107	108	102	101	107	107	104	111	108	112	102	106	101	107	108	104	101	103	106	103	107	110	105	109
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	62	62	62	64	62	62	62	64	62	62	62	62	63	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	39	36	37	34	39	34	39	39	39	37	37	37	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	960	957	980	986	984	988	984	979	947	931	934	923	911	906	897	909	917	917	944	953	968	965	966	976
23	Mw Output		MW			27	22.9	22.8	23.6	23.6	23.6	23.6	23.6	23.1	22.6	22.4	22.2	21.9	21.7	21.6	21.4	21.6	21.8	21.8	22.5	22.8	23.1	23.1	23.1	23.2
24	80% Base Load Minimum		MW				18.8	18.8	19.2	19.2	19.2	19.2	19.2	18.9	18.6	18.5	18.2	18.1	17.9	17.8	17.7	17.9	18.1	18.1	18.5	18.7	18.8	18.9	18.6	18.9
25	Running Hours (unit overview)						10569	10570	10571	10572	10573	10574	10575	10576	10576	10577	10578	10579	10580	10581	10582	10583	10584	10585	10586	10587	10588	10589	10590	10591
26	Ambient Temperature	T1 inlet					62	62	57	57	56	57	56	60	63	63	68	70	72	73	74	72	70	70	66	63	61	61	61	60
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	71	71	70	70	70	70	71	71	71	0	69	69	69	69	68	0	0	0	70	70	70	70	70	70
28	Total Fuel Flow		Mscf/h				217	218	222	222	223	222	224	214	213	213	212	210	209	209	207	209	207	211	216	217	218	220	220	221

Date: 9-25-2022 Signature: Bob A-3 (M105) day shift

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	23	23	23	23	23	23	23	22	22	22	22	22	22	21	21	21	21	21	21	21	21	21	21	20
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	97	97	96	96	97	97	97	97	97	97	97	97	97	98	98	98	97	97	97	97	97	97	97	97
Stage Disch. Press	PI-2101	psig		238	285	279	278	276	276	277	277	276	276	277	278	279	280	281	281	282	281	281	279	279	278	278	278	278	278
2nd Stage Inlet Press	PI-2200	psig		267	285	279	278	277	271	272	272	272	272	272	273	274	275	276	277	277	276	277	277	274	274	273	273	273	273
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	506	506	505	507	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	499	500	499	499	499	499	499	500	499	499	502	499	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		59	59	58	59	59	59	58	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59
Lube Oil Temp	TE-1584	deg		150	170	164	164	165	165	167	165	166	165	164	165	165	164	164	164	164	163	163	162	164	164	164	164	164	164
Final Discharge Temp	TE-2120	deg		110	150	100	92	98	97	95	95	98	98	102	104	103	110	113	114	114	112	110	110	104	103	102	102	100	100
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	213	209	211	214	211	210	210	212	214	215	217	218	220	220	221	219	218	217	215	214	213	213	213	213
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	202	200	197	197	197	197	197	199	201	201	201	208	209	212	213	211	209	209	205	204	202	202	201	201
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	213	211	210	210	210	210	210	212	214	214	216	217	218	219	220	219	217	217	215	214	213	213	212	212
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	204	201	199	199	199	199	199	199	203	203	205	209	211	213	214	214	213	214	206	207	204	204	203	203
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.04	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.04	.06	.04	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.									500								500												
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8				496								496												
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20				483								484												

DATE 9-25-2022

SIGNATURE

Mid Shift Bob Arp

Days Shift

Notes

Utilities and Institutional Facilities

Date: 9-26-2022

CGTG HOURLY READING LOG

MST / (MDT) (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	110	111	107	110	111	109	100	101	103	105	101	103	106	109	105	109	101	102	110	109	104	109	111	106
4	Instrument Temperature	TI-001	deg C		20	50	19	19	19	19	18	18	18	18	19	21	24	25	25	25	25	25	25	25	25	25	24	23	23	22
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	101	103	101	107	106	102	100	101	103	108	109	108	112	112	109	116	104	103	103	107	104	102	102	108
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	62	62	62	63	63	63	63	63	63	63	63	63	63	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	36	36	36	24	24	24	25	25	25	25	25	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/ on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	56	56	56	56	56	56	56	56	60	56	54	56	58	54	56	60	50	56	55	55	56	56	56	56
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	985	987	980	989	998	1004	1062	979	963	943	938	918	903	906	912	904	901	909	931	946	954	952	952	960
23	Mw Output		MW			27	23.5	23.5	23.6	23.6	23.8	23.9	23.9	23.4	22.9	22.4	22.3	21.8	21.5	21.5	21.6	21.5	21.4	21.6	22.2	22.4	22.7	22.7	22.7	23.0
24	80% Base Load Minimum		MW				19.1	19.1	19.1	19.1	19.3	19.3	19.3	19.0	18.7	18.5	18.3	18.0	17.8	17.5	17.7	17.8	17.8	17.9	18.3	18.4	18.6	18.6	18.7	18.8
25	Running Hours (unit overview)						10596	10597	10598	10598	10596	10597	10599	10600	10601	10602	10603	10604	10605	10606	10607	10608	10609	10610	10611	10612	10613	10614	10615	10616
26	Ambient Temperature	T1 inlet					57	57	57	56	56	55	58.5	59.0	62.2	66	68.2	71.4	73.4	73.2	72.3	73.8	73.9	72.3	68	66	64	64	63	62
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	70	70	71	71	71	71	71	71	70	69	68	68	68	69	68	0	0	70	70	72	71	71	71	71
28	Total Fuel Flow		Mscf/h				219	220	221	222	224	225	224	226	219	218	213	209	207	209	201	205	204	206	210	212	216	216	216	218

Date: 9-26-2022 Signature: Bob Hay (MIOS)

341977

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	20	20	20	20	20	20	20	20	19	19	19	9	19	FULL	FULL	FULL	FULL	FULL	F	F	53	53	52	52
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	0	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	97	97	97	97	97	97	96	95	96	96	97	97	97	97	97	97	97	97	97	97	97	97	97	97
Stage Disch. Press	PI-2101	psig		238	285	277	277	277	277	277	277	278	275	276	276	278	279	281	281	281	281	281	281	279	279	279	278	278	278
2nd Stage Inlet Press	PI-2200	psig		267	285	272	272	272	272	272	272	271	271	271	271	273	273	274	274	274	274	274	274	274	274	274	274	273	273
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	506	506	506	506	505	507	506	506	506	506	506	506	506	506	506	50	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	499	499	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		59	59	59	59	59	59	58	58	58	58	58	58	58	58	58	58	58	58	59	59	59	59	59	59
Lube Oil Temp	TE-1584	deg		150	170	165	164	165	165	166	166	165	165	165	164	165	164	165	165	165	165	165	164	165	164	164	164	164	164
Final Discharge Temp	TE-2120	deg		110	150	96	96	96	95	94	94	97	97	101	101	104	104	111	111	111	111	112	110	105	104	103	101	100	99
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	212	212	212	211	210	210	212	212	213	213	216	216	221	221	221	221	221	220	218	217	216	215	214	214
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	200	200	200	198	197	197	199	199	201	201	204	204	211	211	211	211	211	210	207	206	205	204	203	204
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	212	212	212	211	210	210	212	212	213	213	215	215	220	220	220	220	220	220	218	217	216	215	214	214
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	201	201	201	200	198	197	201	201	203	203	206	206	212	212	212	212	212	213	209	208	207	206	205	205
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.05	.06	.04	.04	.05	.05	.06	.04	.04	.04	.04	.04	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.									500															500					
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8				498															498					
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20				482															484					

DATE 9-26-2022

SIGNATURE

Mid Shift Bob Ag

Days Shift

Notes

Utilities and Institutional Facilities

CGTG HOURLY READING LOG

Date: 9-27-2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	106	111	109	106	111	107	108	110	106	112	106	110	108	112	108	112	114	110	109	111	107	107	111	109
4	Instrument Temperature	TI-001	deg C		20	50	22	20	19	19	19	19	19	19	20	23	24	26	27	28	29	29	35	27	24	23	22	22	21	21
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	108	107	102	101	104	105	101	107	112	105	104	108	102	107	103	107	106	103	101	107	107	101	106	106
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	4/5	3/3	3/3	3/3	2/3	3/3	3/3	2/3	3/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	62	62	62	62	62	62	63	64	62	62	62	62	62	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	36	34	34	34	34	34	34	34	34	32	32	32	32	32	32	32	32
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	961	981	985	986	990	991	993	981	961	940	932	925	899	895	890	894	913	911	949	960	967	969	974	977
23	Mw Output		MW			27	23.1	23.4	23.5	23.5	23.7	23.7	23.7	23.4	23.0	22.4	22.2	21.9	21.3	21.2	21.1	21.2	21.7	21.7	22.6	22.9	23.1	23.1	23.2	23.2
24	80% Base Load Minimum		MW				18.9	19.1	19.1	19.1	19.2	19.2	19.2	19.0	18.8	18.6	18.3	18.0	17.7	17.6	17.7	17.7	18.2	19.0	18.6	18.7	18.6	18.7	18.5	18.7
25	Running Hours (unit overview)						10617	10617	10618	10619	10620	10621	10622	10623	10624	10625	10626	10627	10628	10629	10630	10631	10632	10633	10634	10635	10636	10637	10638	10639
26	Ambient Temperature	T1 inlet					62	58	57	57	57	56	56	58	61	66	68	70	74	75	74	73	71	71	65	63	61	61	60	60
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	71	71	71	71	71	71	71	71	71	70	70	70	70	70	70	71	71	71	71	71	71	71	71	71
28	Total Fuel Flow		Mscf/h				218	220	221	223	221	225	225	223	216	211	210	207	204	202	204	204	206	206	213	219	221	219	221	220

Date: 9-27-2022 Signature: Bob Aug dupa - Bob Aug

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	52	52	52	52	52	52	51	51	51	51	51	51	51	50	50	50	50	50	50	50	49	49	49	49
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	97	97	97	97	97	97	96	96	96	97	96	97	96	97	96	97	97	97	97	97	97	97	97	97
Stage Disch. Press	PI-2101	psig		238	285	276	277	277	277	277	277	276	276	276	277	276	279	279	280	284	281	280	280	279	278	278	278	278	278
2nd Stage Inlet Press	PI-2200	psig		267	285	273	272	272	272	272	272	272	271	271	273	272	274	275	277	277	276	276	276	274	274	273	273	273	273
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	506	506	506	506	506	506	506	505	506	506	506	506	506	506	506	506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	500	500	499	500	500	499	500	499	500	499	499	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		59	59	59	59	59	59	58	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59
Lube Oil Temp	TE-1584	deg		150	170	164	165	165	165	161	165	166	165	165	165	165	165	165	165	165	164	164	164	164	164	164	164	165	161
Final Discharge Temp	TE-2120	deg		110	150	99	97	97	96	96	96	95	97	99	104	107	109	111	115	115	112	111	111	104	103	100	100	99	99
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	214	213	210	211	210	210	210	211	213	217	217	216	222	224	224	222	222	220	217	216	215	214	214	214
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	262	260	200	199	197	198	197	198	201	208	209	210	210	216	215	212	211	211	206	205	204	202	202	202
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	214	213	212	211	210	210	210	211	214	217	218	220	221	222	223	222	221	221	217	216	215	214	214	214
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	205	201	200	199	199	199	199	200	203	207	207	210	214	217	217	217	213	212	208	207	206	205	205	205
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.05	.05	.04	.05	.04	.04	.04	.04	.04	.04	.04
Compressor Frame Vibration	VT-1512	IPS			0.35	.04	.06	.06	.06	.06	.04	.06	.06	.06	.05	.06	.05	.05	.06	.06	.06	.06	.05	.05	.05	.05	.05	.05	.05
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.									500								500												
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8				495								496												
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20				482								484												

DATE 9-27-2022

SIGNATURE

Mid Shift Bob Ava

Days Shift

Notes

Utilities and Institutional Facilities

CGTG HOURLY READING LOG

Date: 9-28-2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	110	109	111	107	112	110	108	108	111	108	110	110	108	112	110	110	110	108	109	110	110	110	109	110
4	Instrument Temperature	TI-001	deg C		20	50	21	20	19	19	19	19	18	18	20	23	24	25	26	27	27	28	27	27	26	24	23	23	22	22
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	103	102	104	108	101	104	108	102	111	99	104	102	103	111	104	107	100	103	99	101	104	106	110	106
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	62	62	62	62	62	62	62	64	62	63	62	64	63	63	60	63	63	63
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	36	36	37	39	34	39	39	39	37	36	36	36	36	36	36	38	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	72	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	56	56	56	56	56	56	56	56	12	12	12	11	11	11	11	10	10	10	11	11	11	11	11	11
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	980	981	996	992	994	1000	995	968	967	945	944	971	923	951	910	898	908	912	951	963	963	954	966	980
23	Mw Output		MW			27	23.4	23.5	23.6	23.6	23.7	23.9	23.7	23.3	23.0	22.5	22.4	21.9	21.9	21.6	21.6	21.6	21.6	21.7	22.1	23.0	23.0	22.8	23.1	23.4
24	80% Base Load Minimum		MW				19.0	19.0	19.1	19.1	19.2	19.3	19.2	19.0	18.8	18.4	18.3	18.1	18.0	17.9	17.9	17.8	17.9	17.9	18.6	18.7	18.1	18.7	18.8	19.0
25	Running Hours (unit overview)						10640	10641	10643	10643	10644	10645	10646	10647	10648	10649	10650	10651	10652	10653	10654	10655	10656	10657	10658	10659	10660	10661	10662	10663
26	Ambient Temperature	T1 inlet					54	58	5	57	56	55	56	58	61	46	67	78	70	72	72	73	72	71	64	63	62	63	61	59
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	71	71	71	71	71	71	72	71	12	16	18	21	25	27	29	31	33	34	34	36	37	38	38	38
28	Total Fuel Flow		Mscf/h				220	221	223	224	224	221	224	222	220	215	214	212	211	209	209	208	209	209	216	217	219	218	220	223

Date: 9-28-2022 Signature: Bob Young (MIDS)

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	49	49	49	49	48	48	48	48	48	48	48	47	47	47	47	47	47	47	46	46	46	46	46	46
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	97	97	97	97	97	97	95	95	94	95	96	96	97	97	97	97	97	97	96	96	96	97	96	96
Stage Disch. Press	PI-2101	psig		238	285	277	277	277	277	277	277	273	274	274	276	278	274	280	280	281	281	280	280	276	276	276	277	276	276
2nd Stage Inlet Press	PI-2200	psig		267	285	272	272	272	272	272	274	269	271	270	271	274	274	275	276	276	276	276	276	272	272	272	272	271	271
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	500	500	499	500	500	500	500	500	500	499	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		59	59	59	59	59	59	58	58	59	58	59	61	59	59	59	59	59	59	59	59	59	59	59	59
Lube Oil Temp	TE-1584	deg		150	170	165	165	165	165	165	165	166	165	165	165	165	164	164	164	163	164	163	163	163	163	163	165	164	164
Final Discharge Temp	TE-2120	deg		110	150	97	97	97	96	96	96	93	95	99	103	108	109	112	112	112	113	111	110	100	100	100	97	99	99
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	213	213	212	210	210	210	211	212	215	217	218	220	221	222	224	223	222	220	215	215	215	213	213	213
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	200	200	200	198	198	197	198	200	202	205	208	211	213	214	213	213	212	212	204	204	201	200	202	202
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	213	213	212	210	210	210	211	212	214	216	218	219	220	220	221	220	220	220	215	215	215	213	213	213
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	201	201	200	199	199	199	199	201	203	207	209	209	210	211	211	211	211	211	206	206	206	201	203	203
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.05	.05	.04	.04	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.										500								500											
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8					499								496											
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20					490								493											

DATE 9-28-2022

SIGNATURE

Mid Shift

Days Shift

Notes

Utilities and Institutional Facilities

Date: SEP 2 9 2022

CGTG HOURLY READING LOG

MST / MDT (circle one)
Time Gas Introduced (Turbine Rolling):
Time of Turbine Online (Brkr Closed):
Time Turbine Offline (Brkr Open):
Time No Gas Flow:

Notes:

		I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	110	108	104	106	106	106	105	109	110	102	108	110	100	101	106	111	104	102						
4	Instrument Temperature	TI-001	deg C		20	50	22	20	20	20	19	19	19	19	20	20	23	23	27	27	27	22	27	27						
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19						
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	99	104	104	106	106	100	107	103	99	101	109	101	103	100	100	105	108	100						
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3						
9	Coolant Return Differential from GG	FI-001	In WC		60	80	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63						
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36						
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70						
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y						
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y						
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	11	11	11	11	11	11	11	11	10	9	11	11	11	10	10	10	18	10						
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						
21	Acknowledge Alarms Hourly		V																											
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	984	995	998	986	989	992	994	983	970	985	920	919	903	901	903	916	915	920						
23	Mw Output		MW			27	23.5	23.7	23.9	23.5	23.6	23.7	23.8	23.4	23.1	22.7	21.9	21.9	21.4	21.4	21.4	21.8	21.8	21.9						
24	80% Base Load Minimum		MW				19.1	19.2	19.3	19.1	19.2	19.2	19.2	19.1	18.9	18.6	18.1	18.1	17.8	17.8	17.9	18.1	18.1	18.2						
25	Running Hours (unit overview)						10664	10665	10666	10667	10668	10669	10670	10671	10672	10673	10674	10675	10676	10677	10678	10679	10680	10681						
26	Ambient Temperature	T1 inlet					58	56	56	57	57	56	55.8	57.9	60.8	64.2	70.2	70.5	73.9	73.8	72.3	70.3	70.3	68.9						
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	38	38	38	38	38	38	38	39	39	38	37	38	38	38	38	37	39	39						
28	Total Fuel Flow		Mscf/h				224	225	227	229	44224	224	224	221	222	216	211	214	267	268	209	209	209	211						

Date: SEP 29 2022 Signature: GOMEZ

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B						
Liquid Level - Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E						
Crankcase Sight eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2						
Oil Day Tank Level	LI-1562	GAL	10		FULL	46	46	46	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45						
Lubrication Sight eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F						
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	F						
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	F						
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B						
psig 1st Stage Inlet Press.	PI-2100	psig		85	100	96	97	97	97	96	96	96	96	96	96	96	96	97	97	97	97	97	97						
psig Stage Disch. Press	PI-2101	psig		195	235	276	277	277	277	274	274	274	275	275	275	275	278	280	280	280	280	281	281						
psig 2nd Stage Inlet Press	PI-2200	psig		200	245	271	272	272	272	270	270	270	270	270	270	270	270	274	274	274	274	276	276						
psig 2nd Stage Disch. Press	PI-2201	psig		375	600	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506						
psig Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500						
psig Lube Oil Pressure	PI-1572	psig	40	60		59	59	59	59	59	59	58	58	58	58	58	58	59	59	59	59	59	59						
deg Lube Oil Temp	TE-1584	deg		150	170	164	165	165	166	162	165	165	165	166	165	165	166	167	167	167	169	163	163						
deg Final Discharge Temp	TE-2120	deg		200	250	97	91	97	97	94	94	97	98	98	98	98	96	111	111	111	116	169	169						
deg 1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		250	290	213	213	213	213	211	211	211	212	214	214	215	215	222	222	221	224	219	219						
deg 2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		283	325	202	200	200	200	199	199	199	201	201	201	202	202	212	212	212	214	210	210						
deg 1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	290	213	213	213	213	211	211	211	214	214	214	214	216	221	221	220	220	218	218						
deg 2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	203	201	201	200	200	200	200	202	202	202	202	203	213	213	214	217	211	211						
IPS Motor Frame Vibration	VT-1015	IPS				.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04						
IPS Compressor Frame Vibration	VT-1512	IPS				.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06						
psig Turbine Lube Oil Pressure		psig		Normal		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp Discharge Press.							500																						
Blowdown Block and Bleed Pressure	A63FGDT	45-46=psid		8			496																						
Fuel Gas Supply Pressure	A63FTGST	50-49=psid		20			483																						

DATE SEP 2 9 2022

SIGNATURE

Mid Shift

Days Shift

Notes

Utilities and Institutional Facilities

Date: 9-29-22

CGTG HOURLY READING LOG

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√																						√	√	√	√	√	√
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√																						√	√	√	√	√	√
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120																			113	110	107	112	113	109
4	Instrument Temperature	TI-001	deg C		20	50																			29	29	29	32	22	21
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25																				19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120																			111	103	100	107	99	103
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL																			2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80																			60	60	60	60	60	60
10	Coolant Return Differential from	FI-002	In WC		37	50																			36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85																			70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)																			Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)																			Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%																			11	11	11	11	11	11
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%																			0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√																						√	√	√	√	√	√
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427																			956	955	951	951	952	962
23	Mw Output		MW			27																			22.8	22.8	22.7	22.7	22.7	23.0
24	80% Base Load Minimum		MW																						18.8	18.7	18.7	18.7	18.7	18.9
25	Running Hours (unit overview)																								10682	10683	10684	10685	10686	10687
26	Ambient Temperature	T1 inlet																							62.1	62.4	62.8	62.6	62.5	60.4
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%																			39	39	39	39	39	38
28	Total Fuel Flow		Mscf/h																						217	217	216	216	216	218

Date: 9-29-22 Signature: A Wal

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK																				B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY																			E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL																			1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL																			43	43	43	43	43	43
Lubricator Bulls eye		LEVEL	1/2	FULL																				F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY																			E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY																			E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK																				B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140																			97	97	97	97	97	97
Stage Disch. Press	PI-2101	psig		238	285																			278	278	278	278	278	278
2nd Stage Inlet Press	PI-2200	psig		267	285																			273	273	273	273	273	273
2nd Stage Disch. Press	PI-2201	psig		575	600																			506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600																			500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60																				59	59	59	59	59	59
Lube Oil Temp	TE-1584	deg		150	170																			164	163	163	163	164	163
Final Discharge Temp	TE-2120	deg		110	150																			101	101	102	102	101	100
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297																			215	214	215	214	213	212
2ndStage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283																			203	204	204	204	204	200
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297																			214	213	214	213	213	211
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283																			205	204	204	203	204	202
Motor Frame Vibration	VT-1015	IPS			0.15																			.05	.05	.05	.05	.05	.05
Compresser Frame Vibration	VT-1512	IPS			0.35																			.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																								

DATE	9-29-22
SIGNATURE	
Mid Shift	A Wan
Days Shift	

Notes

Utilities and Institutional Facilities

Date: 9-30-22

CGTG HOURLY READING LOG

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	109	113	107	110	117	113	102	106	102	101	106	104	99	101	106	108	111	110	112	113	110	107	112	110
4	Instrument Temperature	TI-001	deg C		20	50	21	21	20	19	19	19	19	19	19	19	19	21	22	22	27	27	26	26	24	23	22	27	22	20
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	101	105	109	103	108	104	98	101	105	109	110	111	106	104	100	104	110	106	103	109	107	101	99	103
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60	60	60	60	60	60	63	63	63	63	63	63	63	63	63	63	63	63	62	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	34	34	35	35	35	35	35	36	36	36	36	36	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	11	11	11	11	11	11	11	11	11	11	11	11	11	11	10	10	10	10	10	11	11	11	11	11
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	959	961	975	988	997	1000	1004	974	946	940	923	915	903	903	895	899	902	907	951	949	948	949	948	960
23	Mw Output		MW			27	22.9	23.0	23.3	23.6	23.8	23.8	23.9	23.3	22.6	22.3	22.0	21.8	21.5	21.5	21.3	21.4	21.5	21.6	22.6	22.6	22.6	22.6	22.9
24	80% Base Load Minimum		MW				18.9	18.9	19.1	19.2	19.4	19.4	19.5	19.1	18.7	18.5	18.2	18.1	18.0	17.9	17.8	17.9	18	18.1	18.8	18.8	18.8	18.8	18.8	18.9
25	Running Hours (unit overview)						10688	10689	10690	10691	10692	10693	10694	10695	10696	10697	10698	10699	10700	10701	10702	10703	10704	10705	10706	10707	10708	10709	10710	10711
26	Ambient Temperature	T1 inlet					60-6	60.4	58.9	55.6	54.1	53.8	52.9	58.3	63.3	66.2	68.2	69.8	71.2	72	73	72	71	71	67.1	62.2	62.1	63.0	62.1	60.3
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	38	38	38	38	38	38	38	39	38	37	36	35	36	36	36	36	37	37	37	37	37	37	37	38
28	Total Fuel Flow		Mscf/h				218	218	222	223	225	225	224	220	216	214	211	210	209	208	207	208	208	209	216	215	216	217	216	217

Date: 9-30-22 Signature: A Wor

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	43	43	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	40	40	40	40	40	40
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	97	97	97	97	97	97	96	96	96	96	97	97	97	97	98	98	98	98	97	97	97	97	97	97
Stage Disch. Press	PI-2101	psig		238	285	278	278	278	277	277	277	275	278	278	275	279	279	280	280	282	282	281	281	280	279	279	279	279	279
2nd Stage Inlet Press	PI-2200	psig		267	285	274	274	273	273	272	272	271	271	271	271	274	274	275	275	277	277	277	277	276	274	274	274	274	274
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	506	506	506	506	506	506	506	506	506	506	506	506	507	507	506	506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		59	59	59	58	58	58	58	58	58	58	59	59	59	59	59	59	60	60	60	59	59	59	59	59
Lube Oil Temp	TE-1584	deg		150	170	164	164	164	164	164	164	166	166	166	168	164	164	163	163	163	163	162	162	162	164	164	164	164	163
Final Discharge Temp	TE-2120	deg		110	150	100	99	97	94	100	92	91	91	91	91	107	107	111	110	110	113	109	109	107	101	101	101	101	99
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	212	211	210	210	208	208	209	209	209	209	216	216	219	219	221	221	219	219	217	213	213	210	210	208
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	201	201	199	197	196	196	195	195	195	195	208	208	211	210	212	212	210	216	215	208	208	201	201	200
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	212	210	209	209	208	208	209	209	209	209	215	215	218	219	219	219	218	218	216	213	211	210	209	208
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	202	202	199	198	197	196	197	197	197	197	209	209	212	211	214	214	211	211	210	207	203	202	201	200
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.05	.05	.04	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.04	.04	.06	.04	.06	.04	.04	.04	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																					500								
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																496								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																485								

DATE	9-30-22
SIGNATURE	
Mid Shift	A Wlac
Days Shift	

Notes

Utilities and Institutional Facilities

Date: OCT 01 2022

CGTG HOURLY READING LOG

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	112	110	110	113	111	107	108	108	106	110	106	106	110	108	110	108	110	106	110	113	108	112	113	108
4	Instrument Temperature	TI-001	deg C		20	50	20	19	19	18	17	17	17	17	19	21	24	25	25	26	27	27	27	27	24	21	21	20	20	20
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	101	109	103	99	106	100	106	108	101	103	100	105	107	111	102	100	101	104	101	108	103	101	108	106
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	60	60	62	62	62	62	62	62	62	64	62	62	62	62	62	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	36	37	39	39	38	39	39	36	39	39	39	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	11	11	11	11	11	11	11	12	12	12	11	11	11	10	10	10	10	10	10	11	11	11	11	11
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		v				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	963	975	975	976	995	992	997	983	961	938	927	924	913	895	897	892	896	923	966	979	985	988	989	990
23	Mw Output		MW			27	23.0	23.1	23.2	23.2	23.8	23.7	23.8	23.5	22.9	22.3	22.1	22.0	21.7	21.3	21.4	21.2	21.3	22.0	23.1	23.3	23.5	23.6	23.6	23.6
24	80% Base Load Minimum		MW				18.9	19.0	19.1	19.1	19.4	19.4	19.4	19.2	18.6	18.5	18.1	18.2	18.1	17.9	17.8	17.8	17.9	18.2	18.9	19.0	19.1	19.2	19.2	19.2
25	Running Hours (unit overview)						10712	10713	10714	10715	10716	10717	10718	10719	10720	10721	10722	10723	10724	10725	10726	10727	10728	10729	10730	10731	10732	10733	10734	10735
26	Ambient Temperature	T1 inlet					59.9	58.8	57.7	57.5	54.0	54.1	53	56	60	66	67	68	70	72	73	73	72	68	59.9	58.3	57	56.3	56.1	55.9
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	38	38	38	38	38	39	40	39	40	39	38	38	38	38	38	38	39	39	40	40	40	40	40	41
28	Total Fuel Flow	—	Mscf/h				218	219	219	219	224	224	224	222	218	213	212	213	210	208	207	206	207	211	219	221	223	223	223	224

Date: OCT 01 2022 Signature: A Wlan day shift – [illegible]

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
Oil Day Tank Level	LI-1562	GAL	10		FULL	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	38	38	38	38	38	38
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	97	97	97	97	96	96	96	96	97	97	97	97	97	98	98	98	98	98	97	97	97	97	97	97
Stage Disch. Press	PI-2101	psig		238	285	279	279	279	279	275	276	277	277	278	279	280	281	281	282	282	282	282	282	278	278	278	278	278	278
2nd Stage Inlet Press	PI-2200	psig		267	285	274	274	274	274	270	270	270	272	273	274	273	276	276	277	278	278	277	277	273	273	273	273	272	272
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	506	506	506	506	506	506	506	507	506	506	506	506	507	507	506	506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	501	499	500	500	500	499	500	499	500	499	500	499	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		59	59	59	59	58	58	58	58	58	59	59	59	59	59	58	59	59	59	59	59	59	59	59	59
Lube Oil Temp	TE-1584	deg		150	170	164	164	163	163	165	165	166	164	164	164	164	163	163	161	164	164	163	163	163	163	163	163	163	163
Final Discharge Temp	TE-2120	deg		110	150	99	99	98	98	94	92	93	95	96	104	108	110	111	113	113	115	112	112	100	98	98	97	97	98
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	212	211	210	210	209	208	208	209	212	214	216	217	219	219	220	220	219	219	211	210	209	208	208	208
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	201	201	200	200	196	194	196	197	201	204	207	209	211	212	212	212	211	211	201	200	200	200	200	200
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	211	210	209	210	209	208	208	209	211	214	215	216	217	218	219	219	218	218	211	210	209	208	208	209
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	203	202	201	201	197	196	197	197	202	206	206	209	210	212	213	214	214	214	202	201	200	199	200	201
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.													500								500								
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8								495								496								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20								482								483								

DATE OCT 0 1 2022

SIGNATURE

Mid Shift A Wan

Days Shift

Notes

Utilities and Institutional Facilities

Date: 10-2-22

CGTG HOURLY READING LOG

MST / MDT (circle one)
Time Gas Introduced (Turbine Rolling):
Time of Turbine Online (Brkr Closed):
Time Turbine Offline (Brkr Open):
Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	113	110	112	108	111	108	105	101	110	107	105	103	107	100	108	110	100	106	108	111	113	110	105	108
4	Instrument Temperature	TI-001	deg C		20	50	20	19	18	18	18	18	18	18	18	18	18	19	19	19	19	19	19	19	19	18	18	18	18	18
5	Fin Fan Cooler		Units	Low	Norm	Max														19										
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	103	108	100	99	107	103	101	100	105	105	104	105	106	107	105	104	102	100	103	101	110	106	104	108
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	61	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	61
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	35	34	35	38	35	35	35	38	35	35	35	35	35	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	71	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	11	11	11	11	11	11	11	11	11	11	11	12	12	12	12	12	11	11	11	12	12	12	12	12
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	991	1007	1005	1004	988	991	1030	1025	1022	1013	1021	1006	999	976	970	1001	1005	1003	999	993	987	991	996	990
23	Mw Output		MW			27	23.6	24.0	24.0	24.0	23.6	23.7	23.8	24.2	24.4	24.2	24.3	24.1	23.8	23.3	23.1	23.8	24.0	24.0	23.8	23.7	23.6	23.6	23.8	23.6
24	80% Base Load Minimum		MW				19.2	19.5	19.5	19.5	19.2	19.2	19.3	19.5	19.6	19.5	19.4	19.4	19.3	19.0	18.9	19.4	19.4	19.4	19.2	19.2	19.2	19.2	19.3	19.2
25	Running Hours (unit overview)						10736	10737	10738	10739	10740	10741	10744	10748	10744	10745	10744	10748	10749	10749	10750	10751	10752	10753	10754	10755	10756	10757	10758	10759
26	Ambient Temperature	T1 inlet					56.9	53.0	53.1	53.1	56.1	55.8	54.3	51.8	50.5	52.9	53.1	53.2	55	58.0	57.8	54.1	53.8		55.0	55.8	56.7	56.5	55.4	56.3
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	41	41	41	41	41	41	41	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
28	Total Fuel Flow		Mscf/h				225	226	227	228	226	224	225	225	229	228	227	227	230	221	220	221	226	227	225	224	223	223	225	224

Date: 10-2-22 Signature: A Wes

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	38	38	38	38	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	35	35	35	35	35
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	E	F	F	F	F	F	E	E	E	E	E	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	F	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	97	96	96	96	97	97	97	97	97	96	96	96	97	97	97	92	96	96	96	96	96	96	96	96
Stage Disch. Press	PI-2101	psig		238	285	278	276	274	274	277	277	277	277	277	275	275	278	277	275	277	257	257	257	277	276	276	276	276	276
2nd Stage Inlet Press	PI-2200	psig		267	285	272	270	270	270	274	272	272	272	274	270	270	270	270	270	272	272	272	272	272	271	271	271	271	271
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		59	59	59	59	59	59	59	59	58	56	58	56	58	58	58	56	58	60	59	58	58	58	58	59
Lube Oil Temp	TE-1584	deg		150	170	164	166	167	167	167	167	167	167	167	166	167	167	167	167	167	169	169	169	167	166	166	166	166	167
Final Discharge Temp	TE-2120	deg		110	150	96	93	90	90	96	97	96	96	96	92	92	92	92	92	99	99	99	99	99	94	96	96	95	97
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	207	208	208	208	210	210	210	210	210	207	206	206	206	210	210	210	210	210	210	208	210	210	209	210
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	200	196	194	194	198	199	198	199	197	193	193	196	196	196	198	198	196	196	199	196	200	201	200	200
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	208	208	208	208	209	210	210	210	209	207	206	206	206	209	210	210	210	210	210	208	210	211	210	211
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	200	196	196	196	199	199	199	219	219	194	194	194	199	199	200	200	200	200	200	197	198	199	199	201
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																								

DATE 10-2-22

SIGNATURE

Mid Shift A Warr

Days Shift

Notes

Utilities and Institutional Facilities

Date: OCT 03 2022

CGTG HOURLY READING LOG

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	112	106	113	110	105	111	110	108	112	110	110	112	108	114	108	108	114	110	111	109	112	109	111	108
4	Instrument Temperature	TI-001	deg C		20	50	18	17	17	17	17	17	17	16	16	16	18	19	19	20	20	20	20	19	17	17	17	17	17	17
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	103	108	100	102	99	104	102	100	101	98	110	98	104	99	111	104	105	101	100	104	107	103	107	102
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	61	61	61	61	61	61	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	34	36	36	36	34	36	36	39	39	37	36	36	36	36	36	36	36	37
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	12	12	12	12	12	12	12	12	12	12	12	12	11	11	11	11	11	11	11	11	11	12	12	12
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		V				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1000	1003	1005	1006	1010	1006	1017	1017	1016	1006	995	990	993	968	972	974	974	999	1013	1011	1002	1006	1005	1016
23	Mw Output		MW			27	23.9	23.9	24.0	24.1	24.1	24.0	24.3	24.2	24.2	24.0	23.2	23.6	23.2	23.0	23.2	23.2	23.2	23.7	24.2	24.0	23.9	24.0	24.0	24.2
24	80% Base Load Minimum		MW				19.3	19.4	19.4	19.5	19.5	19.4	19.6	19.6	19.6	19.6	19.0	19.2	19.0	18.9	19.0	19.0	19.0	19.3	19.6	19.5	19.4	19.4	19.5	19.6
25	Running Hours (unit overview)						10760	10761	10762	10763	10764	10765	10766	10767	10768	10769	10770	10771	10772	10773	10774	10775	10776	10777	10778	10779	10780	10781	10782	10783
26	Ambient Temperature	T1 inlet					54.9	53.7	53.4	52.5	57.3	53.2	50	51	51	53	58	56	59	60	58	58	58	55	51	53	53	53	53	51
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	40	40	40	40	40	40	41	40	41	41	41	40	40	40	41	41	41	41	42	42	42	42	43	43
28	Total Fuel Flow		Mscf/h				225	226	226	227	227	226	228	228	228	226	221	223	219	218	219	219	219	223	227	226	226	225	225	226

Date: OCT 03 2022 Signature: A Wa

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
Oil Day Tank Level	LI-1562	GAL	10		FULL	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	34	34	34
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	96	96	96	96	96	96	96	96	96	96	96	95	95	95	97	96	96	95	96	96	96	96	96	96
Stage Disch. Press	PI-2101	psig		238	285	276	276	276	276	278	278	274	275	275	276	270	276	274	277	276	276	276	270	274	278	274	274	274	274
2nd Stage Inlet Press	PI-2200	psig		267	285	271	271	271	271	270	270	270	270	270	271	270	271	272	273	272	272	272	272	269	270	270	270	269	269
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	506	506	506	506	506	506	506	506	506	507	506	506	506	506	506	506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	500	500	499	500	500	500	499	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		59	59	58	58	58	58	57	57	58	58	59	58	59	58	58	58	58	58	57	58	58	58	58	58
Lube Oil Temp	TE-1584	deg		150	170	167	166	166	164	166	166	168	165	167	167	165	166	166	165	165	165	165	165	165	165	166	166	167	166
Final Discharge Temp	TE-2120	deg		110	150	96	94	94	93	91	91	89	89	90	92	93	95	97	98	97	97	97	97	89	90	90	90	90	90
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	208	206	206	204	206	206	205	205	206	207	208	208	210	212	211	211	211	211	210	207	207	206	209	209
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	200	199	198	196	193	194	194	191	192	194	194	193	195	195	199	198	199	195	192	193	194	194	195	194
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	209	207	206	205	206	206	205	205	206	206	208	208	209	211	210	210	210	208	207	207	206	206	209	208
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	200	199	198	196	195	195	194	193	193	194	200	197	197	201	200	199	201	199	194	194	195	194	196	196
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.05	.05	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.05	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.													500								500								
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8								498								498								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20								482								481								

DATE OCT 03 2022

SIGNATURE

Mid Shift A Ware

Days Shift

Notes

Utilities and Institutional Facilities

CGTG HOURLY READING LOG

Date: 10-4-2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	112	108	110	107	111	105	112	114	114	110	112	106	108	106	106	108	100	106	107	111	109	112	110	107
4	Instrument Temperature	TI-001	deg C		20	50	17	17	17	17	16	16	15	14	15	16	18	19	19	19	19	19	19	19	18	18	18	17	17	17
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	100	104	105	103	101	106	99	98	110	102	103	111	103	99	102	104	99	102	111	105	104	109	107	103
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	3/3	3/3	3/3	3/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	62	62	62	62	62	62	64	62	60	62	62	62	62	62	62	64	64	64
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	36	36	37	38	36	36	36	36	37	39	37	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	12	12	12	12	12	12	12	12	12	12	12	12	11	11	11	11	11	11	11	11	11	11	11	11
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
21	Acknowledge Alarms Hourly		v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1014	1016	1023	1026	1027	1027	1032	1033	1021	1006	985	967	976	994	984	986	954	984	989	1001	1005	1007	1014	1013
23	Mw Output		MW			27	24.1	24.1	24.4	24.4	24.4	24.5	24.6	24.6	24.3	23.9	23.5	23.0	23.3	23.7	23.4	23.5	27.4	23.4	23.5	23.6	23.9	24.1	24.3	24.3
24	80% Base Load Minimum		MW				19.5	19.5	19.7	19.7	19.7	19.8	19.9	19.9	19.7	19.5	19.1	18.9	19.0	19.2	19.1	19.2	19.1	19.1	19.3	19.4	19.4	19.5	19.6	19.6
25	Running Hours (unit overview)						10786	10786	10786	10787	10786	10787	10790	10791	10792	10793	10794	10795	10796	10797	10798	10799	10800	10801	10802	10803	10804	10805	10806	10807
26	Ambient Temperature	T1 inlet					51	51	50	49	49	48	46	47	50	52	57	60	58	55	57	55	57	57	56	54	53	53	51	50
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	43	43	43	43	42	42	42	42	44	43	43	42	42	42	43	43	43	43	43	44	44	44	44	44
28	Total Fuel Flow		Mscf/h				225	227	224	229	229	230	230	230	227	225	224	218	219	221	221	224	220	220	221	223	224	225	227	228

Date: 10-04-2022 Signature: Bob Aberg (MIOS) Supv

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level - Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL.	10		FULL	34	34	34	34	34	34	34	34	34	33	33	33	33	33	32	32	32	32	32	32	32	32	31	31
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
psig 1st Stage Inlet Press.	PI-2100	psig		88	100	96	96	96	96	96	96	95	95	95	96	96	96	97	96	96	96	96	95	96	96	96	96	96	96
psig 1st Stage Disch. Press	PI-2101	psig		238	300	274	274	274	274	274	274	271	271	273	273	275	276	276	276	276	276	276	276	276	276	276	276	274	272
psig 2nd Stage Inlet Press	PI-2200	psig		267	285	269	270	270	269	269	269	267	267	269	269	271	271	272	271	271	272	272	272	271	271	271	270	269	269
psig 2nd Stage Disch Press	PI-2201	psig		575	600	506	506	506	506	506	506	506	506	506	505	506	506	506	506	506	506	506	506	506	506	506	506	506	506
psig Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	499	499	500	500	499	500	499	500	499	500	499	500	500	500	500	500	500	500
psig Lube Oil Pressure	PI-1572	psig	40	60		58	58	57	57	57	57	57	57	57	56	58	58	59	58	59	58	58	58	58	58	58	58	57	57
deg Lube Oil Sump Temp	TE-1584	deg		150	170	166	167	168	169	169	169	169	169	168	168	167	169	169	165	166	165	165	165	166	166	166	166	166	166
deg Final Discharge Temp	TE-2120	deg		130	150	89	89	89	87	88	88	86	86	88	90	94	97	97	94	93	94	94	94	94	93	91	90	89	88
deg 1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		230	287	208	207	206	206	206	206	206	208	207	208	210	212	211	210	210	211	211	210	211	210	208	208	208	208
deg 2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		158	225	192	192	192	192	192	192	191	190	193	193	197	199	200	197	196	197	198	197	198	197	194	193	192	192
deg 1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	287	206	207	206	206	206	206	206	205	207	208	210	211	211	210	210	211	211	211	211	210	208	208	208	208
deg 2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		228	283	195	195	195	193	193	193	193	191	194	195	198	200	201	198	198	198	199	199	197	198	197	194	194	193
IPS Motor Frame Vibration	VT-1015	IPS			0.25	.04	.04	.06	.04	.04	.04	.04	.04	.04	.04	.04	.04	.05	.04	.04	.04	.05	.04	.04	.04	.04	.04	.04	.04
IPS Compressor Frame Vibration	VT-1512	IPS			0.55	.04	.06	.06	.06	.06	.04	.06	.06	.06	.06	.06	.06	.00	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
psig Filter Differential Pressure		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Control Fuel Gas Supply Pressure									500								500												
49-48 Double Block and Bleed Pressure	A63FGDT	49-48=psid			8				496								496												
50-49 Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20				484								484												

DATE 10-4-2022

SIGNATURE

Mid Shift

Days Shift

Notes:

Utilities and Institutional Facilities

CGTG HOURLY READING LOG

Date: 10-05-2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	109	111	110	107	109	112	108	114	112	108	106	106	106	110	109	108	114	110	111	109	108	111	107	110
4	Instrument Temperature	TI-001	deg C		20	50	17	17	17	16	16	16	15	15	15	15	15	15	15	16	16	16	16	16	16	16	16	16	16	16
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	109	101	102	107	101	105	110	105	107	100	109	109	105	98	105	100	98	103	110	103	107	104	101	106
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	60	62	62	62	62	62	62	62	62	62	61	62	62	62	62	62	62	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	38	36	36	36	36	36	38	36	36	37	36	36	36	34	34	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	11	11	12	12	12	13	12	12	12	12	12	12	12	12	12	12	12	12	12	12	13	12	13	13
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1019	1021	1023	1024	1026	1027	1033	1028	1030	1028	1035	1026	1017	1016	1004	1009	1002	1007	1014	1026	1030	1025	1033	1038
23	Mw Output		MW			27	24.3	24.3	24.3	24.4	24.5	24.5	24.6	24.6	24.5	24.5	24.4	24.5	24.2	24.2	24.0	24.0	23.9	24.0	24.2	24.4	24.5	24.4	24.6	24.7
24	80% Base Load Minimum		MW				19.6	19.6	19.7	19.8	19.8	19.8	19.9	19.9	19.8	19.8	19.6	19.8	19.6	19.6	19.5	19.6	19.5	19.5	19.6	19.7	19.8	19.7	19.8	19.9
25	Running Hours (unit overview)						10808	10809	10810	10811	10812	10813	10814	10815	10816	10817	10818	10819	10820	10821	10822	10823	10824	10824	10825	10826	10827	10828	10829	10830
26	Ambient Temperature	T1 inlet					50	50	50	49	48	47	46	46	47	48	48	48	50	50	52	52	53	52	51	50	49	49	48	47
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	44	44	45	44	44	44	45	45	45	45	44	44	44	44	45	45	44	44	44	44	44	44	44	44
28	Total Fuel Flow		Mscf/h				226	228	229	229	230	230	231	231	229	230	229	230	227	228	225	226	225	225	225	227	228	228	230	230

Date: 10-05-2022 Signature: Bob Haug (MIOS) Shaun Jackson

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	31	31	31	31	31	31	30	30	30	30	30	30	30	30	29	29	29	29	29	29	29	29	29	29
Oil Day Tank Level	LI-1562	GAL	10		FULL	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
Lubricator Bulls eye		LEVEL	1/2	FULL		E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	96	96	96	96	96	96	95	95	95	95	95	95	96	95	96	96	96	96	96	96	96	96	96	96
1st Stage Disch. Press	PI-2101	psig		238	285	273	273	274	274	274	274	270	271	271	270	271	270	270	271	274	268	275	272	274	274	273	273	273	273
2nd Stage Inlet Press	PI-2200	psig		267	285	269	269	269	269	269	269	266	267	267	260	268	267	260	267	267	270	270	270	270	270	269	269	268	268
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	499	500	499	500	500	500	500	501	500	500	499	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		58	58	58	58	58	58	57	57	58	57	57	57	58	57	58	58	58	58	58	58	58	58	58	58
Lube Oil Temp	TE-1584	deg		150	170	168	168	168	168	168	168	169	168	168	167	168	168	165	168	167	167	167	167	167	169	167	168	168	169
Final Discharge Temp	TE-2120	deg		110	150	88	80	86	86	88	80	86	85	86	87	87	87	89	89	90	92	90	92	90	89	89	86	86	85
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	208	208	207	208	208	208	206	206	207	206	208	207	208	208	209	208	207	207	208	208	207	207	206	206
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	193	193	193	193	193	193	189	190	190	190	191	191	192	194	194	193	193	193	193	193	192	191	190	190
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	208	208	208	208	208	208	206	207	207	206	207	207	208	208	209	208	207	207	208	208	207	207	206	206
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	195	195	194	194	194	194	191	192	192	192	192	192	192	193	196	194	195	195	195	194	193	193	192	192
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
Compressor Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.													500								500								
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8								495								495								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20								481								482								

DATE 10-5-2022

SIGNATURE

Mid Shift Bob Aug

Days Shift

Notes

Utilities and Institutional Facilities

Date: 10-06-2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

CGTG HOURLY READING LOG

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	111	107	110	106	111	112	112	108	108	112	108	108	112	106	106	110	110	108	111	109	111	111	107	110
4	Instrument Temperature	TI-001	deg C		20	50	16	16	16	16	16	16	15	15	15	16	16	17	19	19	19	19	20	20	18	18	18	17	17	17
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	103	101	107	109	103	109	111	99	100	104	98	99	111	98	112	108	101	103	109	107	100	104	109	103
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	36	35	36	36	36	38	36	37	36	36	35	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/ on at 6.3MW		Yes (Y)			No (N)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	12	12	12	12	12	12	12	12	12	12	12	12	11	11	11	11	11	11	11	11	11	11	11	11
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1059	1051	1026	1027	1055	1052	1022	1026	1021	1013	1007	997	997	989	990	992	994	990	1011	1010	1017	1021	1023	1023
23	Mw Output		MW			27	24.7	24.6	24.5	24.5	24.6	24.6	24.3	24.4	24.3	24.1	24.0	23.7	23.7	23.5	23.6	23.6	23.6	23.7	24.0	24.1	24.5	24.4	24.4	24.4
24	80% Base Load Minimum		MW				19.9	19.9	19.8	19.8	19.9	19.9	19.7	19.8	19.6	19.5	19.4	19.2	19.2	19.1	19.1	19.1	19.1	19.2	19.4	19.5	19.6	19.6	19.6	19.7
25	Running Hours (unit overview)						10834	10832	10833	10834	10835	10836	10838	10839	10839	10840	10841	10842	10843	10844	10845	10846	10847	10848	10849	10850	10851	10852	10853	10854
26	Ambient Temperature	T1 inlet					47	48	47	48	47	48	49	48	50	52	54	55	56	58	57	57	57	56	53	53	51	51	51	50
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	44	44	45	45	45	45	46	45	44	44	44	44	44	43	44	44	44	44	44	44	44	44	45	45
28	Total Fuel Flow		Mscf/h				231	230	227	230	231	230	230	230	229	228	226	224	224	221	222	222	222	223	226	227	227	227	227	228

Date: 10-06-2022 Signature: Bob Berg (MM105)

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

10-06-2022

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	29	29	29	29	28	28	28	28	28	28	27	27	27	27	27	26	26	26	26	26	26	26	26	26
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	96	96	96	96	96	96	96	95	96	95	96	96	96	97	97	96	96	95	96	96	96	96	96	96
Stage Disch. Press	PI-2101	psig		238	285	273	273	273	273	273	273	274	273	274	274	275	276	276	278	277	277	276	276	275	275	276	276	274	274
2nd Stage Inlet Press	PI-2200	psig		267	285	268	268	268	268	268	268	269	269	269	269	270	271	272	273	273	272	272	272	271	271	271	271	270	270
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	506	506	506	506	506	506	506	506	506	506	506	507	506	506	506	506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	499	500	500	499	500	500	499	500	503	499	499	499	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		58	58	58	58	58	58	57	57	58	58	58	58	58	58	58	58	59	58	58	58	58	58	58	58
Lube Oil Temp	TE-1584	deg		150	170	169	169	165	169	169	169	168	165	165	162	166	166	165	165	165	164	164	164	164	164	167	167	167	167
Final Discharge Temp	TE-2120	deg		110	150	85	85	85	86	86	86	88	88	88	90	91	93	95	97	96	95	96	95	92	92	90	90	89	89
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	206	206	206	206	206	206	205	206	206	206	207	208	210	210	210	210	210	210	207	207	206	206	206	206
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	190	190	190	191	191	191	190	191	192	192	194	195	198	198	199	199	198	198	195	195	193	193	193	193
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	206	206	206	206	206	206	205	205	206	206	207	208	209	210	209	209	209	209	207	207	206	206	206	206
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	192	192	192	192	192	192	192	192	193	194	195	197	200	200	200	200	200	200	196	195	195	195	195	195
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.05	.05	.05	.05	.05	.05	.05	.05	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.04	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.										499								500											
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8					491								496											
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20					481								482											

DATE 10-06-2022

SIGNATURE

Mid Shift Bob Stacy

Days Shift

Notes

Utilities and Institutional Facilities

CGTG HOURLY READING LOG

Date: 10-7-2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	109	111	112	107	111	105	103	101	105	106	105	109	107	110	106	108	105	100	112	110	107	109	111	107
4	Instrument Temperature	TI-001	deg C		20	50	17	17	16	16	16	16	14	15	14	17	17	19	19	19	19	19	18	18	17	17	17	17	17	16
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant FLC Temperature	TI-002	deg F	100	110	120	101	104	107	102	104	107	103	108	106	110	111	99	98	101	102	100	103	101	105	99	107	104	101	108
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	3/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	3/3	3/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	61	61	61	61	61	61
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	34	36	36	34	34	34	34	34	36	34	34	34	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	69	70	70	71	70	70	70	70	70	70	70	70	70	70	70
13	MySCC Log		Operational?																											
14	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
15	Operation of AVR Voltage Mode @ 13.8 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
16	Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	11	11	12	12	12	12	12	12	12	12	12	12	12	11	11	11	11	13	13	13	13	13	13	13
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL compressor (on line trip)	A63GGD ST-01	psig	35	20		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						
21	Acknowledge Alarms Hourly		v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1026	1024	1053	1028	1022	1023	1032	1033	1010	997	994	990	982	985	1005	1014	1010	1014	1013	1014	1019	1020	1025	
23	MW Output		MW			27	24.7	24.5	24.6	24.5	24.4	24.4	24.2	24.5	24.1	23.7	23.1	23.6	23.4	23.4	24.0	24.2	24.1	24.2	24.2	24.2	24.3	24.3	24.5	24.5
24	20% Base Load Minimum		MW				19.7	19.7	19.8	19.8	19.7	19.7	19.8	19.8	19.4	19.2	19.1	19.1	19.1	19.1	19.4	19.5	19.5	19.5	19.5	19.5	19.6	19.6	19.7	19.7
25	Running Hours (unit overview)						10835	10836	10837	10838	10839	10840	10841	10842	10843	10844	10845	10846	10847	10848	10870	10871	10872	10873	10874	10875	10876	10877	10878	10879
26	Ambient Temperature	T1 inlet					50	49	48	49	50	50	47.7	49.1	53.2	56.3	57.8	56.8	57.5	58.1	53.6	52.2	52.7	52.0	52.1	52.3	51.3	51.1	49.8	49.4
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	45	45	45	45	45	45	45	45	45	43	43	43	44	44	44	45	46		46	46	46	46	46	46
28	Total Fuel Flow		Mscf/h				227	228	230	230	230	230	232	230	227	224	224	224	222	221	225	226	227		228	228	228	229	230	230

Date: 10-7-2022 Signature: BG Ag (M105)

CGTG TURBINE UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		E	E	E	E	E	E	E	E	E	E	E	F	E	E	E	E	E	E	E	E	E	E	E	E
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	26	26	26	26	25	25	25	25	25	25	25	25	25	25	25	25	25	25	23	23	23	23	23	23
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	F	F	F	F	F	F	F	F	F	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	96	96	96	96	96	96	95	95	95	96	96	96	96	96	95	96	96	96	95	95	95	95	95	95
Stage Disch. Press	PI-2101	psig		238	285	274	274	274	274	274	274	272	272	273	275	275	276	276	276	276	274	274	274	274	274	274	274	274	274
2nd Stage Inlet Press	PI-2200	psig		267	285	270	269	269	269	269	269	267	267	268	271	271	271	271	271	271	269	269	269	270	270	270	270	270	270
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	499	499	499	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		58	58	58	58	58	58	57	57	57	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
Lube Oil Temp	TE-1584	deg		150	170	167	168	168	168	168	168	169	169	169	168	169	166	164	164	164	164	164	164	166	167	167	166	164	166
Final Discharge Temp	TE-2120	deg		110	150	89	88	87	87	87	87	82	87	83	94	94	95	96	96	96	88	87	87	90	90	89	88	87	87
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	206	206	205	205	205	205	204	204	204	208	208	209	212	212	211	208	208	207	208	208	207	206	205	206
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	193	193	192	192	192	192	190	190	190	196	195	198	200	200	200	193	193	193	193	194	193	192	191	192
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	206	206	205	205	205	205	204	204	204	207	207	208	211	211	211	208	208	210	208	208	207	206	206	206
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	195	194	193	193	193	193	191	191	191	197	197	199	202	202	202	195	195	195	195	195	194	192	191	193
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.05	.05	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.										500																			
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8					495																			
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20					482																			

DATE 10-7-2024

SIGNATURE

Mid Shift Bob Hacks

Days Shift

Notes

Utilities and Institutional Facilities

OCT 0 8 2022

CGTG HOURLY READING LOG

Date: _____

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling): _____ Time Turbine Offline (Brkr Open): _____

Time of Turbine Online (Brkr Closed): _____ Time No Gas Flow: _____

Notes: _____

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	113	107	110	112	114	110	100	102	109	106	105	110	102	105	104	109	106	105	108	112	113	110	108	112
4	Instrument Temperature	TI-001	deg C		20	50	16	16	16	16	16	16	15	15	15	15	15	15	15	15	15	15	15	15	17	16	16	16	16	15
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	100	103	107	105	108	103	98	100	107	105	106	103	109	110	102	106	106	105	107	104	99	108	101	107
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	35	38	37	37	37	35	37	38	37	37	37	35	37	37	37	37	37	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20								✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
21	Acknowledge Alarms Hourly		V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1029	1031	1034	1033	1034	1038	1039	1041	1038	1033	1037	1038	1021	1025	1013	1007	1009	1015	1029	1033	1032	1033	1029	1042
23	Mw Output		MW			27	24.6	24.6	24.6	24.7	24.7	24.8	24.7	24.8	24.7	24.6	24.6	24.5	24.3	24.4	24.1	24.0	24.1	24.2	24.5	24.6	24.6	24.6	24.6	24.9
24	80% Base Load Minimum		MW				19.8	19.8	19.8	19.8	19.8	19.9	19.8	19.9	19.9	19.8	19.9	19.8	19.6	19.7	19.5	19.4	19.5	19.6	19.8	19.9	19.8	19.8	19.8	20.0
25	Running Hours (unit overview)						10880	10881	10882	10883	10884	10885	10886	10887	10888	10889	10890	10891	10892	10893	10894	10895	10896	10897	10898	10899	10900	10901	10902	10903
26	Ambient Temperature	T1 inlet					48.9	48.4	48.3	47.9	47.7	46.9	47.7	46.9	47.1	48.4	48.9	51.1	50.4	50.2	52.5	53.2	52.5	51.4	48.6	47.5	47.8	48.4	48	45.3
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	45	45	45	45	45	46	46	45	45	45	45	45	45	48	46	50	48	48	49	49	49	49	49	49
28	Total Fuel Flow		Mscf/h				231	232	232	231	231	232	231	232	232	232	231	231	228	230	224	227	224	227	229	231	230	231	230	233

Date: 10-8-22 Signature: A Wan

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	23	23	22	22	22	22	22	22	22	21	22	22	22	22	21	21	21	21	21	21	21	21	21	21
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	B	B	B	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	95	95	95	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96
Stage Disch. Press	PI-2101	psig		238	285	274	274	274	274	274	274	274	274	274	274	274	276	275	275	275	275	274	275	276	275	275	275	275	274
2nd Stage Inlet Press	PI-2200	psig		267	285	270	270	269	269	269	269	269	269	269	269	269	271	270	270	271	271	271	271	270	270	270	270	270	269
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	499	499	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		58	58	57	57	57	57	57	57	57	57	58	58	58	58	58	58	57	59	57	57	57	58	57	57
Lube Oil Temp	TE-1584	deg		150	170	167	167	167	168	169	169	169	169	169	169	168	168	168	168	167	167	167	167	169	169	169	169	169	169
Final Discharge Temp	TE-2120	deg		110	150	87	87	86	86	86	86	86	86	86	84	84	83	89	89	91	91	91	91	87	87	87	87	87	84
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	204	205	205	204	204	204	204	204	204	204	204	203	206	204	207	207	207	207	206	204	204	204	203	203
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	191	192	191	190	190	190	189	189	189	189	189	190	193	193	195	195	195	195	193	191	192	193	191	188
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	204	205	206	205	204	204	204	204	204	204	204	203	206	204	207	207	207	207	207	204	204	204	203	203
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	192	193	191	191	191	190	191	190	190	190	190	192	194	194	195	194	195	194	194	192	192	192	191	190
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.06	.05	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																								

DATE	OCT 0 8 2022
SIGNATURE	
Mid Shift	A Wan
Days Shift	

Notes

Utilities and Institutional Facilities

CGTG HOURLY READING LOG

Date: OCT 09 2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	113	110	108	112	113	110	105	110	160	111	100	101	107	110	102	105	103	100	109	112	114	110	113	105
4	Instrument Temperature	TI-001	deg C		20	50	15	15	15	14	15	15	15	15	15	17	17	20	20	20	20	20	20	20	18	17	17	17	16	16
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	103	108	99	101	106	101	100	106	110	109	106	98	105	109	109	98	99	98	99	103	107	101	107	104
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	61	61	61	61	61	61	61	61	161	161	61	63	63	63	63	64	65	63	62	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	36	36	34	34	36	36	36	36	34	34	34	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1043	1046	1047	1047	1043	1039	1038	1021	1018	1001	985	982	971	954	967	971	998	998	1014	1018	1019	1025	1023	1017
23	Mw Output		MW			27	24.9	24.9	24.9	24.8	24.8	24.8	24.8	24.5	24.3	23.5	22.5	23.4	23.2	22.7	23.0	23.2	23.8	23.8	24.1	24.2	24.3	24.5	24.4	24.3
24	80% Base Load Minimum		MW				20.0	20.1	20.1	20.1	20.1	20.0	20.0	19.8	19.6	19.4	19.1	19.0	18.9	18.7	18.9	19.0	19.4	19.3	19.5	19.6	19.6	19.8	19.8	19.7
25	Running Hours (unit overview)						10904	10905	10906	10907	10908	10909	10910	10911	10912	10913	10914	10915	10916	10917	10918	10919	10920	10921	10922	10923	10924	10925	10926	10927
26	Ambient Temperature	T1 inlet					45.1	45.0	45.0	45.7	45.5	45.8	45.9	45.9	50.5	54.7	57.2	58.3	60.1	62.8	59.7	59.0	54.1	54.3	51.4	50.5	50.5	48.7	48.6	49.8
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	49	49	49	49	49	49	49	49	49	48	48	47	47	47	48	48	49	49	49	50	49	50	50	50
28	Total Fuel Flow		Mscf/h				233	233	234	233	232	232	231	229	230	226	223	222	219	216	218	219	225	224	227	228	228	229	229	227

Date: OCT 09 2022 Signature: A Wal

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	D	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	21	21	21	21	20	20	20	20	20	20	20	20	20	20	20	20	20	20	18	18	18	18	18	18
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	G	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	D	B	B	B	B	D	B	B	D	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	96	96	96	96	96	96	96	95	95	95	95	97	97	97	97	97	97	97	96	96	96	96	96	96
Stage Disch. Press	PI-2101	psig		238	285	274	274	274	274	273	273	273	273	273	273	273	277	277	278	278	278	278	278	276	276	276	276	276	276
2nd Stage Inlet Press	PI-2200	psig		267	285	269	269	269	269	269	269	269	269	269	269	269	272	274	274	274	274	274	274	272	272	272	272	272	272
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	499	499	499	499	500	500	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57	57	57	57	57	57	57	58	60	58	59	59	59	59	58	58	58	58	58	59
Lube Oil Temp	TE-1584	deg		150	170	169	169	169	169	169	169	169	169	169	169	167	168	165	165	164	164	164	164	167	168	168	168	168	167
Final Discharge Temp	TE-2120	deg		110	150	84	83	83	83	84	84	84	87	87	87	93	95	95	99	98	97	97	97	90	90	89	88	88	90
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	202	209	202	200	202	202	205	205	205	205	204	211	211	212	211	210	210	210	207	206	206	204	204	206
2ndStage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	188	189	188	187	187	187	188	191	191	191	191	198	198	201	200	200	200	200	193	192	192	191	192	194
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	202	209	202	201	203	202	205	205	205	205	206	210	216	212	216	210	210	210	207	206	206	204	205	206
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	188	189	188	188	189	189	189	192	191	191	196	199	199	202	201	201	201	201	195	193	192	191	192	194
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.												500																	
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8							498																	
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20							482																	

DATE	OCT 09 2022
SIGNATURE	
Mid Shift	A Wyse
Days Shift	

Notes

Utilities and Institutional Facilities

CGTG HOURLY READING LOG

Date: OCT 10 2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Instrument Air Compressor	**I.D**	**Units**	**Low**	**Norm**	**Max**																								
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√		√	√	√	√
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	113	110	107	109	112	108	114	108	110	110	108	112	106	108	112	108	108	110	111	109	110	112	109	107
4	Instrument Temperature	TI-001	deg C		20	50	16	16	16	15	15	15	13	13	16	18	19	20	22	21	19	20	20	20	20	19	18	18	17	17
5	**Fin Fan Cooler**		**Units**	**Low**	**Norm**	**Max**																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	102	105	99	107	103	100	110	99	101	111	106	111	100	101	104	98	98	103	101	104	107	107	103	107
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	61	61	61	61	61	61	62	62	62	62	62	62	64	62	62	60	62	64	62	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	36	36	37	37	39	39	36	36	36	36	36	36	36	36	36	36	36
11	**Control Room**		**Units**	**Low**	**Norm**	**Max**																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	**WECC Log**		**Operational?**																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	X	√	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	Y	Y	Y	Y	N	N
	Entronic Control System		**Units**	**Low**	**Norm**	**Max**																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	13	13	13	13	13	13	13	13	13	13	13	13	13	12	13	13	13	13	13	13	13	13	13	13
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		V				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1023	1025	1024	1027	1039	1045	1048	1037	1011	994	983	973	961	986	882	880	888	877	820	891	886	880	334	877
23	Mw Output		MW			27	24.5	24.6	24.5	24.7	24.8	24.9	24.9	24.7	24.1	23.7	23.4	23.2	22.9	21.1	21.1	21.0	20.9	20.4	21.0	21.1	21.9	21.1	20.9	21.0
24	80% Base Load Minimum		MW				19.8	19.9	19.9	20.0	20.1	20.2	20.2	20.0	19.6	19.3	19.1	19.0	18.8	19.5	19.6	19.2	18.9	19.1	19.2	19.3	19.4	19.5	19.6	19.6
25	Running Hours (unit overview)						10928	10929	10930	10931	10932	10933	10933	10934	10935	10936	10937	10938	10939	10940	10941	10942	10943	10944	10945	10946	10947	10948	10949	10950
26	Ambient Temperature	T1 inlet					48.4	48	48.1	46.1	45	43.7	43	45	51	54	57	54	61	52	81	56	60	57	56	55	54	52	51	51
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	50	50	50	50	50	50	50	50	50	49	48	48	48	47	49	50	50	50	50	49	49	50	50	50
28	Total Fuel Flow		Mscf/h				229	230	230	231	231	232	232	231	227	224	221	220	217	203	202	206	204	205	202	203	202	207	202	20

Date: OCT 10 2022 Signature: A Wren

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
Oil Day Tank Level	LI-1562	GAL	10		FULL	18	18	18	17	17	17	17	17	17	17	17	17	17	16	16	16	16	16	16	16	16	16	16	16
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	96	96	96	96	96	96	95	95	96	96	96	96	96	99	99	98	98	98	99	99	99	99	99	99
Stage Disch. Press	PI-2101	psig		238	285	276	276	276	274	273	273	272	272	274	275	275	277	276	281	281	282	282	282	282	282	282	282	282	282
2nd Stage Inlet Press	PI-2200	psig		267	285	272	272	272	270	269	269	268	267	269	270	271	273	273	276	277	277	277	278	277	277	277	277	277	277
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	506	506	506	506	506	506	506	506	505	507	506	506	506	506	507	506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	500	500	500	499	500	500	500	500	500	499	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		58	58	58	57	57	57	57	57	56	58	58	56	58	59	58	59	58	58	59	59	58	58	58	58
Lube Oil Temp	TE-1584	deg		150	170	168	168	168	169	170	170	169	169	167	167	166	165	165	169	167	165	164	165	165	166	166	165	166	166
Final Discharge Temp	TE-2120	deg		110	150	88	88	88	85	83	83	81	82	88	91	94	96	98	89	88	95	96	96	94	93	91	89	89	89
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	204	204	204	203	203	204	203	203	207	208	209	211	212	209	207	210	211	210	210	209	208	208	208	208
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	193	192	192	191	190	189	186	187	192	194	196	199	202	193	190	195	197	197	195	195	194	194	194	194
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	204	204	204	203	203	204	203	204	207	208	207	210	212	208	207	210	211	211	210	209	208	207	207	207
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	194	192	192	191	190	188	188	189	194	195	198	200	202	195	191	199	198	198	196	195	194	193	193	193
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.05	.05	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.05	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.													500								500								
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8								495								495								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20								484								484								

DATE OCT 2022

SIGNATURE

Mid Shift A Wan

Days Shift

Notes

Utilities and Institutional Facilities

Date: 10-11-2022

CGTG HOURLY READING LOG

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	111	108	112	107	110	14	109	106	110	108	106	110	108	112	106	108	112	110	111	109	111	106	107	117
4	Instrument Temperature	TI-001	deg C		20	50	17	17	17	16	16	16	14	15	16	18	20	22	22	24	24	25	24	24	23	20	19	19	18	18
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	17	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	106	101	107	103	102	107	99	112	105	109	108	100	112	107	111	108	100	104	103	107	101	103	111	108
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	62	62	62	62	62	62	62	63	62	62	62	62	62	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	36	38	36	39	37	39	39	39	37	36	36	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	13	13	13	13	13	13	13	13	13	13	13	13	13	12	12	13	12	13	12	12	13	13	13	13
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	879	876	876	873	880	881	879	1024	1005	984	967	955	939	935	926	932	936	942	946	970	978	973	985	983
23	Mw Output		MW			27	20.9	20.9	20.9	20.9	21.0	21.1	20.9	24.3	23.9	23.4	23.0	22.7	22.3	22.2	22.0	22.2	22.2	22.4	23.5	23.1	23.3	23.2	23.5	23.5
24	80% Base Load Minimum		MW				19.8	19.8	19.8	19.8	19.8	19.9	19.8	19.8	19.8	19.2	19.2	18.8	18.6	18.5	18.4	18.5	18.6	18.7	18.3	19.1	19.2	19.1	19.3	19.3
25	Running Hours (unit overview)						10951	10952	10953	10954	10955	10956	10957	10958	10959	10960	10961	10962	10963	10964	10965	10966	10967	10968	10969	10970	10971	10972	10973	10974
26	Ambient Temperature	T1 inlet					51	50	50	48	48	47	45	47	51	56	59	61	64	66	66	65	64	63	62	58	56	57	55	55
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	50	50	50	50	50	50	50	51	50	49	48	48	48	48	49	49	50	50	50	50	51	51	51	51
28	Total Fuel Flow		Mscf/h				203	203	203	204	204	205	202	229	225	224	218	215	213	210	210	211	211	212	213	213	219	218	221	221

Date: 10-11-2022 Signature: (MIDS) Bob Gray day shift – [illegible]

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	16	16	16	16	16	16	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	14	14
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	99	99	99	99	99	99	99	95	95	95	96	97	97	97	97	97	98	98	98	98	98	98	97	97
Stage Disch. Press	PI-2101	psig		238	285	282	282	282	281	281	281	280	277	273	278	277	278	279	280	279	280	280	284	280	278	278	277	277	277
2nd Stage Inlet Press	PI-2200	psig		267	285	277	277	277	277	277	276	275	267	268	270	272	274	271	273	275	276	276	276	277	274	274	274	273	273
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	506	506	506	506	506	506	506	506	506	507	506	506	506	506	506	506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	499	500	499	499	500	499	499	499	500	500	499	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		58	58	58	58	58	58	57	57	58	58	58	58	59	59	59	59	59	59	59	59	59	59	59	59
Lube Oil Temp	TE-1584	deg		150	170	168	168	168	168	168	168	164	168	168	167	166	165	164	164	164	164	163	163	165	165	163	164	165	165
Final Discharge Temp	TE-2120	deg		110	150	90	90	89	87	86	86	85	86	89	96	97	99	102	104	105	104	101	101	200	96	96	95	93	92
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	208	208	208	207	206	206	205	205	208	208	211	212	214	215	215	215	214	213	213	211	211	210	210	209
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	192	191	191	190	188	188	187	190	192	193	199	202	204	203	203	204	202	202	201	198	198	198	197	197
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	208	208	207	207	206	206	205	205	207	208	211	212	213	214	214	215	214	214	213	211	211	210	210	209
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	199	192	191	191	190	190	189	191	194	197	201	203	205	205	204	206	203	203	201	200	199	199	198	197
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.05	.05	.05	.05	.05	.05	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.05	.05	.05
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.									500								500												
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8				496								495												
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20				485								482												

DATE 10-11-2022

SIGNATURE

Mid Shift

Days Shift

Notes

Utilities and Institutional Facilities

CGTG HOURLY READING LOG

Date: 10-12-2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	111	107	108	112	110	111	112	106	114	106	110	108	108	112	112	110	110	107	111	109	107	110	112	111
4	Instrument Temperature	TI-001	deg C		20	50	18	18	17	17	17	17	15	15	17	20	21	23	23	24	25	25	25	25	23	21	20	19	19	19
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	103	107	106	101	107	109	104	104	114	99	111	100	104	112	99	99	108	103	101	100	103	101	104	104
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	62	60	60	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	36	37	39	39	37	34	34	39	36	36	36	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	13	13	13	13	13	13	13	13	13	13	13	13	13	12	12	12	12	12	12	12	12	13	13	13
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps				987	993	1009	1012	1002	1011	1024	1002	981	966	961	953	938	933	922	918	919	928	877	883	884	885	887	874
23	Mw Output		MW			1427	23.5	23.6	24.0	24.2	23.1	24.0	24.4	23.8	23.4	23.0	22.9	22.6	22.2	22.2	21.9	21.8	21.9	22.0	21.0	21.0	21.0	21.0	21.0	21.0
24	80% Base Load Minimum		MW			27	19.4	19.4	19.6	19.7	19.5	19.6	19.8	19.5	19.1	19.0	18.8	18.7	18.8	18.8	18.2	18.2	18.2	18.4	18.7	18.8	18.9	19.0	19.0	19.0
25	Running Hours (unit overview)						10975	10977	10977	10978	10979	10979	10981	10982	10983	10984	10985	10986	10987	10988	10989	10990	10991	10992	10993	10994	10995	10996	10997	10998
26	Ambient Temperature	T1 inlet					54	53	53	49	51	49	48	52	56	59	60	63	65	66	66	68	68	66	63	60	60	60	59	59
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	51	51	51	51	52	51	52	53	52	51	50	50	50	50	50	50	52	51	51	51	52	52	52	52
28	Total Fuel Flow		Mscf/h				224	222	225	226	224	227	228	224	220	217	217	214	213	212	209	209	210	210	206	203	204	203	202	204

Date: 10-12-2022 Signature: Bob Engr

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	R	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	14	14	14	14	14	14	14	14	14	14	13	55	55	55	55	55	55	55	51	51	51	51	51	51
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	97	97	97	97	97	97	95	95	96	96	96	97	97	97	97	98	98	98	99	99	99	99	98	98
Stage Disch. Press	PI-2101	psig		238	285	277	277	275	275	275	275	273	274	275	276	278	279	279	280	281	282	281	281	283	283	283	282	282	282
2nd Stage Inlet Press	PI-2200	psig		267	285	273	272	271	271	271	271	268	269	270	271	273	275	276	276	276	277	277	277	277	277	277	277	277	277
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	500	500	500	500	499	499	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		59	59	58	58	58	58	57	58	58	58	58	59	59	59	59	59	59	59	59	59	59	59	59	59
Lube Oil Temp	TE-1584	deg		150	170	165	165	165	165	165	165	166	167	165	166	165	164	164	164	163	163	163	163	163	163	163	163	163	164
Final Discharge Temp	TE-2120	deg		110	150	92	91	89	89	89	89	88	89	94	95	99	103	103	105	107	108	106	105	100	99	98	98	96	96
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	209	209	208	208	208	208	206	208	211	212	212	214	215	216	217	217	216	216	214	214	213	213	212	212
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	196	195	193	193	193	193	191	193	197	198	201	204	206	209	208	208	207	207	201	200	199	199	197	197
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	209	209	208	208	208	208	206	208	210	212	212	214	214	216	217	216	216	216	214	214	213	213	211	211
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	197	196	195	195	195	195	193	195	198	199	203	205	207	208	210	210	208	208	208	202	200	199	198	198
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.05	.05	.05	.05	.05	.05	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.									500							500													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8				495							496													
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20				482							483													

DATE 10-12-2022

SIGNATURE

Mid Shift Bob Long

Days Shift

Notes

Utilities and Institutional Facilities

Date: 10-13-2022

CGTG HOURLY READING LOG

MST / MDT (circle one)
Time Gas Introduced (Turbine Rolling):
Time of Turbine Online (Brkr Closed):
Time Turbine Offline (Brkr Open):
Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	108	112	111	108	112	111	110	109	108	110	108	110	102	103	104	102	104	110	108	110	108	108	102	108
4	Instrument Temperature	TI-001	deg C			20	18	18	17	17	17	16	17	17	18	18	18	19	19	19	19	20	20	20	22	22	28	20	20	20
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	103	109	108	101	103	109	105	109	110	109	105	110	105	110	102	108	103	105	101	102	108	102	103	102
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	60	60	60	60	60	60
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	36	34	35	34	34	34	35	34	34	34	36	35	35	35	35	35	35
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	76	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	13	13	13	13	13	13	13	13	17	13	13	13	13	13	13	13	13	13	13	12	12	12	12	12
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0								0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
21	Acknowledge Alarms Hourly		v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	884	885	880	882	886	879	1004	1000	983	982	969	941	942	925	919	908	907	918	908	926	922	919	922	921
23	Mw Output		MW			27	21.0	21.0	21.0	21.6	21.1	21.1	24.0	23.8	23.4	23.4	23.0	22.4	22.4	22.0	21.8	21.6	21.6	21.8	22.8	21.9	21.9	21.9	21.9	21.9
24	80% Base Load Minimum		MW				19.3	19.3	19.6	19.6	19.7	19.6	19.6	19.5	19.5	19.1	18.1	18.6	18.4	18.3	18.2	18.1	18.4	18.3	18.3	18.8	18.8	18.8	18.8	18.8
25	Running Hours (unit overview)						10999	11000	11001	11002	11003	11004	11005	11006	11007	11008	11009	11010	11011	11012	11013	11014	11015	11016	11017	11018	11019	11020	11021	11022
26	Ambient Temperature	T1 inlet					55	55	51	50	50	51	51.3	53.1	57.2	56.7	59.7	61.7	63.9	62.6	68.5	69.6	68.9	67.6	66	62	62	60	60	56
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	52	52	52	52	52	52	52	52	51	51	50	50	50	50	51	51	51	52	52	52	52	52	52	52
28	Total Fuel Flow		Mscf/h				203	203	203	201	202	202	224	224	223	222	219	213	214	216	208	206	211	210	210	210	210	210	210	210

Date: 10-13-2022 Signature: Bob Hung (M105)

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	51	51	51	51	51	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	98	98	98	98	98	98	95	95	95	95	96	96	96	98	98	98	97	98	98	98	98	98	98	98
Stage Disch. Press	PI-2101	psig		238	285	282	282	281	281	280	280	273	273	273	273	271	271	272	281	281	281	281	281	281	28	281	281	281	281
2nd Stage Inlet Press	PI-2200	psig		267	285	277	277	277	276	276	276	269	269	269	269	272	272	272	277	277	277	277	277	276	276	276	276	276	276
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	506	506	507	507	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	499	499	499	499	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		59	59	59	58	58	58	58	58	58	58	58	58	58	59	59	59	59	59	59	59	59	59	59	59
Lube Oil Temp	TE-1584	deg		150	170	169	167	166	169	169	169	168	168	167	167	165	165	165	163	163	167	167	167	163	163	163	163	163	163
Final Discharge Temp	TE-2120	deg		110	150	96	96	95	92	90	86	90	90	90	90	99	99	99	106	106	106	106	106	102	102	101	101	101	101
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	212	212	211	211	209	207	209	209	209	209	213	213	213	216	216	214	214	213	214	213	213	213	213	213
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	197	197	197	198	198	199	195	195	195	195	202	202	202	206	206	206	206	206	204	202	202	202	202	202
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	211	211	210	209	209	206	208	208	209	209	212	212	212	216	216	216	214	214	213	213	213	213	213	213
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	198	198	196	195	195	192	196	196	196	196	203	203	203	208	208	208	207	207	204	204	204	204	204	204
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.04	.04	.04	.04	.04	.01	.06	.04	.04	.04	.04	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.								500																					
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8			496																					
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20			485																					

DATE	OCTOBER 13 2022
SIGNATURE	
Mid Shift	
Days Shift	
Notes	

Utilities and Institutional Facilities

2/14/22
106

Date: OCT 18 2022

CGTG HOURLY READING LOG

MST / MDT (circle one)
Time Gas Introduced (Turbine Rolling):
Time of Turbine Online (Brkr Closed):
Time Turbine Offline (Brkr Open):
Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	110	108	108	103	110	109	102	111	101	102	105	100	104	110	108	102	105	110	110	108	100	98	102	100
4	Instrument Temperature	TI-001	deg C		20	50	18	18	18	18	18	18	18	18	19	20	20	21	21	25	25	25	25	25	24	24	24	22	22	22
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	101	98	102	106	102	103	108	110	108	100	108	111	110	109	103	105	107	100	102	100	106			
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60	60	60	60	60	60	61	61	61	61	61	63	63	63	63	63	63	63	60	60	60	60	60	60
10	Coolant Return Differential from	FI-002	In WC		37	50	35	35	35	35	35	35	35	35	35	31	35	35	36	36	34	36	34	35	35	35	35	35	35	35
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/ on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	12	12	12	13	13	13	13	13	13	13	13	13	13	13	12	12	12	12	12	12	12	12	12	12
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20								✓	✓	✓	✓	✓	✓	✓											
21	Acknowledge Alarms Hourly		V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	998	1007	1006	1009	1007	1009	1017	992	987	968	951	944	928	928	909	908	914	917	951	962	961	969	968	971
23	Mw Output		MW			27	23.8	24.0	24.0	24.0	24.0	24.0	24.2	23.6	23.5	23.0	22.7	22.4	22.1	22.0	21.6	21.5	21.7	21.8	22.4	22.9	22.9	23.1	23.1	23.1
24	80% Base Load Minimum		MW				19.5	19.6	19.6	19.6	19.6	19.6	19.5	19.4	19.3	18.9	18.8	18.4	18.4	18.4	18.2	18.1	18.2	18.3	18.4	19.0	19.0	19.1	19.1	19.1
25	Running Hours (unit overview)						11023	11024	11025	11026	11027	11028	11029	11030	11031	1032	11033	11034	11035	11036	11037	11038	11040	11041	11041	11042	11043	11044	11045	11046
26	Ambient Temperature	T1 inlet					52	51	51	50	50	50	48.7	54.9	55.5	59.4	62.2	63.7	66.4	66.6	62.1	69.8	68.5	67.5	62	60	59	58	58	57
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	52	52	52	52	52	52	52	52	52	50	50	50	50	49	50	50	51	51	51	51	51	51	51	51
28	Total Fuel Flow		Mscf/h				224	226	225	225	225	225	227	223	224	217	214	214	211	211	209	204	209	210	217	217	217	218	218	218

Date:

Signature:

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	47	47	47	47	47	47	47	47
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	96	96	96	96	96	96	95	95	97	97	97	97	97	97	97	98	98	98	98	98	98	98	98	98
Stage Disch. Press	PI-2101	psig		238	285	276	276	276	275	275	275	273	277	277	277	279	279	281	281	280	282	284	284	280	280	280	280	280	280
2nd Stage Inlet Press	PI-2200	psig		267	285	271	271	271	271	271	271	269	269	272	272	272	274	276	276	276	277	276	275	275	275	275	275	275	275
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	500	500	506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		58	58	58	58	58	58	57	57	58	58	58	58	58	58	58	59	59	59	59	59	59	59	59	59
Lube Oil Temp	TE-1584	deg		150	170	168	168	167	167	167	167	167	167	168	168	168	165	164	164	164	164	164	165	163	163	163	163	163	163
Final Discharge Temp	TE-2120	deg		110	150	89	89	89	89	89	89	86	86	96	96	96	104	106	104	106	107	107	107	98	98	98	98	98	98
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	206	206	206	207	207	207	206	206	210	210	210	213	215	215	214	215	215	215	210	210	210	210	210	210
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	192	192	192	192	193	193	191	191	198	198	198	203	206	204	206	206	206	206	198	198	198	198	198	198
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	206	206	206	206	207	207	206	206	210	210	210	213	214	214	214	215	214	213	210	210	210	210	210	210
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	192	192	193	193	193	193	193	193	200	200	200	204	206	200	205	207	207	209	200	200	200	200	200	200
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.04	.04	.06	.06	.06	.06	.04	.04	.06	.06	.04	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																								

DATE	OCTOBER 14 2022
SIGNATURE	
Mid Shift	
Days Shift	

Notes

Utilities and Institutional Facilities

Date: OCT 15 2022

MST / (MDT) (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

CGTG HOURLY READING LOG

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	108	108	110	110	105	108	110	106	105	106	108	110	108	112	112	106	108	110	108	108	110	103	108	105
4	Instrument Temperature	TI-001	deg C		20	50	20	20	20	20	20	20	15	15	16	20	22	23	24	25	26	25	25	25	20	20	20	20	20	20
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	101	104					98	105	107	107	105	110	100	107	100	105	111	103	105	106	102	105	108	106
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60	60	60	60	60	60	60	62	62	62	62	62	63	64	63	62	62	62	60	60	60	60	60	60
10	Coolant Return Differential from	FI-002	In WC		37	50	35	35	35	35	35	35	36	36	37	38	39	39	39	39	39	36	36	36	35	35	35	35	35	35
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
24	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	13	13	13	13	13	13	13	13	13	13	13	13	13	12	12	12	12	12	12	12	12	12	12	12
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm Ni. Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	983	981	992	1011	1042	1041	1025	994	979	956	944	926	911	902	911	910	922	927	955	957	883	877	879	876
23	Mw Output		MW			27	23.4	23.4	23.8	24.1	24.2	24.1	24.4	23.7	23.4	22.8	22.5	22.1	21.8	21.5	21.7	21.7	21.7	22.1	22.8	22.8	20.9	20.9	20.9	20.9
24	80% Base Load Minimum		MW				19.3	19.3	19.5	19.7	19.7	19.7	19.6	19.5	19.2	18.9	19.7	18.4	18.2	18.1	18.2	18.3	18.1	18.5	18.9	18.9	19.0	19.0	19.0	19.0
25	Running Hours (unit overview)						11047	11048	11049	11050	11051	11052	11053	11054	11055	11056	11057	11057	11059	11060	11061	11062	11063	11063	11064	11065	11066	11067	11068	11069
26	Ambient Temperature	T1 inlet					55	55	52	52	50	50	47	52	56	60	62	66	68	70	69	68	66	65	60	60	58	58	58	58
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	51	51	51	51	51	51	51	53	53	52	50	51	51	51	52	53	53	53	53	53	53	53	53	53
28	Total Fuel Flow		Mscf/h				221	224	225	225	225	225	228	223	220	216	214	211	209	208	208	208	210	211	216	216	204	204	204	204

Date: OCT 15 2022 Signature: day shift = John Doe

CGTG TURBINE UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
Oil Day Tank Level	LI-1562	GAL	10		FULL	47	47	47	47	47	47	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	98	98	98	98	97	97	96	96	95	97	97	97	97	98	98	98	98	98	98	98	99	99	99	99
Stage Disch. Press	PI-2101	psig		238	285	279	279	279	279	277	277	275	275	276	278	279	280	280	282	283	283	282	282	282	282	283	283	283	283
2nd Stage Inlet Press	PI-2200	psig		267	285	274	274	274	273	273	273	270	270	271	273	274	273	275	277	278	278	278	278	278	278	278	279	279	279
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	499	499	500	500	500	499	500	500	500	500	500	499	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		59	59	59	59	58	58	57	58	58	58	58	59	59	59	58	59	59	59	59	59	59	59	59	59
Lube Oil Temp	TE-1584	deg		150	170	166	166	166	167	167	167	169	168	165	165	165	164	164	164	164	163	163	163	163	163	164	164	164	164
Final Discharge Temp	TE-2120	deg		110	150	93	93	93	90	90	90	86	88	98	90	100	103	105	107	107	107	105	107	105	105	100	100	99	99
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	206	206	206	206	206	206	205	206	209	211	213	215	217	217	216	215	214	213	213	213	212	212	212	212
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	194	194	194	193	193	193	191	192	198	199	201	205	207	207	207	207	205	204	206	206	206	205	199	199
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	206	206	206	206	206	206	205	206	209	211	212	214	216	216	216	214	214	214	214	214	212	212	212	212
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	196	196	196	194	194	194	192	193	197	200	202	206	208	208	209	208	206	205	206	206	206	201	201	201
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.05	.05	.05	.05	.07	.09	.05	.05	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.05	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.													500								500								
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8								496								496								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20								524								484								

DATE OCTOBER 15 2022

SIGNATURE

Mid Shift

Days Shift

Notes

Utilities and Institutional Facilities

Date: OCT 16 2022

MST / (MDT) (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

CGTG HOURLY READING LOG

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	110	108	105	108	110	109	101	107	100	101	110	110	105	111	100	102	100	101	108	108	110	108	108	110
4	Instrument Temperature	TI-001	deg C		20	50	18	18	18	18	18	18	17	16	16	19	19	17	17	17	17	17	17	17	17	17	17	17	17	17
5	Air For Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	100	102	100	101	100	102	106	106	109	108	107	106	100	98	99	101	102	104	100	104	102	101	103	102
8	Skid Base Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	in WC		60	80	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
10	Coolant Return Differential from	FI-002	in WC		37	50	35	35	35	35	35	35	35	35	35	35	35	36	36	36	36	35	35	35	35	35	35	35	35	35
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
13	MCC Lgt		Operational?																											
14	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
15	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
16	Governor Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	12	12	12	12	12	12	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	14	14	14	14	14	14
20	Record on hard S/D trip over 4590 rpm NL Compressor (on line trip)	A53GGD ST-01	psig	35	20																			0	0	0	0	0	0	0
21	Acknowledge Alarms Hourly		v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	880	884	880	875	878	883	880	882	882	887	1058	1068	995	1014	999	1003	1004	1001	1004	1003	1007	1009	1002	1006
23	Mw Output		MW			27	21.1	21.1	21.1	21.1	21.1	21.1	21.0	21	21.1	20.0	24.0	23.9	23.8	24.2	23.8	23.9	23.9	23.9	24.1	24.1	24.1	24.0	24.0	24.0
24	80% Base Load Minimum		MW				19.8	19.8	19.9	20.0	20.0	20.0	20.2	20.1	20.0	20.0	20.1	19.9	19.8	19.9	19.9	19.8	19.8	19.8	20.0	20.0	20.0	20.1	20.1	20.1
25	Running Hours (unit overview)						11070	11071	11072	11073	11074	11075	11076	11077	11080	11080	11081	11082	11083	11084	11085	11086	11087	11088	11089	11090	11091	11092	11093	11094
26	Ambient Temperature	T1 inlet					49	49	46	46	45	45	47.1	47.1	48.5	48.5	48.1	46.6	46.0	46.6	46.9	47.7	48.7	48.6	46	46	46	44	44	44
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	53	53	53	53	53	53	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54
28	Total Fuel Flow		Mscf/h				202	202	202	202	204	204	202	203	201	227	226	225	224	226	224	225	225	225	225	225	225	225	225	225

Date:

Signature:

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	44	44	44	44	44	44	44	44	44	44	44	44	43	43	43	43	43	43	43	43	43	43	43	43
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	E	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	F	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	99	99	99	99	100	100	99	96	96	96	96	96	96	96	96	96	96	96	96	96	96	97	97	
Stage Disch. Press	PI-2101	psig		238	285	282	282	282	282	282	282	282	276	276	276	276	276	276	276	276	276	276	276	276	276	276	276	276	276
2nd Stage Inlet Press	PI-2200	psig		267	285	278	278	278	278	277	277	277	271	271	271	271	271	271	271	271	271	271	271	271	271	271	271	271	271
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	499	499	499	499	500	500	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		59	59	59	59	59	59	58	58	58	58	58	57	57	57	57	57	57	57	57	57	57	58	58	58
Lube Oil Temp	TE-1584	deg		150	170	166	166	166	166	167	167	167	168	168	168	168	168	168	168	168	168	168	168	168	168	168	169	169	169
Final Discharge Temp	TE-2120	deg		110	150	86	86	84	84	83	83	83	83	83	83	83	85	85	85	85	85	87	87	87	87	87	85	85	85
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	205	205	205	203	203	203	202	202	202	202	202	203	203	202	202	204	204	204	204	204	204	203	203	203
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	188	188	186	184	184	184	184	186	186	186	186	184	184	188	188	188	190	188	188	188	188	188	188	188
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	205	205	205	203	203	203	201	201	201	201	201	201	202	202	202	202	201	201	201	201	201	202	202	202
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	190	190	188	188	186	186	186	186	184	188	185	189	189	189	189	189	191	191	188	188	188	188	190	190
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																								

DATE	OCT 16 2022
SIGNATURE	
Mid Shift	
Days Shift	

Notes

Utilities and Institutional Facilities

CGTG HOURLY READING LOG

Date: OCT 17 2022

MST / (MDT) (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Instrument Air Compressor	I.D	Units	Low	Norm	Max																								
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	108	110	108	105	108	110	106	108	106	112	106	114	106	108	112	110	106	108	111	109	108	110	110	108
4	Instrument Temperature	TI-001	deg C		20	50	18	18	18	18	18	18	13	13	12	12	13	13	13	13	13	13	13	13	13	12	12	12	12	12
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	100	99	101	103	102	100	110	107	98	112	99	111	106	109	109	104	106	100	98	103	107	102	107	106
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60	60	60	60	60	60	62	62	62	62	62	62	62	62	62	62	62	62	61	61	61	61	61	61
10	Coolant Return Differential from	FI-002	In WC		37	50	35	35	35	35	35	35	36	36	36	36	36	36	36	38	36	36	35	34	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	14	14	14	14	14	14	14	14	14	14	14	14	14	17	17	17	17	17	17	17	17	17	17	17
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Coinpressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1001	1006	1005	1000	998	1011	1007	1007	1010	1001	1005	1009	1005	1006	1005	1006	1006	1005	1003	1012	1006	1010	1010	1013
23	Mw Output		MW			27	23.8	23.9	23.9	23.9	23.8	24.2	23.8	23.9	24.0	23.9	23.9	24.0	23.9	24.1	24.1	24.0	24.1	24.0	23.8	24.2	23.9	24.1	23.9	24.2
24	80% Base Load Minimum		MW				20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.3	20.4	20.2	20.2	20.2	20.2	20.2	20.2	20.0	20.0	20.0	20.2	20.2	20.5	20.4	20.4	20.3
25	Running Hours (unit overview)						11095	11096	11097	11098	11099	11100	11101	11102	11103	11103	11104	11105	11106	11107	11108	11110	11111	11112	11112	11113	11114	11115	11116	11117
26	Ambient Temperature	T1 inlet					45	45	45	44	44	43	42	41	40	42	43	43	43	43	43	46.7	46.7	45.2	44	43	42	41	40	41
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	54	54	54	54	54	54	54	54	54	56	55	54	55	55	55	55	55	55	55	55	55	55	55	55
28	Total Fuel Flow		Mscf/h				225	225	225	225	225	225	224	223	223	225	223	224	225	222	225	224	224	225	223	224	226	226	224	225

Date: OCT 17 2022 Signature:

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
Oil Day Tank Level	LI-1562	GAL	10		FULL	42	42	42	42	42	42	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	37
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	97	97	97	97	97	97	96	96	96	97	97	96	96	96	96	96	96	96	96	96	96	96	96	96
Stage Disch. Press	PI-2101	psig		238	285	276	276	276	275	275	275	275	276	276	276	276	275	276	275	275	275	275	275	275	275	274	274	274	274
2nd Stage Inlet Press	PI-2200	psig		267	285	271	271	271	271	271	271	270	270	271	271	271	270	271	270	270	270	270	270	270	270	269	269	269	269
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	500	499	499	499	499	500	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		58	58	58	58	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
Lube Oil Temp	TE-1584	deg		150	170	169	169	170	170	170	170	170	170	168	169	169	168	168	169	168	168	168	168	169	169	169	169	169	169
Final Discharge Temp	TE-2120	deg		110	150	84	84	84	84	82	82	81	82	79	82	82	82	82	82	82	85	85	85	83	83	82	82	82	82
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	203	203	203	203	202	202	201	200	200	201	201	201	202	202	202	203	203	203	203	203	203	202	202	202
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	188	188	188	188	185	185	186	184	185	186	186	187	187	186	187	189	189	189	186	187	187	186	186	186
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	202	202	202	202	202	202	201	200	198	199	201	201	201	202	201	203	203	203	203	202	202	201	201	201
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	190	190	190	190	187	187	187	186	186	186	187	188	188	187	188	190	189	186	189	186	186	186	186	180
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.03	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.05	.05	.05	.05	.05	.05	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8							500																	
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20							485																	
												482																	

DATE OCT 17 2022

SIGNATURE

Mid Shift

Days Shift

Notes

Utilities and Institutional Facilities

CGTG HOURLY READING LOG

Date: 10-18-2022

MST (MDT) (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	111	109	110	107	112	111	106	110	112	112	114	108	100	108	110	112	110	108	110	109	108	111	110	107
4	Instrument Temperature	TI-001	deg C		20	50	12	12	12	12	13	13	11	11	12	14	16	17	19	20	20	21	20	20	16	17	17	17	16	16
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	103	107	109	101	104	109	110	104	110	100	100	111	98	108	110	103	101	104	112	101	107	102	103	109
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	61	61	61	61	61	61	62	62	62	62	62	62	63	64	62	62	62	62	62	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	30	37	36	36	36	39	39	39	39	39	36	36	36	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	76	70	70	70	70	76	70	70	76	70	70	76	70	70	70	70	70	70	78	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	16	17	17	17	17	17	17	17
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		V				✓	✓	/	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1012	1007	1005	1004	1005	1010	1009	1012	1001	1011	1013	1000	982	969	958	958	974	987	1008	1003	1002	1011	1004	1007
23	Mw Output		MW			27	24.2	24.1	24.1	24.2	24.2	24.0	24.1	24.2	24.0	24.1	24.1	23.8	23.4	23.1	22.8	22.8	23.2	23.9	24.0	23.9	24.0	24.1	24.0	24.1
24	80% Base Load Minimum		MW				20.3	20.3	20.3	20.3	20.3	20.4	20.4	20.4	20.1	19.9	19.6	19.4	19.2	19.0	18.9	19.8	19.0	19.1	19.5	19.6	19.5	19.6	19.6	19.7
25	Running Hours (unit overview)						11118	11119	11120	11121	11122	11123	11124	11125	11126	11127	11128	11129	11130	11131	11132	11133	11134	11135	11136	11137	11138	11139	11140	11141
26	Ambient Temperature	T1 Inlet					41	41	42	41	42	41	40	41	41	46	50	53	56	59	59	61	58	57	52	51	51	50	48	48
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	55	55	55	55	55	55	55	55	56	55	54	53	53	53	54	54	55	55	55	56	56	56	56	56
28	Total Fuel Flow		Mscf/h				224	221	221	224	224	225	226	226	226	225	225	225	224	219	217	218	219	224	226	227	227	226	226	226

Date: 10-18-2022 Signature: Bob Seay (M105) day Shift - [illegible]

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	39	39	39	39	39	36	38	37	37	37	37	37	37	37	36	36	36	36	36	36	36	36	36	36
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	96	96	96	96	96	96	96	95	95	95	94	94	94	95	97	97	97	97	97	97	97	96	96	96
Stage Disch. Press	PI-2101	psig		238	285	274	274	274	274	274	274	277	271	270	271	271	271	272	278	280	279	278	278	277	277	277	276	276	275
2nd Stage Inlet Press	PI-2200	psig		267	285	269	269	269	269	269	269	268	266	266	266	267	267	272	273	275	274	274	276	277	272	270	272	271	271
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	499	500	500	500	500	500	500	499	499	499	499	499	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57	57	57	57	57	57	57	58	58	58	58	59	57	58	58	58	58	58	58	58
Lube Oil Temp	TE-1584	deg		150	170	169	169	165	165	164	169	170	170	169	169	169	167	166	166	165	164	164	164	164	164	166	168	168	168
Final Discharge Temp	TE-2120	deg		110	150	82	82	82	81	76	80	79	79	81	83	87	90	93	95	98	98	96	95	90	90	89	87	86	85
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	202	202	202	202	202	202	201	201	204	205	206	205	209	209	211	210	208	207	206	206	206	206	207	205
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	186	186	186	185	185	185	184	184	182	183	191	196	197	197	198	199	198	198	193	192	192	191	190	190
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	201	201	202	202	202	202	201	201	204	205	206	208	209	209	210	209	208	208	206	206	206	206	204	204
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	186	187	186	186	186	186	185	186	185	190	193	197	198	199	200	199	198	198	195	194	194	193	192	191
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.05	.05	.05	.05	.04	.04	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.07	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.								580								500													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8			496								496													
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20			483								482													

DATE 10-18-2022

SIGNATURE

Mid Shift Bob A

Days Shift

Notes

Utilities and Institutional Facilities

CGTG HOURLY READING LOG

Date: 10-19-2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

		I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Instrument Air Compressor	BVT-013	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
1	Blowdown Dry Receiver Tank Hourly	BVT-007	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	PI-002	psig	90	105	120	111	106	110	107	108	113	110	110	114	112	112	106	114	114	108	106	112	106	104	111	109	110	106	108
3	Wet Receiver Air Pressure	TI-001	deg C		20	50	16	15	15	15	14	14	12	12	14	16	18	19	20	21	22	23	23	23	20	19	18	18	18	17
4	Instrument Temperature		Units	Low	Norm	Max																								
5	Fin Fan Cooler	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
6	Coolant Pressure	TI-002	deg F	100	110	120	106	102	111	104	107	106	112	111	103	106	104	107	102	108	107	110	103	107	101	100	104	108	110	112
7	Coolant PLC Temperature	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
8	Sight glass Level Expansion Tank	FI-001	In WC		60	80	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62
9	Coolant Return Differential from GG	FI-002	In WC		37	50	36	36	36	36	36	36	36	36	36	39	36	39	36	39	39	39	36	37	37	36	36	36	36	36
10	Coolant Return Differential from		Units	Low	Norm	Max																								
11	Control Room		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
12	Room Temperature		Operational?																											
15	WECC Log		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Units	Low	Norm	Max																								
	Entronic Control System																													
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	17	17	17	17	17	17	17	17	17	17	17	17	17	17	16	16	16	16	16	16	17	17	17	17
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
21	Acknowledge Alarms Hourly		V																											
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1010	1002	998	1010	1011	1003	1010	1005	1001	1009	996	967	967	918	913	926	919	914	918	920	921	920	914	916
23	Mw Output		MW			27	24.1	24.1	24.1	24.0	24.0	24.0	24.1	24.0	23.9	24.0	23.9	23.0	22.9	21.9	22.2	22.6	22.9	22.1	22.6	22.0	22.1	22.0	22.1	22.1
24	80% Base Load Minimum		MW				19.7	19.9	20.0	20.0	20.1	20.1	20.2	20.8	19.8	19.6	19.3	19.1	18.9	18.7	18.7	18.6	18.7	18.7	19.2	19.0	19.2	19.3	19.4	19.3
25	Running Hours (unit overview)						11142	11143	11144	11145	11146	11147	11148	11149	11150	11151	11152	11153	11154	11155	11156	11157	11158	11159	11160	11161	11162	11163	11164	11165
26	Ambient Temperature	T1 inlet					47	46	45	45	44	44	43	45	48	51	54	58	60	63	62	64	63	63	57	57	57	56	54	53
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	56	56	56	56	57	57	57	57	57	56	54	55	55	54	55	56	56	56	56	56	57	57	57	56
28	Total Fuel Flow		Mscf/h				220	221	226	226	227	227	224	226	226	226	225	217	219	210	211	211	210	211	216	211	211	212	212	213

Date: 10-19-2022 Signature: Bob Hay (mins) Ryan Jacobs

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	36	36	35	35	35	35	35	35	35	35	35	35	35	35	35	34	34	34	34	34	34	34	34	34
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	96	97	97	97	97	97	96	95	95	95	95	95	97	98	98	98	98	98	98	96	98	98	98	98
Stage Disch. Press	PI-2101	psig		238	285	276	277	276	277	276	277	277	277	277	277	277	277	278	281	282	282	282	282	282	282	282	282	282	282
2nd Stage Inlet Press	PI-2200	psig		267	285	277	277	277	277	277	277	269	267	268	268	267	269	273	276	277	277	277	276	277	277	277	277	277	277
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	499	500	500	499	500	500	500	499	500	499	500	499	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		58	58	57	57	57	57	57	57	57	57	58	58	58	58	58	59	59	59	59	59	59	59	59	59
Lube Oil Temp	TE-1584	deg		150	170	168	169	169	169	169	169	169	169	168	168	167	166	165	165	164	163	163	163	163	164	165	165	166	166
Final Discharge Temp	TE-2120	deg		110	150	85	84	83	83	83	83	81	87	85	88	91	94	97	99	101	101	100	99	94	95	95	94	93	92
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	205	204	204	204	204	204	202	203	205	207	208	209	210	210	212	212	212	211	209	209	209	209	209	208
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	190	189	188	188	188	188	186	187	189	192	195	198	198	201	201	202	201	200	196	196	196	195	194	193
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	209	209	209	209	209	209	207	208	207	207	208	209	210	212	212	212	211	211	209	209	208	208	208	207
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	191	190	189	189	189	188	187	189	191	193	196	199	199	202	203	204	202	202	198	198	197	197	196	195
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.05	.05	.05	.05	.05	.05	.05	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.									500								500												
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8				496								496												
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20				489								483												

DATE 10-19-2022

SIGNATURE

Mid Shift Bob

Days Shift

Notes

Utilities and Institutional Facilities

CGTG HOURLY READING LOG

Date: 10-20-2022

MST / (MDT) (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

		I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	108	112	109	107	110	111	106	114	108	108	106	108	112	110	112	108	112	110	111	109	110	106	111	107
4	Instrument Temperature	TI-001	deg C		20	50	17	17	17	16	15	17	14	14	16	19	20	21	22	23	23	24	24	24	21	21	21	20	19	19
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	105	109	110	102	106	101	107	106	103	108	99	107	100	108	104	106	106	103	102	101	108	99	103	107
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	62	62	62	62	62	62	62	64	62	62	62	62	62	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	34	36	30	36	36	37	38	37	38	39	39	39	39	36	36	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/ on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	17	17	17	17	17	17	17	17	17	17	17	17	17	17	16	16	16	16	16	17	17	17	17	17
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	916	917	917	916	918	917	927	929	925	922	930	921	920	928	920	928	927	925	922	920	919	917	918	919
23	Mw Output		MW			27	22.0	22.0	22.1	22.0	22.1	22.0	22.1	22.1	22.1	21.9	22.1	22.0	21.9	22.0	21.9	22.1	22.0	22.1	22.1	22.0	22.1	21.9	22.0	22.0
24	80% Base Load Minimum		MW				19.5	19.6	19.7	19.8	19.9	19.9	19.8	19.8	19.4	19.1	19.0	18.0	18.6	18.4	18.4	18.4	18.5	18.6	19.1	19.1	19.1	19.1	19.1	19.1
25	Running Hours (unit overview)						11166	11167	11168	11169	11170	11171	11172	11173	11174	11175	11176	11177	11178	11179	11180	11181	11182	11183	11184	11185	11186	11187	11188	11189
26	Ambient Temperature	T1 inlet					53	52	50	49	48	47	47	48	53	58	58	62	63	66	66	65	65	65	57	57	57	57	57	57
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	56	56	56	57	57	57	57	57	57	56	55	55	55	55	55	56	56	56	58	58	58	57	58	58
28	Total Fuel Flow		Mscf/h				212	211	210	212	213	213	211	211	211	212	210	211	210	212	210	211	211	211	210	209	211	211	211	211

Date: 10-20-2022 Signature: Bob Lang (MCNS) Josh Cook – day shift

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	O	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	34	34	34	33	33	33	33	32	32	32	32	32	32	32	32	32	31	31	31	31	31	31	31	31
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	98	98	98	98	98	98	98	97	97	97	97	97	97	97	97	97	97	97	98	98	98	98	98	98
Stage Disch. Press	PI-2101	psig		238	285	281	281	281	280	280	280	279	278	278	279	279	280	280	280	280	281	280	280	280	280	280	280	280	280
2nd Stage Inlet Press	PI-2200	psig		267	285	277	277	277	276	276	276	276	277	277	275	275	275	275	275	275	274	276	276	276	276	276	276	276	276
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	506	506	506	506	507	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	500	500	500	500	500	499	499	499	499	499	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		59	59	59	58	58	58	57	57	59	58	58	58	59	54	59	59	59	59	59	59	59	59	59	59
Lube Oil Temp	TE-1584	deg		150	170	166	166	166	166	166	168	165	169	167	166	165	164	164	164	164	163	163	163	164	164	165	165	165	166
Final Discharge Temp	TE-2120	deg		110	150	92	91	90	88	87	86	86	86	90	95	97	99	102	103	103	104	103	103	96	96	96	95	95	95
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	208	207	207	206	204	205	205	205	208	210	211	212	214	216	214	214	213	213	213	210	210	209	209	209
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	193	191	190	189	188	188	189	188	192	197	199	201	204	204	204	205	204	204	198	198	198	197	197	197
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	207	207	207	206	205	205	206	206	207	210	211	212	213	214	214	213	213	213	210	210	210	209	209	209
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	195	194	193	191	190	190	191	190	194	199	200	203	205	206	206	207	205	202	200	200	199	198	198	198
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.05	.05	.05	.05	.05	.05	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.04	.06	.06	.06	.06	.04	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.									500								500												
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8				496								495												
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20				482								483												

DATE 10-20-2022

SIGNATURE

Mid Shift

Days Shift

Notes

Utilities and Institutional Facilities

Date: 10-21-2022

MST / (MDT) (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

CGTG HOURLY READING LOG

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	111	108	109	111	109	110	105	110	105	109	111	101	104	110	109	100	102	100	108	110	104	110	108	108
4	Instrument Temperature	TI-001	deg C		20	50	18	18	16	16	16	15	16	16	16	16	19 20	20	21	21	21	21	21	21	21	21	21	21	20	20
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	107	102	103	110	111	102	106	110	104	100	108	110	111	108	107	101	105	110	105	103	104	110	111	102
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	60	60	60	60	60	60
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	36	36	34	30	30	36	34	32	34	36	34	35	35	35	35	35	35
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	16	17	17	17	17	17	17
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	920	919	919	920	918	920	928	927	926	925	920	917	919	926	925	923	916	915	918	919	916	920	916	918
23	Mw Output		MW			27	22.0	21.9	22.0	22.0	21.9	22.0	22.1	22.1	22.1	22.0	21.9	21.9	21.9	22.1	22.0	22.0	21.8	21.9	21.9	21.9	21.9	22	22	22
24	80% Base Load Minimum		MW				19.1	19.3	19.5	19.8	19.9	19.9	19.8	19.8	19.0	19.0	19.0	18.9	18.8	18.5	18.5	18.5	18.7	18.7	18.7	18.7	18.7	19.2	19.2	19.2
25	Running Hours (unit overview)						11190	11191	11192	11193	11194	11195	11196	11197	11198	11199	11200	11201	11202	11203	11204	11205	11206	11207	11208	11209	11210	11211	11212	11213
26	Ambient Temperature	T1 inlet					57	55	52	50	48	47	48.7	48.7	59.4	59.0	59.7	60.1	61.9	65.1	65.2	65.3	63.1	67.1	60	60	58	58	56	56
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	58	58	58	57	57	57	56	58	57	57	56	56	54	56	54	57	58	56	58	58	58	58	58	58
28	Total Fuel Flow		Mscf/h				211	211	210	211	211	210	209	211	210	211	209	209	209	210	209	210	211	210	210	210	211	210	210	210

Date: 10-21-2022 Signature: Robert Stacy

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	D	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	Y2	Y2	Y2	Y2	Y2	Y2
Oil Day Tank Level	LI-1562	GAL	10		FULL	31	31	31	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	29	29	29
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	E	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	97	98	98	98	98	96	98	98	97	97	97	97	97	97	97	97	97	97	97	97	97	98	98	98
Stage Disch. Press	PI-2101	psig		238	285	280	280	279	281	281	281	278	278	278	278	278	279	280	280	280	281	280	280	280	280	280	281	281	281
2nd Stage Inlet Press	PI-2200	psig		267	285	276	276	276	276	276	276	274	274	273	273	274	275	275	275	275	276	274	274	276	276	276	277	277	277
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		59	59	59	58	58	58	57	57	58	58	58	58	58	59	59	59	59	59	59	59	59	59	59	59
Lube Oil Temp	TE-1584	deg		150	170	165	165	166	168	168	168	168	168	166	160	165	165	165	164	165	163	163	163	163	163	165	165	165	165
Final Discharge Temp	TE-2120	deg		110	150	95	93	90	88	86	86	87	87	97	97	97	98	96	104	104	102	100	100	100	100	98	98	98	98
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	209	207	206	205	204	204	205	205	211	211	212	212	212	214	214	213	212	212	210	210	210	210	210	210
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	197	194	192	190	187	187	188	198	197	197	199	201	201	204	204	202	200	200	200	200	200	200	200	200
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	209	208	207	205	204	204	205	205	211	211	211	211	211	214	214	212	211	211	210	210	210	210	210	210
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	198	195	192	190	189	188	189	189	198	198	200	202	202	205	204	203	202	202	202	202	200	200	200	200
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.									500																				
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8				495																				
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20				494																				

DATE	10-21-2022
SIGNATURE	
Mid Shift	Bobby
Days Shift	
Notes	

Utilities and Institutional Facilities

Date: OCT 22 2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

CGTG HOURLY READING LOG

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	110	108	100	107	102	108	110	109	102	101	106	107	100	101	109	103	105	104	108	110	110	105	110	108
4	Instrument Temperature	TI-001	deg C		20	50	20	20	20	20	20	20	20	20	20	20	20	20	20	21	21	21	21	21	20	20	20	20	20	20
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	102	100	99	103	101	104	100	101	103	100	110	111	106	104	110	108	104	109	106	102	101	106	103	102
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
10	Coolant Return Differential from	FI-002	In WC		37	50	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/ on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	919	916	918	910	1001	916	925	220	915	927	919	931	926	720	927	922	926	924	928	933	930	927	928	931
23	Mw Output		MW			27	22.0	22.0	22.0	22.0	22.0	22.0	21.8	22.9	21.9	22.2	21.9	22.2	22.1	18.0	22.2	21.9	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0
24	80% Base Load Minimum		MW				19.2	19.2	19.7	19.7	19.7	19.7	19.7	19.7	19.2	19.1	18.9	18.7	18.7	18.4	18.6	18.6	18.7	18.7	18.7	18.7	19.1	19.1	19.1	19.1
25	Running Hours (unit overview)						11214	11215	11216	11217	11218	11219	11220	11221	11222	11223	11224	11225	11226	11227	11228	11229	11230	11231	11232	11233	11234	11235	11236	11237
26	Ambient Temperature	T1 inlet					56	55	55	53	53	50	49.1	49.7	49.3	58.1	59.9	63.3	63.3	64.2	64.2	63.7	63.3	63.2	62	62	60	60	58	58
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	58	58	58	58	58	58	59	59	58	57	57	57	57	57	57	58	58	55	57	57	59	59	59	59
28	Total Fuel Flow		Mscf/h				210	210	210	209	209	209	212	209	216	210	211	211	211	210	211	210	210	211	219	211	210	210	211	210

Date: OCT 22 2022 Signature:

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	D	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
Oil Day Tank Level	LI-1562	GAL	10		FULL	29	29	29	29	29	29	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	D	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	98	98	98	98	98	98	97	97	97	97	97	97	97	97	97	97	97	97	97	97	98	98	98	98
Stage Disch. Press	PI-2101	psig		238	285	281	281	281	281	280	280	277	278	278	279	279	280	280	280	280	280	280	280	280	280	280	281	281	281
2nd Stage Inlet Press	PI-2200	psig		267	285	277	277	276	276	275	275	272	273	273	274	274	275	278	278	278	275	278	278	275	275	275	276	276	276
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	507	507	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	499	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		59	59	59	58	58	58	57	58	58	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59
Lube Oil Temp	TE-1584	deg		150	170	165	166	166	166	168	168	168	167	167	165	164	164	164	163	163	162	162	162	162	162	163	163	163	163
Final Discharge Temp	TE-2120	deg		110	150	95	92	92	90	90	89	87	93	93	94	96	101	101	102	102	102	102	102	102	102	100	100	100	100
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	209	209	209	209	207	207	206	210	210	211	212	214	214	214	214	214	214	214	214	214	212	212	212	212
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	195	195	193	193	193	192	190	195	195	196	198	202	202	204	204	204	204	204	204	204	202	202	202	202
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	208	208	208	208	207	207	206	210	210	210	211	213	213	213	213	213	213	213	213	213	211	211	211	211
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	197	195	195	195	193	193	191	196	196	198	199	204	204	205	205	205	205	205	204	204	202	202	202	202
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																				500									
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8															496									
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20															484									

DATE	OCT 22 2022
SIGNATURE	
Mid Shift	
Days Shift	

Notes

Utilities and Institutional Facilities

CGTG HOURLY READING LOG

Date: OCT 23 2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	108	110	108	105	110	110	98	100	103	102	106	108	110	105	100	102	108	100	110	108	110	108	104	108
4	Instrument Temperature	TI-001	deg C		20	50	20	20	20	20	20	20	19	19	19	19	19	19	19	19	19	19	19	19	16	16	16	16	16	16
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	102	100	102	106	103	107	108	102	108	106	116	99	109	110	98	103	108	101	110	101	104	107	101	105
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60	60	60	60	60	60	61	60	61	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
10	Coolant Return Differential from	FI-002	In WC		37	50	35	35	35	35	35	35	35	35	35	35	35	34	35	35	35	35	35	35	35	35	35	35	35	35
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	76	70	76	76	76	70	70	70	70	70	70	76	76	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/ on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20								✓	✓	✓	✓	✓	✓	✓											
21	Acknowledge Alarms Hourly		V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	928	933	930	928	921	925	914	921	927	926	925	916	913	929	926	923	924	923	1020	1022	1043	1040	917	926
23	Mw Output		MW			27	22.0	22.0	22.0	22.0	22.0	19.1	21.8	21.9	22.1	22.1	22.1	21.9	21.8	22.1	22.1	22.0	22.0	21.9	24.3	24.3	24.9	24.9	21.9	21.9
24	80% Base Load Minimum		MW				19.1	19.1	19.1	19.1	19.1	19.1	19.6	19.6	19.4	19.4	19.5	19.5	19.9	20.2	20.0	19.9	20.2	20.2	20.2	20.2	20.6	20.6	20.6	20.6
25	Running Hours (unit overview)						11238	11239	11240	11241	11242	11243	11244	11245	11246	11247	11248	11249	11250	11252	11253	11254	11255	11256	11256	11257	11258	11259	11260	11261
26	Ambient Temperature	T1 Inlet					56	55	55	54	54	54	50.5	50.5	53.4	53.1	52.7	52.3	46.4	43.7	46.0	46.9	48.3	49.1	44	40	38	38	38	38
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	59	59	59	59	59	59	59	58	58	57	58	58	59	59	59	59	59	59	59	59	59	59	59	59
28	Total Fuel Flow		Mscf/h				210	210	211	211	210	211	211	211	210	210	210	211	209	211	209	209	210	210	228	228	230	230	210	210

Date: OCT 23 2022 Signature:

CGTG TURBINE UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	26	26	26	26	26	26	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	98	98	98	98	98	98	98	98	97	97	98	98	98	98	98	98	98	98	97	97	97	99	99	99
Stage Disch. Press	PI-2101	psig		238	285	281	281	281	281	281	281	279	279	279	279	280	281	280	280	280	281	280	280	276	276	278	278	280	280
2nd Stage Inlet Press	PI-2200	psig		267	285	276	276	276	276	276	276	274	274	274	274	275	277	277	275	278	276	275	275	271	271	273	273	273	275
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	507	507	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	507	506	507
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	500	500	500	500	500	500	499	499	500	499	499	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		59	59	59	59	59	59	58	58	59	59	59	59	58	57	58	58	58	58	58	58	58	58	57	57
Lube Oil Temp	TE-1584	deg		150	170	163	163	163	163	165	165	165	165	167	167	164	165	161	165	168	167	168	164	169	169	169	170	170	170
Final Discharge Temp	TE-2120	deg		110	150	98	98	95	95	95	93	90	90	93	93	94	93	93	81	84	84	82	82	81	81	80	80	78	78
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	211	211	210	210	208	208	207	207	208	207	205	207	207	202	203	203	202	203	201	201	201	201	200	200
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	200	200	196	196	194	194	192	192	195	195	195	197	196	194	186	186	185	186	186	186	183	185	181	180
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	210	210	210	207	207	207	206	206	207	207	206	206	204	201	203	202	202	203	201	201	201	200	200	200
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	201	201	201	198	198	195	197	197	197	197	196	195	195	195	187	187	186	186	187	187	185	185	183	181
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.04	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.														500															
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8									496															
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20									484															

DATE	OCT 23 2022
SIGNATURE	
Mid Shift	
Days Shift	

Notes

Utilities and Institutional Facilities

Date: OCT 24 2022

CGTG HOURLY READING LOG

MST (MDT) (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	108	110	110	108	108	108	111	110	100	101	105	101	100	105	110	100	109	100	109	107	109	106	108	112
4	Instrument Temperature	TI-001	deg C		20	50	14	14	14	14	16	16	09	10	10	10	10	10	10	10	10	10	10	10	12	12	12	12	12	9
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	102	100	107	104	100	102	110	111	105	94	99	102	98	108	108	105	102	102	101	104	101	100	103	101
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	61	61	61	61	61	61
10	Coolant Return Differential from	FI-002	In WC		37	50	35	35	35	35	35	35	35	35	35	35	35	35	34	35	35	35	35	35	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/ on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	917	918	920	916	918	921	922	923	922	923	923	924	928	921	923	929	914	926	929	1056	1086	1066	1069	925
23	Mw Output		MW			27	21.9	21.9	21.9	21.9	21.9	21.9	21.9	22.1	21.9	22.0	21.9	21.9	22.1	21.9	22.0	22.1	21.9	22.1	22.2	25.2	25.3	25.5	25.5	21.9
24	80% Base Load Minimum		MW				20.6	20.6	20.6	20.6	20.6	20.6	21.1	20.8	20.8	20.2	20.7	20.6	20.4	20.5	20.5	20.4	20.4	20.5	20.7	20.8	20.9	20.9	20.9	21.2
25	Running Hours (unit overview)						11262	11263	11264	11265	11266	11267	11268	11269	11270	11271	11272	11273	11274	11275	11276	11277	11278	11279	11280	11281	11282	11283	11284	11285
26	Ambient Temperature	T1 inlet											32.7	35.4	35.4	37.2	37.3	37.0	40.5	38.5	38.8	41.0	39.9	39.8	36.7	36.1	35.8	34.3	34.1	31.5
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	59	59	59	59	59	59	59	59	59	59	59	59	58	58	58	58	59	59	59	59	59	59	59	59
28	Total Fuel Flow		Mscf/h				208	208	210	210	210	210	209	207	208	209	209	204	209	208	208	211	208	209	234	234	237	238	211	

Date: OCT 24 2022 Signature:

1120
16.07

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	24	24	24	24	24	24	24	22	22	22	22	22	22	22	22	22	22	22	20	20	20	20	20	20
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	97	97	99	99	99	99	99	98	98	99	99	98	98	99	99	98	98	98	96	96	96	96	96	99
Stage Disch. Press	PI-2101	psig		238	285	276	276	280	279	279	279	279	279	279	279	279	279	279	280	280	280	280	280	276	274	272	272	272	279
2nd Stage Inlet Press	PI-2200	psig		267	285	271	271	275	274	274	274	274	274	274	274	274	274	274	275	275	275	275	275	272	269	269	267	267	274
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	507	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	499	499	499	499	499	499	500	500	499	500	500	500	500	500	499	499	500
Lube Oil Pressure	PI-1572	psig	40	60		58	58	58	57	57	57	56	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
Lube Oil Temp	TE-1584	deg		150	170	169	169	170	170	170	170	170	170	170	169	169	169	170	170	170	169	168	168	169	169	169	169	169	169
Final Discharge Temp	TE-2120	deg		110	150	81	81	78	75	75	73	72	74	74	74	74	74	79	77	77	78	77	77	74	73	72	73	72	71
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	201	201	200	200	200	198	197	198	198	197	198	197	201	200	200	199	198	198	195	195	194	195	195	195
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	186	186	184	184	180	180	176	177	177	177	177	177	181	179	179	180	179	179	178	178	176	177	177	174
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	201	201	200	200	200	198	197	198	198	198	198	197	201	200	200	199	199	196	196	195	194	195	195	195
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	187	187	185	181	178	178	177	179	179	179	179	179	182	180	180	181	180	180	178	179	178	179	178	175
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	-.04	-.04	-.04	-.04	-.04	-.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	-.06	-.06	-.06	-.06	-.06	-.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																								

DATE	OCT 24 2022
SIGNATURE	
Mid Shift	
Days Shift	

Notes

Utilities and Institutional Facilities

Date: 10-25-22

CGTG HOURLY READING LOG

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	113	110	108	112	111	113	110	99	101	99	108	109	110	111	100	107	101	109	112	108	109	113	104	110
4	Instrument Temperature	TI-001	deg C		20	50	9	9	8	8	8	8	9	9	9	9	12	15	19	19	19	20	20	20	18	16	16	15	14	13
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	103	101	105	107	98	102	102	101	110	110	109	111	107	110	111	111	98	106	107	103	97	99	101	105
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	61	61	62	62	62	62	62	62	62	62	62	63	63	63	63	63	63	63	62	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/ on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	17	17	17	17	17	17	17	17	17	17	17	17	17	17	16	16	16	16	17	17	17	17	17	17
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	927	929	1094	1093	1090	1091	1077	1075	1050	1049	1038	1021	1015	997	987	988	991	996	1021	1022	1023	1025	1025	1027
23	Mw Output		MW			27	22.0	21.9	26.1	26.2	26.0	26.0	25.7	25.6	25.0	24.9	24.7	24.3	24.2	23.8	23.6	23.6	23.6	23.4	24.3	24.3	24.4	24.4	24.5	24.6
24	80% Base Load Minimum		MW				21.2	21.1	21.4	21.5	21.3	21.3	21.1	21.4	20.6	20.5	20.3	19.9	19.8	19.6	19.4	19.8	19.5	19.5	20.0	20.0	20.1	20.1	20.1	20.2
25	Running Hours (unit overview)						11286	11287	11288	11289	11290	11291	11292	11293	11294	11297	11296	11297	11298	11299	11300	11302	11303	11304	11305	11306	11307	11308	11309	
26	Ambient Temperature	T1 inlet					31.4	31.3	29.1	28.2	29.7	29.8	32.2	33.3	38.5	38.7	41.7	46.4	48.2	51.6	52.9	52.3	52.2	52.1	46.8	46.0	45.7	45.0	44.1	43.3
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	59	59	59	59	59	59	59	59	58	65	87	56	57	57	58	58	58	60	59	59	59	59	59	59
28	Total Fuel Flow		Mscf/h				212	213	242	242	241	241	238	237	233	23	23	224	227	224	222	222	223	221	228	228	229	228	229	229

Date: 10-25-22 Signature: A Wan

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	D	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	20	20	20	20	19	19	19	19	19	19	19	19	19	19	19	19	19	18	18	18	18	18	18	18
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	99	99	95	95	95	95	95	95	95	95	95	96	96	96	96	97	97	97	96	96	96	96	96	96
Stage Disch. Press	PI-2101	psig		238	285	279	279	271	271	271	271	270	270	272	272	271	275	275	277	277	278	278	278	277	277	277	276	276	276
2nd Stage Inlet Press	PI-2200	psig		267	285	274	274	266	266	266	266	265	265	267	267	267	270	270	272	271	273	273	273	272	272	272	271	271	271
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	506	506	506	506	506	506	506	506	506	506	506	507	507	506	506	506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	499	499	499	499	499	499	499	499	499	499	499	500	500	499	499	499	499	499	499	499	499	499
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	58	58	58	57	57	57	57	57	57
Lube Oil Temp	TE-1584	deg		150	170	169	169	168	168	169	169	169	169	169	169	170	169	169	168	167	167	167	167	169	169	168	169	169	169
Final Discharge Temp	TE-2120	deg		110	150	71	71	70	70	70	70	70	75	75	75	78	85	85	89	89	89	89	89	85	85	85	82	82	82
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	194	193	194	193	194	194	194	194	197	197	200	203	203	205	205	204	204	204	203	202	201	201	200	201
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	173	172	177	176	177	176	176	170	180	180	183	190	190	192	194	192	192	191	187	186	184	186	185	186
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	194	193	195	193	195	194	194	194	198	198	200	203	203	204	204	204	204	204	203	202	201	201	200	202
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	174	173	178	176	178	177	174	179	181	181	185	190	190	193	190	198	197	192	188	187	185	187	185	186
Motor Frame Vibration	VT-1015	IPS			0.15	-04	-04	-04	-04	-04	-04	04	04	04	04	04	04	04	04	04	04	04	04	-04	-04	-04	-04	-04	-04
Compresser Frame Vibration	VT-1512	IPS			0.35	-06	-06	-06	-06	-06	-06	06	01	06	06	06	06	06	06	06	06	06	06	-06	-06	-06	-06	-06	-06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.													500																
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8								496																
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20								482																

DATE	10-25-22
SIGNATURE	
Mid Shift	Awlson
Days Shift	

Notes

Utilities and Institutional Facilities

Date: 10-26-22

CGTG HOURLY READING LOG

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√		√	√	√	√	√	√
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√		√	√	√	√	√	√
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	107	113	110	114	110	108	110	108	110	101	109	101	100	109	110	102	107		114	112	110	107	112	113
4	Instrument Temperature	TI-001	deg C		20	50	12	14	14	12	13	12	12	10	12	12	14	20	21	21	21	21	21		18	18	18	16	16	14
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19		19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	98	103	105	97	101	104	104	109	110	98	110	106	101	110	111	104	111		101	98	100	107	103	99
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3		2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	61	61	61	61	102	61	61	61	61	61	61	61	61	61		62	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	37	37	37	36	36	36	36	36	36	30	30	30	30	30	30	30	35		36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70		70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/ on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	17	17	17	17	17	17	17	17	17	17	17	17	17	6	6	6	6		6	6	6	6	6	6
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√		√	√	√	√	√	√
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1045	1047	1046	1045	1044	1046	1033	1018	1015	1002	999	980	973	975	967	966	972	994	994	1000	1005	1004	1007	1017
23	Mw Output		MW			27	24.9	24.9	24.9	24.9	24.9	24.9	24.7	24.3	24.3	23.9	23.8	23.4	23.2	23.3	23.0	23.0	23.2	23.7	23.7	23.8	23.9	23.9	24.0	24.1
24	80% Base Load Minimum		MW				20.5	20.5	20.5	20.5	20.5	20.5	20.4	20.0	20.0	19.7	19.6	19.3	19.2	19.3	19.1	19.2	19.3	19.6	19.6	19.7	19.8	19.8	19.9	20.0
25	Running Hours (unit overview)						11310	11311	11312	11313	11314	11315	11316	11317	11318	11319	11320	11321	11322	11323	11324	11325	11326		11328	11329	11330	11331	11332	11333
26	Ambient Temperature	T1 Inlet					39.6	39.2	39.3	39.1	39.0	39.0	46.5	47.9	46.0	50.5	~~47.0~~ 50.0	54.7	55.0	55.2	56.8	56.5	55.4		50.9	49.1	48.6	48.1	47.7	47.0
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	59	59	59	59	59	59	59	51	50	45	45	45	45	45	40	46	47	49	49	49	49	49	49	49
28	Total Fuel Flow		Mscf/h				233	233	234	233	232	232	23	222	222	224	223	220	218	219	217	217	218	222	222	224	225	225	226	227

Date: 10-26-22 Signature: A Wise

Switched from New Gas Comp. Back to old Gas comp

08:36

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B											B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E												E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	½	½	½	½	½	½	½												½	½	½	½	½	½
Oil Day Tank Level	LI-1562	GAL	10		FULL	18	18	18	17	17	17	17												52	52	52	52	52	52
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F												F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E												E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E												E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B												B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	96	96	96	96	96	96	96												96	96	96	96	96	96
Stage Disch. Press	PI-2101	psig		238	285	275	275	275	275	275	275	270												278	278	278	278	278	278
2nd Stage Inlet Press	PI-2200	psig		267	285	270	270	270	270	270	270	270												274	274	274	274	274	274
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	506	506	506	506	506												506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	499	499	499	499	499	499	499												499	499	499	499	499	499
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	51	57	57	57												60	58	58	58	58	58
Lube Oil Temp	TE-1584	deg		150	170	170	169	169	169	169	169	169												160	168	168	168	168	168
Final Discharge Temp	TE-2120	deg		110	150	79	79	78	77	77	77	76												87	86	86	86	86	86
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	199	198	196	198	198	198	197												205	204	203	202	201	201
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	184	183	182	182	182	183	183												191	189	187	186	185	184
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	199	198	196	197	197	198	197												206	204	203	202	201	201
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	185	184	182	182	184	185	184												194	192	191	187	187	184
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04												.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06												.05	.05	.05	.05	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8									540															
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20									526															

DATE 10-26-22

SIGNATURE

Mid Shift A Wlson

Days Shift

Notes NO RUNNING HRS THIS TIME DO TO NEW GAS COMP CW & CID ONE DOT FOR STEAMS TEST ENG

Utilities and Institutional Facilities

Date: 10-27-22

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

CGTG HOURLY READING LOG

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	i	√	√
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	113	111	114	110	110	113	110	110	106	108	108	110	110	110	106	108	110	110	108	111	110	108	107	111
4	Instrument Temperature	TI-001	deg C		20	50	16	16	14	14	15	15	15	15	15	15	17	17	17	17	15	13	12	11	10	10	10	10	10	10
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	108	103	101	105	98	107	100	104	110	110	111	110	102	104	105	106	100	104	105	104	102	107	109	107
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	63	63	63	63	63	63	63	63	63	63	63	63	62	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1009	1011	1016	1021	1023	1025	1033	1037	1029	1026	1027	1021	1036	1037	1060	1058	1060	1064	1068	1054	1056	1067	1061	1049
23	Mw Output		MW			27	24.1	24.1	24.2	24.3	24.4	24.4	24.7	24.6	24.4	24.5	24.3	24.3	24.7	24.8	25.2	25.2	25.4	25.3	25.4	25.1	25.2	25.4	25.1	25.0
24	80% Base Load Minimum		MW				19.9	19.9	20.0	20.1	20.2	20.2	20.4	20.4	20.2	20.2	20.1	20.1	20.4	20.5	20.9	20.9	21	21	21.1	20.6	20.4	21.0	20.8	20.6
25	Running Hours (unit overview)						11334	11335	11336	11337	11338	11339	11340	11341	11342	11343	11344	11345	11346	11347	11348	11349	11350	11351	11352	11353	11354	11355	11356	11357
26	Ambient Temperature	T1 inlet					46.6	46.3	45.7	43.3	42.8	42.6	40.5	40.5	43	43	45	44	40	40	36	35	34	33	33	36	35	34	35	38
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	49	49	49	49	48	48	49	49	49	49	48	48	48	48	48	48	49	49	49	51	51	51	51	52
28	Total Fuel Flow		Mscf/h				225	226	226	227	228	229	230	231	228	229	228	228	230	231	234	233	235	236	236	233	235	236	236	235

Date: 10-27-22 Signature: A Wan Bob Gray (MIOS)

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	52	52	52	51	51	51	51	51	51	51	51	51	51	50	50	50	50	50	49	49	49	49	49	49
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96
Stage Disch. Press	PI-2101	psig		238	285	285	285	277	278	276	276	276	276	275	275	276	276	275	275	273	273	272	272	272	273	273	273	274	274
2nd Stage Inlet Press	PI-2200	psig		267	285	281	281	272	274	271	271	271	271	271	271	271	271	270	270	268	269	267	267	267	266	266	269	269	269
2nd Stage Disch. Press	PI-2201	psig		575	600	506	506	506	506	506	506	506	506	506	506	506	506	506	506	507	507	507	507	507	507	506	506	507	507
Final Discharge Pressure	PI-2108	psig		575	600	500	499	500	500	500	500	500	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57	57	57	57	57	57	58	58	57	57	57	57	57	57	57	57	57	57	57	57
Lube Oil Temp	TE-1584	deg		150	170	168	168	169	169	170	170	170	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169
Final Discharge Temp	TE-2120	deg		110	150	84	83	82	82	80	80	78	80	80	80	83	81	84	78	73	74	72	72	73	75	76	76	77	77
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	206	205	201	199	200	200	199	200	201	200	202	201	200	200	196	199	196	197	196	197	197	196	197	197
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	184	184	185	184	184	184	183	185	184	185	188	189	183	183	178	181	178	178	178	178	179	179	180	180
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	206	206	201	200	200	200	199	200	200	206	202	201	199	199	196	196	196	196	196	196	196	196	197	197
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	193	192	187	186	187	186	185	185	186	186	189	189	185	185	180	180	180	180	180	181	181	181	182	182
Motor Frame Vibration	VT-1015	IPS			0.15	.05	.05	.05	.05	.04	.04	.04	.04	.04	.04	.05	.05	.05	.05	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.05	.06	.05	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																					500			
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																					496			
																										483			

DATE 10-27-22

SIGNATURE

Mid Shift Awan

Days Shift

↓ Stg 2 Discharge alarm

Notes

Utilities and Institutional Facilities

Date: 10-28-2022

CGTG HOURLY READING LOG

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	112	108	110	107	109	111	110	110	110	110	110	110	110	110	106	108	110	110	111	109	110	111	110	109
4	Instrument Temperature	TI-001	deg C		20	50	11	11	11	11	11	11	10	10	14	14	16	17	18	19	20	20	20	20	17	15	14	14	14	14
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	102	107	109	104	101	103	108	109	107	105	106	106	100	104	110	110	112	110	103	99	104	107	101	107
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	60	62	62	62	62	63	63	63	63	63	63	63	63	63	63	63	63	63	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	34	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	65	64	64	64	64	67	67	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/ on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	6	6	6	6	6	6	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	6	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1049	1052	1051	1052	1057	1056	1067	1065	1047	1048	1026	1026	999	1003	991	989	1006	1005	1034	1038	1047	1048	1046	1047
23	Mw Output		MW			27	25.1	25.1	25.1	25.1	25.2	25.2	25.4	25.4	25.0	25.0	24.5	24.5	23.8	24.0	23.6	23.6	24.0	24.0	24.7	24.7	25.0	25.0	24.8	24.9
24	80% Base Load Minimum		MW				20.6	20.6	20.6	20.6	20.7	20.7	20.8	20.8	20.3	20.3	19.9	20.0	19.5	19.5	19.4	19.3	19.5	19.5	20.1	20.1	20.3	20.3	20.2	20.2
25	Running Hours (unit overview)						11358	11359	11360	11361	11362	11363	11364	11365	11366	11367	11368	11369	11370	11371	11372	11373	11374	11375	11376	11377	11378	11379	11380	11381
26	Ambient Temperature	T1 inlet					38	38	38	38	37	37	36	36	42	42	46	47	52	53	54	54	52	52	45	44	41	41	42	42
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	52	52	52	52	52	52	52	52	52	52	50	50	50	50	51	51	52	52	52	52	52	52	52	52
28	Total Fuel Flow		Mscf/h				233	233	234	234	235	235	237	236	233	232	230	229	225	224	223	223	226	225	232	232	233	233	232	232

Date: 10-28-2022 Signature: Bob Hoey (Cmios)

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	48	48	48	48	48	48	48	48	48	48	48	48	47	47	47	47	47	47	47	47	47	47	47	46
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	96	96	96	96	96	96	96	96	96	96	96	96	96	97	97	97	97	97	96	96	96	96	96	96
Stage Disch. Press	PI-2101	psig		238	285	274	274	274	274	273	273	272	272	274	274	275	275	277	277	279	279	278	278	275	275	274	274	275	275
2nd Stage Inlet Press	PI-2200	psig		267	285	270	269	269	269	269	269	267	267	269	269	270	269	272	272	274	274	273	273	270	270	270	270	270	270
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57	57	57	57	57	57	57	57	58	58	58	58	58	58	58	57	57	57	57	57
Lube Oil Temp	TE-1584	deg		150	170	169	169	169	169	169	169	170	170	170	170	169	169	168	168	166	166	167	167	169	169	170	170	169	169
Final Discharge Temp	TE-2120	deg		110	150	78	77	77	77	76	76	73	73	79	78	83	83	89	89	91	90	89	89	83	82	78	78	79	79
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	197	197	198	197	199	197	196	196	199	198	201	201	204	204	205	205	204	204	201	200	199	199	199	199
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	180	179	179	179	179	179	178	178	182	182	187	188	191	191	193	192	192	192	188	186	184	184	184	184
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	197	196	196	196	196	196	195	195	198	198	201	200	207	207	207	207	207	207	201	200	199	199	199	199
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	182	181	181	181	181	181	180	180	184	184	189	188	194	194	194	194	194	194	189	186	186	186	186	186
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.05	.05	.05	.05	.05	.05	.05	.05	.05	.04	.04	.04	.05	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.05	.06	.06	.06	.05	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.									500										500										
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8				496										496										
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20				482										483										

DATE 10-28-2022

SIGNATURE

Mid Shift Bob Alvey

Days Shift

Notes

Utilities and Institutional Facilities

Date: 10-29-2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

CGTG HOURLY READING LOG

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	110	111	104	107	110	111	110	110	106	108	108	110	110	116	110	110	110	110	111	110	110	111	106	111
4	Instrument Temperature	TI-001	deg C		20	50	13	13	13	12	12	12	12	12	14	15	16	18	19	20	21	21	20	20	18	17	17	17	16	16
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	101	107	105	104	101	107	112	110	107	108	107	108	104	105	108	110	100	104	104	101	108	104	103	107
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	6	6	6	6	6	6	6	6
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	6	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1048	1054	1053	1053	1054	1056	1051	1056	1024	1025	1005	1003	990	990	982	982	991	990	1051	1019	1024	1024	1047	1033
23	Mw Output		MW			27	25.0	25.1	25.1	25.1	25.1	25.1	25.1	25.2	24.4	24.4	24.0	24.0	23.6	23.6	23.5	23.4	23.7	23.7	24.2	24.3	24.4	24.4	24.4	24.6
24	80% Base Load Minimum		MW				20.4	20.5	20.5	20.5	20.5	20.6	20.6	20.6	20.0	20.0	19.6	19.6	19.3	19.4	19.3	19.3	19.4	19.4	19.7	19.9	20.0	20.0	20.0	20.2
25	Running Hours (unit overview)						11382	11383	11384	11385	11386	11387	11388	11389	11390	11391	11392	11393	11394	11395	11396	11397	11398	11399	11400	11401	11401	11402	11403	11404
26	Ambient Temperature	T1 inlet					40	39	39	39	39	38	38	38	45	46	50	51	53	54	55	55	53	53	48	47	46	46	45	44
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	52	52	52	52	52	52	52	52	52	52	50	50	50	50	51	51	52	52	53	53	53	53	53	53
28	Total Fuel Flow		Mscf/h				234	234	234	234	234	234	235	235	229	228	225	226	222	221	221	220	223	222	227	228	228	228	226	229

Date: 10-29-2022 Signature: Bob Hug (MIOS)

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	F	F	F	F	F	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	46	46	46	46	46	45	45	45	45	45	45	45	45	45	45	46	45	45	45	45	44	44	44	44
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	F	E	E	E	E	E	E	E	E	E	E	E	E	E	F	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	96	96	96	96	96	96	96	96	96	96	96	96	97	97	97	97	97	97	96	96	96	96	96	96
Stage Disch. Press	PI-2101	psig		238	285	275	275	274	274	274	274	273	273	274	274	276	276	279	279	279	279	279	279	277	277	277	277	277	276
2nd Stage Inlet Press	PI-2200	psig		267	285	270	270	269	269	269	269	268	268	269	268	271	271	275	275	275	275	274	274	273	273	272	272	272	271
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57	57	57	57	57	57	58	58	58	58	58	58	58	58	58	58	58	58	58	57
Lube Oil Temp	TE-1584	deg		150	170	170	170	170	170	176	170	169	169	169	169	168	168	166	166	165	165	166	166	160	167	167	168	168	170
Final Discharge Temp	TE-2120	deg		110	150	77	78	77	77	76	76	75	75	83	83	88	88	92	92	94	94	91	91	85	84	83	83	83	81
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	198	198	197	197	197	197	196	196	201	201	204	204	206	206	206	206	205	205	202	201	201	200	200	200
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	183	183	182	182	182	182	180	180	186	186	190	190	194	194	195	195	193	193	189	188	187	186	186	185
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	198	198	197	197	197	197	196	196	200	200	203	203	206	206	206	206	204	204	202	201	201	200	200	199
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	184	184	184	184	184	184	182	182	187	188	192	192	197	197	197	197	195	195	190	189	189	188	188	187
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.03	.04	.05	.05	.05	.05	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.01	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.										500																			
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8					496																			
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20					482																			

DATE 10-29-2022

SIGNATURE

Mid Shift Bob Hay

Days Shift

Notes

Utilities and Institutional Facilities

Date: 10-30-2022

CGTG HOURLY READING LOG

MST / (MDT) (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√				✓	✓	—	—	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	110	111	109	110	111	110	110	110	110	110	106	108	108	110	110	110	110	110	110	111	110	107	110	110
4	Instrument Temperature	TI-001	deg C		20	50	15	14	14	14	14	13	12	12	14	15	18	19	20	20	20	20	20	20	18	18	17	17	16	15
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	102	101	104	109	104	103	110	110	107	104	108	110	109	103	100	104	103	104	100	101	101	104	105	110
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	30	30	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	6	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	6	6	6	6	6	6	6	6
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1039	1033	1037	1043	1044	1047	1051	1057	1021	1017	1002	1000	981	980	990	991	988	992	1015	1018	1019	1023	1031	1046
23	Mw Output		MW			27	24.6	24.7	24.8	24.9	24.9	25.0	25.2	25.2	24.3	24.3	23.9	23.7	23.4	23.4	23.5	23.6	23.6	23.6	24.2	24.3	24.3	24.4	24.6	24.8
24	80% Base Load Minimum		MW				20.2	20.2	20.3	20.4	20.4	20.5	20.7	20.7	20.6	19.9	19.6	19.5	19.3	19.3	19.4	19.5	19.5	19.5	19.9	19.9	19.9	20.0	20.1	20.3
25	Running Hours (unit overview)						11405	11406	11407	11406	11409	11410	11411	11412	11413	11414	11415	11416	11417	11418	11419	11420	11421	11422	11423	11424	11425	11426	11427	11428
26	Ambient Temperature	T1 inlet					43	42	41	40	40	39	37	37	46	46	50	52	54	54	53	52	52	53	47	46	46	46	43	42
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	53	53	53	53	53	53	53	53	53	53	51	51	51	51	52	52	52	52	53	53	53	53	53	53
28	Total Fuel Flow		Mscf/h				230	231	231	232	233	233	235	234	227	228	225	224	222	221	223	222	222	223	227	228	227	227	236	234

Date: 10-30-2022 Signature: Bob Ag

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	44	44	44	44	44	44	43	43	43	43	43	43	43	43	43	43	42	42	42	42	42	42	42	42
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	96	96	96	96	96	96	96	96	96	96	96	96	97	97	97	97	97	97	96	96	96	96	96	96
Stage Disch. Press	PI-2101	psig		238	285	276	276	276	275	275	275	273	273	274	274	276	275	278	278	279	279	280	280	277	277	276	276	276	276
2nd Stage Inlet Press	PI-2200	psig		267	285	271	271	271	270	270	270	269	269	269	269	271	270	273	273	274	273	275	275	273	272	272	272	271	271
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	506	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	500	500	500	500	500	506	506	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57	57	57	57	58	58	58	58	58	58	59	58	59	59	58	58	58	58	57	57
Lube Oil Temp	TE-1584	deg		150	170	170	169	169	169	170	170	170	170	169	169	168	167	166	166	165	165	166	166	166	168	168	168	169	169
Final Discharge Temp	TE-2120	deg		110	150	81	81	80	79	77	76	75	75	83	83	87	87	92	92	92	92	91	91	86	84	83	83	80	80
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	200	199	199	199	198	198	197	197	202	202	204	204	206	206	205	205	204	205	202	201	201	201	200	200
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	185	184	184	183	183	183	181	181	187	188	191	190	195	195	194	195	195	193	189	187	187	187	185	185
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	199	198	198	198	197	197	197	197	202	202	204	204	206	206	209	205	204	204	202	201	201	201	200	200
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	187	186	186	181	184	184	183	183	189	188	193	193	197	197	196	195	195	195	191	189	189	189	187	187
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.05	.04	.05	.05	.05	.04	.05	.05	.05	.05	.05	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.05	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.									500																				
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8				496																				
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20				483																				

DATE	10-30-2022
SIGNATURE	
Mid Shift	Bob Ayers
Days Shift	

Notes

158 27/8
154

Utilities and Institutional Facilities

CGTG HOURLY READING LOG

Date: 10-31-2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	T		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	R		100	109	110	109	105	106	110	105	108	100	110	108
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	110	111	109	110	110	109	100	111	105	101	P		19	21	19	19	19	19	18	18	18	18	18	18
4	Instrument Temperature	TI-001	deg C		20	50	15	14	13	13	13	13	12	11	19	19	D													
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	F		19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	107	101	104	109	100	101	106	109	97	99	A		100	107	106	110	106	101	102	109	102	101	106	104
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	N		2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	63	63	63	63	63	63	60	60	61	61	E		63	63	63	63	63	63	60	60	60	60	60	60
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	34	34	34	1040		36	36	36	34	34	34	35	35	35	35	35	35
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70			70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/ on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	6	6	7	7	7	7	7	7	7	7			7	7	7	7	7	7	7	7	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1047	1046	1047	1047	1046	1047	1045	1044	1011	1009			986	971	963	967	971	972	1003	998	1001	1002	1006	1001
23	Mw Output		MW			27	24.8	24.9	24.9	24.9	24.9	24.9	24.9	24.8	24.5	24.1			23.2	23.2	23.0	23.1	23.2	23.1	24.0	24.0	24.0	24.0	24.0	24.0
24	80% Base Load Minimum		MW				20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.1	19.8			19.3	19.2	19.1	19.1	19.3	19.3	19.7	19.7	19.7	19.7	19.7	19.7
25	Running Hours (unit overview)						11429	11430	11431	11432	11433	11434	11436	11437	11438	11439			11439	11440	11441	11442	11443	10644	114 45	114 46	114 47	11448	11449	11450
26	Ambient Temperature	T1 inlet					42	40	40	40	40	40	39.7	39.7	48.2	48.6			54.7	56.8	57.9	57.2	55.4	55.3	53	50	50	49	49	49
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	53	53	55	55	55	55	54	54	53	51			53	53	54	54	55	58	55	55	55	55	55	55
28	Total Fuel Flow		Mscf/h				232	233	232	230	233	233	232	231	226	228			217	217	217	218	218	207	224	224	224	224	224	225

Date: 10-31-2022 Signature:

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	D			B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E			E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2			1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	42	41	41	41	41	41	41	41	41	41			41	41	41	41	41	41	41	41	41	41	41	41
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F			F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E			E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E			E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B			B	B	B	B	B	D	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	96	96	96	96	96	96	95	95	95	95			96	96	96	97	97	97	97	97	97	97	97	97
Stage Disch. Press	PI-2101	psig		238	285	276	275	275	275	275	275	274	275	272	272			277	277	277	280	280	280	280	280	280	279	279	279
2nd Stage Inlet Press	PI-2200	psig		267	285	271	270	270	270	271	270	269	269	267	267			273	273	273	275	275	275	275	275	275	274	274	274
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	506	506	506	506	506	506			507	507	506	506	506	506	507	507	506	506	507	507
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	499	499	500	500			500	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57	57	57	57	57	57			58	58	58	58	58	58	58	58	58	58	58	58
Lube Oil Temp	TE-1584	deg		150	170	169	169	170	170	176	176	169	169	169	169			141	141	141	166	165	166	165	165	165	165	168	168
Final Discharge Temp	TE-2120	deg		110	150	80	78	79	78	78	78	77	77	85	85			93	93	93	94	92	95	92	90	90	90	87	87
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	200	198	198	198	198	198	197	197	202	200			207	207	207	205	204	204	204	204	204	204	202	202
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	185	183	183	183	183	183	182	182	188	188			196	196	196	196	194	194	194	192	192	192	190	190
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	200	197	197	197	197	197	197	197	202	202			206	206	206	205	205	205	205	205	203	203	203	203
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	187	185	184	184	184	184	184	184	190	190			197	197	197	197	197	197	197	195	195	195	193	193
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.05	.05	.03	.04	.04	04	04	04	04			04	04	04	04	04	04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	06	06	06	06			06	06	06	06	06	06	.06	.06	.06	.05	.05	.05
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.								500																					
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8			496																					
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20			482																					

DATE 10-31-2022

SIGNATURE

Mid Shift Bob Hay

Days Shift

Notes TURBINE TRIPPED @ 10 20:
BACK ON LINE 1245

Utilities and Institutional Facilities

CGTG HOURLY READING LOG

Date: NOV 01 2022

MST (MDT) (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	105	108	102	110	108	108	100	106	110	106	100	110	99	101	111	106	111	105	108	110	110	108	100	110
4	Instrument Temperature	TI-001	deg C		20	50	18	18	18	18	18	18	9	11	17	19	19	20	20	20	23	23	23	21	20	20	20	20	20	20
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	101	105	110	104	107	103	99	106	100	110	109	110	107	100	107	105	100	101	100	102	111	103	105	108
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
10	Coolant Return Differential from	FI-002	In WC		37	50	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/ on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	✓	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	6	6	6	6	6	6	6	6	6
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1001	1003	1022	1030	1035	1033	1035	1007	995	992	981	970	976	978	951	961	974	999	1000	1013	1015	1014	1012	1013
23	Mw Output		MW			27	24.0	24.0	24.4	24.7	24.7	24.7	24.6	24.0	23.8	23.7	23.4	23.2	23.3	23.3	22.7	22.9	23.3	23.4	23.4	23.4	24.3	24.3	24.3	24.3
24	80% Base Load Minimum		MW				19.7	19.7	19.9	20.3	20.3	20.3	20.2	19.8	19.5	19.5	19.3	19.2	19.2	19.2	18.9	19.0	19.2	19.2	19.2	19.2	19.8	19.8	19.8	19.8
25	Running Hours (unit overview)						11451	11452	11453	11454	11455	11456	11457	11459	11460	11461	11464	11463	11464	11464	11464	11465	11468	11469	11469	11470	11471	11472	11473	11474
26	Ambient Temperature	T1 inlet					50	50	46	44	42	42	42.6	48.6	51.4	52.7	54.4	56.5	56.1	56.1	60.6	58.5	55.9	56.1	55	50	48	48	48	48
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	55	55	55	55	55	55	55	55	54	53	53	53	53	53	56	56	57	57	57	57	58	58	58	58
28	Total Fuel Flow		Mscf/h				228	228	230	231	231	230	229	224	223	221	220	218	218	218	215	217	220	220	220	220	226	225	226	226

Date: NOV 01 2022 Signature:

CGTG TURBINE UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	D	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/8
Oil Day Tank Level	LI-1562	GAL	10		FULL	40	40	40	40	40	40	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	F	F	E	E	F	E	E	E	F	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	F	E	E	E	E	F	F	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	D	B	B	B	B	B	D	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	97	97	97	97	96	96	96	96	96	96	96	96	97	97	97	97	97	97	97	97	97	97	97	97
Stage Disch. Press	PI-2101	psig		238	285	279	278	278	278	276	276	274	276	274	276	276	278	280	280	280	281	280	280	280	280	280	279	279	279
2nd Stage Inlet Press	PI-2200	psig		267	285	274	274	274	272	272	272	272	272	272	272	272	273	276	276	271	274	276	276	276	276	274	274	274	274
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	506	506	507	507	507	506	506	504	507	506	506	506	507	506	506	506	506	507	507	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	499	499	499	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		58	58	58	58	57	57	57	57	57	58	58	58	58	58	59	59	58	59	58	58	58	58	58	58
Lube Oil Temp	TE-1584	deg		150	170	168	168	168	168	170	170	170	169	169	168	167	167	165	165	163	164	164	164	164	164	166	166	168	168
Final Discharge Temp	TE-2120	deg		110	150	87	87	85	85	80	80	80	84	84	86	91	94	95	95	98	96	95	95	95	92	92	90	90	90
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	202	202	200	200	198	198	194	200	200	203	208	206	206	206	207	206	205	205	205	203	203	201	201	201
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	189	188	188	186	186	184	184	187	187	191	194	196	196	196	188	196	195	195	195	190	190	190	188	188
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	202	200	200	198	198	198	198	200	200	203	204	205	205	205	206	205	205	205	205	203	203	201	201	201
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	191	188	188	186	186	186	184	188	188	193	195	198	198	196	200	198	197	197	197	195	195	193	193	193
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	04	04	04	04	04	04	04	04	04	04	04	04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.05	.05	.05	.05	.06	.06	06	06	06	06	06	06	06	06	06	06	06	06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																						500							
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																	496							
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																	483							

DATE NOV 01 2022

SIGNATURE

Mid Shift

Days Shift

Notes

23/8115-

99 112

Utilities and Institutional Facilities

CGTG HOURLY READING LOG

Date: NOV 02 2022

MST / (MDT) (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	108	100	110	109	101	112	110	105	104	109	110	100	107	100	104	109	99	101	108	110	104	110	108	108
4	Instrument Temperature	TI-001	deg C		20	50	20	20	20	20	20	20	20	20	20	20	20	21	21	21	21	21	21	21	20	20	20	20	20	20
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	111	100	101	112	113	106	107	110	102	105	106	109	104	101	110	110	111	107	110	102	106	113	105	109
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
10	Coolant Return Differential from	FI-002	In WC		37	50	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1015	1018	1024	1040	1043	1041	1039	1028	1011	993	979	973	977	947	957	976	976	975	970	988	1004	1010	1013	1009
23	Mw Output		MW			27	24.3	24.6	24.4	24.9	24.9	24.9	24.8	24.6	24.1	23.7	23.3	23.1	23.2	22.6	22.8	23.2	23.2	23.1	23.1	23.1	24.1	24.1	24.1	24.1
24	80% Base Load Minimum		MW				19.8	20.0	20.0	20.3	20.3	20.3	20.2	20.2	19.7	19.5	19.2	19.1	19.1	18.8	18.9	19.2	19.2	19.2	19.2	19.2	19.8	19.8	19.8	19.8
25	Running Hours (unit overview)						11475	11476	11477	11478	11479	11480	11481	11482	11483	10484	10485	10486	11487	11488	11489	11491	11492	11493	11494	11495	11496	11497	11498	11499
26	Ambient Temperature	T1 inlet					48	45	45	41	41	40	42.4	43.4	49.6	52.0	56.1	57.2	57.4	60.8	59.7	56.5	56.7	56.0	57	55	50	48	48	48
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	58	58	58	58	58	58	58	55	59	57	57	57	56	57	58	58	58	55	58	58	58	58	58	58
28	Total Fuel Flow		Mscf/h				226	228	228	230	231	231	230	230	224	221	218	217	217	214	215	214	216	218	218	220	222	225	225	225

Date: NOV 02 2022 Signature: JM

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	½	½	½	½	½	½	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	½	½	½	½	½	½	½
Oil Day Tank Level	LI-1562	GAL	10		FULL	37	37	37	37	37	37	35	35	35	35	35	35	38	38	35	35	35	35	35	35	35	35	35	35
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	97	97	97	97	96	96	96	96	96	97	97	97	97	98	97	97	97	97	97	97	97	97	97	97
Stage Disch. Press	PI-2101	psig		238	285	279	279	277	277	276	276	275	277	277	279	279	280	280	282	282	281	281	281	280	280	280	279	279	279
2nd Stage Inlet Press	PI-2200	psig		267	285	274	272	272	272	271	271	271	273	273	274	274	275	276	277	277	276	276	276	276	276	276	274	274	274
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	506	507	507	506	506	507	507	507	506	506	506	507	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	506	499	500	500	499	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		58	58	58	58	57	57	57	58	58	58	58	58	59	58	59	59	59	59	59	59	59	58	58	58
Lube Oil Temp	TE-1584	deg		150	170	168	168	170	170	170	170	170	169	169	167	166	166	165	164	164	163	163	163	165	165	167	167	167	167
Final Discharge Temp	TE-2120	deg		110	150	87	85	85	85	80	80	79	87	87	91	92	95	97	98	98	95	95	95	92	92	90	90	88	88
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	201	200	200	200	198	198	197	201	201	204	205	206	207	208	208	205	205	205	202	202	202	201	201	201
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	188	185	185	186	183	183	184	189	189	193	193	196	196	198	198	198	196	196	194	194	192	192	192	192
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	201	199	199	197	197	197	197	201	201	203	204	206	206	207	207	205	204	205	202	202	202	201	201	201
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	190	188	188	185	185	186	186	191	191	198	195	197	199	200	200	198	195	195	192	192	192	191	191	191
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																								

DATE	NOV 02 2022
SIGNATURE	
Mid Shift	
Days Shift	

Notes

Utilities and Institutional Facilities

Date: NOV 03 2022

MST (MDT) (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

CGTG HOURLY READING LOG

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓									
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓									
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	110	108	105	108	110	110	108	113	107	112	110	113	115	110	112									
4	Instrument Temperature	TI-001	deg C		20	50	20	20	20	20	20	20	22	22	22	20	20	22	22	23	23									
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19									
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	100	109	103	111	102	101	107	104	111	108	101	107	104	110	108									
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3									
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60	60	60	60	60	60	62	62	62	62	62	62	62	62	62									
10	Coolant Return Differential from	FI-002	In WC		37	50	35	35	35	35	35	35	36	36	36	36	36	36	36	36	36									
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70									
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y									
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y									
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7									
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓									
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1010	1008	1012	1004	1013	1015	1024	1023	1020	1033	1025	1027	1004	1003	1011									
23	Mw Output		MW			27	24.1	24.1	24.1	24.2	24.2	24.2	24.5	24.5	24.3	24.6	24.4	24.4	24.0	24.0	24.1									
24	80% Base Load Minimum		MW				19.8	19.8	19.8	19.9	19.9	19.9	20.1	20.1	20.0	20.2	20.1	20.1	19.8	19.8	19.9									
25	Running Hours (unit overview)						11500	11501	11502	11503	11504	11505	11506	11507	11508	11509	11510	11511	11512	11513	11514									
26	Ambient Temperature	T1 inlet					48	48	48	46	46	46	43.9	44.1	45.7	42.8	44.1	44.4	48.4	48.4	47.1									
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58									
28	Total Fuel Flow		Mscf/h				225	225	225	226	226	226	227	228	227	228	228	228	223	223	224									

Date: NOV 03 '22 Signature: Jan

cgtg tripped

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B									
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E									
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2									
Oil Day Tank Level	LI-1562	GAL	10		FULL	34	34	34	34	34	34	32	32	32	32	32	32	32	32	32									
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F									
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E									
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E									
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B									
1st Stage Inlet Press.	PI-2100	psig		88	140	97	97	97	97	97	97	96	96	96	96	96	96	97	97	97									
Stage Disch. Press	PI-2101	psig		238	285	279	279	279	279	279	279	277	277	277	276	276	276	278	278	278									
2nd Stage Inlet Press	PI-2200	psig		267	285	274	274	274	274	274	274	272	272	272	271	271	271	273	273	273									
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	507	507	507	506	506	506	507	507	507									
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	500	500	499	499	500	500	500	500									
Lube Oil Pressure	PI-1572	psig	40	60		58	58	58	58	58	58	57	57	58	57	57	58	58	58	58									
Lube Oil Temp	TE-1584	deg		150	170	167	167	167	167	167	167	168	168	168	167	167	168	168	168	168									
Final Discharge Temp	TE-2120	deg		110	150	88	88	88	86	86	86	83	83	84	82	82	82	86	86	86									
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	201	201	201	200	200	200	198	198	199	197	198	198	200	200	201									
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	190	190	190	188	188	188	186	187	187	185	186	188	187	188	189									
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	201	201	201	199	199	199	197	198	198	197	198	200	199	199	199									
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	191	191	191	189	189	189	187	188	188	187	188	190	189	189	190									
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04									
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.05	.05	.05									
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																								

DATE NOV 03 2022

SIGNATURE

Mid Shift

Days Shift

1600 hrs Cgtg tripped then Gas comp tripped.

Notes

Utilities and Institutional Facilities

CGTG HOURLY READING LOG

Date: NOV 05 2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling): 1157, 1214, 1345

Time of Turbine Online (Brkr Closed): 1357

Time Turbine Offline (Brkr Open): 1801

Time No Gas Flow: 1807

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V																	✓	✓	✓	✓							
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V																	✓	✓	✓	✓							
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120														110	110	108	110							
4	Instrument Temperature	TI-001	deg C		20	50														22	22	22	22							
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25															19	19	19	19							
7	Coolant PLC Temperature	TI-002	deg F	100	110	120														107	110	105	105							
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL														2/3	2/3	2/3	2/3							
9	Coolant Return Differential from GG	FI-001	In WC		60	80														63	63	63	63							
10	Coolant Return Differential from	FI-002	In WC		37	50														36	36	36	36							
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85														70	70	70	76							
15	WECC Log		Operational?																											
16	Operation of PSS/ on at 6.3MW		Yes (Y)			No (N)														Y	Y	Y	Y							
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)														Y	Y	Y	Y							
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																			7	7	6	6							
18	2000 gal Oil Water Tank Level	LI-231	%			70%														0	0	0	0							
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%																								
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20															✓	✓	✓	✓							
21	Acknowledge Alarms Hourly		V																											
	(22–24 found on Power Management page)																			1020	1012	1023	1024							
22	Generator Current		Amps			1427														24.0	23.9	24.1	24.1							
23	Mw Output		MW			27														19.9	19.8	19.9	19.9							
24	80% Base Load Minimum		MW																	11515	11516	11517	11518							
25	Running Hours (unit overview)																			46	48	46	47							
26	Ambient Temperature	T1 Inlet																												
	(27–28 found on Gas Fuel System page)																			57	58	57	57							
27	Waste Oil Tank	LI-120	%			70%														217	216	217	216							
28	Total Fuel Flow		Mscf/h																											

Date: NOV 05 2022 Signature:

CGTG TURBINE UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME	1126																												
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK															B	B	B	B							
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY														E	E	E	E							
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL														1/2	1/2	1/2	1/2							
Oil Day Tank Level	LI-1562	GAL	10		FULL														31	31	31	31							
Lubricator Bulls eye		LEVEL	1/2	FULL															F	F	F	F							
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY														E	E	E	E							
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY														E	E	E	E							
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK															B	B	B	B							
1st Stage Inlet Press.	PI-2100	psig		88	140														96	96	96	96							
Stage Disch. Press	PI-2101	psig		238	285														275	275	277	277							
2nd Stage Inlet Press	PI-2200	psig		267	285														270	270	272	277							
2nd Stage Disch. Press	PI-2201	psig		575	600														506	506	506	506							
Final Discharge Pressure	PI-2108	psig		575	600														500	500	500	500							
Lube Oil Pressure	PI-1572	psig	40	60															57	57	58	58							
Lube Oil Temp	TE-1584	deg		150	170														170	170	168	168							
Final Discharge Temp	TE-2120	deg		110	150														89	84	85	85							
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297														202	202	199	199							
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283														189	189	188	188							
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297														202	202	198	199							
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283														191	191	189	189							
Motor Frame Vibration	VT-1015	IPS			0.15														.05	.04	.05	.05							
Compresser Frame Vibration	VT-1512	IPS			0.35														.05	.05	.06	.06							
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																								
Natural Gas Comp.Discharge Press.																			500										
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8														496										
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20														483										

DATE	NOV 05 2022
SIGNATURE	GOMEZ
Mid Shift	
Days Shift	

Notes

CGTG HOURLY READING LOG

Date: 11-7-22

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V																		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V																		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120															114	107	112	110	108	110	108	108	110	108
4	Instrument Temperature	TI-001	deg C		20	50															24	24	24	24	22	22	20	20	20	20
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25																19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120															104	99	110	107	108	112	100	101	102	106
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL															2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80															60	61	61	61	60	60	60	60	60	60
10	Coolant Return Differential from	FI-002	In WC		37	50															36	36	35	35	35	35	35	35	35	35
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85															70	70	70	70	70	70	70	70	70	70
13	Combustible Gas Detector Monitor		% LEL	0%	0%	20%																								
15	WECC Log		Operational?																											
16	Operation of PSS/ on at 6.3MW		Yes (Y)			No (N)															Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)															Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%															6	6	6	6	6	6	0	0	6	6
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%															0	0	0	0	0	0	6	0	6	6
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	40																									
21	Acknowledge Alarms Hourly		V																		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1200															979	979	995	1014	1029	1032	1036	1037	1039	1042
23	Mw Output		MW			27															23.3	23.3	23.8	24.2	24.5	24.5	24.7	24.7	24.7	24.8
24	80% Base Load Minimum		MW																		19.1	19.1	19.4	19.6	19.9	19.9	20.1	20.1	20.1	20.1
25	Running Hours (unit overview)																				11521	11522	11523	11524	11525	11526	11527	11528	11529	11530
26	Ambient Temperature	T1 inlet																			57.0	57.2	53.8	50.4	49	47	45	45	44	44
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%															57	57	57	57	58	58	58	58	58	58
28	Total Fuel Flow		Mscf/h																		211	211	214	216	219	219	220	221	222	222

Date: 11-7-22 Signature: A Wlan

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%															B	B	B	B	B	B	B	B	B	B
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK																E	E	E	E	E	E	E	E	E	C
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY															½	½	½	½	½	½	½	½	½	½
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL															31	31	31	31	31	31	31	31	31	31
Oil Day Tank Level	LI-1562	GAL	10		FULL															F	F	F	F	F	F	F	F	F	F
Lubricator Bulls eye		LEVEL	1/2	FULL																E	E	E	E	E	E	E	E	E	E
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY															E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY															B	B	B	B	B	B	B	B	B	B
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK																96	96	96	96	96	96	96	96	96	96
1st Stage Inlet Press.	PI-2100	psig		88	140															279	279	278	278	278	278	276	276	276	276
Stage Disch. Press	PI-2101	psig		238	285															274	274	273	273	273	273	271	271	271	271
2nd Stage Inlet Press	PI-2200	psig		267	285															506	506	506	506	507	507	507	507	507	507
2nd Stage Disch. Press	PI-2201	psig		575	600															500	500	500	500	500	506	500	500	500	500
Final Discharge Pressure	PI-2108	psig		575	600															59	59	58	58	58	58	58	58	58	58
Lube Oil Pressure	PI-1572	psig	40	60																163	163	163	163	163	163	165	165	165	165
Lube Oil Temp	TE-1584	deg		150	170															97	95	92	92	92	92	90	90	90	90
Final Discharge Temp	TE-2120	deg		110	150															205	204	202	201	201	201	198	198	198	198
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297															197	196	193	197	193	193	190	190	190	190
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283															203	202	201	200	200	200	198	198	198	198
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297															199	197	195	194	193	193	190	190	190	196
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283															.05	.05	.05	.05	.05	.03	.05	.05	.05	.03
Motor Frame Vibration	VT-1015	IPS			0.15															.05	.05	.06	.06	.06	.06	.06	.06	.06	.06
Compresser Frame Vibration	VT-1512	IPS			0.35																								
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																									
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																								

DATE	11-7-22
SIGNATURE	
Mid Shift	
Days Shift	A Wan

Notes

CGTG HOURLY READING LOG

Date: NOV 08 2022

(MST) MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes: BUSY WITH STEAM TO FIELD

	Instrument Air Compressor	ID	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				✓						✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				✓						✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	108						112	111	117	108	113	110	109	113	111	109	113	110	108	108	110	109	108	110
4	Instrument Temperature	TI-001	deg C		20	50	20						20	20	22	22	24	24	24	24	24	24	22	22	20	20	20	21	20	20
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19						19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	102						105	101	108	110	104	111	103	107	108	103	99	101	110	102	106	111	106	102
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3						2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60						60	60	60	60	60	61	61	62	62	62	61	61	60	60	60	60	60	60
10	Coolant Return Differential from	FI-002	In WC		37	50	35						36	36	36	36	36	37	37	37	37	37	36	36	35	35	35	35	35	35
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70						70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
13	Combustible Gas Detector Monitor		% LEL	0%	0%	20%																								
15	WECC Log		Operational?																											
16	Operation of PSS/ on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	7	7	7	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1200	1037	1044	1048	1044	1047	1046	1048	1047	994	985	971	964	965	969	969	972	987	993	1000	1014	1010	1008	1011	1007
23	Mw Output		MW			27	24.8	25.0	25.1	25.0	24.9	24.9	24.8	24.7	23.6	23.4	23.1	22.9	22.8	22.7	22.8	22.9	23.0	23.5	24.0	24.0	24.0	24.0	24.0	24.0
24	80% Base Load Minimum		MW				20.1	20.2	20.3	20.3	20.2	20.2	20.2	20.1	19.4	19.3	19.0	18.9	18.9	18.8	18.8	18.9	19.0	19.3	19.6	19.6	19.6	19.6	19.6	19.6
25	Running Hours (unit overview)						11531	11532	11533	11534	11535	11536	11537	11538	11539	11540	11541	11542	11543	11544	11545	11546	11547	11548	11549	11550	11551	11552	11553	11554
26	Ambient Temperature	T1 inlet					45	43	42	42	43	43	43.7	44.4	53.2	56.5	58.6	60.1	60.3	61.0	60.7	60.1	59.4	55.0	53	53	51	51	51	51
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	58	58	58	58	58	58	58	58	57	56	56	56	56	56	57	57	57	58	58	58	58	58	58	58
28	Total Fuel Flow		Mscf/h				221	223	223	223	222	222	221	220	214	211	210	211	208	208	208	208	208	213	216	216	216	215	215	215

Date: NOV 08 2022 Signature:

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B					B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E					E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	30	30				½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
Oil Day Tank Level	LI-1562	GAL	10		FULL	30					28	28	28	28	28	28	28	28	28	27	27	27	27	27	27	27	27	27	27
Lubricator Bulls eye		LEVEL	1/2	FULL		F					F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E					E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	C						E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B						B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	96						95	95	96	96	96	96	97	98	98	98	97	97	97	97	97	97	97	97
Stage Disch. Press	PI-2101	psig		238	285	276						275	275	277	278	278	278	280	280	280	280	279	279	279	279	279	279	279	279
2nd Stage Inlet Press	PI-2200	psig		267	285	271						270	271	272	273	273	273	274	274	274	274	274	274	274	274	274	274	274	274
2nd Stage Disch. Press	PI-2201	psig		575	600	507						506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500						499	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		58						57	58	58	58	58	58	59	59	59	59	59	59	59	59	59	59	59	59
Lube Oil Temp	TE-1584	deg		150	170	168						169	170	167	167	167	168	164	162	163	163	164	164	164	164	164	164	164	164
Final Discharge Temp	TE-2120	deg		110	150	85						81	83	90	92	93	99	98	101	107	104	96	94	94	94	94	94	94	94
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	197						195	196	200	202	204	205	206	207	207	208	204	202	202	202	202	202	202	202
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	187						184	185	193	194	196	198	200	202	203	204	198	194	194	194	194	194	194	194
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	196						195	196	200	202	204	205	205	206	206	207	204	202	202	202	202	202	202	202
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	189						186	187	193	195	197	198	202	204	204	204	198	196	196	196	196	196	196	196
Motor Frame Vibration	VT-1015	IPS			0.15	.05						.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.06	.05	.05	.05
Compresser Frame Vibration	VT-1512	IPS			0.35	.06						.06	.06	.06	.06	.06	.06	.06	.05	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																								

DATE NOV 08 2022

SIGNATURE

Mid Shift

Days Shift A Wan

BUSY WITH STEAM TO FIELD

Notes

Date: NOV 09 2022

CGTG HOURLY READING LOG

(MST) / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes: ok

	Instrument Air Compressor	ID	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	108	108	110	108	110	110	112	113	110	108	113	109	112	105	109	112	105	109	110	108	110	108	108	110
4	Instrument Temperature	TI-001	deg C		20	50	20	20	20	20	20	20	22	22	23	24	24	24	24	25	24	24	23	22	22	22	20	21	20	20
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	100	101	112	106	102	107	105	108	108	101	104	99	101	107	108	104	99	105	102	108	111	105	107	112
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60	60	60	60	60	60	60	60	60	62	62	62	62	62	62	62	61	61	60	60	60		60	60
10	Coolant Return Differential from	FI-002	In WC		37	50	35	35	35	35	35	35	36	36	36	36	36	36	36	36	36	36	36	36	35	35	35	35	35	35
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
13	Combustible Gas Detector Monitor		% LEL	0%	0%	20%																								
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	6	6	6	6	6	6	6	6	6
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1200	1036	1033	1051	1032	1030	1032	1031	1006	994	983	981	979	962	959	956	954	969	971	1012	1010	1030	1029	1034	1033
23	Mw Output		MW			27	24.6	24.6	24.6	24.6	24.6	24.6	24.4	24.0	23.7	23.5	23.3	23.2	22.9	22.8	22.7	22.7	23.0	23.1	24.1	24.1	24.5	24.5	24.5	24.5
24	80% Base Load Minimum		MW				20.1	20.1	20.1	20.1	20.1	20.1	20.0	19.6	19.4	19.3	19.2	19.2	19.1	19.0	18.9	18.9	19.2	19.2	19.8	19.8	20.1	20.1	20.1	20.1
25	Running Hours (unit overview)						11555	11556	11557	11558	11559	11560	11561	11562	11563	11564	11565	11566	11567	11568	11569	11570	11571	11572	11573	11574	11575	11576	11577	11578
26	Ambient Temperature	TI Inlet					45	45	45	44	44	44	46.0	50.5	53.4	54.9	55.4	56.5	58.1	58.7	59.7	59.7	56.3	55.9	48	48	46	46	46	45
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	58	58	58	58	58	58	58	58	57	56	56	56	56	56	57	57	57	57	57	57	57	57	57	57
28	Total Fuel Flow		Mscf/h				221	221	221	221	221	222	218	215	213	210	210	210	207	207	206	206	208	209	216	216	220	220	220	220

Date: NOV 09 2022 Signature: Alan

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
Oil Day Tank Level	LI-1562	GAL	10		FULL	27	27	27	27	27	27	26	26	26	26	26	26	26	26	25	25	25	25	25	25	25	25	25	25
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	96	96	96	96	96	96	95	95	96	96	97	97	98	98	97	97	96	96	96	96	96	96	96	96
Stage Disch. Press	PI-2101	psig		238	285	278	276	276	276	275	275	275	275	279	279	280	280	280	280	281	281	280	280	280	280	280	280	280	286
2nd Stage Inlet Press	PI-2200	psig		267	285	273	271	271	270	270	270	270	270	274	275	275	275	275	276	276	276	275	274	274	274	274	274	274	274
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	506	506	506	506	506	507	507	507	506	506	506	506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	506
Lube Oil Pressure	PI-1572	psig	40	60		58	58	58	58	57	57	57	57	58	58	59	59	59	59	59	59	59	59	59	59	59	58	58	58
Lube Oil Temp	TE-1584	deg		150	170	163	169	169	169	168	168	169	169	166	166	165	164	164	164	163	162	163	161	161	161	160	160	160	160
Final Discharge Temp	TE-2120	deg		110	150	92	83	83	83	83	83	83	83	93	94	95	96	98	101	99	99	97	96	96	96	95	95	95	95
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	198	196	196	196	196	196	196	198	200	201	202	203	204	206	204	204	202	200	200	206	200	200	200	206
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	196	186	186	186	186	186	186	188	192	193	195	196	197	199	197	198	196	194	194	194	194	194	194	194
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	188	196	196	196	196	196	196	198	200	201	201	201	203	205	203	204	204	201	201	201	200	200	200	200
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	189	187	187	187	187	187	187	188	194	195	196	197	198	200	199	199	197	195	195	195	195	195	195	195
Motor Frame Vibration	VT-1015	IPS			0.15	.05	.05	.05	.05	.05	.05	.05	.05	.04	.04	.04	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.05	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																								

DATE	NOV 09 2022
SIGNATURE	
Mid Shift	
Days Shift	

Notes

CGTG HOURLY READING LOG

Date: NOV 10 2022

(MST) / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	108	110	110	108	108	N/C	106	108	110	110	110	110	110	116	110	110	110	110	114	112	110	106	110	112
4	Instrument Temperature	TI-001	deg C		20	50	20	20	18	18	18	19	16	16	18	19	20	20	21	21	22	22	22	20	20	19	18	18	17	16
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	100	108	102	107	101	105	112	110	104	108	106	108	99	104	100	101	112	110	112	110	110	97	96	102
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60	60	60	60	60	60	63	63	63	63	63	63	63	63	63	63	63	63	62	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	35	35	35	35	35	35	36	36	36	36	36	36	36	36	36	36	36	30	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	71	71	71	73	73	75	74	75	75	75	75	75	75	73	73	73	72	72	71
13	Combustible Gas Detector Monitor		% LEL	0%	0%	20%																								
15	WECC Log		Operational?																											
16	Operation of PSS/ on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	✓	✓	✓	✓	✓	✓
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	✓	✓	✓	✓	✓	✓
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	6	6	6	6	6	6	7	7	7	7	7	7	6	6	6	6	6	6	7	7	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST 01	psig	35	20																									
21	Acknowledge Alarms Hourly		v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1200	1067	1066	1089	1090	1091	1093	1091	1081	1054	1052	1043	1041	1027	1027	1035	1032	1050	1055	1064	1065	1067	1081	1094	1098
23	Mw Output		MW			27	25.4	25.4	25.9	25.9	25.8	25.8	26.0	25.7	25.1	25.1	24.8	24.8	24.4	24.4	24.6	24.6	25	25.1	25.3	25.3	25.4	25.7	26.0	26.0
24	80% Base Load Minimum		MW				20.8	20.8	21.3	21.3	21.3	21.3	21.3	21.1	20.5	20.5	20.3	20.3	20.0	20.1	20.2	20.2	20.5	20.5	20.8	20.8	20.9	21.1	21.4	21.4
25	Running Hours (unit overview)						11579	11580	11581	11582	11583	11584	11585	11586	11587	11588	11589	11590	11591	11592	11593	11594	11595	11596	11596	11597	11598	11599	11600	11601
26	Ambient Temperature	T1 inlet					36	36	34	34	33	33	30	32	38	39	40	41	45	45	44	43	39	39	36	35	30	32	28	28
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	57	57	57	57	57	57	57	57	56	56	56	56	57	57	57	57	57	57	57	59	62	60	60	60
28	Total Fuel Flow		Mscf/h				226	226	228	230	230	230	230	228	223	223	222	222	217	218	220	219	222	223	224	225	224	227	230	229

Date: NOV 10 2022 Signature:

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
Oil Day Tank Level	LI-1562	GAL	10		FULL	25	25	25	25	25	25	25	25	25	25	25	25	24	24	24	24	24	24	24	24	24	23	23	23
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	95	95	95	95	95	95	95	95	96	96	96	96	97	97	96	96	96	96	95	95	95	95	95	95
Stage Disch. Press	PI-2101	psig		238	285	274	274	273	273	273	273	272	272	274	274	275	275	278	276	277	277	275	275	274	274	273	273	272	272
2nd Stage Inlet Press	PI-2200	psig		267	285	269	269	269	269	268	268	267	267	269	269	270	270	273	273	272	272	270	270	269	269	268	268	267	268
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	506	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	506	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	56
Lube Oil Temp	TE-1584	deg		150	170	170	170	170	169	169	169	169	169	170	170	170	170	169	169	169	169	170	170	169	169	169	169	169	169
Final Discharge Temp	TE-2120	deg		110	150	75	75	75	75	75	75	70	70	77	77	79	79	84	84	83	83	78	78	74	73	72	72	69	70
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	192	192	190	190	190	190	189	189	192	192	194	194	196	195	195	195	193	193	191	190	190	189	190	188
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	178	178	178	178	176	176	175	175	180	180	182	182	186	186	184	184	181	181	179	176	175	176	174	175
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	192	192	190	190	190	196	189	189	192	192	194	194	192	196	195	195	193	193	191	190	190	189	188	188
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	179	179	178	178	178	178	176	176	181	181	183	183	188	185	186	186	183	183	179	178	177	177	176	176
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.05	.05	.05	.05	.04	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	-06	.00	.06	.06	.06	.05	.06	.06	.06	.06	.06	.05	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.													500											500					
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8								496											496					
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20								483											482					

DATE	NOV 10 2022
SIGNATURE	
Mid Shift	
Days Shift	

Notes

Date: 11-1-22

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

CGTG HOURLY READING LOG

	Instrument Air Compressor	ID	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	112	112	110	110	112	110	110	110	110	108	110	118	110	110	110	108	110	112	108	110	108	108	106	104
4	Instrument Temperature	TI-001	deg C		20	50	15	15	15	14	14	14	14	14	13	13	15	16	18	20	20	20	18	18	16	16	16	15	15	14
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	98	107	112	106	104	107	105	108	110	108	112	110	102	104	98	110	105	108	104	99	98	103	96	104
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	63	63	63	63	63	63	63	63	63	63	63	63	62	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	30	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	71	70	69	68	68	68	68	68	68	68	70	71	73	73	73	73	73	73	72	71	70	70	70	68
13	Combustible Gas Detector Monitor		% LEL	0%	0%	20%																								
15	WECC Log		Operational?																											
16	Operation of PSS/ on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	7	7	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 01-01	psig	35	20																									
21	Acknowledge Alarms Hourly		v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1200	1104	1099	1098	1105	1115	1114	1109	1107	1099	1083	1073	1080	1064	1063	1061	1057	1073	1079	1089	1087	1083	1097	1103	1099
23	Mw Output		MW			27	26.3	26.3	26.1	26.3	26.5	26.5	26.4	26.3	26.2	25.9	25.5	25.6	25.3	25.3	25.2	25.2	25.6	25.7	25.9	25.4	25.5	26.1	26.2	26.3
24	80% Base Load Minimum		MW				21.6	21.5	21.5	21.6	21.8	21.7	21.6	21.6	21.4	21.2	20.8	20.9	20.7	20.7	20.6	20.6	20.9	21.0	21.2	21.2	21.2	21.3	21.4	21.4
25	Running Hours (unit overview)						11602	11603	11604	11605	11606	11607	11608	11609	11610	11611	11612	11613	11614	11615	11616	11617	11618	11619	11620	11621	11622	11623	11624	11625
26	Ambient Temperature	T1 inlet					27	27	27	26	25	25	26	27	29	31	35	35	38	37	38	38	34	34	31	31	32	29	28	28
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	61	61	61	61	61	61	61	62	61	61	61	61	61	61	61	61	61	61	61	62	62	62	62	62
28	Total Fuel Flow		Mscf/h				231	231	230	231	233	233	233	232	231	230	226	227	225	226	224	225	227	227	229	229	229	231	231	232

Date: 11-1-22 Signature: Mid shift – [signature]

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%	B	B																						
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	F	P	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	23	23	23	22	22	22	22	22	22	22	22	22	21	21	21	21	21	21	21	21	20	20	20	20
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	94	95	94	94	94	94	95	95	95	95	95	95	96	96	96	96	95	95	95	95	95	94	94	95
Stage Disch. Press	PI-2101	psig		238	285	271	272	272	271	271	271	272	272	272	272	273	273	275	275	275	275	273	273	272	272	271	272	272	272
2nd Stage Inlet Press	PI-2200	psig		267	285	266	268	268	266	266	266	267	267	267	267	268	268	270	270	269	269	268	268	268	268	268	267	267	267
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	499	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	499
Lube Oil Pressure	PI-1572	psig	40	60		56	57	56	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	56	56	56
Lube Oil Temp	TE-1584	deg		150	170	169	165	169	169	168	169	168	168	168	165	168	169	169	169	169	165	169	170	170	169	170	169	169	169
Final Discharge Temp	TE-2120	deg		110	150	70	69	70	70	70	70	70	70	70	70	70	75	77	77	75	75	75	73	70	70	69	70	70	69
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	188	187	188	187	187	187	188	188	188	188	191	191	191	191	190	190	190	190	188	188	187	187	187	187
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	174	174	174	174	174	174	175	175	175	175	179	179	180	180	179	179	177	177	174	174	174	174	174	174
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	188	187	188	187	187	187	188	188	188	188	196	191	191	191	191	191	190	190	188	188	188	188	188	188
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	176	175	176	175	176	176	176	176	176	176	180	180	182	182	180	180	178	178	176	175	175	175	176	176
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.05	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.05	.06	.06	.06	.05	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.									500						500									500					
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8				496						496									496					
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20				484						483									482					

DATE 11-11-22

SIGNATURE

Mid Shift

Days Shift

Notes

Saturday

Date: 11-12-2022

CGTG HOURLY READING LOG

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	108	108	108	108	106	108	110	110	110	108	110	110	110	110	110	110	108	106	106	108	112	108	112	106
4	Instrument Temperature	TI-001	deg C		20	50	14	14	14	13	13	13	14	14	15	13	18	20	20	22	22	20	20	20	19	18	18	19	19	19
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	111	112	99	106	103	105	100	104	108	110	100	104	112	110	104	100	100	104	112	104	97	107	98	110
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	63	63	63	63	63	63	63	63	63	63	63	63	62	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	68	68	68	68	68	68	68	68	68	68	71	73	74	75	75	75	75	75	75	75	73	72	72	72
13	Combustible Gas Detector Monitor		% LEL	0%	0%	20%																								
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	6	6	6	6	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1200	1097	1105	1110	1119	1115	1106	1105	1109	1094	1063	1043	1041	1029	1038	1024	1050	1057	1059	1076	1077	1074	1075	1061	1067
23	Mw Output		MW			27	26.1	26.3	26.4	26.6	26.6	26.3	26.3	26.3	26.0	25.3	24.9	24.8	24.5	24.5	24.4	25.0	25.2	25.2	25.6	25.7	25.6	25.6	25.3	25.4
24	80% Base Load Minimum		MW				21.4	21.5	21.6	21.8	21.7	21.5	21.5	21.5	21.3	20.5	20.3	20.2	20.0	20.0	19.9	20.4	20.5	20.6	20.9	21.0	20.9	20.9	20.7	20.8
25	Running Hours (unit overview)						11626	11627	11628	11629	11630	11631	11632	11633	11634	11635	11636	11637	11638	11639	11640	11641	11642	11643	11644	11645	11646	11647	11648	11649
26	Ambient Temperature	T1 inlet					24	28	26	25	25	27	27	28	31	39	40	43	45	46	47	41	39	38	34	33	34	34	37	35
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	62	62	62	62	62	62	62	62	62	61	61	61	62	62	62	62	62	62	62	62	62	62	62	62
28	Total Fuel Flow		Mscf/h				230	232	233	234	233	231	232	230	230	224	223	222	220	219	218	224	224	224	227	228	227	227	225	226

Date: 11-12-2022

Signature: Josh Crumbley mid shift

CGTG TURBINE Saturday

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%	•																							
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
Oil Day Tank Level	LI-1562	GAL	10		FULL	20	26	20	20	20	20	20	20	20	20	20	20	20	20	20	19	19	19	19	18	18	18	18	19
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	94	95	94	94	94	94	95	95	95	95	96	96	97	97	97	96	96	96	95	95	95	95	95	95
Stage Disch. Press	PI-2101	psig		238	285	272	274	272	271	271	271	271	271	271	271	276	276	278	278	278	275	275	275	275	275	274	274	275	274
2nd Stage Inlet Press	PI-2200	psig		267	285	267	267	267	266	266	265	266	266	266	266	271	271	273	273	273	270	270	270	265	268	269	269	270	270
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	502	507	507
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	499	499	500	500	500	500	500	500	500	500	500	500	500	500	500	499	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		56	57	57	56	56	56	57	57	57	57	57	57	58	58	58	57	57	57	57	57	57	57	57	57
Lube Oil Temp	TE-1584	deg		150	170	169	169	169	169	167	169	169	169	169	169	170	170	168	168	168	170	170	170	170	169	169	169	169	170
Final Discharge Temp	TE-2120	deg		110	150	70	70	70	70	70	70	70	70	70	70	81	81	84	84	84	77	77	77	72	71	73	73	73	73
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	187	187	187	187	187	187	187	189	189	189	195	195	196	196	196	199	196	196	190	189	189	189	190	189
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	174	174	172	175	173	175	175	175	175	174	184	184	186	186	186	181	181	181	176	173	175	176	177	176
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	180	185	186	188	188	189	190	190	190	188	195	195	196	196	196	193	193	193	190	189	189	189	190	189
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	176	176	176	176	176	176	177	177	177	177	186	186	188	188	188	182	182	182	178	177	176	178	179	178
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.05	.05	.05	.05	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.05	.06	.06	.05	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.								500																500					
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8			498																492					
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20			481																482					

DATE 11-12-2022

SIGNATURE

Mid Shift

Days Shift

Notes

Sunday

11-13-22

UI-LOG-033-R2
January 4 2018

CGTG HOURLY READING LOG

/ MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Instrument Air Compressor	I.D	Units	Low	Norm	Max																								
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	108	114	110	112	114	106	110	110	110	110	108	106	110	110	110	110	110	110	108	106	108	106	106	114
4	Instrument Temperature	TI-001	deg C		20	50	19	18	17	17	16	16	18	18	20	22	23	23	24	24	24	24	22	22	22	21	20	19	19	18
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	101	108	98	109	96	102	105	106	104	102	103	110	109	109	109	110	111	112	99	110	120	105	96	111
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	63	63	63	63	63	63	63	63	63	63	63	63	62	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	71	71	71	70	70	70	69	69	71	72	73	75	75	75	75	75	75	75	75	75	73	73	72	72
13	Combustible Gas Detector Monitor		% LEL	0%	0%	20%																								
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	6	6	6	6	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1200	1074	1084	1083	1084	1089	1092	1066	1060	1051	1039	1028	1025	1019	1014	1011	1009	1028	1017	1050	1057	1063	1061	1049	1079
23	Mw Output		MW			27	25.5	25.8	25.8	25.8	25.9	26.0	25.3	25.3	25.0	24.7	24.5	24.4	24.2	24.1	24.0	24.0	24.5	24.5	25.0	25.1	25.1	25.3	25.5	25.9
24	80% Base Load Minimum		MW				20.7	21.1	21.1	21.2	21.2	21.7	20.8	20.7	20.4	20.2	20.0	20.0	19.9	19.9	19.8	19.8	20.2	20.2	20.6	20.7	20.9	20.9	21.1	21.1
25	Running Hours (unit overview)						11650	11651	11652	11653	11654	11655	11656	11657	11658	11659	11660	11661	11662	11663	11664	11665	11666	11667	11668	11669	11670	11671	11672	11673
26	Ambient Temperature	T1 inlet					34	32	32	31	30	29	36	37	40	43	45	45	41	48	48	48	43	43	38	36	34	34	32	32
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	62	62	62	62	62	63	62	62	62	61	61	61	61	61	62	62	62	62	62	63	63	63	63	62
28	Total Fuel Flow		Mscf/h				227	229	229	229	229	230	226	225	223	222	218	218	216	215	215	214	219	218	221	223	224	224	225	225

Date: 11-13-22 Signature:

UI-LOG-033-R2
January 4 2018

URBINE Sunday.

UTILITIES AND INFRASTRUCTURE

s Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	18	18	17	17	17	17	17	17	17	17	17	17	16	16	16	16	15	15	15	25	15	15	15	15
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	95	95	95	95	95	95	96	96	96	96	97	97	97	97	97	97	97	97	96	96	95	95	95	95
Stage Disch. Press	PI-2101	psig		238	285	274	273	270	270	273	270	275	275	276	276	278	278	279	279	279	279	277	277	275	275	274	274	274	272
2nd Stage Inlet Press	PI-2200	psig		267	285	269	260	268	260	268	268	270	270	271	271	273	273	274	274	274	274	272	272	270	270	269	269	268	266
2nd Stage Disch. Press	PI-2201	psig		575	600	507	506	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	499	499	500	499	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57	57	57	57	58	58	58	58	58	58	58	58	57	57	58	57	58	57	56	57
Lube Oil Temp	TE-1584	deg		150	170	170	170	170	164	169	169	169	169	169	169	169	168	167	167	167	169	170	170	169	169	168	169	170	169
Final Discharge Temp	TE-2120	deg		110	150	72	71	70	70	70	70	75	75	83	83	83	86	89	89	87	87	81	81	75	73	72	71	71	
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	189	180	188	187	187	187	190	190	194	194	196	196	197	197	196	196	194	194	192	189	188	189	188	188
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	176	175	174	174	172	173	177	177	185	185	187	187	189	189	188	186	183	183	177	176	174	176	174	175
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	189	188	188	180	188	188	191	191	194	194	195	195	196	196	196	196	194	194	192	189	188	189	188	188
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	177	176	176	175	175	175	179	179	186	186	188	189	191	191	189	189	185	185	178	178	176	177	176	176
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.05	.05	.05	.05	.04	.05	.05	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.05	.05	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8			500									500								500				
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20			496									496								496				
								482									484								482				

DATE	11-13-22
SIGNATURE	
Mid Shift	
Days Shift	

Notes

Monday

Date: 11-14-22

CGTG HOURLY READING LOG

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	ID	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	108	108	112	112	114	106	109	112	110	113	108	112	109	107	109	112	113	110	108	108	110	108	108	110
4	Instrument Temperature	TI-001	deg C		20	50	18	18	18	18	17	17	16	16	16	18	18	18	18	18	20	20	18	18	18	18	18	18	18	16
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	105	104	105	99	96	101	104	99	103	106	108	110	103	105	108	104	101	99	100	101	98	102	104	101
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	60	60	60	61	61	61	61	61	60	60	60	60	60	60	60	60	60	60
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	35	35	35	36	36	36	36	36	36	36	36	36	35	35	35	35	35	35
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	71	71	71	71	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
13	Combustible Gas Detector Monitor		% LEL	0%	0%	20%																								
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–26 found on Power Management page)																													
22	Generator Current		Amps			1200	1076	1078	1074	1078	1086	1085	1097	1098	1091	1094	1089	1092	1085	1084	1077	1073	1085	1090	1100	1099	1101	1109	1111	1110
23	Mw Output		MW			27	25.6	25.6	25.6	25.7	25.9	25.9	26.1	26.1	26.0	26.0	25.9	25.8	25.8	25.8	26.6	25.5	25.8	25.9	25.9	26.0	26.0	26.A	26.4	26.4
24	80% Base Load Minimum		MW				21.1	21.2	21.1	21.2	21.4	21.0	21.5	21.5	21.3	21.3	21.2	21.1	21.2	21.2	21.0	20.9	21.2	21.3	21.3	21.4	21.4	21.6	21.6	21.6
25	Running Hours (unit overview)						11674	11675	11676	11677	11678	11679	11680	11681	11682	11683	11684	11685	11686	11687	11688	11689	11690	11691	11670	11671	11672	11673	11674	11675
26	Ambient Temperature	T1 inlet					32	32	32	30	29	28	28.4	28.2	30.2	29.8	31.5	31.8	31.8	32.0	33.4	34.3	31.3	30.7	30	29	29	28	28	26
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	62	64	62	63	62	62	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	60
28	Total Fuel Flow		Mscf/h				226	226	225	226	228	228	229	229	228	229	228	228	228	229	228	226	229	228	230	231	231	232	232	233

Date: 11-13-22

Signature:

A Wlaz

CGTG TURBINE monday

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	15	15	15	15	15	15	14	14	14	14	14	14	14	14	13	13	13	13	13	13	13	13	13	13
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	95	95	95	95	95	95	94	94	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
Stage Disch. Press	PI-2101	psig		238	285	273	273	273	272	272	271	271	272	272	272	272	273	273	273	272	272	272	272	272	272	272	272	272	272
2nd Stage Inlet Press	PI-2200	psig		267	285	268	268	268	267	266	266	266	267	267	267	268	268	268	267	267	267	267	267	267	267	267	267	267	267
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	507	507	507	507	505	505	505	505	507	507	507	507	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	499	499	500	499	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		57	57	56	57	56	56	57	57	57	57	58	58	58	58	57	57	57	57	57	57	57	57	57	57
Lube Oil Temp	TE-1584	deg		150	170	169	169	169	169	170	170	169	169	168	168	169	169	169	169	170	170	168	168	168	168	168	168	168	169
Final Discharge Temp	TE-2120	deg		110	150	72	72	71	71	69	69	70	70	70	70	71	71	72	72	71	71	70	70	70	70	70	70	70	70
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	188	189	189	180	187	188	187	188	188	190	190	191	191	191	188	188	188	188	188	188	188	188	188	187
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	176	175	175	174	177	174	174	174	174	176	176	177	178	178	176	174	172	172	172	172	172	172	172	175
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	188	189	189	189	187	188	189	188	190	190	192	192	192	188	189	189	189	189	189	189	189	189	189	188
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	177	177	177	175	174	174	176	176	176	178	178	178	178	179	177	175	174	174	174	174	174	174	174	176
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.05	.05	.04	.04	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8		500																						
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20		496																						
							482																						

DATE 11-14-22

SIGNATURE

Mid Shift

Days Shift

Notes

Date: NOV 15 2022

CGTG HOURLY READING LOG

(MST) / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				✓	✓	✓	✓	✓	✓	B	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				✓	✓	✓	✓	✓	✓	u	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	108	108	110	108	110	110	s	108	112	113	107	110	109	107	113	113	110	111	108	110	108	108	110	110
4	Instrument Temperature	TI-001	deg C		20	50	18	18	18	18	18	18	y	16	16	18	18	19	18	18	18	18	18	18	18	18	18		18	18
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	w	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	102	100	103	106	102	101	i	106	103	108	111	112	110	103	101	99	104	107	108	111	102	104	102	110
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	t	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60	60	60	60	60	60	h	60	60	60	60	60	60	60	60	61	61	61	60	60	60	63	60	60
10	Coolant Return Differential from	FI-002	In WC		37	50	35	35	35	35	35	55		36	36	36	36	36	36	36	36	36	36	36	35	35	35	55	35	35
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	B	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
13	Combustible Gas Detector Monitor		% LEL	0%	0%	20%							o																	
15	WECC Log		Operational?										i																	
16	Operation of PSS/ on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	l	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	e	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max							r																	
	(18–20 found on Air Diagram page)												S																	
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	|	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	|	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20								|																	
21	Acknowledge Alarms Hourly		v				✓	✓	✓	✓	✓	✓	|	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)												|																
22	Generator Current		Amps			1200	1115	1116	1114	1116	1115	1116	|	1095	1097	1086	1085	1086	1079	1080	1074	1079	1083	1097	1099	1092	1127	1126	1127	1128
23	Mw Output		MW			27	26.5	26.6	26.5	26.5	26.5	26.5	|	26.1	26.0	25.9	25.7	25.8	25.6	26.6	25.5	25.5	25.7	26.0	26.0	26.0	26.6	26.6	26.6	26.6
24	80% Base Load Minimum		MW				21.8	21.8	21.8	21.8	21.8	21.8	|	21.3	21.2	21.2	21.0	21.0	20.9	20.9	20.9	20.9	21.0	21.2	21.2	21.2	21.6	21.6	21.6	21.6
25	Running Hours (unit overview)						11676	11677	11678	11679	11680	11681	|	11682	11683	11684	11685	11686	11687	11688	11689	11690	11691	11692	11693	11694	11695	11696	11697	11698
26	Ambient Temperature	T1 inlet					25	25	25	25	24	24	|	30.4	31.3	32.2	34.0	33.1	34.7	35.3	34.7	34.1	33.0	31.6	30	30	29	26	26	26
	(27–28 found on Gas Fuel System page)												|																
27	Waste Oil Tank	LI-120	%			70%	63	63	63	63	63	63	|	64	64	63	63	63	63	63	64	64	64	64	64	64	64	64	64	64
28	Total Fuel Flow		Mscf/h				232	232	232	233	233	233	|	230	229	228	227	229	227	228	225	226	227	229	230	230	233	233	235	235

Date: NOV 15 2022 Signature:

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%							B																	
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	U	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	S	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	½	½	½	½	½	½	Y	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
Oil Day Tank Level	LI-1562	GAL	10		FULL	12	12	12	12	12	12		11	11	11	11	11	11	11	10	10	10	10	10	10	10	10	10	10
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	W	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	I	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	T	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	H	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	95	95	95	95	95	95	B	94	94	94	95	95	95	95	95	95	95	95	95	95	95	95	95	95
Stage Disch. Press	PI-2101	psig		238	285	272	272	272	272	272	272	O	271	271	271	273	273	273	272	272	272	272	272	272	272	272	272	272	272
2nd Stage Inlet Press	PI-2200	psig		267	285	267	267	267	267	267	267	I	266	266	266	268	268	268	267	267	267	267	266	266	266	266	266	266	266
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	L	507	507	507	506	506	506	506	506	506	506	506	506	507	507	507	506	507
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	E	500	500	500	499	499	500	500	500	500	500	500	600	500	600	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	67	57	67	R	57	57	57	57	57	57	57	57	57	57	57	57	67	57	67	67	67
Lube Oil Temp	TE-1584	deg		150	170	169	169	169	169	169	169	S	169	169	169	170	170	172	170	170	170	169	168	168	168	168	168	168	168
Final Discharge Temp	TE-2120	deg		110	150	68 70	70	70	70	70	70	T	70	370	370	72	72	74	72	72	72	70	70	70	70	70	70	70	70
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	189	187	187	187	187	187		187	188	188	188	186	188	186	186	185	184	183	182	182	182	182	182	183
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	175	175	175	175	175	175		174	175	176	176	175	176	175	174	173	172	172	172	172	172	172	172	172
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	188	188	188	188	188	188		187	188	188	188	186	188	186	186	185	184	183	182	182	182	182	182	183
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	176	176	176	176	176	176		176	177	177	177	176	177	176	174	174	172	172	172	172	172	172	172	172
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04		.04	.04	.04	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06		.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																								

DATE	NOV 15 2022
SIGNATURE	
Mid Shift	
Days Shift	

Notes

CGTG HOURLY READING LOG

Date: NOV 16 2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D.	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓				✓	✓	✓	✓	1	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				✓	✓	✓	✓	✓	✓	✓	✓	B	B	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	110	108	108	110	108	11	113	110	V	U	112	113	110	113				112	118	110	108	110	110	108
4	Instrument Temperature	TI-001	deg C		20	50	16	16	16	16	16	16	13	13	S	S	15	16	17	18				18	18	18	18	13	18	18
5	Fin Fan Cooler		Units	Low	Norm	Max										Y														
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	[illegible]		19	19	19	19				19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	99	101	102	99	104	101	100	103		W	107	100	103	110				103	105	101	102	100	112	102
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	3/3	3/3	W	i	3/3	2/3	3/3	2/3				2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60	60	60	60	60	60	60	60	i	+	60	60	61	62				62	60	60	60	60	60	60
10	Coolant Return Differential from	FI-002	In WC		37	50	35	35	35	35	36	35	35	35	+	H	35	35	36	36				36	35	35	35	35	35	35
11	Control Room		Units	Low	Norm	Max									H															
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70		L	70	70	70	70				70	70	70	70	70	70	70
13	Combustible Gas Detector Monitor		% LEL	0%	0%	20%									L	O														
15	WECC Log		Operational?												O	+														
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	+	O	Y	Y	Y	Y				Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	O		Y	Y	Y	Y				Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	7	7			7	7	7	7				7	7	7	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	5	0	0			0	0	0	0				0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		v				✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1200	1128	1129	1129	1128	1129	1127	1134	1147			1110	1109	1102	1099				1100	1101	1099	1100	1105	1101	1104
23	Mw Output		MW			27	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7			25.9	25.8	25.7	26.6				26.2	26.3	26.3	26.3	26.3	26.3	26.3
24	80% Base Load Minimum		MW				21.7	21.7	21.7	21.7	21.8	21.8	21.8	21.8			21.1	21.0	20.9	20.9				21.4	21.5	21.6	21.5	21.6	21.6	21.6
25	Running Hours (unit overview)						11699	11700	11701	4702	11703	11704	11728	11729			11732	11733	11734	11735				11736	11737	11738	11739	1172	11741	11742
26	Ambient Temperature	T1 inlet					26	26	26	26	24	24	24-1	24.8			32.2	33.1	35.2	34.9				29.1	28	28	28	26	26	26
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	63	63	63	63	63	63	63	63			62	62	62	62				66	66	66	66	65	66	66
28	Total Fuel Flow		Mscf/h				235	235	236	235	235	234	234	234			229	228	229	226				231	231	232	232	232	233	232

Date: NOV 16 2022 Signature: [signature]

cgtg unit temp

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B			B	B	B	B				B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E			E	E	E	E				E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	½	½	½	½	½	½	½	½			½	½	½	½				½	½	½	½	½	½	½
Oil Day Tank Level	LI-1562	GAL	10		FULL	10	10	10	10	10	10	54	54			54	54	54	54				53	53	53	53	53	55	53
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F			F	F	F	F				F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E			E	E	E	E				E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E			E	E	E	E				E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B			B	B	B	B				B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	95	96	96	95	95	95	94	94			95	95	95	95				94	94	94	94	94	94	94
Stage Disch. Press	PI-2101	psig		238	285	272	272	272	272	272	272	270	270			272	273	273	273				272	272	272	272	272	272	272
2nd Stage Inlet Press	PI-2200	psig		267	285	267	267	267	267	267	267	265	265			267	267	268	268				267	267	267	267	267	267	267
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	507	507			506	506	507	507				506	506	506	506	506	506	506
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	499	499			499	499	500	500				500	500	500	506	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57	57	56	56			57	57	57	58				56	56	56	56	56	56	56
Lube Oil Temp	TE-1584	deg		150	170	169	169	169	169	169	169	169	169			169	169	169	170				169	169	169	169	169	169	169
Final Discharge Temp	TE-2120	deg		110	150	70	70	70	70	70	70	69	69			70	70	72	72				70	70	70	70	70	70	70
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	186	186	186	186	186	186	186	187			187	188	188	188				189	189	189	189	189	189	189
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	174	174	174	174	174	174	173	173			173	174	175	175				176	176	176	176	176	176	176
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	187	187	187	187	187	187	186	187			187	188	188	188				190	190	190	190	190	190	190
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	176	176	176	176	176	176	174	175			174	174	176	176				177	177	177	177	177	177	177
Motor Frame Vibration	VT-1015	IPS			0.15	.05	.05	.09	.05	.05	.05	.05	.05			.05	.05	.05	.05				.05	.05	.05	.05	.05	.05	.05
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06			.06	.06	.06	.06				.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																								

DATE	NOV 16 2022
SIGNATURE	
Mid Shift	
Days Shift	

BUSY With large & Loto For TA-16. J. Sparks

1500 hrs unit tripped

Notes

CGTG HOURLY READING LOG

Date: NOV 17 2022

(MST) / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	ID	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	108	108	110	108	110	103	113	112	109	112	106	110	113	108	112		110	113	118	118	118	108	110	108
4	Instrument Temperature	TI-001	deg C		20	50	16	16	16	16	16	17	14	14	16	17	17	18	18	19	20		19	19	18	18	18	17	18	18
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19		19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	102	110	100	99	102	101	106	101	104	108	100	103	107	101	106		104	108	102	111	100	107	101	103
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3		2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60	60	60	60	60	61	60	60	60	61	61	61	61	62	62		62	62	60	60	60	61	60	60
10	Coolant Return Differential from	FI-002	In WC		37	50	35	35	35	35	35	35	35	35	36	36	36	36	36	36	36		36	36	35	36	35	35	35	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70		70	70	70	70	70	70	70	70
13	Combustible Gas Detector Monitor		% LEL	0%	0%	20%																								
15	WECC Log		Operational?																											
16	Operation of PSS/ on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y		Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y		Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7		7	7	7	7	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1200	1104	1106	1102	1105	1104	1109	1108	1111	1103	1099	1072	1071	1062	1061	1062		1074	1077	1076	1093	1109	1110	1110	1111
23	Mw Output		MW			27	26.4	26.4	26.4	26.4	26.3	26.3	26.2	26.1	26.0	25.9	25.5	25.5	25.2	25.2	25.1		25.3	25.4	25.4	25.7	26.1	26.1	26.1	26.1
24	80% Base Load Minimum		MW				21.8	21.8	21.8	21.8	21.8	21.8	21.6	21.5	21.3	21.2	20.9	20.8	20.6	20.6	20.5		20.8	20.9	20.9	21.2	21.6	21.6	21.6	21.6
25	Running Hours (unit overview)						11743	11744	11745	11746	11747	11748	11749	11750	11751	11752	11753	11754	11755	11756	11757		11759	11760	11761	11762	11763	11764	11765	11766
26	Ambient Temperature	TI inlet					24	24	24	24	22	22	26.3	28.0	29.8	30.9	34.3	35.6	37.9	37.6	38.8		35.2	34.4	33	31	30	30	27	27
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	66	66	66	66	66	66	66	66	66	65	64	64	64	64	64		65	65	66	66	66	66	66	66
28	Total Fuel Flow		Mscf/h				232	232	232	232	232	230	230	230	230	229	227	225	222	223	225		226	226	226	227	229	229	229	229

Date: NOV 17 2022 Signature: A Wan

Went to phase 1 physical.
A Wan

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B		B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E		E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½		½	½	½	½	½	½	½	½
Oil Day Tank Level	LI-1562	GAL	10		FULL	53	53	53	53	53	53	48	48	48	48	48	48	48	48	48		47	47	47	47	47	47	47	47
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F		F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E		E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E		E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B		B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	95	95	95	95	95	95	95	95	94	94	95	95	95	96	96		95	95	95	95	95	96	96	96
Stage Disch. Press	PI-2101	psig		238	285	273	273	273	273	273	273	272	272	271	271	273	273	273	275	276		275	275	275	275	275	276	276	276
2nd Stage Inlet Press	PI-2200	psig		267	285	269	269	269	269	269	269	268	268	266	266	268	268	268	271	271		270	270	270	270	270	269	269	269
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	507	507	506	506	506	506	506	507	507		506	506	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	500	499	499	499	500	500	500	500		500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57	57	57	57	57	57	57	57	57	57	57		57	57	57	57	57	57	57	57
Lube Oil Temp	TE-1584	deg		150	170	169	169	169	169	169	169	168	168	169	169	170	170	170	170	170		170	170	170	170	170	169	169	169
Final Discharge Temp	TE-2120	deg		110	150	71	71	71	71	71	71	70	70	69	69	72	72	72	76	76		74	73	73	73	73	70	70	70
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	187	187	187	187	187	187	186	186	188	188	189	188	189	190	190		189	187	187	187	187	187	187	187
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	174	174	174	174	174	179	173	173	175	176	176	177	178	178	180		176	175	175	176	176	176	176	176
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	187	187	187	187	187	185	186	186	188	188	187	188	189	190	190		188	187	187	187	187	187	187	187
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	175	176	175	174	174	174	174	174	176	177	176	178	179	180	181		178	175	175	175	175	175	175	175
Motor Frame Vibration	VT-1015	IPS			0.15	.07	.07	.07	.07	.07	.07	.05	.05	.06	.06	.06	.06	.06	.05	.05		.05	.05	.05	.05	.05	.05	.05	.05
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06		.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																								

Went to Phase I physical
A Wash

DATE	NOV 17 2022
SIGNATURE	
Mid Shift	
Days Shift	A Wash

Notes

Date: NOV 18 2022

CGTG HOURLY READING LOG

(MS) / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	108	110	110	108	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	114	106	108	106	110
4	Instrument Temperature	TI-001	deg C		20	50	18	18	18	18	18	18	12	12	12	13	13	13	14	14	13	13	13	13	12	12	12	12	11	11
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	104	108	100				104	105	100	95	109	110	104	110	104	106	104	106	104	110	112	103	110	109
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60	60	60	60	60	60	63	63	63	63	63	63	60	63	63	63	63	63	62	62	61	61	60	62
10	Coolant Return Differential from	FI-002	In WC		37	50	35	35	35	35	35	35	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69
13	Combustible Gas Detector Monitor		% LEL	0%	0%	20%																								
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	6	0	6	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1200	1111	1114	1112	1107	1102	1103	1105	1106	1105	1105	1101	1107	1110	1109	1107	1112	1105	1106	1105	1105	1097	1097	1093	1090
23	Mw Output		MW			27	26.1	26.1	26.1	26.1	25.9	25.9	25.9	25.9	25.9	25.9	25.9	26.0	26.0	26.1	26.1	26.1	26.0	26.0	26.0	26.0	26.0	25.9	25.8	25.9
24	80% Base Load Minimum		MW				21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8
25	Running Hours (unit overview)						11767	11768	11769	11770	11771	11772	11773	11774	11775	11776	11777	11778	11779	11780	11781	11782	11783	11784	11785	11786	11787	11788	11789	11790
26	Ambient Temperature	T1 Inlet					28	28	25	23	22	22	21	21	20	20	21	21	22	23	23	23	22	22	21	21	21	20	19	20
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-320	%			70%	66	66	68	66	66	66	66	66	66	66	66	65	65	65	65	65	65	65	68	66	67	66	67	67
28	Total Fuel Flow		Mscf/h				229	230	230	228	227	227	227	227	228	228	228	227	229	229	229	230	229	228	228	228	228	227	226	227

Date: NOV 18 2022 Signature:

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
Oil Day Tank Level	LI-1562	GAL	10		FULL	47	47	47	47	47	47	46	46	46	46	46	46	46	46	45	45	45	44	45	45	45	45	45	44
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	95	95	95	95	96	96	96	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
Stage Disch. Press	PI-2101	psig		238	285	274	274	274	274	275	275	274	274	275	275	274	274	274	274	274	274	274	274	274	273	273	274	274	274
2nd Stage Inlet Press	PI-2200	psig		267	285	269	269	269	272	272	274	269	269	269	269	269	269	269	269	269	269	269	269	264	264	268	264	270	264
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	501	501	507	507	507	501	507	507	507	507	507	507	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	500	500	500	500	500	506	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	56	56	56
Lube Oil Temp	TE-1584	deg		150	170	169	169	169	169	169	169	168	166	168	168	167	167	168	168	168	168	168	168	168	168	169	169	169	169
Final Discharge Temp	TE-2120	deg		110	150	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	64	70
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	186	186	186	186	186	186	186	186	186	186	185	185	186	186	186	186	187	187	186	187	187	186	186	186
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	174	174	174	174	174	174	174	174	174	174	173	173	174	174	174	174	174	174	174	173	172	173	172	171
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	186	186	186	186	186	186	185	185	185	185	184	184	185	185	186	186	186	186	186	186	187	186	186	186
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	175	175	175	175	175	175	175	175	175	175	175	175	175	175	176	176	176	176	175	175	174	174	174	173
Motor Frame Vibration	VT-1015	IPS			0.15	.05	.06	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.06	.06	.06	.06	.06	.06	.06	.06	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																500								500					
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8											496								496					
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20											482								482					

DATE	NOV 18 2022
SIGNATURE	
Mid Shift	
Days Shift	

Notes

Saturday

CGTG HOURLY READING LOG

Date: 11-19-22

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	106	110	110	110	112	110	110	110	110	110	110	110	110	110	110	108	110	110	106	108	108	114	114	106
4	Instrument Temperature	TI-001	deg C		20	50	11	11	11	10	10	10	10	11	14	15	16	18	19	19	19	19	18	18	18	16	15	15	14	13
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	110	112	111	98	108	105	104	100	100	100	105	110	100	110	103	110	109	106	98	109	104	95	110	111
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	63	63	63	63	63	63	63	63	63	63	63	63	63	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	36	36	32	36	36	36	35	36	36	36	36	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	69	69	69	69	69	69	69	69	69	69	69	69	70	71	71	71	69	69	69	69	69	69	69	69
13	Combustible Gas Detector Monitor		% LEL	0%	0%	20%																								
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	7	7	7	7	9	7	7	7	7	7	7	7	7	7	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1200	1091	1091	1090	1083	1087	1090	1096	1097	1096	1097	1070	1069	1059	1054	1061	1061	1095	1096	1103	1106	1112	1115	1114	1114
23	Mw Output		MW			27	25.9	25.8	25.9	25.7	25.7	25.8	26.0	26.0	26.0	26.0	25.4	25.3	25.1	25.0	25.1	25.1	25.8	25.8	26.1	26.2	26.3	26.4	26.4	26.3
24	80% Base Load Minimum		MW				21.8	21.8	21.9	21.8	21.8	21.8	21.8	21.8	21.4	21.5	20.9	20.8	20.5	20.6	20.6	20.6	21.1	21.2	21.4	21.5	21.6	21.7	21.8	21.8
25	Running Hours (unit overview)						11791	11792	11793	11794	11795	11796	11797	11798	11799	11800	11801	11802	11803	11804	11805	11806	11807	11808	11809	11810	11811	11812	11813	11814
26	Ambient Temperature	T1 Inlet					20	19	19	18	18	18	21	21	29	28	35	36	39	39	38	38	32	31	29	29	27	26	24	23
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	67	67	68	67	68	68	68	68	68	68	67	67	67	67	68	68	68	68	68	68	68	68	68	68
28	Total Fuel Flow		Mscf/h				227	227	226	226	226	226	228	228	229	229	224	225	222	221	223	223	228	229	230	230	231	231	232	231

Date: 11-19-22 Signature: mid shift

CGTG TURBINE Saturday

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	44	44	44	44	44	44	44	44	44	44	44	44	43	43	43	43	43	42	42	42	42	42	41	41
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	95	95	95	95	95	95	95	95	95	95	95	95	96	96	96	96	95	96	95	95	95	95	95	95
Stage Disch. Press	PI-2101	psig		238	285	274	273	274	274	274	274	272	272	270	270	273	273	276	276	277	277	274	274	274	273	273	273	273	274
2nd Stage Inlet Press	PI-2200	psig		267	285	264	264	264	264	270	270	267	267	266	266	269	269	271	271	271	271	271	269	269	269	268	268	268	269
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	500	499	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	499	500	499	500
Lube Oil Pressure	PI-1572	psig	40	60		56	56	56	56	56	56	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	56
Lube Oil Temp	TE-1584	deg		150	170	169	167	168	169	168	169	168	168	169	169	170	170	170	170	169	169	169	169	169	169	169	169	169	169
Final Discharge Temp	TE-2120	deg		110	150	70	67	94	70	70	70	70	70	70	70	73	73	76	76	75	75	75	71	70	70	70	70	70	70
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	186	186	186	187	187	187	187	187	188	188	190	190	190	190	190	190	187	187	185	185	185	185	186	186
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	171	171	172	172	170	172	174	174	174	174	176	176	178	178	178	178	175	175	173	173	173	173	173	173
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	186	186	186	186	187	187	187	187	188	188	189	189	189	189	189	189	186	186	185	184	184	184	185	185
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	173	173	173	174	175	175	175	175	175	175	177	177	179	179	179	179	176	176	174	174	173	173	173	173
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.								500									500								500				
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8			496									496								496				
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20			482									482								482				

11-19-2022

DATE 11-19-2022 CJS

SIGNATURE 11.19.22

Mid Shift

Days Shift

Notes

Sunday

Utilities and Institutional Facilities

Date: 11-20-2022

CGTG HOURLY READING LOG

MST / MDT (circle one)
Time Gas Introduced (Turbine Rolling):
Time of Turbine Online (Brkr Closed):
Time Turbine Offline (Brkr Open):
Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	110	112	106	114	114	105	110	110	110	108	110	110	110	110	110	110	110	110	108	106	110	108	108	112
4	Instrument Temperature	TI-001	deg C		20	50	10	12	11	11	11	11	11	11	13	17	19	20	20	20	21	21	20	19	18	16	16	16	16	16
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	95	104	95	112	105	101	106	102	100	100	100	116	110	100	100	110	104	108	110	104	111	101	110	108
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	63	63	63	63	63	63	63	63	63	63	63	63	62	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	36	35	36	35	36	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	69	69	69	69	69	69	69	69	69	69	70	71	72	73	73	73	73	73	72	72	71	69	69	69
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1107	1107	1107	1107	1108	1102	1106	1110	1076	1078	1055	1060	1042	1038	1036	1039	1067	1081	1094	1102	1103	1100	1092	1093
23	Mw Output		MW			27	26.2	26.2	26.2	26.3	26.2	26.1	26.1	26.2	25.5	25.5	25.0	25.0	24.1	24.6	24.6	24.6	25.2	25.5	25.8	26.0	26.0	26.0	26.6	25.9
24	80% Base Load Minimum		MW				21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.1	21.1	20.5	20.5	20.2	20.2	20.2	20.2	20.6	20.8	21.1	21.2	21.2	21.2	21.2	21.1
25	Running Hours (unit overview)						11815	11816	11817	11818	11819	11820	11821	11822	11823	11824	11825	11826	11827	11828	11829	11830	11831	11832	11833	11834	11835	11836	11837	11838
26	Ambient Temperature	T1 inlet					22	22	22	22	22	22	22	23	32	33	40	40	43	43	43	42	38	36	32	31	30	30	31	32
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	68	68	68	68	68	68	68	68	68	68	66	66	66	66	67	67	68	68	68	68	68	68	68	68
28	Total Fuel Flow		Mscf/h				230	230	231	230	230	230	230	231	226	226	222	222	219	219	219	219	224	226	228	229	230	229	229	229

Date: 11-20-2022 Signature:

CGTG TURBINE Sunday

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	41	41	41	41	41	41	41	41	41	41	41	41	40	40	40	40	40	40	40	40	40	40	40	39
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	95	95	95	95	95	95	95	95	95	95	96	96	96	96	96	96	95	95	96	96	96	96	96	96
Stage Disch. Press	PI-2101	psig		238	285	274	274	273	274	274	274	272	272	273	273	275	275	276	276	276	276	275	275	277	276	276	277	277	277
2nd Stage Inlet Press	PI-2200	psig		267	285	264	264	264	264	264	269	267	267	268	268	270	270	271	271	271	271	270	270	272	271	271	272	272	273
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	500	500	499	500	500	499	500	500	500	500	500	500	506	506	500	500	500	500	499	499	499	499	500	500
Lube Oil Pressure	PI-1572	psig	40	60		56	56	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	56	57	57	57	57	57
Lube Oil Temp	TE-1584	deg		150	170	169	169	169	168	168	167	168	168	170	170	170	170	170	170	169	169	170	170	170	169	169	169	169	169
Final Discharge Temp	TE-2120	deg		110	150	69	70	70	70	69	69	70	70	72	72	72	76	80	80	80	80	75	75	72	70	70	70	71	71
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	185	185	185	186	186	186	187	187	189	189	192	192	192	192	192	192	189	189	187	186	186	185	186	186
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	173	173	173	173	173	174	174	174	174	174	179	179	181	181	181	181	177	177	174	172	172	172	172	172
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	185	185	186	186	186	186	187	187	189	189	191	191	191	191	191	191	188	188	187	186	185	185	186	186
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	175	175	175	175	174	174	176	176	175	175	180	180	183	183	183	183	179	179	176	174	174	173	174	175
Motor Frame Vibration	VT-1015	IPS			0.15	.06	.05	.04	.05	.05	.05	.06	.06	.06	.06	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.06	.06	.06	.06
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.									500															500					
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8				494															496					
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20				482															482					

DATE	11-20-2022
SIGNATURE	
Mid Shift	
Days Shift	

Notes

Monday

Utilities and Institutional Facilities

Date: 11-21-2022

CGTG HOURLY READING LOG

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	108	108	108	106	106	108	108	110	110	110	110	108	110	110	108	108	110	110	110	108	109	110	109	110
4	Instrument Temperature	TI-001	deg C		20	50	16	15	15	15	15	15	15	15	19	20	21	22	22	22	23	23	22	22	21	20	20	20	17	17
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	106	104	108	100	105	103	110	110	100	104	100	110	111	110	108	110	105	106	103	106	109	103	102	107
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
10	Coolant Return Differential from	FI-002	In WC		37	50	36	35	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	69	69	69	69	69	69	69	69	71	72	74	75	75	75	75	75	75	75	74	74	74	74	74	74
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	6	6	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1106	1115	1112	1098	1116	1117	1100	1092	1074	1062	1038	1036	1025	1020	1015	1022	1058	1056	1059	1063	1069	1070	1075	1096
23	Mw Output		MW			27	26.3	26.3	26.2	25.9	26.3	26.4	26.0	25.8	25.4	25.1	24.6	24.5	24.2	24.1	24.1	24.1	25.0	25.0	25.1	25.1	25.3	25.3	25.4	26.6
24	80% Base Load Minimum		MW				21.3	21.4	21.4	21.1	21.4	21.5	21.2	21.0	20.7	20.5	20.1	20.0	19.8	19.8	19.7	19.8	20.1	20.4	20.4	20.4	20.6	20.6	20.8	21.1
25	Running Hours (unit overview)						11839	11840	11841	11842	11843	11844	11845	11846	11847	11848	11849	11850	11851	11852	11853	11854	11855	11856	11857	11858	11859	11860	11861	11862
26	Ambient Temperature	T1 inlet					29	28	29	32	28	27	31	33	37	40	45	46	48	49	50	49	43	41	40	40	39	38	36	32
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	68	67	68	67	68	68	67	67	68	68	67	67	67	67	68	68	69	69	69	69	69	69	69	69
28	Total Fuel Flow		Mscf/h				231	232	231	230	232	232	230	228	225	223	219	218	217	216	215	216	222	221	223	223	224	227	226	229

Date: 11-21-2022 Signature:

CGTG TURBINE Monthly

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	F	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	39	39	39	39	39	39	39	39	39	39	39	39	39	38	38	38	38	38	38	38	37	37	37	37
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	96	96	96	96	96	96	97	97	97	97	97	97	98	98	98	98	97	97	97	97	97	97	96	96
Stage Disch. Press	PI-2101	psig		238	285	276	276	276	277	276	279	276	276	277	277	278	278	282	282	283	283	279	279	279	279	279	278	277	276
2nd Stage Inlet Press	PI-2200	psig		267	285	271	272	271	270	271	271	271	271	272	272	273	273	277	277	278	278	274	274	274	274	273	272	272	271
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	500	500	499	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57	57	57	57	57	57	57	57	58	58	58	58	57	57	57	57	57	57	57	57
Lube Oil Temp	TE-1584	deg		150	170	169	169	169	169	169	169	169	169	169	169	169	169	168	168	168	168	170	170	170	170	170	170	169	169
Final Discharge Temp	TE-2120	deg		110	150	69	69	70	70	70	70	71	71	71	71	82	82	86	86	86	86	78	78	72	76	77	75	72	70
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	185	185	185	185	185	185	186	186	190	190	195	195	196	196	195	195	190	190	190	190	189	188	187	186
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	172	171	171	171	172	172	173	173	177	177	183	183	185	185	185	185	180	180	178	178	177	175	174	173
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	185	185	185	185	185	185	186	186	190	190	194	194	195	195	195	195	190	190	189	188	187	187	186	186
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	173	173	173	173	173	173	174	174	178	178	184	184	186	186	185	187	181	181	180	180	179	176	175	174
Motor Frame Vibration	VT-1015	IPS			0.15	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.01	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.								500																					
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8			496																					
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20			492																					

DATE 11-2-2022

SIGNATURE

Mid Shift

Days Shift

Notes

Utilities and Institutional Facilities

CGTG HOURLY READING LOG

Date: 11-22-2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	110	109	109	110	110	108	106	108	110	110	110	110	110	110	110	110	110	110	110	110	108	109	110	110
4	Instrument Temperature	TI-001	deg C		20	50	17	17	17	16	16	15	15	15	18	20	21	22	22	22	22	23	21	20	20	19	19	19	19	19
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	104	103	107	110	107	106	110	106	110	100	100	110	100	110	101	110	110	110	110	103	109	110	102	107
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
10	Coolant Return Differential from	FI-007	In WC		37	50	36	36	36	36	36	30	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	74	74	74	73	71	70	69	69	71	72	74	74	75	75	75	75	75	75	X	75	75	75	75	75
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	6	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	6	6	6	6	6	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A53GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1097	1099	1104	1109	1110	1111	1093	1087	1058	1062	1034	1026	1016	1013	1019	1025	1058	1055	1054	1050	1055	1056	1060	1072
23	Mw Output		MW			27	26.0	26.0	26.0	26.0	26.1	26.1	25.8	25.7	25.0	25.0	24.6	24.4	24.1	24.1	24.2	24.3	25.0	24.9	24.9	25.0	25.1	25.1	25.3	25.5
24	80% Base Load Minimum		MW				21	21.1	21.3	21.3	21.3	21.3	21.0	20.9	20.3	20.4	20.1	20.0	19.7	19.8	19.8	19.9	20.4	20.4	20.4	20.4	20.5	20.5	20.6	20.8
25	Running Hours (unit overview)						11863	11864	11865	11866	11867	11868	11869	11870	11871	11872	11873	11874	11875	11876	11877	11878	11879	11880	11881	11882	11883	11884	11885	11886
26	Ambient Temperature	T1 inlet					32	32	31	31	30	29	33	35	41	42	45	46	49	49	48	47	41	41	41	41	40	40	39	37
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	69	69	69	69	69	69	68	69	69	69	68	68	68	68	69	69	69	69	69	69	69	70	69	69
28	Total Fuel Flow		Mscf/h				229	230	231	230	230	231	229	228	222	223	219	219	216	215	217	218	222	222	222	222	223	223	223	225

Date: 11-22-2022 Signature: Bob Alway (MIDS)

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	37	36	36	36	36	36	36	36	36	36	36	36	35	35	35	35	35	35	35	35	35	35	35	35
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	96	96	96	96	96	96	96	96	97	96	97	97	98	98	98	98	97	97	97	97	97	97	97	97
Stage Disch. Press	PI-2101	psig		238	285	276	276	276	276	276	276	277	277	277	277	280	280	281	281	282	282	280	280	280	280	280	279	279	278
2nd Stage Inlet Press	PI-2200	psig		267	285	271	271	271	271	271	271	272	272	272	272	275	275	277	277	277	277	275	275	275	275	275	274	274	273
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57	57	57	57	57	57	57	57	58	58	58	58	57	57	57	57	57	57	57	57
Lube Oil Temp	TE-1584	deg		150	170	169	169	169	169	169	169	169	169	170	170	169	169	168	168	168	168	168	168	169	169	169	170	170	170
Final Discharge Temp	TE-2120	deg		110	150	70	70	70	70	70	70	72	72	78	78	83	83	87	87	87	87	87	87	83	78	76	78	77	76
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	186	186	186	186	186	186	187	187	191	191	194	194	195	195	195	195	191	191	190	190	190	190	189	188
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	173	171	173	172	172	172	174	174	179	179	184	184	185	185	186	186	180	180	179	179	179	179	178	176
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	186	186	186	186	186	186	187	187	191	191	193	193	194	194	194	194	191	191	190	190	190	189	189	188
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	174	174	174	174	174	174	176	176	181	181	185	185	187	187	187	187	182	182	181	180	180	180	178	177
Motor Frame Vibration	VT-1015	IPS			0.15	.05	.07	.05	.06	.06	.06	.06	.06	.06	.06	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.										500																			
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8					496																			
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20					481																			

DATE 11-22-2022

SIGNATURE

Mid Shift Bob A

Days Shift

Notes

Utilities and Institutional Facilities

Date: 11-23-2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

CGTG HOURLY READING LOG

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	116	109	110	109	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	109	110	109	110	110
4	Instrument Temperature	TI-001	deg C		20	50	18	18	17	17	17	16	16	16	18	20	22	22	22	22	22	22	21	21	21	20	19	18	18	18
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	103	100	107	109	101	107	110	107	105	110	108	109	110	109	108	110	106	110	102	104	103	102	107	105
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	75	74	73	73	73	72	69	69	70	72	74	75	75	75	75	75	75	75	75	74	74	75	74	73
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	6	6	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	6	0	0	0	0	0	6	6	6	0	6	0	0	0	6	0	0	0	6
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	AS3GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1074	1080	1093	1097	1097	1098	1084	1073	1096	1047	1037	1041	1029	1031	1017	1015	1038	1037	1038	1057	968	969	970	970
23	Mw Output		MW			27	25.5	25.6	25.8	25.9	25.9	25.9	25.6	25.5	24.8	24.8	24.5	24.6	24.3	24.3	24.1	24.1	24.6	24.6	24.6	24.6	22.9	22.9	22.9	22.9
24	80% Base Load Minimum		MW				20.8	21.0	21.2	21.2	21.2	21.3	21.0	20.9	20.3	20.3	20.1	20.2	20.1	20.1	19.9	19.9	20.3	20.3	20.3	20.7	20.4	21.1	21.1	21.2
25	Running Hours (unit overview)						11887	11888	11889	11890	11891	11892	11893	11894	11895	11896	11897	11898	11899	11900	11901	11902	11903	11904	11905	11906	11907	11908	11909	11910
26	Ambient Temperature	T1 inlet					35	33	31	31	31	30	32	34	41	41	44	43	45	45	47	46	42	42	41	37	34	33	32	32
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	69	69	69	69	69	69	70	69	70	70	69	68	68	69	69	70	70	70	70	70	70	70	69	69
28	Total Fuel Flow		Mscf/h				225	226	222	228	229	226	227	226	221	221	218	219	217	216	214	215	218	218	219	206	207	207	206	206

Date: 11-23-2022 Signature: Bob Avery (MIDS)

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	35	35	34	34	34	34	34	34	34	34	34	34	34	34	33	33	33	33	33	33	33	33	33	33
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	97	97	97	97	96	96	96	96	95	95	96	96	96	96	98	98	98	98	98	98	99	98	98	98
Stage Disch. Press	PI-2101	psig		238	285	278	278	277	277	276	276	276	276	275	275	276	276	276	276	282	282	281	281	281	280	283	283	283	283
2nd Stage Inlet Press	PI-2200	psig		267	285	273	273	272	272	271	271	271	271	270	270	270	270	270	270	277	277	276	276	276	275	278	278	277	277
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
Lube Oil Temp	TE-1584	deg		150	170	170	170	170	170	169	169	169	169	170	170	169	169	169	169	169	169	170	170	170	169	170	169	169	168
Final Discharge Temp	TE-2120	deg		110	150	76	74	71	71	70	70	71	71	80	80	82	82	83	83	84	84	81	81	79	77	74	73	72	71
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	186	187	186	186	186	186	187	187	193	193	195	195	194	194	193	193	192	192	191	189	188	188	187	187
2ndStage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	176	175	173	173	172	172	174	174	183	183	186	186	185	185	183	183	180	180	178	176	174	173	172	171
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	186	187	186	186	185	185	187	187	193	193	194	194	193	193	193	193	192	192	190	189	188	188	187	187
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	177	176	175	175	174	174	175	175	184	184	187	187	187	187	184	184	182	182	180	177	175	174	173	172
Motor Frame Vibration	VT-1015	IPS			0.15	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.04	.04	.05	.05	.05	.05	.05	.05	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.								500										500											
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8			496										497											
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20			482										484											

DATE 11-23-2022

SIGNATURE

Mid Shift Bob Lang

Days Shift

Notes

Date: 11-24-2022

(MST) / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

CGTG HOURLY READING LOG

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	110	109	110	110	109	110	100	103	108	110	110	106	110	106	108	107	110	109	108	107	110	113	108	113
4	Instrument Temperature	TI-001	deg C		20	50	18	17	16	16	16	15	13	15	14	17	17	18	18	18	18	18	17	17	17	17	17	16	16	16
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	18	18	18	18	18	18	18
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	107	109	102	101	99	106	102	107	112	100	105	104	107	106	101	111	103	101	100	104	108	106	104	101
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	62	62	62	61	61	61
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	73	73	73	73	71	69	69	69	69	69	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	970	962	969	974	975	975	973	971	1019	1017	1067	1057	1069	1086	1011	1014	1016	1004	1020	1014	1011	1013	959	969
23	Mw Output		MW			27	22.9	23.0	23.0	23.0	23.0	23.0	23.1	23.0	24.0	24.0	24.0	23.9	24.0	23.9	22.9	23.9	24.0	23.9	23.9	24.1	23.9	24.0	23.0	22.9
24	80% Base Load Minimum		MW				21.2	21.2	21.4	21.6	21.6	21.6	21.3	21.2	21.1	22.2	20.9	20.7	20.6	20.4	20.8	20.8	21.0	21.0	21.0	20.9	20.9	20.9	21.0	21.0
25	Running Hours (unit overview)						11911	11912	11913	11914	11915	11916	11917	11918	11919	11920	11921	11922	11923	11924	11925	11926	11927	11928	11929	11930	11931	11932	11933	11934
26	Ambient Temperature	T1 inlet					31	31	30	27	27	27	30.0	30.7	32.4	32.1	35.1	37.4	38.5	40.5	35.7	35.4	34.0	33.3	33.8	34.2	34.7	33.9	33.4	33.8
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	69	70	70	70	69	69	70	70	70	70	70	69	69	69	69	69	69	69	69	69	69	69	69	69
28	Total Fuel Flow		Mscf/h				206	206	205	205	205	205	207	207	214	214	211	214	214	214	214	215	215	217	214	214	216	216	208	207

Date: 11-24-2022 Signature: Bob Lang (MOS) A Wan

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	33	33	33	33	32	32	32	32	32	32	32	32	32	32	30	30	30	28	28	28	28	28	28	28
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	D	B	D	B	B	D	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	98	99	99	99	99	99	95	98	99	99	99	98	98	98	98	98	98	98	98	98	98	98	98	99
Stage Disch. Press	PI-2101	psig		238	285	283	283	283	283	282	280	281	281	280	281	281	280	280	280	281	280	280	280	281	281	281	281	281	282
2nd Stage Inlet Press	PI-2200	psig		267	285	277	277	277	277	277	277	277	277	276	275	276	275	275	275	275	276	276	276	275	276	275	276	276	276
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	506	506	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	500	499	499	499	499	499	499	499	499	500	500	500	500	500	500	500	499
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57	57	54	54	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
Lube Oil Temp	TE-1584	deg		150	170	169	169	169	169	169	169	169	169	168	168	168	168	168	169	169	169	169	169	169	169	169	169	169	169
Final Discharge Temp	TE-2120	deg		110	150	71	71	71	70	70	70	70	70	72	72	73	73	73	79	79	79	74	74	74	74	74	72	72	73
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	187	187	187	186	186	186	184	186	186	184	184	184	189	189	189	187	187	187	186	185	185	184	184	186
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	171	171	170	169	168	168	163	167	170	170	170	175	175	176	174	173	172	172	170	170	170	168	167	171
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	187	187	187	186	185	185	184	185	186	186	186	186	186	189	189	187	186	186	185	184	184	183	183	186
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	172	172	172	171	170	170	170	170	171	171	171	176	176	177	177	174	174	174	173	173	170	170	168	172
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.04	.04	.06	.04	.04	.04	.04	.06	.04	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.									500										500										
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8				496										496										
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20				485										484										

DATE	11-24-2022
SIGNATURE	
Mid Shift	Bob Avery
Days Shift	A Wan

Notes

Date: NOV 25 2022

CGTG HOURLY READING LOG

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	ID	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	112	113	103	108	112	110	106	110	101	108	110	109	107	106	105	110	100	103	107	104	110	110	113	117
4	Instrument Temperature	TI-001	deg C		20	50	16	16	16	16	16	16	18	18	18	18	20	20	20	20	20	20	19	19	19	19	18	18	17	17
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		18	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	101	107	100	104	103	107	109	105	104	104	108	110	107	107	101	109	103	101	104	108	100	103	106	101
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	3/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	61	62	62	62	62	62	62	62	63	63	63	63	63	63	63	63	63	63	62	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	34	36	36	34	34	34	34	34	33	36	34	34	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
13	Combustible Gas Detector Monitor		% LEL	0%	0%	20%																								
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20								√	√	√		√	√	√	√	√		√	√	√					
21	Acknowledge Alarms Hourly		v				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1200	966	969	967	970	964	963	960	966	962	960	961	962	959	966	967	964	969	968	966	962	964	958	970	959
23	Mw Output		MW			27	23.0	23.0	22.9	22.9	23.1	23.0	23.1	23.0	23.1	23.0	22.9	23.0	22.9	23.0	23.0	23.1	23.1	22.9	22.9	23.1	23.1	23.0	23.1	23.0
24	80% Base Load Minimum		MW				21.0	21.0	21.0	21.2	21.3	21.4	21.2	20.8	20.5	20.3	20.2	20.0	19.9	19.8	19.8	20.0	20.4	20.6	20.6	20.6	20.6	20.8	21.1	21.0
25	Running Hours (unit overview)						11935	11936	11937	11938	11939	11940	11941	11942	11943	11944	11945	11946	11947	11948	11949	11950	11951	11952	11953	11954	11955	11956	11957	11958
26	Ambient Temperature	T1 inlet					34.0	33.8	33.9	31.7	30.2	29.5	30.7	35.6	39.4	41.7	43.5	45.3	46.4	47.7	47.7	45.3	40.6	37.9	38.3	38.1	37.8	35.6	32.2	33.6
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	69	69	69	69	69	69	69	69	69	69	69	68	68	70	70	71	71	72	73	73	73	73	73	74
28	Total Fuel Flow		Mscf/h				207	208	208	207	208	208	208	207	201	206	207	206	206	207	205	206	201	206	208	205	205	205	207	205

Date: NOV 25 2022 Signature: A Wan

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	28	28	28	28	28	28	28	28	26	27	27	27	27	27	27	27	27	27	26	26	26	26	26	26
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	F	F	E	E	F	F	F	F	F	F	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	99	99	99	99	99	99	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98
Stage Disch. Press	PI-2101	psig		238	285	282	282	282	282	282	282	281	251	251	282	282	282	282	283	283	283	283	283	283	283	283	283	283	283
2nd Stage Inlet Press	PI-2200	psig		267	285	276	276	276	276	276	276	276	276	274	277	277	277	27	278	278	278	278	278	278	278	278	278	278	278
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	507	501	501	507	507	501	506	507	507	507	507	507	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	499	499	499	499	499	499	499	499	499	499	500	500	500	499	499	500	499	499	499	499	499	499	499	499
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	56	56	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
Lube Oil Temp	TE-1584	deg		150	170	169	169	169	168	169	169	170	170	170	169	169	169	169	169	169	168	169	169	169	169	169	168	168	168
Final Discharge Temp	TE-2120	deg		110	150	74	74	74	72	70	70	71	71	71	81	82	82	82	86	84	84	80	180	77	77	77	76	75	75
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	187	186	186	184	186	186	186	186	186	192	192	192	194	195	195	193	192	192	190	189	188	186	184	184
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	172	170	170	168	169	169	169	169	169	178	180	180	180	183	183	182	179	179	176	176	176	174	173	174
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	187	186	186	184	185	185	186	186	186	190	191	191	194	193	193	193	191	191	189	188	187	185	184	184
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	173	171	171	169	170	170	171	171	171	179	181	181	181	185	185	184	181	180	178	178	178	176	174	175
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.05	.05	.05	.05	.05	.05
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.07	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																								

DATE	NOV 2 5 2022
SIGNATURE	
Mid Shift	A Wall
Days Shift	

Notes

Utilities and Institutional Facilities

Date: NOV 26 2022

CGTG HOURLY READING LOG

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	110	113	112	108	110	113	105	109	103	109	104	110	108	105	110	103	107	104	110	108	111	108	107	112
4	Instrument Temperature	TI-001	deg C		20	50	17	17	16	16	16	16	19	19	19	20	21	21	21	21	21	21	21	20	20	20	19	18	18	17
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	103	108	100	107	104	98	102	109	110	100	109	107	98	101	110	98	105	104	108	106	101	104	105	100
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	36	36	36	36	34	36	36	36	36	30	30	37	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/ on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	6	6	7	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	957	1087	1013	1009	1009	1001	1013	1014	1015	1018	1011	1003	999	1003	1008	1011	1008	1007	999	969	966	967	960	962
23	Mw Output		MW			27	23.0	25.8	24.0	24.0	24.0	23.9	24.1	24.0	24.1	24.1	24.0	23.9	23.7	23.8	23.9	24.1	24.0	24.1	24.1	22.9	23.0	23.1	23.1	23.0
24	80% Base Load Minimum		MW				21.0	21.3	21.5	21.5	21.4	21.3	21.5	20.8	20.7	20.5	20.1	19.8	19.7	19.7	19.8	20.0	20.1	20.4	20.3	20.3	20.2	20.3	20.4	20.4
25	Running Hours (unit overview)						11959	11960	11961	11962	11963	11964	11965	11966	11967	11968	11969	11970	11971	11972	11973	11974	11975	11976	11977	11978	11979	11980	11981	11982
26	Ambient Temperature	T1 inlet					35.2	30.6	29.3	28.2	28.6	30.6	27.7	36.1	37.2	39.0	45.0	48.4	49.8	49.6	48.6	46.0	43.9	41.0	42.8	42.4	43.0	41.9	40.3	39.7
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	74	74	74	74	74	74	74	75	74	73	73	72	73	73	74	74	74	74	74	74	74	74	74	74
28	Total Fuel Flow		Mscf/h				222	228	215	214	213	213	213	214	214	214	214	215	212	213	214	214	213	213	207	206	207	207	207	206

Date: NOV 26 2022 Signature: A Wan

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	26	26	26	26	25	25	25	25	25	25	25	25	25	25	25	25	25	25	24	24	24	24	24	24
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	98	96	96	96	98	98	98	97	97	97	97	97	98	98	98	97	98	98	98	98	98	98	98	98
Stage Disch. Press	PI-2101	psig		238	285	283	277	277	277	280	281	280	280	276	281	281	281	282	282	282	282	282	282	284	284	284	284	284	284
2nd Stage Inlet Press	PI-2200	psig		267	285	278	271	271	271	274	274	274	275	273	276	276	276	278	278	278	277	277	277	279	279	279	279	279	279
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	506	507	507	507	506	506	507	507	507	507	507	507	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	499	499	499	499	499	499	499	499	499	499	499	499	499	499	499	500	499	499	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	56	56	56	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
Lube Oil Temp	TE-1584	deg		150	170	169	169	168	168	169	169	169	169	169	169	170	170	169	169	169	168	169	169	169	169	168	167	167	167
Final Discharge Temp	TE-2120	deg		110	150	76	77	76	76	72	69	69	74	74	80	83	83	88	88	88	85	82	82	80	80	78	77	76	74
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	186	185	184	184	186	186	186	186	187	192	193	193	195	198	198	193	192	192	191	191	189	188	186	184
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	176	171	170	170	170	170	170	175	175	180	183	183	186	186	186	184	182	182	179	178	177	176	176	175
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	186	184	183	184	185	185	185	187	187	190	192	192	193	193	193	192	191	191	191	191	190	189	187	186
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	176	173	172	172	172	172	172	176	176	182	184	184	188	188	187	185	183	183	181	180	178	177	176	175
Motor Frame Vibration	VT-1015	IPS			0.15	.05	.05	.05	.05	.05	.05	.05	.05	.05	.04	.04	.04	.04	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.04	.04	.04	.04	.04	.04	.06	.06	.04	.04	.04	.04	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																								

DATE	NOV 26 2022
SIGNATURE	
Mid Shift	A Wa
Days Shift	

Notes

Utilities and Institutional Facilities

992'18 97

Date: NOV 27 2022

CGTG HOURLY READING LOG

MST / MDT (circle one)
Time Gas Introduced (Turbine Rolling):
Time of Turbine Online (Brkr Closed):
Time Turbine Offline (Brkr Open):
Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	113	111	110	108	109	112	110	105	110	109	109	110	102	110	104	106	105	104	108	110	107	112	109	107
4	Instrument Temperature	TI-001	deg C		20	50	17	17	17	17	17	17	19	19	19	20	21	21	21	21	20	20	20	20	19	19	18	18	18	17
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PIC Temperature	TI 003	deg F	100	110	120	101	103	109	103	100	105	100	100	108	103	110	99	101	102	108	103	110	110	106	103	100	98	105	108
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
10	Coolant Return Differential from	FI-002	In WC		37	50	37	37	37	36	36	36	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	6	6	7	7	7	7	6	6	6	6	6	6	6	6	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on Hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1627	960	960	961	965	967	972	964	971	970	972	963	970	970	970	968	975	982	964	964	965	965	1074	1087	1086
23	Mw Output		MW			27	23.1	23.1	23.0	23.1	23.1	22.9	23.0	23.0	23.1	23.1	23.0	23.1	22.9	23.0	23.0	23.0	23.1	23.0	23.0	23.1	22.9	25.5	25.8	25.8
24	80% Base Load Minimum		MW				20.4	20.4	20.4	20.4	20.6	20.8	20.9	20.6	20.5	20.5	20.2	20.2	20.1	20.6	20.1	20.4	20.5	20.5	20.6	20.7	21.0	21.1	21.2	21.3
25	Running Hours (unit overview)						11982	11983	11984	11985	11986	11987	11988	11989	11990	11991	11992	11993	11994	11995	11997	11998	11999	11999	12000	12001	12002	12003	12004	12005
26	Ambient Temperature	T1 Inlet					40.1	40.5	40.3	40.0	36.8	35.8	34.5	37.9	38.8	39.7	43.3	43.5	45	45.7	44.6	40.8	39.2	38.8	38.0	37.2	33.8	32.7	31.5	30.7
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	74	74	74	74	74	74	74	74	74	73	73	73	73	74	74	74	74	74	74	74	74	74	74	74
28	Total Fuel Flow		Nscf/h				208	207	207	208	206	206	206	206	208	206	206	204	207	207	207	206	207	207	208	207	206	206	228	228

Date: NOV 27 2022 Signature: A Wan

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	24	24	24	24	23	23	23	23	23	23	23	23	22	22	22	21	21	21	20	20	20	20	20	20
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	98	98	98	98	99	99	99	99	98	98	98	99	99	99	98	98	98	98	98	98	98	98	98	98
Stage Disch. Press	PI-2101	psig		238	285	284	284	284	284	283	283	283	283	282	282	283	284	284	284	283	283	283	283	283	283	283	283	283	283
2nd Stage Inlet Press	PI-2200	psig		267	285	279	279	279	279	278	277	277	277	277	277	277	278	278	278	278	278	278	278	278	278	277	277	277	277
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	500	499	499	499	499	499	499	499	500	500	500	499	499	499	499	499	499
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
Lube Oil Temp	TE-1584	deg		150	170	167	167	167	167	168	168	168	168	170	169	176	170	170	170	168	169	169	169	170	170	169	169	169	169
Final Discharge Temp	TE-2120	deg		110	150	74	75	75	74	76	77	74	74	76	78	80	82	82	82	82	80	80	80	78	76	73	73	72	72
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	184	185	185	184	187	187	188	186	189	191	192	192	192	192	192	191	191	191	190	189	187	186	184	184
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	175	176	176	175	175	175	173	177	175	177	179	180	180	180	180	179	179	179	176	175	177	171	171	171
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	185	186	185	184	188	188	187	187	189	198	191	191	191	191	191	192	191	191	190	188	187	186	185	184
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	176	177	176	175	177	177	175	177	177	178	180	181	181	181	181	182	181	181	177	177	174	173	173	171
Motor Frame Vibration	VT-1015	IPS			0.15	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																								

DATE	NOV 27 2022
SIGNATURE	
Mid Shift	A Wan
Days Shift	

Notes

Utilities and Institutional Facilities

Date: NOV 28 2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

CGTG HOURLY READING LOG

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	/	√	/	√	√
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√				√	√	√	√	√	√	√	/	√	/	√	√	√	√	/	√	√	√	√	/	/	√	√	√
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	113	110	107	113	110	109	108	110	111	113	114	110	110	110	110	110	110	110	110	108	110	110	110	110
4	Instrument Temperature	TI-001	deg C		20	50	17	17	17	16	17	17	16	16	18	20	21	22	22	23	23	22	21	20	20	20	20	20	20	20
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	103	108	101	107	109	105	100	106	105	104	105	110	105	100	104	110	112	110	104	104	103	102	104	108
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60	60	60	60	61	61	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
10	Coolant Return Differential from	FI-002	In WC		37	50	35	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	69	69	69	69	69	72	74	74	74	74	74	74	74	74	74	74	72	71
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.8MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	6	7	7	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on Hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√				√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1088	1081	1085	1096	1090	1089	1090	1091	1068	1056	1035	1030	1025	1020	1022	1051	1052	1048	1050	1037	1040	1041	1041	1045
23	Mw Output		MW			27	25.8	25.7	25.8	26.0	25.8	25.7	25.8	25.8	25.3	24.9	24.5	24.3	24.2	24.1	24.2	24.8	24.8	24.8	24.9	24.6	24.7	24.7	24.7	24.8
24	80% Base Load Minimum		MW				21.3	21.2	21.3	21.4	21.3	21.2	21.3	21.3	20.8	20.6	20.2	20.2	20.1	20.0	20.1	20.5	20.6	20.5	20.1	20.4	20.5	20.5	20.5	20.6
25	Running Hours (unit overview)						12006	12007	12008	12009	12010	12011	12012	12013	12014	12015	12016	12017	12018	12019	12020	12021	12022	12023	12024	12025	12026	12027	12028	12029
26	Ambient Temperature	T1 Inlet					30.4	31.8	30.0	29.1	30.2	31.1	31	20	36	39	43	44	44	46	45	39	38	39	37	40	39	39	39	38
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	74	74	74	74	74	74	74	74	74	74	73	73	73	73	73	74	74	74	74	74	74	74	74	74
28	Total Fuel Flow		Mscf/h				228	227	228	229	228	227	229	228	225	221	217	217	216	216	216	220	220	220	221	218	219	219	219	221

Date: NOV 28 2022 Signature: A Wan

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	20	20	20	20	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	18	18
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	96	96	96	96	96	96	97	97	97	97	97	98	98	98	98	98	98	98	97	97	97	97	97	97
Stage Disch. Press	PI-2101	psig		238	285	277	277	277	277	277	277	277	277	280	280	281	282	282	282	282	282	281	281	280	281	281	281	281	280
2nd Stage Inlet Press	PI-2200	psig		267	285	272	271	271	271	272	272	272	272	273	273	275	277	277	277	277	277	275	276	275	276	275	276	276	275
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	499	499	499	499	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57	57	57	57	57	57	57	58	58	58	58	58	57	57	57	57	57	57	57	57
Lube Oil Temp	TE-1584	deg		150	170	169	168	167	165	168	169	169	169	168	168	169	168	168	169	169	169	169	169	169	169	168	169	164	165
Final Discharge Temp	TE-2120	deg		110	150	69	70	69	68	70	71	70	70	77	77	82	85	85	89	84	84	79	79	78	79	78	78	77	77
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	184	184	183	181	184	185	185	185	187	187	191	193	193	193	193	193	189	189	188	189	189	189	184	184
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	171	172	170	169	172	172	171	171	174	175	181	184	184	183	183	183	178	178	177	178	178	177	174	177
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	184	185	183	181	184	185	185	187	188	188	190	191	191	192	192	191	188	188	188	188	188	187	182	182
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	173	174	171	169	173	172	173	173	184	184	182	185	185	184	184	184	179	179	178	179	179	179	178	178
Motor Frame Vibration	VT-1015	IPS			0.15	.05	.05	.05	.05	.05	.05	.06	.06	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.08	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																		500											
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8													497											
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20													484											

DATE	NOV 28 2022
SIGNATURE	
Mid Shift	A Wier
Days Shift	

Notes

Utilities and Institutional Facilities

Date: 11-29-2022

(MST) / MDT (circle one)

CGTG HOURLY READING LOG

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	110	110	111	110	110	110	110	110	110	110	108	108	109	109	110	108	110	110	108	114	112	114	114	110
4	Instrument Temperature	TI-001	deg C		20	50	20	20	20	20	19	19	19	19	20	21	22	22	21	21	21	20	20	20	17	16	15	14	14	14
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	102	106	109	102	99	104	107	110	100	110	107	109	98	99	100	105	109	107	105	104	111	103	108	95
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	63	63	63	63	63	62	62	63	63	63	62	62	63	63	62	62	63	63	62	62	62	62	62	62
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	71	69	69	69	69	69	69	69	69	69	69	69	69	71	69	69	69	69	69	69	69	69	69	69
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1046	1050	1051	1054	1054	1055	1065	1066	1057	1059	1039	1043	1055	1054	1060	1062	1076	1075	1099	1105	1113	1119	1114	1120
23	Mw Output		MW			27	24.8	24.9	24.9	25.0	25.0	25.1	25.2	25.2	25.0	25.0	24.7	24.6	24.9	24.9	25.1	25.2	25.4	25.4	26.0	26.2	26.1	26.5	26.4	26.6
24	80% Base Load Minimum		MW				20.6	20.7	20.8	20.8	20.8	20.8	21.0	21.0	20.7	20.7	20.4	20.4	20.6	20.6	20.7	20.8	21.0	21.0	21.3	21.5	21.1	21.7	21.6	21.7
25	Running Hours (unit overview)						12030	12031	12032	12033	12034	12035	12036	12037	12038	12039	12040	12041	12042	12043	12044	12045	12046	12047	12048	12049	12050	12051	12052	12053
26	Ambient Temperature	T1 inlet					38	37	36	36	35	35	34	34	37	37	40	41	38	38	37	36	34	34	29	28	25	25	27	25
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	74	74	74	74	74	74	74	74	74	74	73	73	73	74	74	74	74	75	74	74	75	75	75	76
28	Total Fuel Flow		Mscf/h				222	221	223	222	221	222	223	223	223	222	219	218	221	221	223	224	226	226	229	231	232	232	231	234

Date: 11-29-2022 Signature: Bob Hoag (MIDS)

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	18	18	18	18	18	18	18	18	18	18	Full	Full	Full	Full	Full	Full	F	F	F	F	F	F	F	F
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	96	95	96	95	96	95
Stage Disch. Press	PI-2101	psig		238	285	280	280	280	279	279	279	278	278	279	279	280	279	279	279	279	279	279	279	277	276	275	275	276	275
2nd Stage Inlet Press	PI-2200	psig		267	285	275	275	275	274	274	274	273	273	274	274	275	274	274	274	274	273	274	274	272	272	270	270	271	270
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	500	500	500	500	499	500	500	500	499	500	500	500	499	500	499	500	499
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	58	57	57	57	57	56
Lube Oil Temp	TE-1584	deg		150	170	169	169	169	169	169	169	169	169	168	168	169	169	169	169	169	169	168	168	169	169	169	169	169	169
Final Discharge Temp	TE-2120	deg		110	150	77	75	75	74	73	73	72	72	75	75	79	76	75	75	74	74	72	72	69	69	70	70	70	69
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	184	187	187	186	186	186	186	186	188	188	190	188	189	188	187	186	185	185	184	184	184	184	184	184
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	177	175	175	174	174	174	173	173	175	175	179	176	176	176	174	173	173	173	171	171	171	172	172	171
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	186	186	186	186	186	186	186	186	187	187	189	187	188	187	186	186	185	185	183	183	183	183	183	183
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	178	176	176	175	175	175	175	175	176	176	180	177	177	177	175	174	174	174	173	173	173	174	174	173
Motor Frame Vibration	VT-1015	IPS			0.15	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.06	.05	.05	.05	.05	.05	.05	.05	.05	.05	.06	.06	.06	.06	.06
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.									500															500					
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8				496															496					
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20				483															482					

DATE 11-29-2022

SIGNATURE

Mid Shift Bob Ivey

Days Shift

Notes

Date: 11-30-2022

CGTG HOURLY READING LOG

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	ID	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	106	112	110	112	114	110	110	110	108	110	110	110	114	108	110	110	110	110	110	109	110	109	110	110
4	Instrument Temperature	TI-001	deg C		20	50	13	13	13	13	13	13	13	13	20	20	21	21	21	21	22	23	22	22	22	22	22	22	22	21
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	104	98	100	107	112	105	105	110	109	107	101	104	108	111	100	104	110	106	104	99	107	107	109	101
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	62	62	63	63	62	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	36	36	36	36	36	38	36	36	36	36	36	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	69	69	69	69	69	69	69	69	69	69	71	73	75	76	75	75	75	75	75	74	74	74	73	73
13	Combustible Gas Detector Monitor		% LEL	0%	0%	20%																								
15	WECC Log		Operational?																											
16	Operation of PSS/ on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	6	7	7	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGO 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1200	1118	1118	1124	1117	1119	1116	1115	976	969	959	961	968	975	979	967	967	978	976	976	977	977	976	978	977
23	Mw Output		MW			27	26.5	26.6	26.5	26.5	26.5	26.4	26.4	22.9	23.0	23.0	23.0	23.1	22.9	23.0	23.0	23.0	22.9	23.0	22.9	22.9	22.9	22.9	22.9	22.9
24	80% Base Load Minimum		MW				21.8	21.7	21.8	21.8	21.8	21.6	21.6	21.2	20.7	20.5	20.5	20.2	20.0	20.0	20.1	20.1	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3
25	Running Hours (unit overview)						12054	12055	12056	12057	12058	12059	12060	12061	12062	12063	12064	12065	12066	12067	12068	12069	12070	12071	12072	12073	12074	11075	11076	11077
26	Ambient Temperature	T1 inlet					24	25	25	23	24	26	27	31	37	38	39	43	45	45	45	44	41	41	41	41	40	40	39	39
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	76	76	76	76	76	76	76	76	9	11	13	15	18	22	23	23	27	27	29	30	30	30	30	30
28	Total Fuel Flow		Mscf/h				233	233	234	233	233	233	233	206	209	207	208	208	206	207	207	208	206	206	206	207	207	208	208	208

Date: 11-30-22 Signature:

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	51	51	51	51	51	51	50	50	50	50	50	50	50	50	50	50	50	50	49	49	49	49	49	49
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	95	95	95	96	95	98	99	99	98	97	99	99	98	98	99	99	99	99	99	99	99	99	99	99
Stage Disch. Press	PI-2101	psig		238	285	276	276	275	276	275	275	284	284	283	283	283	283	285	284	285	285	284	284	284	284	284	284	284	284
2nd Stage Inlet Press	PI-2200	psig		267	285	271	270	270	271	270	270	279	279	278	277	278	278	280	279	279	279	279	279	279	279	279	279	279	279
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	500	500	499	499	500	500	500	500	500	500	500	500	500	503	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		57	57	56	56	57	57	57	57	57	57	57	57	57	57	58	58	58	58	58	58	57	57	57	57
Lube Oil Temp	TE-1584	deg		150	170	169	169	169	169	169	169	169	169	170	170	170	170	168	168	168	168	169	169	169	169	169	169	169	169
Final Discharge Temp	TE-2120	deg		110	150	69	69	69	70	70	70	70	70	78	78	81	81	86	86	85	85	82	82	82	82	78	78	78	78
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	184	183	184	183	183	183	185	185	189	189	192	192	193	194	193	193	191	191	191	191	189	189	189	189
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	171	171	171	171	172	172	169	169	176	176	180	180	183	184	183	183	180	180	180	180	177	177	177	177
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	183	183	183	183	183	183	184	184	188	188	190	190	191	192	192	192	190	190	190	190	188	188	188	188
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	172	173	173	173	172	174	171	171	178	178	181	181	185	185	185	185	181	181	181	181	178	178	178	178
Motor Frame Vibration	VT-1015	IPS			0.15	.06	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.								500																					
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8			496																					
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20			482																					

DATE	1-30-2022
SIGNATURE	
Mid Shift	
Days Shift	

Notes

Utilities and Institutional Facilities

CGTG HOURLY READING LOG

Date: 12-1-2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	110	110	110	109	111	110	110	108	108	110	108	113	108	110	109	110	107	111	109	110	110	109	110	110
4	Instrument Temperature	TI-001	deg C		20	50	19	19	18	18	17	17	17	17	21	21	23	22	24	24	24	24	23	22	22	21	21	21	21	21
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	99	102	107	109	108	105	109	110	100	108	110	102	100	108	110	107	102	105	107	102	104	109	102	102
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	62	62	62	62	63	63	63	63	63	62	62	63	64	64	63	62	63	63	63	63	63	63	63	63
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	36	36	36	37	36	36	36	36	36	36	36	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	73	73	72	71	71	71	69	69	72	72	75	74	75	75	75	75	75	75	74	74	73	74	74	74
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18-20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	6	6	6	7	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	AGGGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22-24 found on Power Management page)																													
22	Generator Current		Amps			1627	972	972	974	973	975	974	1084	1074	1042	1031	1020	1017	1018	1002	1000	1018	1035	1049	1046	1040	1041	1041	1041	1043
23	Mw Output		MW			27	22.9	22.9	23.1	22.9	23.0	23.0	25.6	25.5	24.7	24.4	24.2	24.0	24.2	23.8	23.7	24.2	24.5	24.9	24.9	24.7	24.7	24.7	24.7	24.8
24	80% Base Load Minimum		MW				20.9	21.0	21.1	21.1	21.1	21.1	20.9	20.8	20.2	19.9	19.8	19.6	19.8	19.6	19.5	19.8	20.1	20.3	20.3	20.2	20.2	20.2	20.2	20.3
25	Running Hours (unit overview)						12078	12079	12080	12081	12082	12083	12084	12085	12086	12087	12088	12089	12090	12091	12092	12093	12094	12095	12096	12097	12098	12099	12100	12101
26	Ambient Temperature	T1 Inlet					35	34	33	33	33	33	34	36	43	46	48	50	49	51	52	48	45	41	41	41	41	41	42	41
	(27-28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	34	34	35	35	35	35	36	36	36	35	35	35	35	36	36	36	37	37	37	37	37	37	37	37
28	Total Fuel Flow		Mscf/h				206	206	207	205	207	207	226	226	220	217	216	215	216	214	213	216	217	221	221	224	222	220	219	220

Date: 12-1-2022 Signature: Robert [illegible]

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Dey Tank Level	LI-1562	GAL	10		FULL	49	49	48	48	48	48	48	48	48	48	48	48	48	48	47	47	47	47	47	47	47	47	47	47
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	99	99	99	99	99	99	97	97	97	97	97	97	98	98	97	97	97	97	97	97	97	97	97	97
Stage Disch. Press	PI-2101	psig		238	285	283	283	285	283	283	283	278	278	280	278	281	282	283	283	284	283	281	281	280	281	281	281	281	281
2nd Stage Inlet Press	PI-2200	psig		267	285	278	276	278	278	276	278	273	273	275	276	277	277	278	278	279	277	276	276	275	276	276	276	276	276
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	507	507	507	507	507	507	508	507	507	507	507	507	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	500	499	500	500	500	499	500	500	499	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57	57	57	57	57	57	57	57	58	58	58	58	57	57	57	57	57	57	57	57
Lube Oil Temp	TE-1584	deg		150	170	169	169	169	169	169	169	169	169	169	169	169	168	167	167	167	169	169	168	169	169	169	170	169	169
Final Discharge Temp	TE-2120	deg		110	150	75	73	72	71	70	70	73	73	83	83	86	87	89	88	90	88	83	82	78	80	82	80	86	80
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	188	187	186	186	186	186	185	185	190	191	193	193	194	194	195	193	191	190	189	189	189	189	189	189
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	174	173	172	171	171	171	173	173	181	184	184	184	187	187	187	186	182	182	179	179	180	179	179	179
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	186	186	186	185	185	185	185	185	189	190	191	192	192	192	194	192	189	189	188	188	188	188	188	188
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	175	174	173	172	172	172	175	175	183	183	185	186	189	189	189	187	183	183	181	181	180	182	181	181
Motor Frame Vibration	VT-1015	IPS			0.15	.05	.05	.04	.05	.05	.05	.05	.05	.05	.05	.04	.04	.04	.04	.04	.04	.05	.05	.05	.05	.05	.05	.05	.05
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.								500																					
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8			496																					
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20			485																					

DATE 12-1-2022

SIGNATURE

Mid Shift Bob Hay

Days Shift

Notes

2314, 144
139

Date: 12-2-2022

PST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

CGTG HOURLY READING LOG

Notes: @ 1600 PER DISPATCH GO DOWN TO 22 MW

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	109	110	109	109	110	110	109	110	105	160	163	110	102	109	100	105	105	101	108	110	105	112	108	110
4	Instrument Temperature	TI-001	deg C		20	50	21	22	22	21	21	22	22	22	22	22	22	22	22	22	22	22	21	21	20	20	20	20	20	20
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	104	100	109	100	101	106	106	115	110	111	112	111	111	111	111	106	105	106	102	100	101	112	110	101
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	60	60	60	60	60	60
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	35	35	35	35	35	35
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	74	74	74	74	74	74	73	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	7	7	7	7	7	6	4	4	6	6	6	4	6	6	6	6	6	6
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	6	6	6	0	0	6	6	6	0	0	0	6	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	ASBGGD ST-01	psig	85	20																									
21	Acknowledge Alarms Hourly		V				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1043	1035	1035	1038	1040	1043	1029	1035	1031	1019	1021	1022	1626	1015	1018	924	926	923	926	928	926	928	925	926
23	Mw Output		MW			27	24.8	24.6	24.6	24.7	24.7	24.8	24.5	24.5	24.5	24.2	24.3	24.3	24.2	24.1	24.2	22.1	21.9	22.0	22.0	22.0	21.9	22.0	22.0	22.0
24	80% Base Load Minimum		MW				20.3	20.2	20.2	20.3	20.3	20.3	20.1	20.1	20.0	19.8	19.9	19.9	19.9	19.8	19.8	20.0	20.1	20.1	20.4	20.4	20.5	20.8	20.8	20.8
25	Running Hours (unit overview)						12102	12103	12104	12105	12106	12107	12108	12109	12110	12112	12113	12114	12115	12116	12117	12118	12119	12120	12120	12121	12122	12123	12124	12125
26	Ambient Temperature	T1 Inlet					41	43	43	42	42	42	44.6	44.1	45.1	47.8	47.1	46.9	46.9	48.4	47.8	46.2	44.4	43.1	40	40	39	38	35	35
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	37	37	37	37	37	37	37	37	37	37	36	34	34	36	37	37	37	37	37	37	37	37	37	37
28	Total Fuel Flow		Mscf/h				224	218	219	220	221	221	218	218	217	216	216	215	214	218	215	200	198	200	200	200	201	201	200	200

Date: 12-2-2022 Signature: Bob Ary

1663

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	47	46	46	46	46	46	46	46	46	46	46	45	45	45	45	45	45	45	45	45	45	45	45	45
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	F	F	E	F	E	F	E	E	F	E	F	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	F	E	E	E	E	F	F	E	E	E	F	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	99	97	97	97	97	98	98	98
Stage Disch. Press	PI-2101	psig		238	285	281	282	282	281	281	281	281	281	281	282	282	282	282	282	282	284	285	288	287	285	285	284	284	284
2nd Stage Inlet Press	PI-2200	psig		267	285	276	277	276	276	276	276	276	276	276	277	278	277	277	277	277	277	280	280	280	280	280	279	279	279
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	502	507	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	499	499	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57	57	57	57	57	58	58	58	58	58	58	58	575	575	58	57	57	57	57	57
Lube Oil Temp	TE-1584	deg		150	170	169	168	168	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	168	169	169	169
Final Discharge Temp	TE-2120	deg		110	150	80	83	81	80	80	80	80	82	84	85	85	84	84	85	85	85	83	83	83	85	83	80	80	80
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	189	190	190	189	190	190	190	190	190	192	192	192	194	192	192	192	192	192	192	192	192	190	190	189
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	179	181	180	180	181	181	184	181	181	183	183	184	184	183	183	183	180	180	180	180	180	176	176	174
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	189	189	189	189	189	189	189	189	189	191	191	191	191	191	191	191	191	191	191	191	191	190	190	188
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	181	183	182	181	182	182	182	184	185	184	184	184	184	184	184	184	182	182	180	180	180	178	178	175
Motor Frame Vibration	VT-1015	IPS			0.15	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.						560													500										
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8	496													496										
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20	493													484										

DATE 12-2-2022

SIGNATURE

Mid Shift Bob

Days Shift

Notes

Date: DEC 03 2022

CGTG HOURLY READING LOG

(MST) / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	ID	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	108	110	110	108	108	110	101	110	105	101	107	106	110	101	107	104	108	107	110	108	108	111	110	108
4	Instrument Temperature	TI-001	deg C		20	50	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	104	110	102	106	102	104	109	112	106	112	109	110	111	104	102	106	110	111	101	106	111	103	110	102
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
10	Coolant Return Differential from	FI-002	In WC		37	50	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
13	Combustible Gas Detector Monitor		% LEL	0%	0%	20%																								
15	WECC Log		Operational?																											
16	Operation of PSS/ on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1200	1017	1011	1013	1008	1012	1009	1011	1008	1011	1002	1020	1007	1010	1016	1007	1011	1014	1008	1010	1021	1006	1010	1018	1019
23	Mw Output		MW			27	23.9	23.9	23.8	23.9	23.9	24.0	24.1	23.9	23.8	23.9	23.9	23.9	24.1	24.0	24.0	24.6	23.9	24.1	24.1	24.0	24.0	24.6	24.0	24.0
24	80% Base Load Minimum		MW				20.9	20.9	20.7	20.7	20.6	20.7	20.9	21.0	21.0	20.8	20.8	20.2	20.2	20.2	20.2	20.1	19.9	20.1	20.5	20.5	20.2	20.2	20.2	20.2
25	Running Hours (unit overview)						12126	12127	12128	12129	12130	12131	12132	12133	12134	12135	12136	12137	12138	12139	12140	12141	12142	12143	12144	12145	12146	12147	12148	12149
26	Ambient Temperature	T1 inlet					35	35	35	36	37	37	34	33	33.6	35.2	39.2	43.7	43.5	43.2	42.4	45.0	42.3	43.9	40	40	42	43	43	43
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	37	37	38	38	38	38	37	38	38	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37
28	Total Fuel Flow		Mscf/h				200	208	208	210	210	213	214	213	213	213	216	214	215	214	215	217	214	217	214	214	214	216	215	215

Date: DEC 03 2022 Signature:

17.61
1600

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	44	44	44	44	44	44	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	98	98	98	98	98	98	98	98	98	97	97	97	97	97	97	97	97	97	98	98	98	98	98	98
Stage Disch. Press	PI-2101	psig		238	285	281	281	281	281	282	282	281	281	281	281	281	281	281	281	282	282	282	281	281	281	281	281	281	281
2nd Stage Inlet Press	PI-2200	psig		267	285	276	276	276	277	277	277	276	276	276	276	276	276	276	276	277	277	278	277	276	276	276	275	275	275
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	506	507	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	499	499	499	500	500	500	499	499	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57	57	56	56	56	57	57	57	57	57	57	57	57	57	57	57	58	58	58	58
Lube Oil Temp	TE-1584	deg		150	170	169	169	169	169	169	169	169	169	169	170	169	169	169	169	170	170	170	170	170	170	170	172	172	172
Final Discharge Temp	TE-2120	deg		110	150	73	73	75	75	75	76	72	72	72	75	78	78	82	82	82	82	82	82	77	77	78	78	78	78
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	188	188	188	188	188	188	186	186	186	187	188	181	191	191	190	190	190	190	189	189	189	189	190	190
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	174	174	174	176	176	176	173	173	173	175	178	178	180	180	179	179	179	179	177	177	178	178	178	178
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	187	187	187	187	187	187	185	185	185	186	187	187	189	189	189	189	189	189	188	188	190	190	190	190
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	176	176	176	176	177	177	174	174	174	176	179	179	182	182	181	181	181	181	178	178	178	178	178	178
Motor Frame Vibration	VT-1015	IPS			0.15	.05	.05	.05	.05	.06	.06	06	06	06	06	06	06	06	06	06	06	06	06	.05	.05	.05	.05	.05	.05
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	06	06	06	06	06	06	06	06	06	06	06	06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																								

DATE	DEC 03 2022
SIGNATURE	
Mid Shift	
Days Shift	

Notes

Date: DEC 04 2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

CGTG HOURLY READING LOG

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	98	105	120	110	108	108	110	110	108	107	110	106	109	101	108	110	107	109	110	102	108	110	110	108	110	108	108
4	Instrument Temperature	TI-001	deg C		20	50	20	20	20	20	20	2	20	20	20	20	20	21	21	21	21	21	21	21	22	22	22	22	22	22
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	1	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	102	108	100	102	105	102	111	108	109	105	109	109	100	111	98	99	105	109	102	103	101	106	100	102
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
10	Coolant Return Differential from	FI-002	In WC		37	50	35	35	35	35	35	35	38	38	38	35	38	35	32	35	34	35	34	34	35	35	35	34	35	35
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	6	7	7	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on Hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20			✓					✓	✓	✓	✓	✓	✓	✓			✓	✓	✓							
21	Acknowledge Alarms Hourly		√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1627	1016	1014	1010	1012	1009	1010	1010	1015	1006	1002	1016	1020	1015	1009	1014	1011	1016	1013	1011	1014	485	988	1010	1007
23	Mw Output		MW			27	24.0	24.0	24.0	24.0	24.0	24.1	24.1	24.1	24.0	24.0	24.0	24.1	24.0	24.0	24.0	24.0	24.1	24.0	24.0	24.6	23.0	23.6	24.0	24.0
24	80% Base Load Minimum		MW				20.4	20.4	20.4	20.5	20.5	20.5	20.6	20.4	20.1	20.0	19.9	19.9	19.9	20.0	20.0	20.0	20.2	20.3	20.5	20.5	19.9	19.8	20.3	20.3
25	Running Hours (unit overview)						12150	12151	12152	12153	12154	12155	12156	12157	12158	12159	12160	12161	12164	12163	12164	12165	12166	12160	12168	12169	12170	12171	12172	12173
26	Ambient Temperature	T1 Inlet					40	38	38	38	39	39	38.1	38.0 40.0	44.2	45.3	46.6	47.1	47.3	46.4	45.5	45.3	43.2	42.3	42	42	42	43	42	42
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	37	37	37	37	37	37	37	38	38	37	37	37	37	37	37	37	38	38	38	38	38	38	38	38
28	Total Fuel Flow		Mscf/h				217	215	215	214	45	215	214	213	213	213	213	214	215	215	214	214	213	214	214	213	214	214	215	214

Date: DEC 04 2022 Signature:

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	42	42	42	42	42	42	40	40	40	40	40	40	40	40	40	39	39	39	39	39	39	39	39	39
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	98	98	98	98	98	98	98	97	97	97	97	97	97	97	97	97	97	97	98	98	98	99	98	98
Stage Disch. Press	PI-2101	psig		238	285	281	281	282	282	282	283	282	281	280	281	282	284	284	281	281	281	281	281	282	282	282	284	281	281
2nd Stage Inlet Press	PI-2200	psig		267	285	276	276	275	277	277	277	277	276	275	276	277	277	277	276	276	276	276	276	277	277	277	279	276	276
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	507	507	507	507	507	507	509	507	507	507	507	507	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	499	499	499	499	499	499	500	500	500	499	499	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	58	58	58	57	57	57
Lube Oil Temp	TE-1584	deg		150	170	170	170	170	170	170	170	170	170	170	169	168	169	168	168	169	169	168	168	169	169	169	170	169	169
Final Discharge Temp	TE-2120	deg		110	150	78	78	78	78	79	79	79	79	79	83	85	84	85	85	84	84	82	83	85	85	85	81	181	181
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	190	190	190	189	189	189	188	189	189	191	192	192	192	192	192	192	191	191	191	191	191	192	190	190
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	178	178	178	177	177	177	177	177	177	181	184	184	184	183	182	183	180	183	182	182	182	180	181	181
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	189	189	189	189	188	188	188	188	189	190	191	191	191	191	191	191	190	190	190	190	190	191	190	190
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	179	179	179	179	179	179	179	178	178	182	185	184	184	185	184	184	182	184	183	183	183	182	182	182
Motor Frame Vibration	VT-1015	IPS			0.15	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.04	.04	.05	.05	.05	.05	.04	.04	.05	.05	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																	500												
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8												498												
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20												49												

DATE	DEC 04 2022
SIGNATURE	
Mid Shift	
Days Shift	

Notes

2/2/25

129

Utilities and Institutional Facilities

Date: DEC 05 2022

CGTG HOURLY READING LOG

(MST) / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	108	110	108	110	108	108	111	109	105	110	103	107	109	108	112	110	111	108	110	109	110	109	110	109
4	Instrument Temperature	TI-001	deg C		20	50	20	20	20	20	20	21	21	21	21	21	21	21	21	24	23	23	21	21	21	21	21	21	21	20
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	102	100	106	102	104	101	106	110	109	111	104	108	111	105	112	104	99	111	101	107	102	104	100	107
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	3/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60	60	60	60	60	60	60	60	60	60	60	60	60	62	62	60	60	60	60	60	60	60	60	62
10	Coolant Return Differential from	FI-002	In WC		37	50	35	35	35	35	35	35	35	35	35	35	35	35	35	36	36	34	35	35	35	35	35	35	35	35
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	72	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A&BGGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√				✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1008	1012	1015	1010	1008	1016	1011	1007	1012	1009	1021	1012	1011	1018	1016	1022	1028	1017	1026	1020	1026	1020	1024	1028
23	Mw Output		MW			27	24.0	24.0	24.0	24.0	24.0	24.0	23.9	24.0	23.9	23.9	24.0	23.9	23.9	23.9	24.0	24.0	24.1	23.9	24.0	24.1	24.0	24.1	24.1	24.0
24	80% Base Load Minimum		MW				20.4	20.4	20.4	20.2	20.2	20.2	20.1	20.0	20.1	19.9	20.6	19.8	19.8	19.8	19.8	19.6	20.0	20.0	20.1	20.1	20.1	20.2	20.1	20.2
25	Running Hours (unit overview)						12174	12175	12176	12177	12178	12179	12180	12181	12182	12183	12184	12185	12186	12187	12188	12189	12190	12191	12192	12193	12194	12195	12196	12197
26	Ambient Temperature	T1 inlet					40	41	42	42	43	A:3	43.9	46.1	45.1	46.6	45.9	48.6	48.5	48.4	48.2	47.1	45.7	45.1	44	44	44	43	43	42
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	38	38	38	38	38	38	38	38	38	38	38	37	37	37	37	38	38	38	38	38	38	38	38	38
28	Total Fuel Flow		Mscf/h				214	215	215	215	216	216	214	215	215	214	218	214	213	213	213	214	217	212	214	213	214	214	214	214

Date: DEC 05 2022

Signature:

CGTG TURBINE — UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	39	39	39	39	39	39	37	37	37	37	37	37	37	37	37	37	36	36	36	36	36	36	36	36
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	98	98	98	98	98	98	97	97	97	97	97	97	97	97	97	97	97	97	98	98	98	98	98	98
Stage Disch. Press	PI-2101	psig		238	285	282	282	282	282	282	282	281	281	281	281	281	282	282	282	282	282	282	282	282	282	282	282	282	282
2nd Stage Inlet Press	PI-2200	psig		267	285	277	277	277	277	277	277	276	276	276	276	276	277	277	277	277	277	277	277	277	277	277	277	277	277
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	507	507	506	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	499	499	499	500	496	500	500	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57	57	57	57	57	57	57	58	58	58	58	57	57	57	57	57	57	57	57	57
Lube Oil Temp	TE-1584	deg		150	170	169	169	169	169	169	169	170	170	170	168	167	168	168	167	167	167	162	161	170	170	170	169	169	169
Final Discharge Temp	TE-2120	deg		110	150	80	80	80	81	81	81	82	82	82	84	84	86	86	85	85	85	83	87	81	81	81	81	80	80
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	190	190	191	191	191	191	191	191	191	193	193	193	193	193	193	193	192	192	191	191	191	191	190	190
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	180	180	180	180	181	181	181	181	181	183	183	184	184	184	184	183	182	182	181	181	181	181	180	180
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	190	190	190	190	190	190	190	190	190	192	192	192	192	192	191	191	191	191	190	190	190	190	190	190
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	181	181	181	181	182	182	183	183	183	185	185	185	185	185	185	184	184	184	182	182	182	182	182	182
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.04	.04	.04	.04	.04	.08	.05	.05	.05	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.08	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.															500														
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8										496														
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20										489														

DATE	DEC 05 2022
SIGNATURE	
Mid Shift	
Days Shift	

Notes

Utilities and Institutional Facilities

Date: 12-6-2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

CGTG HOURLY READING LOG

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	110	108	110	110	109	110	108	110	110	110	110	110	110	110	110	110	110	110	110	109	110	110	110	110
4	Instrument Temperature	TI-001	deg C		20	50	20	20	20	20	21	21	20	20	22	24	24	24	24	24	23	22	22	22	22	22	20	20	20	20
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	101	104	109	110	103	100	105	104	101	109	110	108	108	100	110	109	100	100	92	106	101	108	107	102
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	PI-001	in WC		60	80	62	62	62	62	62	62	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
10	Coolant Return Differential from	PI-002	in WC		37	50	35	35	35	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	73	73	73	73	75	75	75	75	75	75	75	75	75	75	75	75	73	73	73	73
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	7	7	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI 230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1026	1027	1018	1017	1011	1017	1024	1023	1027	1028	1023	1022	1025	1027	1018	1016	1012	1010	1017	1014	1010	1013	1008	1009
23	Mw Output		MW			27	24.0	24.0	24.1	24.1	24.1	24.0	24.1	23.9	23.9	23.9	24.0	24.0	24.0	24.0	23.9	23.9	23.9	24.1	24.0	24.1	24.0	24.0	24.0	24.0
24	90% Base Load Minimum		MW				20.3	20.4	20.4	20.6	20.5	20.5	20.1	20.5	20.0	20.0	20.0	19.9	19.9	19.9	20.1	20.1	20.2	20.2	20.5	20.5	20.6	20.6	20.7	20.6
25	Running Hours (unit overview)						12198	12199	12199	12200	12201	12202	12203	12204	12205	12206	12207	12208	12209	12210	12211	12212	12213	12214	12215	12216	12217	12218	12219	12220
26	Ambient Temperature	T1 Inlet					41	40	36	38	39	39	37	39	44	45	46	47	47	47	45	45	43	43	39	39	38	38	37	38
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	38	38	38	38	38	38	38	38	37	37	37	36	36	36	37	37	37	37	38	38	38	38	38	38
28	Total Fuel Flow		Mscf/h				214	214	213	214	215	215	215	214	215	216	214	213	215	215	216	214	215	214	214	214	215	215	214	214

Date: 12-6-2022 Signature: Bob Ay

CGTC TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	36	36	36	36	36	36	35	35	35	35	35	35	35	35	35	35	34	34	34	34	34	34	34	34
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98
Stage Disch. Press	PI-2101	psig		238	285	282	282	282	282	282	282	281	281	282	282	282	282	282	282	283	283	282	282	282	282	282	282	282	282
2nd Stage Inlet Press	PI-2200	psig		267	285	277	277	277	277	277	277	276	276	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57	57	57	57	57	57	57	58	58	58	57	57	57	57	57	57	57	57	57	57
Lube Oil Temp	TE-1584	deg		150	170	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	170	170	170	176	176	170	170	176
Final Discharge Temp	TE-2120	deg		110	150	77	76	78	78	78	76	77	77	84	84	84	84	84	84	83	83	82	82	82	78	77	76	76	76
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	190	189	189	189	189	189	188	188	192	192	192	192	192	192	191	191	190	190	190	180	186	187	187	187
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	179	178	178	178	177	177	176	176	182	182	182	182	182	182	182	182	180	180	180	177	176	175	175	175
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	189	188	188	180	188	188	187	187	191	191	191	191	191	191	190	190	190	190	190	182	188	187	187	187
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	180	179	179	179	179	179	177	177	183	183	183	184	184	184	183	183	182	182	182	179	178	177	177	179
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.05	.05	.04	.04	.04	.04	.04	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.04	.05	.05	.05	.05
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.									500																				
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8				496																				
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20				484																				

DATE 12-6-2022

SIGNATURE

Mid Shift Bob Long

Days Shift

Notes

Utilities and Institutional Facilities

Date: 12-7-2022

(MST) / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

CGTG HOURLY READING LOG

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√				✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√				✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	110	110	110	110	110		110	110	110	110	108	110	110	110	110	110	108	110	110	110	109	110	109	110
4	Instrument Temperature	TI-001	deg C		20	50	21	21	20	19	19		19	19	21	22	24	24	23	23	23	23	23	23	21	21	21	21	21	21
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	100	102	106	101	101		106	100	106	104	102	100	110	102	100	110	110	100	103	109	101	107	102	109
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3		2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	63	63	63	63	63		63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36		36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	73	73	73	73	73		72	72	75	75	75	75	75	75	75	75	75	75	75	75	74	74	74	74
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7		7	7	7	7	7	7	6	6	6	6	6	6	7	7	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√				✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1017	1015	1016	1011	1017		1015	1018	1014	1010	1009	1016	1009	1018	1014	1014	1020	1021	1013	1017	1013	1014	1016	1020
23	Mw Output		MW			27	24.0	24.0	24.0	23.9	24.0		24.0	23.9	24.1	24.1	24.0	23.9	23.9	24.0	24.1	24.0	23.9	24.0	24.0	23.9	24.0	24.1	24.0	23.9
24	80% Base Load Minimum		MW				20.5	20.6	20.7	20.9	20.8		20.9	20.7	20.3	20.1	19.9	20.0	20.1	20.1	20.1	20.1	20.2	20.3	20.6	20.4	20.4	20.4	20.5	20.5
25	Running Hours (unit overview)						12221	12222	12223	12224	12225		12227	12228	12229	12230	12231	12232	12233	12234	12235	12236	12237	12238	12239	12240	12241	12242	12243	12244
26	Ambient Temperature	T1 Inlet					39	38	38	35	35		35	37	41	~~38~~ 45	46	46	45	45	45	45	42	42	38	41	40	40	40	40
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	38	38	38	37	38		38	37	38	38	36	36	37	37	37	37	37	37	37	38	41	39	39	39
28	Total Fuel Flow		Mscf/h				214	215	214	214	215		214	215	216	215	215	215	214	215	214	214	215	214	216	214	214	215	215	215

Date:

Signature:

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E		E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	33	33	33	33	33		33	33	33	33	33	33	32	32	32	32	32	32	32	32	32	32	31	31
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E		E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E		E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	98	97	98	98	98		98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98
Stage Disch. Press	PI-2101	psig		238	285	282	282	282	282	282		281	281	281	281	282	282	283	283	283	283	283	283	283	282	282	282	282	282
2nd Stage Inlet Press	PI-2200	psig		267	285	277	277	277	277	277		276	276	276	276	277	277	277	277	277	277	277	277	277	277	277	277	277	277
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507		507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	506	500		500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57		57	57	57	57	58	58	58	58	58	58	58	58	58	57	57	57	57	57
Lube Oil Temp	TE-1584	deg		150	170	170	170	170	170	170		169	169	169	169	168	168	168	168	168	168	168	168	168	168	168	168	168	169
Final Discharge Temp	TE-2120	deg		110	150	76	76	75	75	74		75	75	83	83	87	87	87	87	85	85	85	85	84	82	80	80	80	80
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	187	187	187	187	187		187	187	191	191	193	193	192	192	192	192	192	192	192	191	190	190	190	190
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	175	175	175	175	174		174	174	181	181	185	185	183	183	183	183	183	183	182	180	179	179	179	179
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	187	187	186	186	186		186	186	190	190	192	192	191	191	191	191	191	191	190	190	189	189	189	189
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	177	177	176	176	175		176	176	182	182	186	186	185	185	185	185	185	185	184	181	180	180	180	180
Motor Frame Vibration	VT-1015	IPS			0.15	.05	.05	.05	.05	.05		.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06		.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.05	.04	.05	.05	.05
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.									500																				
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8				496																				
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20				484																				

DATE	12-7-2022
SIGNATURE	
Mid Shift	
Days Shift	
Notes	

Utilities and Institutional Facilities

Date: 12-8-2022

(MST) MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

CGTG HOURLY READING LOG

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	110	109	109	110	110	110	111	109	102	105	109	112	110	105	103	112	109	107	110	108	110	110	108	108
4	Instrument Temperature	TI-001	deg C		20	50	21	21	21	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	107	102	103	109	105	101	107	110	104	105	111	102	110	104	108	110	107	109	100	105	107	108	110	102
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	60	60	60	60	60	60
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	34	36	36	34	36	36	36	36	34	34	34	38	35	35	35	35	35	35
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	74	74	74	73	72	72	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		v				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1019	1020	1019	1015	1014	1017	1014	1020	1018	1015	1017	1007	1006	1012	1011	1003	1008	1007	1005	1011	1009	1012	1006	1010
23	Mw Output		MW			27	24.0	24.0	24.0	24.1	23.9	23.9	23.9	24.6	24.6	23.9	24.1	23.9	23.9	24.0	24.0	23.9	23.9	24.0	24.0	24.0	24.0	24.1	24.1	24.0
24	80% Base Load Minimum		MW				20.5	20.5	20.7	20.9	20.9	21.1	21.3	20.9	20.9	20.8	20.5	20.4	20.4	20.4	20.3	20.6	20.8	21.0	21.2	21.2	21.2	21.2	21.3	21.3
25	Running Hours (unit overview)						12245	12246	12247	12248	12249	12250	12252	12253	12254	12255	12256	12257	12258	12259	12260	12261	12262	12263	12264	12265	12266	12267	12268	12269
26	Ambient Temperature	T1 inlet					40	39	38	36	35	33	30.4	34.3	34.3	39.0	39.2	46.0	46.0	44	41.2	37.8	36.3	33.8	32	32	32	31	31	30
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	39	39	38	39	40	41	41	41	41	40	40	40	40	40	41	41	41	42	42	42	42	42	42	42
28	Total Fuel Flow		Mscf/h				215	215	216	214	214	214	215	214	214	216	215	216	214	214	214	215	214	218	214	214	215	215	214	215

Date: 12-8-2022 Signature: Bob Lang

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	31	31	31	31	31	31	31	31	31	30	30	30	30	30	30	30	29	29	29	29	29	29	29	29
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	98	98	98	98	98	98	97	97	96	97	97	97	97	97	97	98	97	97	97	97	98	98	98	98
Stage Disch. Press	PI-2101	psig		238	285	282	282	281	281	281	281	280	280	280	280	280	281	281	281	281	281	281	281	281	281	282	282	282	282
2nd Stage Inlet Press	PI-2200	psig		267	285	277	277	277	277	277	277	275	275	275	278	278	275	276	276	276	276	276	276	276	276	277	277	277	277
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	520	500	520	499	499	499	500	500	499	499	499	499	499	498	499	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57	57	57	57	57	57	57	56	56	57	57	56	56	56	56	56	57	57	57	57
Lube Oil Temp	TE-1584	deg		150	170	170	170	169	170	170	170	170	170	169	169	169	170	170	170	170	170	170	170	170	170	169	169	169	169
Final Discharge Temp	TE-2120	deg		110	150	78	77	75	74	74	74	71	71	72	72	72	78	78	78	78	76	75	75	75	75	72	72	72	70
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	188	188	187	186	186	186	185	185	185	185	185	188	188	188	188	187	187	187	185	185	184	184	184	184
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	177	176	175	174	174	174	171	171	171	171	170	177	177	176	176	175	174	174	172	172	170	170	170	170
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	187	187	187	186	186	186	185	185	185	184	184	187	187	187	187	186	186	186	184	184	183	183	183	183
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	178	177	176	175	175	175	173	173	173	173	173	178	176	178	178	175	176	176	173	173	172	172	171	171
Motor Frame Vibration	VT-1015	IPS			0.15	.05	.05	.05	.05	.05	.05	.08	.07	.08	.05	.03	.05	.05	.05	.05	.03	.03	.07	.05	.05	.06	.06	.06	.06
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.									500											500									
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8				496											496									
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20				484											484									

DATE 12-8-2022

SIGNATURE

Mid Shift Bob Ley

Days Shift

Notes

117.1
1600

Utilities and Institutional Facilities

Date: DEC 09 2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

CGTG HOURLY READING LOG

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	110	110	108	110	108	110	112	108	110	100	109	106	100	108	103	108	106	103	106	108	110	110	108	116
4	Instrument Temperature	TI-001	deg C		20	50	18	18	18	18	18	18	18	17	18	18	19	19	19	19	19	19	19	19	18	18	18	18	18	18
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19	19	19	19	19	19	19	17	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	101	99	104	100	109	105	110	109	112	109	110	106	111	106	112	111	106	106	100	108	110	102	108	100
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	3/3	3/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
10	Coolant Return Differential from	FI-002	In WC		37	50	35	35	35	35	35	35	35	35	35	30	36	36	36	38	38	35	35	35	35	35	35	35	35	35
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
19	10 gal gas TE Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0									0			0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20								✓	✓		✓	✓	✓	✓			✓	✓								
21	Acknowledge Alarms Hourly		√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1007	1008	1015	1014	1006	1011	1006	1010	1011	1009	1027	1014	1006	1007	1010	1012	1012	1019	1007	1014	1011	1013	1012	1013
23	Mw Output		MW			27	24.0	24.0	24.0	24.0	24.0	24.0	23.9	23.9	24.0	24.0	24.1	24.0	24.0	24.0	24.0	24.0	24.1	24.1	24.0	24.0	24.0	24.0	24.0	24.0
24	80% Base Load Minimum		MW				21.6	21.6	21.4	21.4	21.4	21.4	21.4	21.2	21.1	20.6	20.6	20.2	20.1	19.0	20.0	20.1	20.3	20.4	20.6	20.6	21.0	20.9	20.9	21.0
25	Running Hours (unit overview)						12269	12270	12271	12272	12273	12274	12276	12277	12277	12278	12279	12280	12281	12282	12284	12285	12286	12287	12287	12288	12289	12290	12291	12292
26	Ambient Temperature	T1 Inlet					26	26	26	29	29	29	28.6	31.3	32.4	38.1	38.7	42.4	45.0	46.9	43.5	41.2	40.4	40.1	39	39	36	36	36	34
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	42	42	42	42	42	42	42	42	42	41	41	41	40	41	44	43	43	44	43	43	44	44	44	44
28	Total Fuel Flow		Mscf/h				215	215	215	215	216	215	213	213	214	213	215	216	215	214	216	216	214	214	215	215	214	214	215	215

Date: DEC 09 2022 Signature:

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	29	29	29	29	29	29	28	26	26	26	26	25	26	26	26	26	26	25	25	25	25	25	25	25
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	F	E	F	E	E	E	F	E	E	F	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	C	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	98	98	98	98	98	98	98	98	98	98	97	97	97	97	97	97	97	97	97	97	98	98	98	98
Stage Disch. Press	PI-2101	psig		238	285	282	282	282	282	281	281	281	281	281	281	282	282	282	282	282	282	282	282	282	282	282	282	282	282
2nd Stage Inlet Press	PI-2200	psig		267	285	277	277	277	277	275	275	275	275	275	275	276	276	276	277	277	277	277	277	277	277	277	277	277	277
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	499	499	499	500	500	500	499	499	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	58	58	58	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
Lube Oil Temp	TE-1584	deg		150	170	169	169	169	169	168	168	168	168	168	169	169	169	169	170	168	169	169	169	169	169	169	169	170	170
Final Discharge Temp	TE-2120	deg		110	150	70	70	70	70	70	70	70	72	72	72	80	80	80	81	84	79	79	79	79	79	79	79	74	74
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	184	184	184	184	182	182	182	185	185	185	190	190	190	192	190	189	185	185	185	185	185	186	186	186
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	170	170	170	170	169	169	169	171	171	171	180	180	180	184	182	179	176	177	179	179	177	177	177	175
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	183	183	183	183	182	182	182	185	185	185	186	186	186	190	189	188	188	187	188	188	186	186	186	186
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	171	171	171	171	170	170	170	172	172	172	181	181	181	186	184	180	180	178	180	180	178	178	178	178
Motor Frame Vibration	VT-1015	IPS			0.15	.06	.06	.07	.07	.07	.07	.06	.06	.06	.06	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.04	.04	.04	.05	.05	.06	.06	.05	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																								

DATE	DEC 09 2022
SIGNATURE	
Mid Shift	
Days Shift	

Notes

Utilities and Institutional Facilities

Date: DEC 10 2022

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

CGTG HOURLY READING LOG

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	108	110	110	108	110	[illegible]	100	108	110	105	107	100	102	106	109	103	108	107	110	110	108	110	110	108
4	Instrument Temperature	TI-001	deg C		20	50	18	18	18	18	18	[illegible]	19	18	18	18	18	19	18	18	19	19	19	19	18	18	18	18	18	18
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	[illegible]	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	112	100	103	110	106	[illegible]	111	109	112	104	110	109	110	112	110	105	106	110	100	110	102	110	106	111
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	[illegible]	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	in WC		60	80	60	60	60	60	60	[illegible]	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
10	Coolant Return Differential from	FI-002	in WC		37	50	35	35	35	35	35	3	35	35	35	38	35	35	35	35	34	34	35	34	35	35	35	35	35	35
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	?	7	7	7	7	7	7	7	6	6	6	6	6	7	7	7	7	7	7
19	10 gal gas TE Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1007	1012	1008	1016	1014	[illegible]	1015	1008	1015	1011	1003	1014	1007	1011	1010	1012	1002	1003	1004	1011	1007	1009	1007	1009
23	Mw Output		MW			27	24.0	24.0	23.9	24.0	23.9	24.1	24.1	24.1	24.0	24.0	24.0	24.1	24.1	24.1	24.1	24.6	24.0	23.9	24.0	24.0	24.0	24.0	26.9	24.0
24	80% Base Load Minimum		MW				21.1	21.0	21.0	21.0	21.0	21.0	20.9	20.8	20.9	20.0	20.0	20.0	20.0	19.8	19.8	20.1	20.9	20.7	20.6	20.6	20.6	20.6	20.7	20.7
25	Running Hours (unit overview)						12293	12294	12295	12296	12297	[illegible]	12299	12300	12293	12302	12303	12304	1205	12306	12307	12308	12309	12310	12311	12312	12313	12314	12315	12316
26	Ambient Temperature	T1 Inlet					33	33	33	33	33	[illegible]	35.2	35.2	40.1	42.1	45.5	45.7	46.2	45.6	45.8	44.2	40.5	39.6	38	38	38	38	37	37
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	44	44	44	44	44	[illegible]	45	45	45	44	43	47	43	44	44	45	45	45	45	45	45	45	45	45
28	Total Fuel Flow		Mscf/h				216	215	215	214	215	[illegible]	218	215	217	215	214	214	216	215	218	215	216	216	216	216	216	216	216	216

Date:

Signature:

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		E	E	E	E	E	E	E	E	E	E	E	F	F	E	E	E	F	F	E	E	E	E	E	E
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	F	F	E	E	E	F	F	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL	25	25	25	25	25	25	25	25	25	25	29	25	25	25	25	25	28	24	24	24	24	24	24	24
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E	E	E	E	E	F	F	E	E	F	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	F	E	F	E	F	F	F	E	F	F	E	F	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140	98	98	98	98	98	98	98	98	97	97	97	97	97	97	97	97	97	97	97	98	98	98	98	98
Stage Disch. Press	PI-2101	psig		238	285	282	282	283	283	282	282	282	281	280	280	280	282	282	283	284	282	282	281	282	282	282	282	282	282
2nd Stage Inlet Press	PI-2200	psig		267	285	277	277	277	276	276	276	276	276	275	278	278	277	277	278	278	277	277	277	277	277	277	277	277	277
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	507	505	507	508	507	501	501	501	501	502	507	507	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500	500	499	499	499	499	500	500	499	499	500	500	500	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57	57	57	56	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
Lube Oil Temp	TE-1584	deg		150	170	170	170	169	169	169	169	169	169	169	169	169	169	169	169	169	168	167	167	169	169	169	169	169	169
Final Discharge Temp	TE-2120	deg		110	150	75	75	73	73	72	72	72	72	79	79	79	84	85	87	87	83	83	83	80	78	78	78	76	76
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	187	187	186	186	185	185	185	186	188	188	195	192	193	193	193	191	191	191	188	188	187	187	187	187
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	175	175	173	172	172	172	172	172	176	176	176	184	185	185	185	182	182	182	180	179	175	175	175	175
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	186	186	185	185	185	185	184	185	188	188	187	190	192	192	192	190	190	190	188	188	186	186	186	186
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	176	176	174	174	174	174	174	174	178	178	178	184	185	187	187	187	187	187	178	178	176	176	176	176
Motor Frame Vibration	VT-1015	IPS			0.15	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.06	.06	.06	.06	.06	.06
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06	.09	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																								

DEC 10 2022

DATE ~~DEC 10 2022~~

SIGNATURE

Mid Shift

Days Shift

Notes

195

3718 198

DEC 10 2022

Utilities and Institutional Facilities

Date: DEC 11 2022

CGTG HOURLY READING LOG

(MST) / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				✓	✓	✓	✓	✓	✓																		
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				✓	✓	✓	✓	✓	✓																		
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	108	108	110	110	108	103																		
4	Instrument Temperature	TI-001	deg C		20	50	18	18	18	18	18	18																		
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19																		
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	112	102	110	111	101	109																		
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3																		
9	Coolant Return Differential from GG	FI-001	In WC		60	80	60	60	60	60	60	60																		
10	Coolant Return Differential from	FI-002	In WC		37	50	35	35	35	35	35	35																		
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70																		
15	WECC Log		Operational?																											
16	Operation of PSS/ on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y																		
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y																		
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7																		
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0																		
20	Record on Hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GCD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		V				✓	✓	✓	✓	✓	✓																		
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1004	1013	1011	1012	1014	1009																		
23	Mw Output		MW			27	24.0	23.9	24.0	24.0	23.9	24.0																		
24	80% Base Load Minimum		MW				20.8	21.0	21.0	21.2	21.2	21.2																		
25	Running Hours (unit overview)						12317	12318	12319	12320	12321	12322																		
26	Ambient Temperature	T1 Inlet					35	33	33	32	32	31																		
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	45	45	45	45	45	45																		
28	Total Fuel Flow		Mscf/h				216	215	215	216	215	216																		

Date: DEC 11 2022 Signature:

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B																		
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E																		
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2																		
Oil Day Tank Level	LI-1562	GAL	10		FULL	24	24	24	24	24	24																		
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F																		
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E																		
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E																		
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B																		
1st Stage Inlet Press.	PI-2100	psig		88	140	98	98	98	98	98	98																		
Stage Disch. Press	PI-2101	psig		238	285	282	282	282	282	281	281																		
2nd Stage Inlet Press	PI-2200	psig		267	285	277	277	277	277	277	277																		
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507																		
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	500	500	500																		
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57	57																		
Lube Oil Temp	TE-1584	deg		150	170	170	170	170	170	170	170																		
Final Discharge Temp	TE-2120	deg		110	150	72	72	72	72	71	71																		
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	185	185	185	185	185	185																		
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	172	172	172	172	172	171																		
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	185	185	185	184	184	184																		
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	174	174	174	174	172	172																		
Motor Frame Vibration	VT-1015	IPS			0.15	.05	.05	.05	.05	.05	.05																		
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06																		
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																								

DATE	DEC 11 2022
SIGNATURE	
Mid Shift	
Days Shift	

Notes

Utilities and Institutional Facilities

Date: 12-14-22

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling): 1641

Time of Turbine Online (Brkr Closed): 1626

Time Turbine Offline (Brkr Open):

Time No Gas Flow: 1700

CGTG HOURLY READING LOG

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V																											
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V																											
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120																								
4	Instrument Temperature	TI-001	deg C		20	50																								
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25																									
7	Coolant PLC Temperature	TI-002	deg F	100	110	120																								
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL																								
9	Coolant Return Differential from GG	FI-001	In WC		60	80																								
10	Coolant Return Differential from	FI-002	In WC		37	50																								
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85																								
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)																								
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)																								
	Entronic Control System		Units	Low	Norm	Max																								
	(18-20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%																								
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%																								
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		V																											
	(22-24 found on Power Management page)																													
22	Generator Current		Amps			1427																								
23	Mw Output		MW			27																								
24	80% Base Load Minimum		MW																											
25	Running Hours (unit overview)																													
26	Ambient Temperature	T1 Inlet																												
	(27-28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%																								
28	Total Fuel Flow		Mscf/h																											

Date: 12-14-22 Signature:

CGTG TURBINE UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor	1616	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME	1604																												
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK																									
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY																								
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL																								
Oil Day Tank Level	LI-1562	GAL	10		FULL																								
Lubricator Bulls eye		LEVEL	1/2	FULL																									
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY																								
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY																								
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK																									
1st Stage Inlet Press.	PI-2100	psig		88	140																								
Stage Disch. Press	PI-2101	psig		238	285																								
2nd Stage Inlet Press	PI-2200	psig		267	285																								
2nd Stage Disch. Press	PI-2201	psig		575	600																								
Final Discharge Pressure	PI-2108	psig		575	600																								
Lube Oil Pressure	PI-1572	psig	40	60																									
Lube Oil Temp	TE-1584	deg		150	170																								
Final Discharge Temp	TE-2120	deg		110	150																								
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297																								
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283																								
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297																								
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283																								
Motor Frame Vibration	VT-1015	IPS			0.15																								
Compresser Frame Vibration	VT-1512	IPS			0.35																								
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																								

DATE	12-14-22
SIGNATURE	
Mid Shift	
Days Shift	

Notes 1604 temp on HI discharge pressure.

Utilities and Institutional Facilities

Date: 12-15-22

PST / MDT (circle one)

CGTG HOURLY READING LOG

Time Gas Introduced (Turbine Rolling): 0944

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow: 1109

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V																											
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V																											
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120																								
4	Instrument Temperature	TI-001	deg C		20	50																								
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25																									
7	Coolant PLC Temperature	TI-002	deg F	100	110	120																								
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL																								
9	Coolant Return Differential from GG	FI-001	In WC		60	80																								
10	Coolant Return Differential from	FI-002	In WC		37	50																								
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85																								
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)																								
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)																								
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%																								
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%																								
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		V																											
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427																								
23	Mw Output		MW			27																								
24	80% Base Load Minimum		MW																											
25	Running Hours (unit overview)																													
26	Ambient Temperature	T1 Inlet																												
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%																								
28	Total Fuel Flow		Mscf/h																											

Date: 12-15-22 Signature:

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME	0437																												
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK																									
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY																								
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL																								
Oil Day Tank Level	LI-1562	GAL	10		FULL																								
Lubricator Bulls eye		LEVEL	1/2	FULL																									
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY																								
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY																								
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK																									
1st Stage Inlet Press.	PI-2100	psig		88	140																								
Stage Disch. Press	PI-2101	psig		238	285																								
2nd Stage Inlet Press	PI-2200	psig		267	285																								
2nd Stage Disch. Press	PI-2201	psig		575	600																								
Final Discharge Pressure	PI-2108	psig		575	600																								
Lube Oil Pressure	PI-1572	psig	40	60																									
Lube Oil Temp	TE-1584	deg		150	170																								
Final Discharge Temp	TE-2120	deg		110	150																								
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297																								
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283																								
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297																								
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283																								
Motor Frame Vibration	VT-1015	IPS			0.15																								
Compresser Frame Vibration	VT-1512	IPS			0.35																								
Take Once per Shift / at Full Load		psig		Max psid	When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																								
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																								

DATE	12-15-22
SIGNATURE	
Mid Shift	
Days Shift	

Notes

Utilities and Institutional Facilities

Date: 12-16-22

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling): 0930

Time of Turbine Online (Brkr Closed): 1000

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

Notes:

CGTG HOURLY READING LOG

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V													✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V													✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120										110	105	101	102	110	109	110	106	110	110	108	110	110	108	110
4	Instrument Temperature	TI-001	deg C		20	50										13	13	13	13	13	13	13	13	13	12	12	12	12	12	12
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25											19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120										105	110	100	101	117	101	108	110	114	100	110	99	105	101	110
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL										2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80										60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
10	Coolant Return Differential from	FI-002	In WC		37	50										35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85										70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/ on at 6.3MW		Yes (Y)			No (N)										Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)										Y	Y	Y	Y	Y	✓	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%										7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%										0	0	0	0	1	0	1	1	0	0	0	0	0	0	0
20	Record on Hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20											✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓
21	Acknowledge Alarms Hourly		V													Y	Y	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1627										1103	1099	1108	1101	1110	1109	1102	1104	1103	1096	1098	1091	1095	1091	1092
23	Mw Output		MW			27										26.2	26.8	26.4	26.2	26.3	26.3	26.2	26.2	26.2	26.1	26.1	26.0	26.0	26.0	26.0
24	80% Base Load Minimum		MW													21.8	21.8	21.8	21.6	21.7	21.7	21.7	21.6	21.8	21.8	21.8	21.8	21.8	21.8	21.8
25	Running Hours (unit overview)															12326	12327	12328	12329	12330	12331	12332	12333	12334	12335	12336	12337	12338	12339	12340
26	Ambient Temperature	T1 Inlet														24.1	23.0	26.0	24.8	24.5	25.2	22.1	21.4	20.3	18	18	17	17	16	16
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%										55	55	55	55	56	56	56	56	56	57	57	57	57	57	57
28	Total Fuel Flow		Mscf/h													232	232	231	231	233	232	231	231	231	230	230	230	230	230	230

Date: 12-16-22 Signature:

CGTG TURBINE **UTILITIES AND INFRASTRUCTURE**

			Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
20	Natural Gas Compressor																													
21	GAS COMPRESSOR START TIME																													
24	Combustible Gas Detector	AAH-303	%		0%	20%										B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
25	Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK											E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
26	Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY										1/2	1/2	1/2	1/2	3/4	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
27	Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL										FULL	FULL	FULL	F	F	F	F	F	F	F	F	F	F	F	F
28	Oil Day Tank Level	LI-1562	GAL	10		FULL										F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
29	Lubricator Bulls eye		LEVEL	1/2	FULL											E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
30	1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY										E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
31	2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY										B	B	D	D	B	B	B	B	B	B	B	B	B	B	B
32	Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK											94	94	94	94	94	96	96	96	96	96	96	96	96	96	96
33	1st Stage Inlet Press.	PI-2100	psig		88	140										271	271	271	271	272	274	272	272	272	272	272	274	274	274	274
34	Stage Disch. Press	PI-2101	psig		238	285										266	266	266	266	267	267	267	267	267	267	267	269	269	269	269
35	2nd Stage Inlet Press	PI-2200	psig		267	285										506	506	506	503	507	507	507	507	507	507	507	507	507	507	507
36	2nd Stage Disch. Press	PI-2201	psig		575	600										499	499	499	499	500	500	500	500	500	500	506	500	500	500	500
37	Final Discharge Pressure	PI-2108	psig		575	600										57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
38	Lube Oil Pressure	PI-1572	psig	40	60											108	108	108	104	168	168	168	168	168	168	168	169	169	169	168
39	Lube Oil Temp	TE-1584	deg		150	170										69	69	69	69	70	70	70	70	70	70	70	70	70	70	70
40	Final Discharge Temp	TE-2120	deg		110	150										185	185	185	185	184	184	184	184	184	184	185	185	185	185	185
41	1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297										173	173	173	173	172	173	172	172	172	172	172	175	175	175	176
42	2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283										184	184	184	184	184	184	180	184	180	184	184	184	184	184	184
43	1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297										174	174	174	174	174	174	174	174	174	174	174	176	176	176	176
44	2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283										04	04	04	04	04	04	04	04	04	.04	.04	.04	.04	.04	.04
45	Motor Frame Vibration	VT-1015	IPS			0.15										07	07	07	07	06	06	06	07	07	.06	.06	.06	.06	.06	.06
46	Compresser Frame Vibration	VT-1512	IPS			0.35																								
47	Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																									
48	Natural Gas Comp.Discharge Press.																													
49	Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																								
50	Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																								

DATE

SIGNATURE

Mid Shift

Days Shift

NOTES

Utilities and Institutional Facilities

DEC 17 2022

Date: _____

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open):

Time No Gas Flow:

CGTG HOURLY READING LOG

Notes: _____

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√				✓	✓	✓	✓	✓	✓																		
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√				✓	✓	✓	✓	✓	✓																		
3	Wet Receiver Air Pressure	PI-002	psig	98	105	120	108	108	110	108	110	(1)																		
4	Instrument Temperature	TI-001	deg C		20	50	10	10	10	10	10	15																		
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19																		
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	100	98	101	102	108	[illegible]																		
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3																		
9	Coolant Return Differential from GG	FI-001	in WC		60	80	60	60	60	60	60	60																		
10	Coolant Return Differential from	FI-002	in WC		37	50	35	35	35	35	35	35																		
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70																		
13	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y																		
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y																		
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7																		
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0																		
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A6SGGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√				✓	✓	✓	✓	✓	✓																		
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1091	1090	1082	1090	1089	1087																		
23	Mw Output		MW			27	25.8	25.8	25.9	25.8	25.7	25.7																		
24	80% Base Load Minimum		MW				21.8	21.8	21.8	21.8	21.8	21.8																		
25	Running Hours (unit overview)						12340	12341	12342	12343	12344	12345																		
26	Ambient Temperature	T1 Inlet					14	14	14	14	13	13																		
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	57	57	57	57	57	9																		
28	Total Fuel Flow		Mscf/h				227	227	227	227	227	227																		

Date: DEC 17 2022 Signature:

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B																		
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E																		
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	½	½	½	½	½	½																		
Oil Day Tank Level	LI-1562	GAL	10		FULL	F	F	F	F	F	F																		
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F																		
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E																		
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E																		
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B																		
1st Stage Inlet Press.	PI-2100	psig		88	140	95	95	95	95	95	95																		
Stage Disch. Press	PI-2101	psig		238	285	275	275	275	275	275	274																		
2nd Stage Inlet Press	PI-2200	psig		267	285	270	270	270	270	269	269																		
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	587	507	507																		
Final Discharge Pressure	PI-2108	psig		575	600	500	500	500	580	580	500																		
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	57	57																		
Lube Oil Temp	TE-1584	deg		150	170	169	169	169	169	168	168																		
Final Discharge Temp	TE-2120	deg		110	150	70	70	70	70	70	70																		
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	185	185	185	185	184	184																		
2ndStage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	175	175	175	175	175	175																		
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	184	184	184	184	184	184																		
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	176	176	176	176	176	176																		
Motor Frame Vibration	VT-1015	IPS			0.15	.04	.04	.04	.04	.04	.04																		
Compresser Frame Vibration	VT-1512	IPS			0.35	.05	.05	.05	.05	.05	.05																		
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																								

DATE	DEC 17 2022
SIGNATURE	
Mid Shift	
Days Shift	

Notes

Utilities and Institutional Facilities

12-20-2022
Date

CGTG HOURLY READING LOG

MST / MDT (circle one)
Time Gas Introduced (Turbine Rolling):
Time of Turbine Online (Brkr Closed):
Time Turbine Offline (Brkr Open):
Time No Gas Flow:

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	√													✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Blowdown Wet Receiver Tank Hourly	BVT-007	√													✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120										110	101	104	108	110	105	103	106	109	113	110	109	112	110	108
4	Instrument Temperature	TI-001	deg C		20	50										16	17	18	19	19	19	19	19	19	17	17	17	16	16	16
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25											19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
7	Coolant PLC Temperature	TI-002	deg F	100	110	120										110	109	111	103	104	102	103	110	112	111	107	104	101	99	107
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL										2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	2/3	3/3	2/3	3/3	3/3	2/3	3/3
9	Coolant Return Differential from GG	FI-001	In WC		60	80										63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
10	Coolant Return Differential from	FI-002	In WC		37	50										36	36	34	34	36	34	36	36	36	36	36	36	36	36	36
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85										70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
15	WECC Log		Operational?																											
16	Operation of PSS/ on at 6.3MW		Yes (Y)			No (N)										✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)										✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%										7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD ST-01	psig	35	20																									
21	Acknowledge Alarms Hourly		√													✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427										1100	1095	1073	1065	1071	1068	1064	1024	1084	1086	1081	1079	1078	1089	1089	1091
23	Mw Output		MW			27										26.1	26.0	25.5	25.3	25.4	25.5	25.3	25.5	25.7	25.7	25.7	25.6	25.6	25.8	25.9	26.0
24	80% Base Load Minimum		MW													21.2	21.2	20.4	20.5	20.5	20.5	20.5	20.7	20.8	20.9	20.9	20.8	20.8	21.0	21.1	21.2
25	Running Hours (unit overview)															12346	12347	12349	12350	12350	12352	12353	12354	12356	12356	12357	12358	12359	12360	12361	12362
26	Ambient Temperature	T1 Inlet														31	31	37.0	39.2	38.7	38.8	39.4	35.9	35.4	34.2	34.9	35.6	35.7	32.9	32.4	32.0
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%										55	54	54	54	54	54	55	50	55	53	55	55	55	55	55	55
28	Total Fuel Flow		Mscf/h													232	231	228	225	226	221	226	227	228	229	228	228	229	229	229	229

Date: 12-20-2022 Signature: GOMEZ

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME	0820																												
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK											B	B	D	B	B	B	B	B	B	B	B	B	B	B	B
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY										E	E	E	E	E	F	E	E	E	E	E	E	E	E	E
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL										1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Oil Day Tank Level	LI-1562	GAL	10		FULL										F	F	F	F	F	F	F	F	F	53	53	53	53	53	53
Lubricator Bulls eye		LEVEL	1/2	FULL											F	E	E	F	F	F	F	F	F	F	F	F	F	F	F
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY										E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY										E	E	F	E	E	E	E	E	E	E	E	E	E	E	E
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK											B	B	B	D	D	B	B	D	B	B	B	B	B	B	B
1st Stage Inlet Press.	PI-2100	psig		88	140										94	94	95	95	95	95	95	95	95	95	95	95	95	95	95
Stage Disch. Press	PI-2101	psig		238	285										273	279	276	274	276	276	276	276	276	275	275	276	274	274	274
2nd Stage Inlet Press	PI-2200	psig		267	285										268	260	271	271	271	271	271	271	271	270	270	271	270	270	270
2nd Stage Disch. Press	PI-2201	psig		575	600										507	507	507	507	507	507	507	507	507	507	507	507	507	507	507
Final Discharge Pressure	PI-2108	psig		575	600										500	500	500	500	500	500	499	499	499	500	500	500	500	500	500
Lube Oil Pressure	PI-1572	psig	40	60											57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
Lube Oil Temp	TE-1584	deg		150	170										169	168	170	170	170	170	170	170	170	169	170	170	169	168	168
Final Discharge Temp	TE-2120	deg		110	150										71	71	72	72	72	72	72	72	72	73	74	74	73	72	71
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297										184	184	187	187	186	186	186	186	186	184	184	184	182	181	181
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283										173	173	179	179	179	179	179	179	179	174	175	175	173	171	171
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297										183	183	185	185	185	185	184	184	184	183	183	183	181	180	181
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283										174	174	180	180	180	180	180	180	180	176	177	177	174	173	171
Motor Frame Vibration	VT-1015	IPS			0.15										.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
Compresser Frame Vibration	VT-1512	IPS			0.35										.05	.04	.04	.05	.04	.05	.04	.04	.04	.04	.04	.04	.04	.04	.04
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.															500					500									
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8										496					496									
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20										482					483									

DATE	12.20.2022
SIGNATURE	
Mid Shift	
Days Shift	

Notes

Utilities and Institutional Facilities

Date: DEC 21 2022

CGTG HOURLY READING LOG

MST / MDT (circle one)

Time Gas Introduced (Turbine Rolling):

Time of Turbine Online (Brkr Closed):

Time Turbine Offline (Brkr Open): 0804

Time No Gas Flow: 0804

Notes:

	Instrument Air Compressor	I.D	Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Blowdown Dry Receiver Tank Hourly	BVT-013	V				~~113~~ √	√	√	√	√	√	√																	
2	Blowdown Wet Receiver Tank Hourly	BVT-007	V				√	√	√	√	√	√	√																	
3	Wet Receiver Air Pressure	PI-002	psig	90	105	120	113	110	112	109	113	110	112																	
4	Instrument Temperature	TI-001	deg C		20	50	16	15	14	14	13	13	14																	
5	Fin Fan Cooler		Units	Low	Norm	Max																								
6	Coolant Pressure	PI-250	psig		25		19	19	19	19	19	19	19																	
7	Coolant PLC Temperature	TI-002	deg F	100	110	120	104	100	107	109	101	105	104																	
8	Sight glass Level Expansion Tank	LI-001	LEVEL	1/3	2/3	FULL	2/3	2/3	2/3	2/3	2/3	2/3	2/3																	
9	Coolant Return Differential from GG	FI-001	In WC		60	80	63	63	63	63	63	63	62																	
10	Coolant Return Differential from	FI-002	In WC		37	50	36	36	36	36	36	36	36																	
11	Control Room		Units	Low	Norm	Max																								
12	Room Temperature		deg F		72	85	70	70	70	70	70	70	70																	
15	WECC Log		Operational?																											
16	Operation of PSS/on at 6.3MW		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y																	
17	Operation of AVR Voltage Mode @ 13.6 KV		Yes (Y)			No (N)	Y	Y	Y	Y	Y	Y	Y																	
	Entronic Control System		Units	Low	Norm	Max																								
	(18–20 found on Air Diagram page)																													
18	2000 gal Oil Water Tank Level	LI-231	%			70%	7	7	7	7	7	7	7																	
19	10 gal gas TG Drain Tank (Air Diagram page)	LI-230	%			70%	0	0	0	0	0	0	0																	
20	Record on hard S/D trip over 4500 rpm NL Compressor (on line trip)	A63GGD 5T-01	psig	35	20																									
21	Acknowledge Alarms Hourly		V				√	√	√	√	√	√	√																	
	(22–24 found on Power Management page)																													
22	Generator Current		Amps			1427	1096	1103	1105	1099	1111	1114	1119																	
23	Mw Output		MW			27	26.0	26.2	26.2	26.1	26.3	26.5	26.5																	
24	80% Base Load Minimum		MW				21.2	21.4	21.4	21.3	21.5	21.6	21.6																	
25	Running Hours (unit overview)						12363	12364	12366	12366	12367	12368	12368																	
26	Ambient Temperature	T1 inlet					30.7	28.9	28.8	30.4	28.0	26.6	25																	
	(27–28 found on Gas Fuel System page)																													
27	Waste Oil Tank	LI-120	%			70%	55	55	55	55	55	55	55																	
28	Total Fuel Flow		Mscf/h				231	237	232	231	233	234	234																	

Date: DEC 21 2022 Signature: A Wilson

CGTG TURBINE

UTILITIES AND INFRASTRUCTURE

Natural Gas Compressor		Units	Low	Norm	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
GAS COMPRESSOR START TIME																													
Combustible Gas Detector	AAH-303	%		0%	20%																								
Packing Lube Oil Flow Indicator Left Side	FSL-1501B	LIGHT		BLINK		B	B	B	B	B	B	B																	
Liquid Level Coalescing	LI-7721	LIQID		EMPTY	ANY	E	E	E	E	E	E	E																	
Crankcase Bulls eye	LC-1574	LEVEL	1/4	1/2	FULL	1/2	1/2	1/2	1/2	1/2	1/2	1/2																	
Oil Day Tank Level	LI-1562	GAL	10		FULL	53	53	53	52	52	52	52																	
Lubricator Bulls eye		LEVEL	1/2	FULL		F	F	F	F	F	F	F																	
1st Stage Scrubber Liquid Level	LI-7416	LIQID		EMPTY	ANY	E	E	E	E	E	E	E																	
2nd Stage Scrubber Liquid Level	LI-7466	LIQID		EMPTY	ANY	E	E	E	E	E	E	E																	
Packing Lube Oil Flow Indicator Right Side	FSL-1501A	LIGHT		BLINK		B	B	B	B	B	B	B																	
1st Stage Inlet Press.	PI-2100	psig		88	140	95	95	95	95	94	94	94																	
Stage Disch. Press	PI-2101	psig		238	285	274	274	274	274	273	273	274																	
2nd Stage Inlet Press	PI-2200	psig		267	285	269	269	269	269	268	268	269																	
2nd Stage Disch. Press	PI-2201	psig		575	600	507	507	507	507	507	507	507																	
Final Discharge Pressure	PI-2108	psig		575	600	499	499	499	499	499	499	499																	
Lube Oil Pressure	PI-1572	psig	40	60		57	57	57	57	56	56	56																	
Lube Oil Temp	TE-1584	deg		150	170	169	169	168	168	168	168	169																	
Final Discharge Temp	TE-2120	deg		110	150	70	69	69	69	69	69	69																	
1st Stage Cylinder Disch. Temperature A	TE-2054 A	deg		226	297	182	181	180	180	181	181	181																	
2nd Stage Cylinder Disch. Temperature A	TE-2062 A	deg		258	283	172	170	169	169	170	170	172																	
1st Stage Cylinder Disch. Temperature B	TE-2054 B	deg		226	297	182	181	180	181	181	181	181																	
2nd Stage Cylinder Disch. Temperature B	TE-2062 B	deg		258	283	173	171	169	170	172	171	173																	
Motor Frame Vibration	VT-1015	IPS			0.15	.05	.05	.05	.05	.05	.05	.04																	
Compresser Frame Vibration	VT-1512	IPS			0.35	.06	.06	.06	.06	.06	.06	.06																	
Take Once per Shift / at Full Load		psig		Max psid		When the differential pressure exceeds Max psid the filter should be changed out. Notify System Engineer																							
Natural Gas Comp.Discharge Press.																													
Double Block and Bleed Pressure	A63FGDT	49-48=psid			8																								
Fuel Gas Supply Pressure	A63FTGST	50-49=psid			20																								

DATE DEC 21 2022

SIGNATURE

Mid Shift

Days Shift

Notes

ATTACHMENT A1307.E.

TA-03 Power Plant

FGR Fan Inspection and Maintenance

Facility : F08 **Unit :** 030022 **Proj :**
Task Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
W/O Type : PM **W/O Group :** UTIL **Task Priority :** 4
Planner : 185614 HARRIS JEANETTE S
W/O Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
Written To : TA03-0022 FAN, FLUE GAS RECIRCULING (FGR-001, FGR-002, FGR-003)
Task Dspln : **Due Date :** 07/31/2022
Superintendant :

Hazard : LOW **IWD Reqmt :** N/A LOW HZRD

Work Order Task

00723139 01

MASTER

Date: 04/19/2022

Work Order Task Written To

Facility : F08 **Unit :** 030022 **Op Sys :**
Room : **Area :** **Sys/Cls :**
Equipment : **Component :**
Location :
Job Type : PM
Tag 1 : **Tag 2 :**
Work Item : TA03-0022 FGR **Ops Review Reqd :**

Authorization

Start Permission : Glenn martinez **Start Date :** 6-24-22

Complete Notice : Glenn Martinez **Complete Date :** 7-21-22

Work Order Task Instructions

DO NOT lubricate the bearings if the FGR fan is NOT in operation or in service so that proper amount of grease can be applied using headphones
You can hear when grease reaches the bearing rolling element. At this point, stop adding grease to prevent bearing damage from overheating

There are two bearings on the fan, each with its own zerk plug
Remove the shaft guard located in the middle of the drive. The two zerk plugs are located on each of the two bearings

1. Use grease gun with the Ultralube headphones to insert the correct amount

Facility : F08 **Unit :** 030022 **Proj :**
Task Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
W/O Type : PM **W/O Group :** UTIL **Task Priority :** 4
Planner : 185614 HARRIS JEANETTE S
W/O Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
Written To : TA03-0022 FAN, FLUE GAS RECIRCULING (FGR-001, FGR-002, FGR-003)
Task Dspln : **Due Date :** 07/31/2022
Superintendant :

Hazard : LOW **IWD Reqmt :** N/A LOW HZRD

Work Order Task

00723139 01

MASTER

Date: 04/19/2022

of Mobilith SHC 100 grease into zerk fitting
b. Apply grease while fan is running and stop when you hear the grease enter the running bearing

Lubricated fan bearings on FGR-001,FGR-002 & FGR-003

4. Add grease with a hand-operated pressure gun until new grease enters the running bearing
a. This is accomplished by using the ultrasonic sensor and headphones to hear when the new grease enters the running bearing
b. Stop adding grease when the grease reaches the bearing to limit excess grease from migrating down the motor shaft and into the windings
Note: Be careful when greasing the fan end bearing of the TEFC (Totally (Totally Enclosed Fan Cooled) motors. Some motors have a spring-relief outlet grease fitting on the fan end that is not accessible. This spring-relief fitting normally does not have to be removed when regreasing. When greasing, take care in the amount of pressure you apply and verify relief is working
5. Putting in too much or too little grease can cause overheating of the motors and result in motor failure. Use this rule of thumb when adding grease to a motor that has been lubricated on a regular basis:
It is better to use a little grease more often than a lot of grease less often
Note: Watch out for motors that were shipped only with the bearings packed and not the fill tube or even the bearing housing
Apply new grease until you can hear it enter the running bearing
6. Now that greasing is complete, leave the relief plug off and run the motor for 10 minutes to expel any excess grease
7. Replace the drain plug and wipe the bearing housing clean
8. Dispose of dirty rags in accordance with Hazardous Waste Guidelines
9. Ensure correct operation of electric motors.

Facility : F08 **Unit :** 030022 **Proj :**
Task Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
W/O Type : PM **W/O Group :** UTIL **Task Priority :** 4
Planner : 185614 HARRIS JEANETTE S
W/O Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
Written To : TA03-0022 FAN, FLUE GAS RECIRCULING (FGR-001, FGR-002, FGR-003)
Task Dspln : **Due Date :** 07/31/2022
Superintendant :

Hazard : LOW **IWD Reqmt :** N/A LOW HZRD

Work Order Task

00723139 01

MASTER

Date: 04/19/2022

QC Requirements / Comments

Work Completion Signatures

Name	Function/Dept.	Date
Chris Salazar	LOG-CS/PP MAINT.....	07-20-22

Comments

(rework?)

Cost Accounting

Cost Center : 7D120C **Activity :** 640CL000

Percentage : 100 **Acct No :** XU5000 **Sub Acct :** 7E2P0000

Facility : F08 **Unit :** 030022 **Proj :**
Task Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
W/O Type : PM **W/O Group :** UTIL **Task Priority :** 4
Planner : 185614 HARRIS JEANETTE S
W/O Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
Written To : TA03-0022 FAN, FLUE GAS RECIRCULING (FGR-001, FGR-002, FGR-003)
Task Dspln : **Due Date :** 07/31/2022
Superintendant :

Hazard : LOW **IWD Reqmt :** N/A LOW HZRD

Work Order Task

00723139 01

MASTER

Date: 04/19/2022

Worker engagement questions are intended to focus attention on the task and ensure uncertainties are addressed. Examples of worker engagement questions are provided below. Worker engagement questions should be tailored to the situation.

Each of the questions listed below will be discussed at each Pre-Job Brief with all affected personnel.

Topic 1M FGR Bearing Lubrication	***Completed (X)***
What permits, permissions, or support are required to safely start this work?	X
What is the most likely thing that could go wrong (not the worst thing) and what, specifically, will prevent it?	X
What can cause us to go beyond the scope of the work?	X
What hazards in the work area may not have been considered during planning of this job	X

Form 2101

Integrated Work Document (IWD) Part 2, FOD Requirements and Approval for Entry and Area Hazards and Controls

Non-Tenant Activity Form

IWD No./Work Request No: _____ Revision #: _____

The Facility Operation Director (FOD) must determine the facility entry and coordination requirements and identify the Environment, Safety, Health (ESH)/Security and Safeguards (S&S) hazards and controls associated with the specific activity location.

FOD	TA	Bldg.	Room	Other Location
8	03	22-24	N/A	Power Plant Bldg - Inside
FOD Designated Facility Point-of-Contact	Name Nicholas Nelson	Phone 505-655-5508	Pager N/A	Email nelson_n@lanl.gov

Entry and Coordination Requirements (*Check one or more of the following*)

- ☐ No Entry/Coordination Requirements
- ☐ FOD-designated facility Point-of-Contact must sign IWD Part 3
- ☒ Plan of the Day/Plan of the Week (POTD/POTW)
- ☒ Check in at Start of Work
- ☒ Work-Area Training Required
- ☒ Security Clearance Requirements
- ☒ Work must be Scheduled
- ☒ Check in Daily
- ☐ Co-located Hazards/Concerns
- ☐ Other Security Requirements (ex.: Cellphone, No Foreign Nationals, etc.)
- ☒ Check out at End of Work
- ☐ Quality Issues
- ☒ Check out Daily
- ☐ Escort Required
- ☐ Review under Authorization Basis (AB)/Safety Basis/Unreviewed Safety Question (USQ)
- ☒ Other Bounding Conditions: PIC is responsible to conduct a pre-job brief for work activities to ensure that work conditions and worker communications are adequate. A pre job briefing shall be conducted at the job site. UI-OPS will determine if onsite ESH representation is required during work activities.

Additional Comments

All work must be approved by the Utilities FOD or OM or OS. POD/POTW – 1:30pm Mon. thru Friday. Evaluate outside ground conditions during cold or wet weather events, wear appropriate foot wear (spiky-plus) in snow and ice conditions. Evaluate inside floor and housekeeping conditions to safely proceed with activities. Check in with Plant Operations Manager/Specialist or Operations Shift Head for final approval to proceed with tasks. All personnel entering any area must view the site specific training video in room 116 (Boiler Control Room), one time requirement. Observe safety signs and floor markings in all buildings and areas. The West end front lobby and office areas of Bldg 22 are considered a no hazard area.

Instructions: In the block below, identify work-area hazards that could potentially affect the worker(s) or others. Avoid using the same Part 2, Form 2101 for multiple facilities. Ensure that work area hazards, specific to the facility or work location are identified and controlled. Specify the facility controls and preventive measures that must be implemented by the worker(s) to protect against the work area hazards, and also special training required.

ESH/S&S WORK AREA HAZARDS & CONTROLS				
Work Area Hazards/Concerns Identify site hazards and concerns that could potentially affect the worker(s) or others.	**Work Area Hazard Present**	**Facility Controls/ Preventive Measures/ Bounding Conditions** Specify preventive measures, controls and bounding conditions for each site hazard	**Reference Documents** List permits, operating manuals, and other reference procedures	**Training and Qualification** List training requirements (P300, Integretated Work Management, Section 6.1)
☐ **No Work Area Hazards**				
Ionizing Radiation Work in posted radiological areas, work with radioactive materials,	☐ Yes ☒ No			

or work on or near radiation producing devices. **Specify Hazard:**				

IWD No./Work Request No: _____ Revision #: _____

ESH/S&S WORK AREA HAZARDS & CONTROLS				
Work Area Hazards/Concerns Identify site hazards and concerns that could potentially affect the worker(s) or others.	**Work Area Hazard Present**	**Facility Controls/ Preventive Measures/ Bounding Conditions** Specify preventive measures, controls and bounding conditions for each site hazard	**Reference Documents** List permits, operating manuals, and other reference procedures	**Training and Qualification** List training requirements (P300, Integretated Work Management, Section 6.1)
Worker Exposure Working near non-ionizing radiation, beryllium, noise, chemicals, hazardous biological materials, lead, asbestos, temperature/humidity extremes, or high explosives. **Specify Hazards:** Hot Piping, Potential Hot Water/Steam from pipe/fitting openings, Boiler Water Treatment Chemicals, Asbestos.	☒ Yes ☐ No	Required PPE: Hard hat, safety shoes, safety glasses. Hearing protection (noise > 85 dba). Avoid hot surfaces and piping. Long sleeve shirt or Ansell sleeves or coveralls. Gloves when operating valves or contacting pipe/fitting openings where there is potential for hot water/steam release. Be aware of encapsulated asbestos. Follow LANL Asbestos program/rqmts if PACM identified outside containment. Be aware of chemical containers and check labeling. Be aware of piping, associated systems for any leaks. If chemical leak is noticed contact operations manager, IH&S Rep during regular working hrs. Over100 gallons of a chemical spill leave area, and control access. Call Serf Operators 667-8982 or by Radio Lanl for mitigation cleanup process. For after-hours contact the UI Duty Officer, 699-7452 to re-assess any abnormal situation	• P101-6 PPE •P101-23 Asbestos • P101-31Hearing Conservations/Noise Program	•LANL PPE or equivalent • Hearing protection • Site specific training • Asbestos awareness • Hazcom

Energized and Operative Systems Working near energized electrical parts, pressure systems, steam lines; near unprotected belts, pulleys, chains or rotating equipment; fuel fired equipment other than vehicles; or spark or flame producing operations. **Specify Hazards:** Energized/rotating equipment, hot pressurized water/steam lines .	☒ Yes ☐ No	Stay within established walking areas. Observe safety signage alarm lights and horns. Identify explosive hazards and follow task specific IWD if working on plant equipment or components. Note: All TA3-22 LOTOs require independent verification and written specific procedure. If questions consult with UI system engineer, Operation Mgr. Designee, or Safety rep. .	P101-13 Electrical Safety P101-3 LOTO P101-34 Pressure, Vacuum, Cryogenic System	Site Specific Training video. Electrical Safety LOTO if applicable to task.
Confined Spaces Entry into tanks, manholes, cooling towers, sumps, or any other area with potentially low oxygen concentration or other hazards such as toxic vapors or engulfment. **Specify Hazards:**	☒ Yes ☐ No	Observe confined space signs or markings and follow LANL Confined Space Requirements if task requires confined space entry.	P101-27 Confined Space	Confined Space Traning
Elevated Work Surface Elevated work when fall protection is not provided by conventional handrail systems or required per P101-20, *Fall Protection Program*	☒ Yes ☐ No	Stay within established walking areas, stairways and paths. Observe safety signage. Follow LANL Fall Protection Requirements if task on roofs or work above 4 feet.	P101-20.0	Fall Protection
Environmental Impact Activities conducted in areas containing potential release site, contaminated soil, sensitive species, watercourse wetlands, floodplain, historical/archeological sites, or other work area condition that can be impacted by or can impact the environment. **Specify Hazards:**	☐ Yes ☒ No			
Security Requirements **Specify:**	☐ Yes ☒ No			
Other Hazards **Specify:**	☒ Yes ☐ No	Call pest control for clean-up if excessive rat droppings, dead rodents, wasp nest, etc in area of task activity.		

I have verified that the hazards identified above adequately identify the area hazards and that the IWM process has been applied appropriately.

FOD or Representative (Signature/Z #/Date) **Approval Required** NICHOLAS NELSON (Affiliate) Digitally signed by NICHOLAS NELSON (Affiliate) Date: 2021.07.13 10:14:50 -06'00'

Date Approval Expires: 9-30-2022

Facility : F08 **Unit :** 030022 **Proj :**
Task Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
W/O Type : PM **W/O Group :** UTIL **Task Priority :** 4
Planner : 185614 HARRIS JEANETTE S
W/O Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
Written To : TA03-0022 FAN, FLUE GAS RECIRCULING (FGR-001, FGR-002, FGR-003)
Task Dspln : **Due Date :** 08/31/2022
Superintendant :

Hazard : LOW **IWD Reqmt :** N/A LOW HZRD

Work Order Task

00725571 01

MASTER

Date: 05/12/2022

Work Order Task Written To

Facility : F08 **Unit :** 030022 **Op Sys :**
Room : **Area :** **Sys/Cls :**
Equipment : **Component :**
Location :
Job Type : PM
Tag 1 : **Tag 2 :**
Work Item : TA03-0022 FGR **Ops Review Reqd :**

Authorization

Start Permission : Glenn martinez **Start Date :** 7-22-22

Complete Notice : Glenn martinez **Complete Date :** 8-26-22

Work Order Task Instructions

DO NOT lubricate the bearings if the FGR fan is NOT in operation or in service so that proper amount of grease can be applied
using headphones
You can hear when grease reaches the bearing rolling element. At this point, stop adding grease to prevent bearing damage from overheating

There are two bearings on the fan, each with its own zerk plug
Remove the shaft guard located in the middle of the drive. The two zerk plugs are located on each of the two bearings

1. Use grease gun with the Ultralube headphones to insert the correct amount

Facility : F08 **Unit :** 030022 **Proj :**
Task Title : PP 1M TA3–22 FGR BEARINGS, LUBRICATE
W/O Type : PM **W/O Group :** UTIL **Task Priority :** 4
Planner : 185614 HARRIS JEANETTE S
W/O Title : PP 1M TA3–22 FGR BEARINGS, LUBRICATE
Written To : TA03–0022 FAN, FLUE GAS RECIRCULING (FGR–001, FGR–002, FGR–003)
Task Dspln : **Due Date :** 08/31/2022
Superintendant :

Hazard : LOW **IWD Reqmt :** N/A LOW HZRD

Work Order Task

00725571 01

MASTER

Date: 05/12/2022

of Mobilith SHC 100 grease into zerk fitting
b. Apply grease while fan is running and stop when you hear the grease enter the running bearing

Lubricated fan bearings on FGR–001,FGR–002 & FGR–003

4. Add grease with a hand–operated pressure gun until new grease enters the running bearing
a. This is accomplished by using the ultrasonic sensor and headphones to hear when the new grease enters the running bearing
b. Stop adding grease when the grease reaches the bearing to limit excess grease from migrating down the motor shaft and into the windings
Note: Be careful when greasing the fan end bearing of the TEFC (Totally (Totally Enclosed Fan Cooled) motors. Some motors have a spring–relief outlet grease fitting on the fan end that is not accessible. This spring–relief fitting normally does not have to be removed when regreasing. When greasing, take care in the amount of pressure you apply and verify relief is working
5. Putting in too much or too little grease can cause overheating of the motors and result in motor failure. Use this rule of thumb when adding grease to a motor that has been lubricated on a regular basis:
It is better to use a little grease more often than a lot of grease less often
Note: Watch out for motors that were shipped only with the bearings packed and not the fill tube or even the bearing housing
Apply new grease until you can hear it enter the running bearing
6. Now that greasing is complete, leave the relief plug off and run the motor for 10 minutes to expel any excess grease
7. Replace the drain plug and wipe the bearing housing clean
8. Dispose of dirty rags in accordance with Hazardous Waste Guidelines
9. Ensure correct operation of electric motors.

Facility : F08 **Unit :** 030022 **Proj :**
Task Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
W/O Type : PM **W/O Group :** UTIL **Task Priority :** 4
Planner : 185614 HARRIS JEANETTE S
W/O Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
Written To : TA03-0022 FAN, FLUE GAS RECIRCULING (FGR-001, FGR-002, FGR-003)
Task Dspln : **Due Date :** 08/31/2022
Superintendant :

Hazard : LOW **IWD Reqmt :** N/A LOW HZRD

Work Order Task

00725571 01

MASTER

Date: 05/12/2022

QC Requirements / Comments

Work Completion Signatures

Name	Function/Dept.	Date
Jerry Lujan	LOG-CS/PP Maint.	8/25/22

Comments

(rework?)

Cost Accounting

Cost Center : 7D120C **Activity :** 640CL000

Percentage : 100 **Acct No :** XU5000 **Sub Acct :** 7E2P0000

Facility : F08 **Unit :** 030022 **Proj :**
Task Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
W/O Type : PM **W/O Group :** UTIL **Task Priority :** 4
Planner : 185614 HARRIS JEANETTE S
W/O Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
Written To : TA03-0022 FAN, FLUE GAS RECIRCULING (FGR-001, FGR-002, FGR-003)
Task Dspln : **Due Date :** 08/31/2022
Superintendant :

Hazard : LOW **IWD Reqmt :** N/A LOW HZRD

Work Order Task

00725571 01

MASTER

Date: 05/12/2022

Worker engagement questions are intended to focus attention on the task and ensure uncertainties are addressed. Examples of worker engagement questions are provided below. Worker engagement questions should be tailored to the situation.

Each of the questions listed below will be discussed at each Pre-Job Brief with all affected personnel.

Topic 1mo FGR Fan Lube 08-25-2022	**Completed (X)**
What permits, permissions, or support are required to safely start this work?	X
What is the most likely thing that could go wrong (not the worst thing) and what, specifically, will prevent it?	X
What can cause us to go beyond the scope of the work?	X
What hazards in the work area may not have been considered during planning of this job	X

Form 2101

Integrated Work Document (IWD) Part 2, FOD Requirements and Approval for Entry and Area Hazards and Controls

Non-Tenant Activity Form

IWD No./Work Request No: ____ Revision #: ____

The Facility Operation Director (FOD) must determine the facility entry and coordination requirements and identify the Environment, Safety, Health (ESH)/Security and Safeguards (S&S) hazards and controls associated with the specific activity location.

FOD 8	TA 03	Bldg. 22-24	Room N/A	Other Location Power Plant Bldg - Inside
FOD Designated Facility Point-of-Contact	Name Nicholas Nelson	Phone 505-655-5508	Pager N/A	Email nelson_n@lanl.gov

Entry and Coordination Requirements (*Check one or more of the following*)

- ☐ No Entry/Coordination Requirements
- ☒ Plan of the Day/Plan of the Week (POTD/POTW)
- ☒ Security Clearance Requirements
- ☐ Co-located Hazards/Concerns
- ☒ Check out at End of Work
- ☐ Escort Required
- ☐ FOD-designated facility Point-of-Contact must sign IWD Part 3
- ☒ Check in at Start of Work
- ☒ Work must be Scheduled
- ☐ Quality Issues
- ☐ Other Security Requirements (ex.: Cellphone, No Foreign Nationals, etc.)
- ☐ Review under Authorization Basis (AB)/Safety Basis/Unreviewed Safety Question (USQ)
- ☒ Work-Area Training Required
- ☒ Check in Daily
- ☒ Check out Daily
- ☒ Other Bounding Conditions: PIC is responsible to conduct a pre-job brief for work activities to ensure that work conditions and worker communications are adequate. A pre job briefing shall be conducted at the job site. UI-OPS will determine if onsite ESH representation is required during work activities.

Additional Comments

All work must be approved by the Utilities FOD or OM or OS. POD/POTW – 1:30pm Mon. thru Friday. Evaluate outside ground conditions during cold or wet weather events, wear appropriate foot wear (spiky-plus) in snow and ice conditions. Evaluate inside floor and housekeeping conditions to safely proceed with activities. Check in with Plant Operations Manager/Specialist or Operations Shift Head for final approval to proceed with tasks. All personnel entering any area must view the site specific training video in room 116 (Boiler Control Room), one time requirement. Observe safety signs and floor markings in all buildings and areas. The West end front lobby and office areas of Bldg 22 are considered a no hazard area.

Instructions: In the block below, identify work-area hazards that could potentially affect the worker(s) or others. Avoid using the same Part 2, Form 2101 for multiple facilities. Ensure that work area hazards, specific to the facility or work location are identified and controlled. Specify the facility controls and preventive measures that must be implemented by the worker(s) to protect against the work area hazards, and also special training required.

ESH/S&S WORK AREA HAZARDS & CONTROLS				
Work Area Hazards/Concerns Identify site hazards and concerns that could potentially affect the worker(s) or others.	**Work Area Hazard Present**	**Facility Controls/ Preventive Measures/ Bounding Conditions** Specify preventive measures, controls and bounding conditions for each site hazard	**Reference Documents** List permits, operating manuals, and other reference procedures	**Training and Qualification** List training requirements (P300, Integretated Work Management, Section 6.1)
☐ **No Work Area Hazards**				
Ionizing Radiation Work in posted radiological areas, work with radioactive materials,	☐ Yes ☒ No			

or work on or near radiation producing devices. **Specify Hazard:**				

IWD No./Work Request No: _____ Revision #: _____

ESH/S&S WORK AREA HAZARDS & CONTROLS				
Work Area Hazards/Concerns Identify site hazards and concerns that could potentially affect the worker(s) or others.	**Work Area Hazard Present**	**Facility Controls/ Preventive Measures/ Bounding Conditions** Specify preventive measures, controls and bounding conditions for each site hazard	**Reference Documents** List permits, operating manuals, and other reference procedures	**Training and Qualification** List training requirements (P300, Integretated Work Management, Section 6.1)
Worker Exposure Working near non-ionizing radiation, beryllium, noise, chemicals, hazardous biological materials, lead, asbestos, temperature/humidity extremes, or high explosives. **Specify Hazards:** Hot Piping, Potential Hot Water/Steam from pipe/fitting openings, Boiler Water Treatment Chemicals, Asbestos.	☒ Yes ☐ No	Required PPE: Hard hat, safety shoes, safety glasses. Hearing protection (noise > 85 dba). Avoid hot surfaces and piping. Long sleeve shirt or Ansell sleeves or coveralls. Gloves when operating valves or contacting pipe/fitting openings where there is potential for hot water/steam release. Be aware of encapsulated asbestos. Follow LANL Asbestos program/rqmts if PACM identified outside containment. Be aware of chemical containers and check labeling. Be aware of piping, associated systems for any leaks. If chemical leak is noticed contact operations manager, IH&S Rep during regular working hrs. Over100 gallons of a chemical spill leave area, and control access. Call Serf Operators 667-8982 or by Radio Lanl for mitigation cleanup process. For after-hours contact the UI Duty Officer, 699-7452 to re-assess any abnormal situation	• P101-6 PPE •P101-23 Asbestos • P101-31Hearing Conservations/Noise Program	•LANL PPE or equivalent • Hearing protection • Site specific training • Asbestos awareness • Hazcom

Energized and Operative Systems Working near energized electrical parts, pressure systems, steam lines; near unprotected belts, pulleys, chains or rotating equipment; fuel fired equipment other than vehicles; or spark or flame producing operations. **Specify Hazards:** Energized/rotating equipment, hot pressurized water/steam lines .	☒ Yes ☐ No	Stay within established walking areas. Observe safety signage alarm lights and horns. Identify explosive hazards and follow task specific IWD if working on plant equipment or components. Note: All TA3-22 LOTOs require independent verification and written specific procedure. If questions consult with UI system engineer, Operation Mgr. Designee, or Safety rep. .	P101-13 Electrical Safety P101-3 LOTO P101-34 Pressure, Vacuum, Cryogenic System	Site Specific Training video. Electrical Safety LOTO if applicable to task.
Confined Spaces Entry into tanks, manholes, cooling towers, sumps, or any other area with potentially low oxygen concentration or other hazards such as toxic vapors or engulfment. **Specify Hazards:**	☒ Yes ☐ No	Observe confined space signs or markings and follow LANL Confined Space Requirements if task requires confined space entry.	P101-27 Confined Space	Confined Space Traning
Elevated Work Surface Elevated work when fall protection is not provided by conventional handrail systems or required per P101-20, *Fall Protection Program*	☒ Yes ☐ No	Stay within established walking areas, stairways and paths. Observe safety signage. Follow LANL Fall Protection Requirements if task on roofs or work above 4 feet.	P101-20.0	Fall Protection
Environmental Impact Activities conducted in areas containing potential release site, contaminated soil, sensitive species, watercourse wetlands, floodplain, historical/archeological sites, or other work area condition that can be impacted by or can impact the environment. **Specify Hazards:**	☐ Yes ☒ No			
Security Requirements **Specify:**	☐ Yes ☒ No			
Other Hazards **Specify:**	☒ Yes ☐ No	Call pest control for clean-up if excessive rat droppings, dead rodents, wasp nest, etc in area of task activity.		

I have verified that the hazards identified above adequately identify the area hazards and that the IWM process has been applied appropriately.

FOD or Representative (Signature/Z #/Date) **Approval Required** NICHOLAS NELSON (Affiliate) Digitally signed by NICHOLAS NELSON (Affiliate) Date: 2021.07.13 10:14:50 -06'00'

Date Approval Expires: 9-30-2022

Facility : F08 **Unit :** 030022 **Proj :**
Task Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
W/O Type : PM **W/O Group :** UTIL **Task Priority :** 4
Planner : 185614 HARRIS JEANETTE S
W/O Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
Written To : TA03-0022 FAN, FLUE GAS RECIRCULING (FGR-001, FGR-002, FGR-003)
Task Dspln : **Due Date :** 09/30/2022
Superintendant :

Hazard : LOW **IWD Reqmt :** N/A LOW HZRD

Work Order Task

00728123 01

MASTER

Date: 06/23/2022

Work Order Task Written To

Facility : F08 **Unit :** 030022 **Op Sys :**
Room : **Area :** **Sys/Cls :**
Equipment : **Component :**
Location :
Job Type : PM
Tag 1 : **Tag 2 :**
Work Item : TA03-0022 FGR **Ops Review Reqd :**

Authorization

Start Permission : Glenn martinez **Start Date :** 8-22-22

Complete Notice : Glenn Martinez **Complete Date :** 9-20-22

Work Order Task Instructions

DO NOT lubricate the bearings if the FGR fan is NOT in operation or in service so that proper amount of grease can be applied
using headphones
You can hear when grease reaches the bearing rolling element. At this point, stop adding grease to prevent bearing damage from overheating

There are two bearings on the fan, each with its own zerk plug
Remove the shaft guard located in the middle of the drive. The two zerk plugs are located on each of the two bearings

1. Use grease gun with the Ultralube headphones to insert the correct amount

Facility : F08 **Unit :** 030022 **Proj :**
Task Title : PP 1M TA3–22 FGR BEARINGS, LUBRICATE
W/O Type : PM **W/O Group :** UTIL **Task Priority :** 4
Planner : 185614 HARRIS JEANETTE S
W/O Title : PP 1M TA3–22 FGR BEARINGS, LUBRICATE
Written To : TA03–0022 FAN, FLUE GAS RECIRCULING (FGR–001, FGR–002, FGR–003)
Task Dspln : **Due Date :** 09/30/2022
Superintendant :

Hazard : LOW **IWD Reqmt :** N/A LOW HZRD

Work Order Task

00728123 01

MASTER

Date: 06/23/2022

of Mobilith SHC 100 grease into zerk fitting
b. Apply grease while fan is running and stop when you hear the grease enter the running bearing

Lubricated fan bearings on FGR–001,FGR–002 & FGR–003

4. Add grease with a hand–operated pressure gun until new grease enters the running bearing
a. This is accomplished by using the ultrasonic sensor and headphones to hear when the new grease enters the running bearing
b. Stop adding grease when the grease reaches the bearing to limit excess grease from migrating down the motor shaft and into the windings
Note: Be careful when greasing the fan end bearing of the TEFC (Totally (Totally Enclosed Fan Cooled) motors. Some motors have a spring–relief outlet grease fitting on the fan end that is not accessible. This spring–relief fitting normally does not have to be removed when regreasing. When greasing, take care in the amount of pressure you apply and verify relief is working
5. Putting in too much or too little grease can cause overheating of the motors and result in motor failure. Use this rule of thumb when adding grease to a motor that has been lubricated on a regular basis:
It is better to use a little grease more often than a lot of grease less often
Note: Watch out for motors that were shipped only with the bearings packed and not the fill tube or even the bearing housing
Apply new grease until you can hear it enter the running bearing
6. Now that greasing is complete, leave the relief plug off and run the motor for 10 minutes to expel any excess grease
7. Replace the drain plug and wipe the bearing housing clean
8. Dispose of dirty rags in accordance with Hazardous Waste Guidelines
9. Ensure correct operation of electric motors.

Facility : F08 **Unit :** 030022 **Proj :**
Task Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
W/O Type : PM **W/O Group :** UTIL **Task Priority :** 4
Planner : 185614 HARRIS JEANETTE S
W/O Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
Written To : TA03-0022 FAN, FLUE GAS RECIRCULING (FGR-001, FGR-002, FGR-003)
Task Dspln : **Due Date :** 09/30/2022
Superintendant :

Hazard : LOW **IWD Reqmt :** N/A LOW HZRD

Work Order Task

00728123 01

MASTER

Date: 06/23/2022

QC Requirements / Comments

Work Completion Signatures

Name	Function/Dept.	Date
Chris Salazar	LOG-CS/PP MAINT.....	09-20-2022

Comments

(rework?)

Cost Accounting

Cost Center : 7D120C **Activity :** 640CL000

Percentage : 100 **Acct No :** XU5000 **Sub Acct :** 7E2P0000

Facility : F08 **Unit :** 030022 **Proj :**
Task Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
W/O Type : PM **W/O Group :** UTIL **Task Priority :** 4
Planner : 185614 HARRIS JEANETTE S
W/O Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
Written To : TA03-0022 FAN, FLUE GAS RECIRCULING (FGR-001, FGR-002, FGR-003)
Task Dspln : **Due Date :** 09/30/2022
Superintendant :

Hazard : LOW **IWD Reqmt :** N/A LOW HZRD

Work Order Task

00728123 01

MASTER

Date: 06/23/2022

Worker engagement questions are intended to focus attention on the task and ensure uncertainties are addressed. Basic worker engagement questions are provided below. Additional worker engagement questions should be tailored to the situation.

Each of the questions listed below will be discussed at each Pre-Job Brief with all affected personnel.

Topic 1mo FGR Fan Lube 09-20-22	**Completed (X)**
What permits, permissions, or support are required to safely start this work?	X
What is the most likely thing that could go wrong (not the worst thing) and what, specifically, will prevent it?	X
What can cause us to go beyond the scope of the work?	X
What hazards in the work area may not have been considered during planning of this job?	X

Form 2101

Integrated Work Document (IWD) Part 2, FOD Requirements and Approval for Entry and Area Hazards and Controls

Non-Tenant Activity Form

IWD No./Work Request No: ____ Revision #: ____

The Facility Operation Director (FOD) must determine the facility entry and coordination requirements and identify the Environment, Safety, Health (ESH)/Security and Safeguards (S&S) hazards and controls associated with the specific activity location.

FOD 8	TA 03	Bldg. 22-24	Room N/A	Other Location Power Plant Bldg - Inside
FOD Designated Facility Point-of-Contact	Name Nicholas Nelson	Phone 505-655-5508	Pager N/A	Email nelson_n@lanl.gov

Entry and Coordination Requirements (*Check one or more of the following*)

- ☐ No Entry/Coordination Requirements
- ☒ Plan of the Day/Plan of the Week (POTD/POTW)
- ☒ Security Clearance Requirements
- ☐ Co-located Hazards/Concerns
- ☒ Check out at End of Work
- ☐ Escort Required
- ☐ FOD-designated facility Point-of-Contact must sign IWD Part 3
- ☒ Check in at Start of Work
- ☒ Work must be Scheduled
- ☐ Quality Issues
- ☐ Other Security Requirements (ex.: Cellphone, No Foreign Nationals, etc.)
- ☐ Review under Authorization Basis (AB)/Safety Basis/Unreviewed Safety Question (USQ)
- ☒ Work-Area Training Required
- ☒ Check in Daily
- ☒ Check out Daily
- ☒ Other Bounding Conditions: PIC is responsible to conduct a pre-job brief for work activities to ensure that work conditions and worker communications are adequate. A pre job briefing shall be conducted at the job site. UI-OPS will determine if onsite ESH representation is required during work activities.

Additional Comments

All work must be approved by the Utilities FOD or OM or OS. POD/POTW – 1:30pm Mon. thru Friday. Evaluate outside ground conditions during cold or wet weather events, wear appropriate foot wear (spiky-plus) in snow and ice conditions. Evaluate inside floor and housekeeping conditions to safely proceed with activities. Check in with Plant Operations Manager/Specialist or Operations Shift Head for final approval to proceed with tasks. All personnel entering any area must view the site specific training video in room 116 (Boiler Control Room), one time requirement. Observe safety signs and floor markings in all buildings and areas. The West end front lobby and office areas of Bldg 22 are considered a no hazard area.

Instructions: In the block below, identify work-area hazards that could potentially affect the worker(s) or others. Avoid using the same Part 2, Form 2101 for multiple facilities. Ensure that work area hazards, specific to the facility or work location are identified and controlled. Specify the facility controls and preventive measures that must be implemented by the worker(s) to protect against the work area hazards, and also special training required.

ESH/S&S WORK AREA HAZARDS & CONTROLS				
Work Area Hazards/Concerns Identify site hazards and concerns that could potentially affect the worker(s) or others.	**Work Area Hazard Present**	**Facility Controls/ Preventive Measures/ Bounding Conditions** Specify preventive measures, controls and bounding conditions for each site hazard	**Reference Documents** List permits, operating manuals, and other reference procedures	**Training and Qualification** List training requirements (P300, Integretated Work Management, Section 6.1)
☐ **No Work Area Hazards**				
Ionizing Radiation Work in posted radiological areas, work with radioactive materials,	☐ Yes ☒ No			

or work on or near radiation producing devices. **Specify Hazard:**				

IWD No./Work Request No: _____ Revision #: _____

ESH/S&S WORK AREA HAZARDS & CONTROLS				
Work Area Hazards/Concerns Identify site hazards and concerns that could potentially affect the worker(s) or others.	**Work Area Hazard Present**	**Facility Controls/ Preventive Measures/ Bounding Conditions** Specify preventive measures, controls and bounding conditions for each site hazard	**Reference Documents** List permits, operating manuals, and other reference procedures	**Training and Qualification** List training requirements (P300, Integretated Work Management, Section 6.1)
Worker Exposure Working near non-ionizing radiation, beryllium, noise, chemicals, hazardous biological materials, lead, asbestos, temperature/humidity extremes, or high explosives. **Specify Hazards:** Hot Piping, Potential Hot Water/Steam from pipe/fitting openings, Boiler Water Treatment Chemicals, Asbestos.	☒ Yes ☐ No	Required PPE: Hard hat, safety shoes, safety glasses. Hearing protection (noise > 85 dba). Avoid hot surfaces and piping. Long sleeve shirt or Ansell sleeves or coveralls. Gloves when operating valves or contacting pipe/fitting openings where there is potential for hot water/steam release. Be aware of encapsulated asbestos. Follow LANL Asbestos program/rqmts if PACM identified outside containment. Be aware of chemical containers and check labeling. Be aware of piping, associated systems for any leaks. If chemical leak is noticed contact operations manager, IH&S Rep during regular working hrs. Over100 gallons of a chemical spill leave area, and control access. Call Serf Operators 667-8982 or by Radio Lanl for mitigation cleanup process. For after-hours contact the UI Duty Officer, 699-7452 to re-assess any abnormal situation	• P101-6 PPE •P101-23 Asbestos • P101-31Hearing Conservations/Noise Program	•LANL PPE or equivalent • Hearing protection • Site specific training • Asbestos awareness • Hazcom

Energized and Operative Systems Working near energized electrical parts, pressure systems, steam lines; near unprotected belts, pulleys, chains or rotating equipment; fuel fired equipment other than vehicles; or spark or flame producing operations. **Specify Hazards:** Energized/rotating equipment, hot pressurized water/steam lines .	☒ Yes ☐ No	Stay within established walking areas. Observe safety signage alarm lights and horns. Identify explosive hazards and follow task specific IWD if working on plant equipment or components. Note: All TA3-22 LOTOs require independent verification and written specific procedure. If questions consult with UI system engineer, Operation Mgr. Designee, or Safety rep. .	P101-13 Electrical Safety P101-3 LOTO P101-34 Pressure, Vacuum, Cryogenic System	Site Specific Training video. Electrical Safety LOTO if applicable to task.
Confined Spaces Entry into tanks, manholes, cooling towers, sumps, or any other area with potentially low oxygen concentration or other hazards such as toxic vapors or engulfment. **Specify Hazards:**	☒ Yes ☐ No	Observe confined space signs or markings and follow LANL Confined Space Requirements if task requires confined space entry.	P101-27 Confined Space	Confined Space Traning
Elevated Work Surface Elevated work when fall protection is not provided by conventional handrail systems or required per P101-20, *Fall Protection Program*	☒ Yes ☐ No	Stay within established walking areas, stairways and paths. Observe safety signage. Follow LANL Fall Protection Requirements if task on roofs or work above 4 feet.	P101-20.0	Fall Protection
Environmental Impact Activities conducted in areas containing potential release site, contaminated soil, sensitive species, watercourse wetlands, floodplain, historical/archeological sites, or other work area condition that can be impacted by or can impact the environment. **Specify Hazards:**	☐ Yes ☒ No			
Security Requirements **Specify:**	☐ Yes ☒ No			
Other Hazards **Specify:**	☒ Yes ☐ No	Call pest control for clean-up if excessive rat droppings, dead rodents, wasp nest, etc in area of task activity.		

I have verified that the hazards identified above adequately identify the area hazards and that the IWM process has been applied appropriately.

FOD or Representative (Signature/Z #/Date) **Approval Required** NICHOLAS NELSON (Affiliate) Digitally signed by NICHOLAS NELSON (Affiliate) Date: 2021.07.13 10:14:50 -06'00'

Date Approval Expires: 9-30-2022

Facility : F08 **Unit :** 030022 **Proj :**
Task Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
W/O Type : PM **W/O Group :** UTIL **Task Priority :** 4
Planner : 185614 HARRIS JEANETTE S
W/O Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
Written To : TA03-0022 FAN, FLUE GAS RECIRCULING (FGR-001, FGR-002, FGR-003)
Task Dspln : **Due Date :** 10/31/2022
Superintendant :

Hazard : LOW **IWD Reqmt :** N/A LOW HZRD

Work Order Task

00730924 01

MASTER

Date: 07/15/2022

Work Order Task Written To

Facility : F08 **Unit :** 030022 **Op Sys :**
Room : **Area :** **Sys/Cls :**
Equipment : **Component :**
Location :
Job Type : PM
Tag 1 : **Tag 2 :**
Work Item : TA03-0022 FGR **Ops Review Reqd :**

Authorization

Start Permission : Glenn Martinez **Start Date :** 9-24-22

Complete Notice : Glenn Martinez **Complete Date :** 10-18-22

Work Order Task Instructions

DO NOT lubricate the bearings if the FGR fan is NOT in operation or in service so that proper amount of grease can be applied using headphones
You can hear when grease reaches the bearing rolling element. At this point, stop adding grease to prevent bearing damage from overheating

There are two bearings on the fan, each with its own zerk plug
Remove the shaft guard located in the middle of the drive. The two zerk plugs are located on each of the two bearings

1. Use grease gun with the Ultralube headphones to insert the correct amount

Facility : F08 **Unit :** 030022 **Proj :**
Task Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
W/O Type : PM **W/O Group :** UTIL **Task Priority :** 4
Planner : 185614 HARRIS JEANETTE S
W/O Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
Written To : TA03-0022 FAN, FLUE GAS RECIRCULING (FGR-001, FGR-002, FGR-003)
Task Dspln : **Due Date :** 10/31/2022
Superintendant :

Hazard : LOW **IWD Reqmt :** N/A LOW HZRD

Work Order Task

00730924 01

MASTER

Date: 07/15/2022

of Mobilith SHC 100 grease into zerk fitting
b. Apply grease while fan is running and stop when you hear the grease enter the running bearing

Lubricated fan bearings on FGR-001,FGR-002 & FGR-003

4. Add grease with a hand-operated pressure gun until new grease enters the running bearing
a. This is accomplished by using the ultrasonic sensor and headphones to hear when the new grease enters the running bearing
b. Stop adding grease when the grease reaches the bearing to limit excess grease from migrating down the motor shaft and into the windings
Note: Be careful when greasing the fan end bearing of the TEFC (Totally (Totally Enclosed Fan Cooled) motors. Some motors have a spring-relief outlet grease fitting on the fan end that is not accessible. This spring-relief fitting normally does not have to be removed when regreasing. When greasing, take care in the amount of pressure you apply and verify relief is working
5. Putting in too much or too little grease can cause overheating of the motors and result in motor failure. Use this rule of thumb when adding grease to a motor that has been lubricated on a regular basis:
It is better to use a little grease more often than a lot of grease less often
Note: Watch out for motors that were shipped only with the bearings packed and not the fill tube or even the bearing housing
Apply new grease until you can hear it enter the running bearing
6. Now that greasing is complete, leave the relief plug off and run the motor for 10 minutes to expel any excess grease
7. Replace the drain plug and wipe the bearing housing clean
8. Dispose of dirty rags in accordance with Hazardous Waste Guidelines
9. Ensure correct operation of electric motors.

Facility : F08 **Unit :** 030022 **Proj :**
Task Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
W/O Type : PM **W/O Group :** UTIL **Task Priority :** 4
Planner : 185614 HARRIS JEANETTE S
W/O Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
Written To : TA03-0022 FAN, FLUE GAS RECIRCULING (FGR-001, FGR-002, FGR-003)
Task Dspln : **Due Date :** 10/31/2022
Superintendant :

Hazard : LOW **IWD Reqmt :** N/A LOW HZRD

Work Order Task

00730924 01

MASTER

Date: 07/15/2022

QC Requirements / Comments

Work Completion Signatures

Name	Function/Dept.	Date
Chris Salazar	LOG-CS/PP MAINT.....	10/12/22

Comments

(rework?)

Cost Accounting

Cost Center : 7D120C **Activity :** 640CL000

Percentage : 100 **Acct No :** XU5000 **Sub Acct :** 7E2P0000

Facility : F08 **Unit :** 030022 **Proj :**
Task Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
W/O Type : PM **W/O Group :** UTIL **Task Priority :** 4
Planner : 185614 HARRIS JEANETTE S
W/O Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
Written To : TA03-0022 FAN, FLUE GAS RECIRCULING (FGR-001, FGR-002, FGR-003)
Task Dspln : **Due Date :** 10/31/2022
Superintendant :

Hazard : LOW **IWD Reqmt :** N/A LOW HZRD

Work Order Task

00730924 01

MASTER

Date: 07/15/2022

Worker engagement questions are intended to focus attention on the task and ensure uncertainties are addressed. Basic worker engagement questions are provided below. Additional worker engagement questions should be tailored to the situation.

Each of the questions listed below will be discussed at each Pre-Job Brief with all affected personnel.

Topic 1M FGR Fan Bearing Lubrication	***Completed (X)***
What permits, permissions, or support are required to safely start this work?	X
What is the most likely thing that could go wrong (not the worst thing) and what, specifically, will prevent it?	X
What can cause us to go beyond the scope of the work?	X
What hazards in the work area may not have been considered during planning of this job?	X

Los Alamos NATIONAL LABORATORY

Integrated Work Document (IWD) Part 2
FOD Requirements and Approval for Entry and Area Hazards and Controls
Non-Tenant

IWD No./Work Request No: _____ Revision No.: _____

The Facility Operations Director (FOD) or designee must determine the facility entry and coordination requirements and identify the area environment, safety, health (ESH)/security and safeguards (S&S) hazards and controls associated with the specific activity location.

FOD	TA	Bldg.	Room	Other Location
8	03	22 & 24		Inside plant buildings.
FOD Designated Facility Point-of-Contact	Name Nicholas Nelson	Phone 505-665-5508	Pager	Email nelson_n@lanl.gov

General Requirement/Guidance:

- Workers in areas that have building or facility-specific training (FST) shall take the FST unless they are escorted by someone who is current in the training.
- Any abnormal event or condition, whether within or beyond the bounds of the assigned work area, must be reported to supervisors or first-line managers and the FOD.

Entry and Coordination Requirements (*check one or more of the following*):

- ☐ No entry/coordination requirements
- ☒ Schedule work with the FOD
- ☒ Attend Plan of the Day/Plan of the Week (POTD/POTW)
- ☐ Security clearance or escort required
- ☐ Other security requirements (e.g., no cellphone or foreign nationals)
- ☐ Review work under Authorization Basis / Safety Basis / Unreviewed Safety Question (USQ)
- ☐ FOD-designated facility point-of-contact must sign IWD Part 3
- ☒ Facility-specific or other work area training required
- ☒ Check in daily
- ☒ Check out daily
- ☐ Quality issues
- ☒ Non-security escort required
- ☒ Other bounding conditions: Watch Plant specific video, check in and out with plant operations.

Additional Comments:

All work must be approved by the Utilities FOD or OM or OS. POD/POTW – 1:30pm Mon. thru Friday. Evaluate outside ground conditions during cold or wet weather events, wear appropriate foot wear (spiky-plus) in snow and ice conditions. Evaluate inside floor and housekeeping conditions to safely proceed with activities. Check in with Plant Operations Manager/Specialist or Operations Shift Head for final approval to proceed with tasks. All personnel entering any area must view the site specific training video in room 116 (Boiler Control Room), one time requirement. Observe safety signs and floor markings in all buildings and areas. The West end front lobby and office areas of Bldg 22 are considered a no hazard area.

Instructions: In the block below, identify work area hazards that could potentially affect the worker(s) or others. Avoid using the same Part 2, Form 2101 for multiple facilities. Ensure that work area hazards specific to the facility or work location are identified and controlled. Specify the facility controls and preventive measures that must be implemented by the worker(s) to protect against the work area hazards, including any unique or special training required because of work area conditions/hazards.

ESH/S&S WORK AREA HAZARDS AND CONTROLS				
Work Area Hazards/Concerns Identify site hazards and concerns that could potentially affect the worker(s) or others.	**Work Area Hazard Present**	**Facility Controls/ Preventive Measures/ Bounding Conditions** Specify preventive measures, controls, and bounding conditions for each site hazard	**Reference Documents** List permits, operating manuals, and other procedures (if required in the field)	**Training and Qualification** (*special or unique to the area*)
☐ **No work area hazards**				
Ionizing Radiation Work in posted radiological areas, work with radioactive materials, or work on or near radiation producing devices. **Specify Hazard:**	☐ Yes ☒ No			

IWD No./Work Request No.: _____ Revision No.: _____

ESH/S&S WORK AREA HAZARDS AND CONTROLS				
Work Area Hazards/Concerns Identify site hazards and concerns that could potentially affect the worker(s) or others.	**Work Area Hazard Present**	**Facility Controls/ Preventive Measures/ Bounding Conditions** Specify preventive measures, controls, and bounding conditions for each site hazard	**Reference Documents** List permits, operating manuals, and other reference procedures	**Training and Qualification** List training requirements
Worker Exposure Working near non-ionizing radiation, beryllium, noise, chemicals, biological hazards, lead, asbestos, temperature/humidity extremes, nanoparticles, cryogens, or high explosives. **Specify Hazards:** Hot Piping, Potential Hot Water/Steam from pipe/fitting openings, Boiler Water Treatment Chemicals, Asbestos.	☒ Yes ☐ No	**All Asbestos is encapsulated and marked, if damaged or found to be damaged, pause work and notify management, for repair or remediation. All Electrical is covered with engineering controls, if controls are removed LOTO required and 2193 required as well as PPE. Not all hot surfaces are marked or covered, whare long sleeves and note uncovered surfaces when working in the plant.**		NA
Energized and Operative Systems Working near energized electrical parts, pressure systems, steam lines; unprotected belts, pulleys, chains, rotating equipment; fuel-fired equipment (other than vehicles); or spark/flame-producing operations. **Specify Hazards:** Electrical, Hot surfaces, ACM, Hot water, Hot steam, High noise, Rotating equipment, Overhead work.	☒ Yes ☐ No	All Asbestos is encapsulated and marked, if damaged or found to be damaged, pause work and notify management, for repair or remediation. All Electrical is covered with engineering controls, if controls are removed LOTO required and 2193 required as well as PPE. Not all hot surfaces are marked or covered, whare long sleeves and note uncovered surfaces when working		NA

		in the plant, be aware of work execution in the area.		
Confined Spaces Entry into tanks, manholes, cooling towers, sumps, or any other area with potentially low oxygen concentration or other hazards such as toxic vapors or engulfment. **Specify Hazards:**	☒ Yes ☐ No	All Confined Spaces are labeled, as permit required or non-permit required.	P 101-27 Conf. Space Confind space permit and evaluation.	Confined Space Training
Elevated Work Surface Unprotected elevated work (e.g., conventional guardrails are not provided) requiring fall protection per P101-20, *Fall Protection Program*, or a surface not designed to support worker(s) and equipment.	☒ Yes ☐ No	Elevated work surfaces should have fall protection if not. Follow LANL requires fall protection when working on a surface higher than 4ft.	P101-20 Fall Protection	Fall Protection
Environmental Activities conducted in areas containing potential release sites, contaminated soil, sensitive species, watercourse, wetlands, floodplains, historical/archeological sites, or other work area element that can impact, or be impacted by, the environment. **Specify Hazards:**	☐ Yes ☒ No			
Security Requirements **Specify:**	☐ Yes ☒ No			
Other Hazards **Specify:** Pests	☒ Yes ☐ No	Call pest control for clean-up if excessive rat droppings, dead rodents, wasp nest, etc in area of task activity.		

I have verified that the items indicated above adequately identify existing and potential area hazards associated with the work location and communicate facility-required controls that will enable safe, secure, and environmentally compliant work execution.

FOD or Representative (Signature/Z Number/Date) **Approval Required**

Nicholas Nelson 253914 6-28-22

Facility : F08 **Unit :** 030022 **Proj :**
Task Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
W/O Type : PM **W/O Group :** UTIL **Task Priority :** 4
Planner : 185614 HARRIS JEANETTE S
W/O Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
Written To : TA03-0022 FAN, FLUE GAS RECIRCULING (FGR-001, FGR-002, FGR-003)
Task Dspln : **Due Date :** 11/30/2022
Superintendant :

Hazard : LOW **IWD Reqmt :** N/A LOW HZRD

Work Order Task

00733271 01

MASTER

Date: 08/11/2022

Work Order Task Written To

Facility : F08 **Unit :** 030022 **Op Sys :**
Room : **Area :** **Sys/Cls :**
Equipment : **Component :**
Location :
Job Type : PM
Tag 1 : **Tag 2 :**
Work Item : TA03-0022 FGR **Ops Review Reqd :**

Authorization

Start Permission : Glenn Martinez **Start Date :** 10-18-22

Complete Notice : Glenn Martinez **Complete Date :** 11-18-22

Work Order Task Instructions

DO NOT lubricate the bearings if the FGR fan is NOT in operation or in service so that proper amount of grease can be applied using headphones
You can hear when grease reaches the bearing rolling element. At this point, stop adding grease to prevent bearing damage from overheating

There are two bearings on the fan, each with its own zerk plug
Remove the shaft guard located in the middle of the drive. The two zerk plugs are located on each of the two bearings

1. Use grease gun with the Ultralube headphones to insert the correct amount

Facility : F08 **Unit :** 030022 **Proj :**
Task Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
W/O Type : PM **W/O Group :** UTIL **Task Priority :** 4
Planner : 185614 HARRIS JEANETTE S
W/O Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
Written To : TA03-0022 FAN, FLUE GAS RECIRCULING (FGR-001, FGR-002, FGR-003)
Task Dspln : **Due Date :** 11/30/2022
Superintendant :

Hazard : LOW **IWD Reqmt :** N/A LOW HZRD

Work Order Task

00733271 01

MASTER

Date: 08/11/2022

of Mobilith SHC 100 grease into zerk fitting
b. Apply grease while fan is running and stop when you hear the grease enter the running bearing

Lubricated fan bearings on FGR-001,FGR-002 & FGR-003

4. Add grease with a hand-operated pressure gun until new grease enters the running bearing
a. This is accomplished by using the ultrasonic sensor and headphones to hear when the new grease enters the running bearing
b. Stop adding grease when the grease reaches the bearing to limit excess grease from migrating down the motor shaft and into the windings
Note: Be careful when greasing the fan end bearing of the TEFC (Totally (Totally Enclosed Fan Cooled) motors. Some motors have a spring-relief outlet grease fitting on the fan end that is not accessible. This spring-relief fitting normally does not have to be removed when regreasing. When greasing, take care in the amount of pressure you apply and verify relief is working
5. Putting in too much or too little grease can cause overheating of the motors and result in motor failure. Use this rule of thumb when adding grease to a motor that has been lubricated on a regular basis:
It is better to use a little grease more often than a lot of grease less often
Note: Watch out for motors that were shipped only with the bearings packed and not the fill tube or even the bearing housing
Apply new grease until you can hear it enter the running bearing
6. Now that greasing is complete, leave the relief plug off and run the motor for 10 minutes to expel any excess grease
7. Replace the drain plug and wipe the bearing housing clean
8. Dispose of dirty rags in accordance with Hazardous Waste Guidelines
9. Ensure correct operation of electric motors.

Facility : F08 **Unit :** 030022 **Proj :**
Task Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
W/O Type : PM **W/O Group :** UTIL **Task Priority :** 4
Planner : 185614 HARRIS JEANETTE S
W/O Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
Written To : TA03-0022 FAN, FLUE GAS RECIRCULING (FGR-001, FGR-002, FGR-003)
Task Dspln : **Due Date :** 11/30/2022
Superintendant :

Hazard : LOW **IWD Reqmt :** N/A LOW HZRD

Work Order Task

00733271 01

MASTER

Date: 08/11/2022

QC Requirements / Comments

Work Completion Signatures

Name	Function/Dept.	Date
John M. Miller	Maintenance Foreman/UPPS	11/18/22

Comments

(rework?)

Cost Accounting

Cost Center : 7D120C **Activity :** 640CL000

Percentage : 100 **Acct No :** XU5000 **Sub Acct :** 7E2P0000

Facility : F08 **Unit :** 030022 **Proj :**
Task Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
W/O Type : PM **W/O Group :** UTIL **Task Priority :** 4
Planner : 185614 HARRIS JEANETTE S
W/O Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
Written To : TA03-0022 FAN, FLUE GAS RECIRCULING (FGR-001, FGR-002, FGR-003)
Task Dspln : **Due Date :** 11/30/2022
Superintendant :

Hazard : LOW **IWD Reqmt :** N/A LOW HZRD

Work Order Task

00733271 01

MASTER

Date: 08/11/2022

Worker engagement questions are intended to focus attention on the task and ensure uncertainties are addressed. Basic worker engagement questions are provided below. Additional worker engagement questions should be tailored to the situation.

Each of the questions listed below will be discussed at each Pre-Job Brief with all affected personnel.

Topic 1M FGR Bearings Lubrication	***Completed (X)***
What permits, permissions, or support are required to safely start this work?	X
What is the most likely thing that could go wrong (not the worst thing) and what, specifically, will prevent it?	X
What can cause us to go beyond the scope of the work?	X
What hazards in the work area may not have been considered during planning of this job?	X

Los Alamos NATIONAL LABORATORY

Integrated Work Document (IWD) Part 2
FOD Requirements and Approval for Entry and Area Hazards and Controls
Non-Tenant

IWD No./Work Request No: _____ Revision No.: _____

The Facility Operations Director (FOD) or designee must determine the facility entry and coordination requirements and identify the area environment, safety, health (ESH)/security and safeguards (S&S) hazards and controls associated with the specific activity location.

FOD	TA	Bldg.	Room	Other Location
8	03	22 & 24		Inside plant buildings.
FOD Designated Facility Point-of-Contact	Name Nicholas Nelson	Phone 505-665-5508	Pager	Email nelson_n@lanl.gov

General Requirement/Guidance:

- Workers in areas that have building or facility-specific training (FST) shall take the FST unless they are escorted by someone who is current in the training.
- Any abnormal event or condition, whether within or beyond the bounds of the assigned work area, must be reported to supervisors or first-line managers and the FOD.

Entry and Coordination Requirements (*check one or more of the following*):

- ☐ No entry/coordination requirements
- ☒ Schedule work with the FOD
- ☒ Attend Plan of the Day/Plan of the Week (POTD/POTW)
- ☐ Security clearance or escort required
- ☐ Other security requirements (e.g., no cellphone or foreign nationals)
- ☐ Review work under Authorization Basis / Safety Basis / Unreviewed Safety Question (USQ)
- ☐ FOD-designated facility point-of-contact must sign IWD Part 3
- ☒ Facility-specific or other work area training required
- ☒ Check in daily
- ☒ Check out daily
- ☐ Quality issues
- ☒ Non-security escort required
- ☒ Other bounding conditions: Watch Plant specific video, check in and out with plant operations.

Additional Comments:

All work must be approved by the Utilities FOD or OM or OS. POD/POTW – 1:30pm Mon. thru Friday. Evaluate outside ground conditions during cold or wet weather events, wear appropriate foot wear (spiky-plus) in snow and ice conditions. Evaluate inside floor and housekeeping conditions to safely proceed with activities. Check in with Plant Operations Manager/Specialist or Operations Shift Head for final approval to proceed with tasks. All personnel entering any area must view the site specific training video in room 116 (Boiler Control Room), one time requirement. Observe safety signs and floor markings in all buildings and areas. The West end front lobby and office areas of Bldg 22 are considered a no hazard area.

Instructions: In the block below, identify work area hazards that could potentially affect the worker(s) or others. Avoid using the same Part 2, Form 2101 for multiple facilities. Ensure that work area hazards specific to the facility or work location are identified and controlled. Specify the facility controls and preventive measures that must be implemented by the worker(s) to protect against the work area hazards, including any unique or special training required because of work area conditions/hazards.

ESH/S&S WORK AREA HAZARDS AND CONTROLS				
Work Area Hazards/Concerns Identify site hazards and concerns that could potentially affect the worker(s) or others.	**Work Area Hazard Present**	**Facility Controls/ Preventive Measures/ Bounding Conditions** Specify preventive measures, controls, and bounding conditions for each site hazard	**Reference Documents** List permits, operating manuals, and other procedures (if required in the field)	**Training and Qualification** (*special or unique to the area*)
☐ **No work area hazards**				
Ionizing Radiation Work in posted radiological areas, work with radioactive materials, or work on or near radiation producing devices. **Specify Hazard:**	☐ Yes ☒ No			

IWD No./Work Request No.: _____ Revision No.: _____

ESH/S&S WORK AREA HAZARDS AND CONTROLS				
Work Area Hazards/Concerns Identify site hazards and concerns that could potentially affect the worker(s) or others.	**Work Area Hazard Present**	**Facility Controls/ Preventive Measures/ Bounding Conditions** Specify preventive measures, controls, and bounding conditions for each site hazard	**Reference Documents** List permits, operating manuals, and other reference procedures	**Training and Qualification** List training requirements
Worker Exposure Working near non-ionizing radiation, beryllium, noise, chemicals, biological hazards, lead, asbestos, temperature/humidity extremes, nanoparticles, cryogens, or high explosives. **Specify Hazards:** Hot Piping, Potential Hot Water/Steam from pipe/fitting openings, Boiler Water Treatment Chemicals, Asbestos.	☒ Yes ☐ No	**All Asbestos is encapsulated and marked, if damaged or found to be damaged, pause work and notify management, for repair or remediation. All Electrical is covered with engineering controls, if controls are removed LOTO required and 2193 required as well as PPE. Not all hot surfaces are marked or covered, whare long sleeves and note uncovered surfaces when working in the plant.**		NA
Energized and Operative Systems Working near energized electrical parts, pressure systems, steam lines; unprotected belts, pulleys, chains, rotating equipment; fuel-fired equipment (other than vehicles); or spark/flame-producing operations. **Specify Hazards:** Electrical, Hot surfaces, ACM, Hot water, Hot steam, High noise, Rotating equipment, Overhead work.	☒ Yes ☐ No	All Asbestos is encapsulated and marked, if damaged or found to be damaged, pause work and notify management, for repair or remediation. All Electrical is covered with engineering controls, if controls are removed LOTO required and 2193 required as well as PPE. Not all hot surfaces are marked or covered, whare long sleeves and note uncovered surfaces when working		NA

		in the plant, be aware of work execution in the area.		
Confined Spaces Entry into tanks, manholes, cooling towers, sumps, or any other area with potentially low oxygen concentration or other hazards such as toxic vapors or engulfment. **Specify Hazards:**	☒ Yes ☐ No	All Confined Spaces are labeled, as permit required or non-permit required.	P 101-27 Conf. Space Confind space permit and evaluation.	Confined Space Training
Elevated Work Surface Unprotected elevated work (e.g., conventional guardrails are not provided) requiring fall protection per P101-20, *Fall Protection Program*, or a surface not designed to support worker(s) and equipment.	☒ Yes ☐ No	Elevated work surfaces should have fall protection if not. Follow LANL requires fall protection when working on a surface higher than 4ft.	P101-20 Fall Protection	Fall Protection
Environmental Activities conducted in areas containing potential release sites, contaminated soil, sensitive species, watercourse, wetlands, floodplains, historical/archeological sites, or other work area element that can impact, or be impacted by, the environment. **Specify Hazards:**	☐ Yes ☒ No			
Security Requirements **Specify:**	☐ Yes ☒ No			
Other Hazards **Specify:** Pests	☒ Yes ☐ No	Call pest control for clean-up if excessive rat droppings, dead rodents, wasp nest, etc in area of task activity.		

I have verified that the items indicated above adequately identify existing and potential area hazards associated with the work location and communicate facility-required controls that will enable safe, secure, and environmentally compliant work execution.

FOD or Representative (Signature/Z Number/Date) **Approval Required**

Nicholas Nelson 253914 6-28-22

Facility : F08 **Unit :** 030022 **Proj :**
Task Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
W/O Type : PM **W/O Group :** UTIL **Task Priority :** 4
Planner : 185614 HARRIS JEANETTE S
W/O Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
Written To : TA03-0022 FAN, FLUE GAS RECIRCULING (FGR-001, FGR-002, FGR-003)
Task Dspln : **Due Date :** 12/31/2022
Superintendant :

Hazard : LOW **IWD Reqmt :** N/A LOW HZRD

Work Order Task

00736241 01

MASTER

Date: 09/19/2022

Work Order Task Written To

Facility : F08 **Unit :** 030022 **Op Sys :**
Room : **Area :** **Sys/Cls :**
Equipment : **Component :**
Location :
Job Type : PM
Tag 1 : **Tag 2 :**
Work Item : TA03-0022 FGR **Ops Review Reqd :**

Authorization

Start Permission : Glenn Martinez **Start Date :** 11-21-22

Complete Notice : Glenn Martinez **Complete Date :** 12-9-22

Work Order Task Instructions

DO NOT lubricate the bearings if the FGR fan is NOT in operation or in service so that proper amount of grease can be applied
using headphones
You can hear when grease reaches the bearing rolling element. At this point, stop adding grease to prevent bearing damage from overheating

There are two bearings on the fan, each with its own zerk plug
Remove the shaft guard located in the middle of the drive. The two zerk plugs are located on each of the two bearings

1. Use grease gun with the Ultralube headphones to insert the correct amount

Facility : F08 **Unit :** 030022 **Proj :**
Task Title : PP 1M TA3–22 FGR BEARINGS, LUBRICATE
W/O Type : PM **W/O Group :** UTIL **Task Priority :** 4
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Task Dspln : **Due Date :** 12/31/2022
Superintendant :

Hazard : LOW **IWD Reqmt :** N/A LOW HZRD

Work Order Task

00736241 01

MASTER

Date: 09/19/2022

of Mobilith SHC 100 grease into zerk fitting
b. Apply grease while fan is running and stop when you hear the grease enter the running bearing

Lubricated fan bearings on FGR–001,FGR–002 & FGR–003

4. Add grease with a hand–operated pressure gun until new grease enters the running bearing
a. This is accomplished by using the ultrasonic sensor and headphones to hear when the new grease enters the running bearing
b. Stop adding grease when the grease reaches the bearing to limit excess grease from migrating down the motor shaft and into the windings
Note: Be careful when greasing the fan end bearing of the TEFC (Totally (Totally Enclosed Fan Cooled) motors. Some motors have a spring–relief outlet grease fitting on the fan end that is not accessible. This spring–relief fitting normally does not have to be removed when regreasing. When greasing, take care in the amount of pressure you apply and verify relief is working
5. Putting in too much or too little grease can cause overheating of the motors and result in motor failure. Use this rule of thumb when adding grease to a motor that has been lubricated on a regular basis:
It is better to use a little grease more often than a lot of grease less often
Note: Watch out for motors that were shipped only with the bearings packed and not the fill tube or even the bearing housing
Apply new grease until you can hear it enter the running bearing
6. Now that greasing is complete, leave the relief plug off and run the motor for 10 minutes to expel any excess grease
7. Replace the drain plug and wipe the bearing housing clean
8. Dispose of dirty rags in accordance with Hazardous Waste Guidelines
9. Ensure correct operation of electric motors.

Facility : F08 **Unit :** 030022 **Proj :**
Task Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
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Task Dspln : **Due Date :** 12/31/2022
Superintendant :

Hazard : LOW **IWD Reqmt :** N/A LOW HZRD

Work Order Task

00736241 01

MASTER

Date: 09/19/2022

QC Requirements / Comments

Work Completion Signatures

Name	Function/Dept.	Date
Chris Salazar	LOG-CS/PP MAINT.....	12-08-2022

Comments

(rework?)

Cost Accounting

Cost Center : 7D120C **Activity :** 640CL000

Percentage : 100 **Acct No :** XU5000 **Sub Acct :** 7E2P0000

Facility : F08 **Unit :** 030022 **Proj :**
Task Title : PP 1M TA3-22 FGR BEARINGS, LUBRICATE
W/O Type : PM **W/O Group :** UTIL **Task Priority :** 4
Planner : 185614 HARRIS JEANETTE S
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Written To : TA03-0022 FAN, FLUE GAS RECIRCULING (FGR-001, FGR-002, FGR-003)
Task Dspln : **Due Date :** 12/31/2022
Superintendant :

Hazard : LOW **IWD Reqmt :** N/A LOW HZRD

Work Order Task

00736241 01

MASTER

Date: 09/19/2022

Worker engagement questions are intended to focus attention on the task and ensure uncertainties are addressed. Basic worker engagement questions are provided below. Additional worker engagement questions should be tailored to the situation.

Each of the questions listed below will be discussed at each Pre-Job Brief with all affected personnel.

12/8/22

Topic 1M FGR Bearings Lubrication	**Completed (X)**
What permits, permissions, or support are required to safely start this work?	X
What is the most likely thing that could go wrong (not the worst thing) and what, specifically, will prevent it?	X
What can cause us to go beyond the scope of the work?	X
What hazards in the work area may not have been considered during planning of this job?	X

Los Alamos NATIONAL LABORATORY

Integrated Work Document (IWD) Part 2
FOD Requirements and Approval for Entry and Area Hazards and Controls
Non-Tenant

IWD No./Work Request No: _____ Revision No.: _____

The Facility Operations Director (FOD) or designee must determine the facility entry and coordination requirements and identify the area environment, safety, health (ESH)/security and safeguards (S&S) hazards and controls associated with the specific activity location.

FOD 8	TA 03	Bldg. 22 & 24	Room	Other Location Inside plant buildings.
FOD Designated Facility Point-of-Contact	Name Nicholas Nelson	Phone 505-665-5508	Pager	Email nelson_n@lanl.gov

General Requirement/Guidance:

- Workers in areas that have building or facility-specific training (FST) shall take the FST unless they are escorted by someone who is current in the training.
- Any abnormal event or condition, whether within or beyond the bounds of the assigned work area, must be reported to supervisors or first-line managers and the FOD.

Entry and Coordination Requirements (*check one or more of the following*):

☐ No entry/coordination requirements
☒ Schedule work with the FOD
☒ Attend Plan of the Day/Plan of the Week (POTD/POTW)
☐ Security clearance or escort required
☐ Other security requirements (e.g., no cellphone or foreign nationals)
☐ Review work under Authorization Basis / Safety Basis / Unreviewed Safety Question (USQ)
☐ FOD-designated facility point-of-contact must sign IWD Part 3
☒ Facility-specific or other work area training required
☒ Check in daily
☒ Check out daily
☐ Quality issues
☒ Non-security escort required
☒ Other bounding conditions: Watch Plant specific video, check in and out with plant operations.

Additional Comments:

All work must be approved by the Utilities FOD or OM or OS. POD/POTW – 1:30pm Mon. thru Friday. Evaluate outside ground conditions during cold or wet weather events, wear appropriate foot wear (spiky-plus) in snow and ice conditions. Evaluate inside floor and housekeeping conditions to safely proceed with activities. Check in with Plant Operations Manager/Specialist or Operations Shift Head for final approval to proceed with tasks. All personnel entering any area must view the site specific training video in room 116 (Boiler Control Room), one time requirement. Observe safety signs and floor markings in all buildings and areas. The West end front lobby and office areas of Bldg 22 are considered a no hazard area.

Instructions: In the block below, identify work area hazards that could potentially affect the worker(s) or others. Avoid using the same Part 2, Form 2101 for multiple facilities. Ensure that work area hazards specific to the facility or work location are identified and controlled. Specify the facility controls and preventive measures that must be implemented by the worker(s) to protect against the work area hazards, including any unique or special training required because of work area conditions/hazards.

ESH/S&S WORK AREA HAZARDS AND CONTROLS				
Work Area Hazards/Concerns Identify site hazards and concerns that could potentially affect the worker(s) or others.	**Work Area Hazard Present**	**Facility Controls/ Preventive Measures/ Bounding Conditions** Specify preventive measures, controls, and bounding conditions for each site hazard	**Reference Documents** List permits, operating manuals, and other procedures (if required in the field)	**Training and Qualification** (*special or unique to the area*)
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IWD No./Work Request No.: _____ Revision No.: _____

ESH/S&S WORK AREA HAZARDS AND CONTROLS				
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Worker Exposure Working near non-ionizing radiation, beryllium, noise, chemicals, biological hazards, lead, asbestos, temperature/humidity extremes, nanoparticles, cryogens, or high explosives. **Specify Hazards:** Hot Piping, Potential Hot Water/Steam from pipe/fitting openings, Boiler Water Treatment Chemicals, Asbestos.	☒ Yes ☐ No	**All Asbestos is encapsulated and marked, if damaged or found to be damaged, pause work and notify management, for repair or remediation. All Electrical is covered with engineering controls, if controls are removed LOTO required and 2193 required as well as PPE. Not all hot surfaces are marked or covered, whare long sleeves and note uncovered surfaces when working in the plant.**		NA
Energized and Operative Systems Working near energized electrical parts, pressure systems, steam lines; unprotected belts, pulleys, chains, rotating equipment; fuel-fired equipment (other than vehicles); or spark/flame-producing operations. **Specify Hazards:** Electrical, Hot surfaces, ACM, Hot water, Hot steam, High noise, Rotating equipment, Overhead work.	☒ Yes ☐ No	All Asbestos is encapsulated and marked, if damaged or found to be damaged, pause work and notify management, for repair or remediation. All Electrical is covered with engineering controls, if controls are removed LOTO required and 2193 required as well as PPE. Not all hot surfaces are marked or covered, whare long sleeves and note uncovered surfaces when working		NA

		in the plant, be aware of work execution in the area.		
Confined Spaces Entry into tanks, manholes, cooling towers, sumps, or any other area with potentially low oxygen concentration or other hazards such as toxic vapors or engulfment. **Specify Hazards:**	☒ Yes ☐ No	All Confined Spaces are labeled, as permit required or non-permit required.	P 101-27 Conf. Space Confind space permit and evaluation.	Confined Space Training
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Security Requirements **Specify:**	☐ Yes ☒ No			
Other Hazards **Specify:** Pests	☒ Yes ☐ No	Call pest control for clean-up if excessive rat droppings, dead rodents, wasp nest, etc in area of task activity.		

I have verified that the items indicated above adequately identify existing and potential area hazards associated with the work location and communicate facility-required controls that will enable safe, secure, and environmentally compliant work execution.

FOD or Representative (Signature/Z Number/Date) **Approval Required**

Nicholas Nelson 253914 6-28-22

AI 856 | Los Alamos National Laboratory

Operating Permit P100-R2M4

Monitoring Period July 1–December 31, 2022

ATTACHMENT A1307.H.

TA-03 Power Plant

Combustion Turbine Emission Stack Test Report

NEW MEXICO ENVIRONMENT DEPARTMENT
AIR QUALITY BUREAU
TITLE V PERMIT NUMBER P100-R2M4

COMPLIANCE TEST REPORT
ON:
EXHAUST EMISSIONS

FROM:
SIEMENS ENERGY SGT A35-DLE-GT
STATIONARY GAS TURBINE

LOCATED IN:
LOS ALAMOS, NM

PREPARED FOR:
LOS ALAMOS NATIONAL LABORATORY

TEST DATE:
NOVEMBER 29, 2022

PROJECT NUMBER:
2450

COMPLIANCE SERVICES & TESTING

P.O. Box 94191-87199
7108 Washington St. NE
Suite A
Albuquerque, NM 87109
(505) 681-4909 Phone
www.comptesting.com

Table of Contents

Introduction 1
- Table 1: Background Data 2

Summary of Results 3
- Table 2: Summarized Results 3

Process Description 4

Analytical Technique 5
- Figure 1: Instrumental Sampling System Diagram 6
- Table 3: Analytical Instrumentation 7

Quality Assurance Activities 8-9

Appendices
- A: Tabular Results
- B: Example Calculations
- C: Fuel Analysis, F-Factor Calculations, and Fuel Meter Calibration Certificate
- D: Quality Assurance/Control Activities
- E: Calibration Certifications
- F: Datalog Record

Introduction

Exhaust emissions testing was conducted on a natural gas-fired centrifugal internal combustion engine (turbine) in service at Los Alamos National Laboratory's TA-3 Power Plant. The purpose of this test was to demonstrate compliance with the requirements specified in the New Mexico Environment Department NMED-AQB Title V Permit Number P100-R2M4 annual testing requirements.

Testing on Unit #TA-3-22 was performed at the maximum load available at the time of the test (95.9%). The testing followed the procedures set forth in the ASTM D6522-00. Oxides of nitrogen (NO_X defined as NO + NO_2) and carbon monoxide (CO) oxygen (O_2), and carbon dioxide (CO_2) were measured from the exhaust stack to derive the mass emission rates of the compounds of interest. NO_X and CO are the criteria pollutants of interest which are limited by the air permit. Compliance Services and Testing conducted all gaseous sampling on November 29, 2022.

Table 1: Background Data

Source Operator:	**Los Alamos National Laboratory (LANL)** Attn: Marjorie Stockton P.O. Box 1663, MS J978 Los Alamos, NM 87545 (505) 665-3289 Phone
Test Contractor:	**Compliance Services and Testing (CST)** Attn: Chris Spencer P.O. Box 94191 Albuquerque, New Mexico 87199 (505) 681-4909 Phone
Test Participants:	**CST** Chris Spencer - Director **LANL** Marjorie Stockton - EHS Air Quality Joe Baughman - Supervisor Cris Gomez - Utilities Foreman Jon Lutz - DEP
Test Date:	November 29, 2022
Location:	TA-3 Power Station located within Los Alamos National Laboratory, Los Alamos, New Mexico
Test Methods:	ASTM 6522-00 Method 19 - Exhaust Flow Rate

Summary of Results

NO_X has a permitted emission limit of 23.8 pounds per hour (lbs/hr) and 59.4 tons per year (tpy). CO has a permit limit of 29.0 lbs/hr and 72.3 tpy. The tons per year mass emission rates are limited by annual fuel consumption of no more than 1400 MMSCF. The annual fuel consumption limit was divided by the average hourly fuel consumption during the test to calculate the maximum allowable annual hours of operation at full load (6310.1 hours per year). The average lb/hr emission values from the testing were then multiplied by these annual hours of operation number to calculate estimated ton per year emissions. NO_X also has a limit of 25 ppmvd (parts per million by volume on a dry basis) at 15% O2. The results show that NO_X and CO are below the permitted limits.

Table 2: Summarized Results

Unit #	SN	Load	NOx pph/*tpy	CO pph/*tpy
Limits	***---***	***≥90%***	***23.8/59.4***	***29.0/72.3***
TA-3-22	1890D-2015	95.9%	15.74/49.67	2.25/7.09

*tons per year are limited by annual fuel consumption of no more than 1400 MMSCF

Figure 1 shows the sample system diagram used for the testing and Table 3 lists the analytical analyzers and sensitivities. Appendix A contains the engine, compressor, and control equipment operating data and tabular results compared with the emission limits along with the field data sheets. The load, horsepower, and turbine/generator operating parameters along with the analytical results are listed on the Summary of Results (SOR) page produced for the turbine. Also included on the SOR is the date of the test, location of unit, serial number, and calculated mass emission rates compared to the permitted limits. Appendix B contains the example calculations. Appendix C contains the fuel analysis and CST's fuel calculations and the fuel meter calibration data. Appendix D contains the quality assurance and quality control documentation. Appendix E contains the calibration gas certificate and the datalog record is in Appendix F.

Process Description

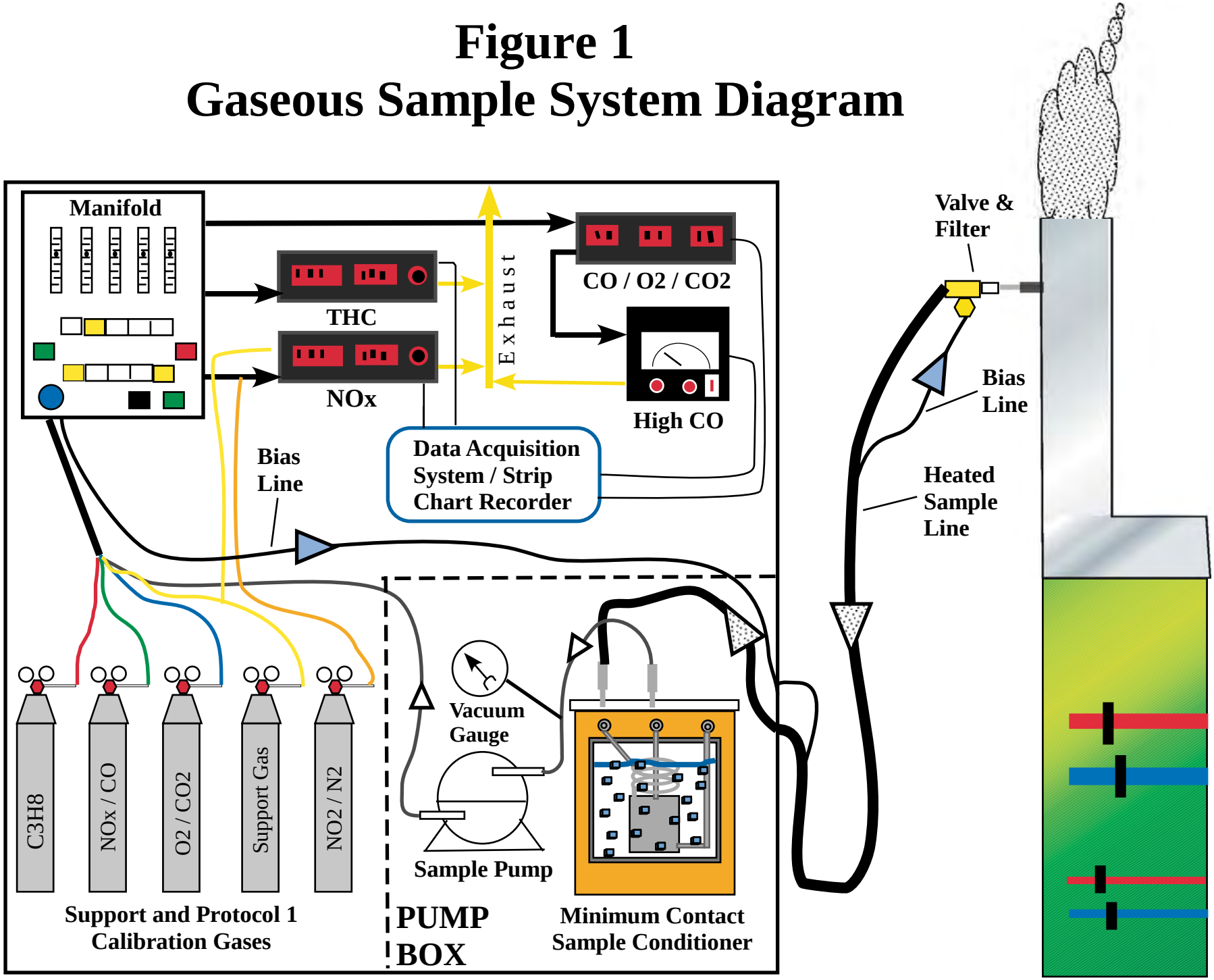
The turbine is a Siemens Energy SGT A35-DLE-GT centrifugal internal combustion engine that bears the serial number 1890D-2015. The turbine is rated for 24.6MW (32,989 Horsepower). The turbine is used to generate electricity for use at Los Alamos National Laboratory (LANL) or placing on the electrical grid for outside consumption.

Analytical Technique

Stack gas entered the instrumental sampling system through a stainless-steel probe placed into the stack with an in-line 90-micron filter and then was transported via 3/8-inch heat-traced Teflon® tubing to a specially designed stainless-steel minimum-contact condenser which dried the sample without removing the pollutants of interest. The sample was then passed to the gas manifold through 3/8" Teflon® tubing via a stainless steel/Teflon® diaphragm vacuum pump. The sample was partitioned to the analyzers through glass and stainless-steel rotameters that control the flow of the sample and did not allow a variance of more than 10% during the tests. The remaining gas was then vented outside of the climate-controlled laboratory. The gas manifold also allowed for the convenient introduction of calibration gases. Once the equipment was placed into the stack and hooked into the sampling manifold in the mobile laboratory, the desired ranges were selected by observing the stack effluents of interest. Each instrument was then calibrated, and the testing proceeded. All testing was performed from the stack centroid, each being bracketed by a zero and upscale analyzer drift calibration check.

Each test consisted of three consecutive twenty-minute test runs and was completed on-site. The stack gas analysis for O_2/CO_2 diluent concentrations were monitored with a paramagnetic detector and a non-dispersive infrared (NDIR) detector, respectively. NO_X emissions were quantified using a chemiluminescence detector and CO emission concentrations were quantified with an NDIR analyzer. This analyzer was equipped with a gas correlation filter, which also eliminates any interference from moisture, CO_2, and other combustion products. All gaseous data from the continuous monitoring instruments were recorded on an Omega OMB-DAQ-56 data acquisition system and was recorded at one-minute intervals. Each instrument was calibrated per protocol procedures and none were operated outside the acceptable variance limits. The volumetric flow rate was determined by EPA Method 19 and validated with a current fuel gas composition analysis and a calibrated fuel consumption meter. The volumetric flow rate was factored with the observed stack concentration and species-specific weight factors to derive the calculated mass emission rates. Details of these calculations are found in the example calculation section of the report.

Figure 1
Gaseous Sample System Diagram



Testing Conducted by Compliance Services and Testing

Table 3: List of Instrumentation, Detection Principles and Data Recording Devices

Analytical Instrumentation

Parameter	Models and Manufacturers	Common Operating Ranges	Minimum Sensitivity	Typical Response Time (sec)	Detection Principle
Sample System 1					
NOx	**California Analytical Instruments Model 400 CLD SN: W01059**	30 ppm 100 ppm 300 ppm 1000 ppm 3000 ppm	0.1 ppm	5	Thermal reduction of NO2 to NO. Chemiluminescent reaction of NO with excess of ozone. Detection by Photo-multiplier or Photodiode. Inherently linear for ranges listed.
CO	**California Analytical Instruments Model ZRE SN: A8P9061T**	200 ppm 1000 ppm	0.1 ppm	5	Single beam non-dispersive infrared absorption.
O_2	**California Analytical Instruments Model ZRE SN: A8P9061T**	10% 25%	0.01%	2	Paramagnetic by magneto-dynamic type measuring. All detection principals are inherently linear over a wide range.
CO_2	**California Analytical Instruments Model ZRE SN: A8P9061T**	10% 20%	0.01%	5	Infrared absorption, analog linearization, solid state detector.
CO	**California Analytical Instruments Model ZRE SN: A8P9061T**	1000 ppm 10000 ppm	0.1%	5	Single beam non-dispersive infrared absorption.
THC	**California Analytical Instruments Model 600M HFID SN: Z10046**	10 ppm 100 ppm 1000 ppm 10000 ppm	0.1 ppm	5	Flame Ionization Detection to determine the total hydrocarbons.
Sample System 2					
NOx	**California Analytical Instruments Model 400 CLD SN: 6N07002**	30 ppm 100 ppm 300 ppm 1000 ppm 3000 ppm	0.1 ppm	5	Thermal reduction of NO2 to NO. Chemiluminescent reaction of NO with excess of ozone. Detection by Photo-multiplier or Photodiode. Inherently linear for ranges listed.
CO	**California Analytical Instruments Model 300 SN: 1N05011**	200 ppm 1000 ppm	0.2 ppm	5	Infrared absorption, gas filter correlation detector. Microprocessor based linearization.
O_2	**California Analytical Instruments Model 300 SN: 1N05011**	5% 10% 25%	0.1%	2	Paramagnetic by magneto-dynamic type measuring. All detection principals are inherently linear over a wide range.
CO_2	**California Analytical Instruments Model 300 SN: 1N05011**	10% 20%	0.02%	5	Infrared absorption, analog linearization, solid state detector.
THC	**California Analytical Instruments 100 SN: T11028**	1000 ppm 5000 ppm	0.2 ppm	5	Non-dispersive Infrared absorption. Correlation filter with a mass flow sensor.

Data Recorder

Parameter	Models and Manufacturers	Common Operating Speeds	Measuring Range	Detection Principle
20 channels	**Omega OMB-DAQ-56 SN: 271775**	625 ms to 6.25 secs	+/- 15 Volts	Voltage differential to a CPU.

CST reserves the right to substitute equivalent model analyzers that meet the specifications of the test methods.
Higher ranges available by sample dilution. Other ranges available via data logger/recorder signal attenuation.
Operating range is defined by the calibration gases used during the test (per EPA Methods 7e and 25b).

Quality Assurance Activities

Each instrument's response was checked and adjusted in the field prior to the collection of data via direct inject multi-point calibration. The instrument's linearity was checked by first adjusting the zero and span responses to zero (nitrogen) and an upscale calibration gas in the range of the expected concentrations. The instrument response was then challenged with other calibration gases of known concentration and accepted as being linear if the response of the other calibration gases agreed within ± 2% of span of the predicted values. Appendix D contains Instrumental Analysis Quality Assurance Worksheets, which summarize the results of these calibration error tests.

The sampling system's integrity was tested by comparing the responses of the analyzers to calibration gases introduced via two paths. The first path was into the analyzer via the zero/span calibration manifold. The second path was to introduce a calibration gas into the sample system at the sample probe. Any difference in the instrument responses by these two methods was attributed to sampling system bias or leakage. These bias checks were conducted before and after dismantling or setting up the sample system, and as required by the various methods. Examination of the datalog excerpt and Instrumental Analysis Quality Assurance Data worksheet in Appendix D show that the analyzer response via both sample paths agreed within acceptable limits in all cases.

Interference response tests on the NO_x, CO, CO_2, and O_2 instruments were conducted during the response time / bias check. The sum of the interference response for each analyzer is less than ± 5% of the applicable full-scale span value.

The efficiency of the NO_2 to NO converter in the NO_x analyzer was checked by introducing a certified mixture of NO_2 in N_2 standard gas into the analyzer. The criterion for acceptability is a demonstrated NO_x converter efficiency greater than 90%. The datalog excerpt that demonstrate the converter efficiency test are available in Appendix F. The above-mentioned quality assurance worksheets of Appendix D also summarize the results of the converter efficiency test.

The residence time of the sampling and measurement system was estimated using the pump flow rate and the sampling system volume. The pump's rated flow is 0.625 cfm at 10 psig. The sampling system volume is approximately 0.034 cf, therefore, the sample residence time is approximately 3.3 seconds. The sampling system purge time is twice of the longest response time, which is typically at or near 120 seconds.

Response time tests for individual instruments were conducted prior to sampling and noted in the Daily Assurance Worksheet of Appendix D and on the datalog record of Appendix F.

The control gases used to calibrate the instruments were analyzed and certified by the compressed gas vendors to ± 1% accuracy for the NO_x/CO, and O_2/CO_2 gases. EPA Protocol Number 1 was used, where applicable, to assign the concentration values traceable to the National Bureau of Standards, Standard Reference Materials (SRM's). The gas calibration sheets as prepared by the vendor are contained in Appendix E. The calibration certificate for the dry gas meter used is also contained in Appendix E.

Before and after the test, the analyzers were checked for zero and span drift. This allowed each test run to be bracketed by calibrations and documents the precision of the data just collected. The criterion for acceptable data is that the instrument drift is no more than ± 3% of the full-scale response. The quality assurance worksheets in Appendix D summarize all multi-point calibration checks and zero to span checks performed during the tests. These worksheets (as prepared from the datalog records of Appendix F) show that no drifts more than the criteria specified by the respective methods existed.

CST collected and reported the enclosed test data in accordance with the procedures and quality assurance activities described in this test report. CST makes no warranty as to the suitability of the test methods and assumes no liability relating to the interpretation and use of the test data.

Appendix A:
Tabular Results and Field Data

Summary of Results
Unit TA-3-22-CT-1

Company: Los Alamos National Laboratory
Location: TA-3 Power Station
Source: Siemens Energy SGT A35-DLE-GT SN: 1890D-2015
Engine Site Rating: 24.6 MW (32,989 Hp)
Technician: CS

Test Run Number	**1**	**2**	**3**	
Unit Number	**TA-3-22**	**TA-3-22**	**TA-3-22**	
Equipment Number	**CT-1**	**CT-1**	**CT-1**	
Date	11/29/22	11/29/22	11/29/22	
Start Time	12:57	13:18	13:39	
Stop Time	13:17	13:38	13:59	
Turbine / Generator Operating Parameters				***Average***
Load (%)	95.9	95.8	95.9	**95.9**
Gas Generator Speed NL (RPM)	6,389	6,391	6,389	**6,389.7**
Gas Generator Speed NH (RPM)	9,084	9,082	9,078	**9,081.3**
Power Turbine Speed (RPM)	4,849	4,848	4,848	**4,848.3**
Engine Horsepower (HP)	31,642	31,599	31,628	**31,623.2**
Generator Wattage (MW)	25.0	24.9	24.9	**24.9**
Voltage (kV)	13.7	13.7	13.7	**13.7**
Amperage (A)	1059	1055	1052	**1055.3**
Frequency (Hz)	60.1	60.1	60.1	**60.1**
Power Factor (PF)	1.0	1.0	1.0	**1.0**
Inlet Temperature (T1) (°F)	38	38	38	**38.0**
Average Exhaust Temperature (T455) (°F)	1452	1452	1452	**1452.0**
Fuel Data				
Fuel Pressure (psia)	465.3	465.3	465.3	**465.3**
Fuel Temperature (°F)	70	69	69	**69.3**
Calculated Fuel Consumption (SCFH)	222,000	221,700	221,900	**221,866.7**
O2 F-Factor (DSCF/MMBtu, HHV basis)	8657	8657	8657	**8657**
Fuel Heating Value (Btu/SCF, HHV)	1051	1051	1051	**1051**
BHp Specific Fuel Rate (Btu/Hp-hr, HHV basis)	7375	7375	7375	**7375**
Ambient Conditions				
Pressure Altitude (MSL)	7300	7300	7300	**7300**
Atmospheric Pressure ("Hg)	22.85	22.85	22.85	**22.85**
Dry Bulb Temperature (°F)	40.3	44.2	38.5	**41.0**
Wet Bulb Temperature (°F)	33.1	34.9	32.0	**33.3**
Humidity (lb/lb air)	0.0035	0.0034	0.0034	**0.0034**
Measured Exhaust Emissions (Instrument Drift Corrected)				
NOx (ppmv)	19.06	18.79	18.59	**18.82**
NOx @ 15% O2 (ppmvd) {Permit Limit = 25.0}	18.53	18.41	18.35	**18.43**
CO (ppmv)	4.96	4.26	4.02	**4.42**
O2 (vol %)	14.83	14.88	14.92	**14.88**
CO2 (vol %)	3.40	3.36	3.31	**3.36**
Fo (Natural Gas)	1.79	1.79	1.80	**1.79**
Exhaust Flow Rates				
Dry Standard Cubic Feet per Minute	115,941.36	116,710.37	117,674.11	**116,775.28**
Dry Standard Cubic Feet per Hour	6,956,481	7,002,622	7,060,446	**7,006,517**
Calculated Mass Emission Rates				
NOx (lbs/hr) **{Permit Limit = 23.8}**	15.84	15.72	15.68	**15.74**
CO (lbs/hr) **{Permit Limit = 29.0}**	2.51	2.17	2.06	**2.25**
Hours per Year =	***1.40E+09***	***÷ Fuel Use =***	***6310.10***	
*NOx (tons/yr) **{Permit Limit = 59.4}**	49.97	49.59	49.46	**49.67**
*CO (tons/yr) **{Permit Limit = 72.3}**	7.92	6.85	6.52	**7.09**

***TPY based on 238.00 MSCF/Hr. Turbine limited to 1400 MMSCF of Fuel per 12 Month Period.**

Field Test Participants Sign In Sheet

Job Name: ~~1450~~ LANL **DATE(S):** 11-29-22

Job Number: 2450 **PERMIT #:** P100-R2M4

Plant Name/Location: TA-3 POWER PLANT

Emission Source(s): TURBINE CT-1

PARTICIPANTS:

Compliance Services and Testing	Test Contractor
LANL	Owner/Operator
NMED-AQB	Regulatory Agency
	Regulation

Print Name:	Affiliation:	Position:	Phone Number:
CHRIS SPENCER	CST	DIR	505-681-4909
Jim Lutz	LANL	DEP	505-660-6452
Joe Baughman	LANL	SUP	505-699-0201
Cris Gomez	LANS	Gen foreman	505-412-2025
MARGIE STOCKTON	LANL	EHS	505-665-3289

Summary of Results
Unit TA-3-22-CT-1

Company: Los Alamos National Laboratory
Location: TA-3 Power Station
Source: Rolls Royce RB211-6761 DLE SN: 20111
Engine Site Rating: 27 MW
Technician: CS

1257 1400

1:00 - 2:00

Test Run Number	1	2	3	
Unit Number	TA-3-22	TA-3-22	TA-3-22	
Equipment Number	CT-1	CT-1	CT-1	
Date	11-29-22	1/1/04	1/1/04	
Start Time	1257	0:21	0:42	
Stop Time	0:20	0:41	1:02	
Turbine / Generator Operating Parameters				*Average*
Load (%)	0.0	0.0	0.0	**0.0**
Gas Generator Speed NL (RPM)	6389	6391	6384	**#DIV/0!**
Gas Generator Speed NH (RPM)	9084	9082	9078	**#DIV/0!**
Power Turbine Speed (RPM)	4849	4848	4848	**#DIV/0!**
Engine Horsepower (HP)	0	0	0	**0.0**
Generator Wattage (MW)	25.0	24.9	24.9	**#DIV/0!**
Voltage (kV)	13669	13666	13.665	**#DIV/0!**
Amperage (A)	1054	1055	1052	**#DIV/0!**
Frequency (Hz)	60.08	60.03	60.07	**#DIV/0!**
Power Factor (PF)	1.0	1.0	1.00	**#DIV/0!**
Inlet Temperature (T1) (°F)	37.6	37.6	37.0	**#DIV/0!**
Average Exhaust Temperature (T455) (°F)	1452	1452	1452	**#DIV/0!**
Fuel Data				
Engine Compressor Discharge, PCD (psia)				**#DIV/0!**
Fuel Pressure (psia)	465.3	465.3	465.3	**#DIV/0!**
Fuel Temperature (°F)	71	69	69	**#DIV/0!**
Calculated Fuel Consumption (SCFH)	222.0	221.7	221.9	**#DIV/0!**
O2 F-Factor (DSCF/MMBtu, HHV basis)	8672	8672	8672	**8672**
Fuel Heating Value (Btu/SCF, HHV)	1052	1052	1052	**1052**
BHp Specific Fuel Rate (Btu/Hp-hr, HHV basis)	#DIV/0!	#DIV/0!	#DIV/0!	**#DIV/0!**
Ambient Conditions				
Pressure Altitude (MSL)	7530	7310	7300	**#DIV/0!**
Atmospheric Pressure ("Hg)	29.92	29.92	29.92	**29.92**
Dry Bulb Temperature (°F)	40.7	44.2	38.5	**#DIV/0!**
Wet Bulb Temperature (°F)	37.1	34.4	32.0	**#DIV/0!**
Humidity (lb/lb air)	0.0009	0.0009	0.0009	**0.0009**
Measured Exhaust Emissions (Instrument Drift Corrected)				
NOx (ppmv)	21.19	21.11	21.08	**21.13**
NOx @ 15% O2 (ppmvd) {Permit Limit = 25.0}	**20.18**	**20.25**	**20.35**	**20.26**
CO (ppmv)	6.16	6.03	6.22	**6.14**
O2 (vol %)	14.70	14.75	14.79	**14.75**
CO2 (vol %)	3.32	3.36	3.40	**3.36**
Fo (Natural Gas)	1.87	1.83	1.80	**1.83**
Exhaust Flow Rates				
Dry Standard Cubic Feet per Minute	0.00	0.00	0.00	**0.00**
Dry Standard Cubic Feet per Hour	0	0	0	**0**
Calculated Mass Emission Rates				
NOx (lbs/hr) **{Permit Limit = 23.8}**	0.00	0.00	0.00	**0.00**
CO (lbs/hr) **{Permit Limit = 29.0}**	0.00	0.00	0.00	**0.00**
*NOx (tons/yr) **{Permit Limit = 59.4}**	#DIV/0!	#DIV/0!	#DIV/0!	**#DIV/0!**
*CO (tons/yr) **{Permit Limit = 72.3}**	#DIV/0!	#DIV/0!	#DIV/0!	**#DIV/0!**

19.5 4.8 14.8 3-3 15.5 2.5 49.0 7.9

***TPY based on 238.00 MSCF/Hr. Turbine limited to 1400 MMSCF of Fuel per 12 Month Period.**

Appendix B:
Example Calculations

Example Calculations

Drift Corrected Emission Concentrations

Formula

$$C_{GAS} = (Ç - Co) \times \frac{C_{MA}}{C_M - Co} \quad \textit{(eq. 7E-5)}$$

All Calculations Refer to Test Run 1, Unit # TA-3-22-CT-1

$Ç_{NOx}$ =	Raw Concentration of NOx	= 19.31 ppmv
Co =	Avg. of Initial and Final Zero Checks	= 0.09 ppmv
C_M =	Avg. of Initial and Final Span Checks	= 25.30 ppmv
C_{MA} =	Certified Concentration of Span Gas	= 25.00 ppmv

C_{NOx} = (19.31 - 0.09) x 25.00 / (25.30 - 0.09) = 19.06 ppmv

$Ç_{CO}$ =	Raw Concentration of CO	= 4.66 ppmv
Co =	Avg. of Initial and Final Zero Checks	= -0.33 ppmv
C_M =	Avg. of Initial and Final Span Checks	= 24.79 ppmv
C_{MA} =	Certified Concentration of Span Gas	= 25.00 ppmv

C_{CO} = (4.66 + 0.33) x 25.00 / (24.79 + 0.33) = 4.96 ppmv

$Ç_{O2}$ =	Raw Concentration of O2	= 14.83 %
Co =	Avg. of initial and final zero bias checks	= 0.01%
C_M =	Avg. of initial and final span bias checks	= 10.00%
C_{MA} =	Actual concentration of span gas	= 10%

C_{O2} = (14.83 - 0.01) x 10.00 / (10.00 - 0.01) = 14.83%

$Ç_{CO2}$ =	Raw Concentration of CO2	= 3.47%
Co =	Avg. of initial and final zero bias checks	= 0.20%
C_M =	Avg. of initial and final span bias checks	= 5.02%
C_{MA} =	Actual concentration of span gas	= 5.00%

C_{CO2} = (3.47 - 0.20) x 5.00 / (5.02 - 0.20) = 3.40%

Fo Calculation to Verify O2 / CO2 Measurements (Eq. 3b-1)

C_{O2} =	Corrected Concentration of O2	= 14.83%
C_{CO2} =	Corrected Concentration of CO2	= 3.40%
Th. Fo =	Theoretical Fo from FGA	= 1.76

$$Fo = \frac{(20.9 - O2\%)}{CO2\%}$$

$$\mathbf{Fo} = \frac{(20.9 - 14.83)}{3.40} = \mathbf{1.79}$$

Adjust Measured Concentrations to 15% O2 (Eq. 60.335)

$$\mathbf{C_X @ 15\% O2} = C_X\,(ppmv) \times \frac{5.9}{(20.9 - O2\%)}$$

$$\mathbf{C_{NOx} @ 15\% O2} = 19.06 \times \frac{5.9}{(20.9 - 14.83)} = \mathbf{18.53} \ \mathbf{@ 15\% O2}$$

Example Calculations

Mass Emission Rates via EPA Method 19

Measured Data and Constants from Test Run 1

C_{NOx} =	Corrected Concentration of NOx	=	19.06	ppmv
C_{CO} =	Corrected Concentration of CO	=	4.96	ppmv
Horsepower =	Observed Horsepower	=	31642	Hp
lb / mole =	EPA STP for Ideal Gas	=	385.15	SCF
lbs / hr to tpy =	Conversion Factor based on Fuel Usage	=	3.1550	hrs-tons / lbs-yr
C_F =	PPMV Normalization	=	1.00E-06	1 / ppmv
MW_{NOx} =	Molecular Weight of NOx	=	46	lb / lb-mol
MW_{CO} =	Molecular Weight of CO	=	28	lb / lb-mol

Stack Gas Flow Rate via Method 19 (eq. 19-1)

Q_F =	Fuel Flow (Measured)	=	222000	SCF/H
F_{BTU} =	Fuel Higher Heating Value	=	1051	Btu/SCF
F_{O2} =	O2 F-Factor	=	8657	DSCF/MMBtu
C_{O2} =	Corrected Concentration of O2	=	14.83	%

$$Q_{S\ M19} = Q_F \times F_{BTU} \times F_{O2} \times 10^{-6} \times \frac{20.9}{(20.9 - \%O2)}$$

$$Q_{S\ M19} = 222000 \times 1051 \times 8657 \times 3.44 \times 1.00E\text{-}06$$

$$\mathbf{Q_{S\ M19}} = \mathbf{6{,}956{,}481\ DSCF/H}$$

Formulas

Pounds per Hour (lbs/hr)

$$E_x\ (lb/hr) = C_x \times C_F \times Q_S \times \{ MW_x / (lb / mole) \}$$

Tons per Year (tpy)

$$E_x\ (tpy) = E_x\ (lb/hr) \times \{ \text{Fuel Usage (hr / yr)} / 2000\ (lb / ton) \}$$

Calculated Mass Emission Rates From Method 19 Exhaust Flow Rate

E_{NOx}

$$\textbf{lbs/hr} = 19.06 \times 1.00E\text{-}06 \times 6.96E{+}06 \times \frac{46}{385.15} = \mathbf{15.84}$$

$$\textbf{tpy} = 15.84\ lb/hr \times 3.1550\ \frac{\text{hrs-ton}}{\text{lbs-yr}} = \mathbf{49.97}$$

E_{CO}

$$\textbf{lbs/hr} = 4.96 \times 1.00E\text{-}06 \times 6.96E{+}06 \times \frac{28}{385.15} = \mathbf{2.51}$$

$$\textbf{tpy} = 2.51\ lb/hr \times 3.1550\ \frac{\text{hrs-ton}}{\text{lbs-yr}} = \mathbf{7.92}$$

Appendix C:
Fuel Analysis, F-Factor Calculations, and Fuel Meter Calibration Certificate

New Mexico Gas Company
Albuquerque, New Mexico
Gas Analysis General Report (01 Dec 2022)

1-Dec-22
7:27 AM

Analysis ID: 9646 **Alternate ID:** NA

Name: Santa Fe ML 20" Low Flow SF Jnct Daily

Company Name: NMGCO

Analysis Type: NA
Sample Frequency: Daily

Analysis Origin: NA
BTU Var Multiplier:

Sample Date	Effective Date	Sample Type	Sample Pressure Base	Wet BTU	Dry BTU	Gravity	Methane	Ethane	Propane	I Butane	N Butane	I Pentane	N Pentane	Hexanes+	Nitrogen	CO2
			Averages:	1034.7	1053	0.603	90.4	7.019	0.36	0.015	0.025	0.005	0.004	0.002	2.05	0.118
	11/28/22 8:00		14.73	1033.7	1052.1	0.6023	90.541	6.88	0.363	0.015	0.026	0.005	0.004	0.002	2.04	0.121
	11/29/22 8:00		14.73	1033.3	1051.6	0.6023	90.61	6.744	0.386	0.019	0.034	0.007	0.006	0.003	2.075	0.113
	11/30/22 8:00		14.73	1037	1055.4	0.6044	90.049	7.432	0.331	0.011	0.017	0.003	0.002	0.001	2.034	0.119

Fuel Analysis
Gas Fuel F Factor and Heating Value Calculation

Company: LANL
Sample ID: TA-3 Fuel Supply
Time: 7:27
Date: 11/29/22

CALCULATION OF DENSITY AND HEATING VALUE @ 68°F and 29.92 in Hg

Component	% Volume	Molecular Wt.	Density (lb/ft3)	% volume x Density	weight %	Component Gross Btu/lb	Weight Fract. Btu	Gross Htng. Val. (Btu/SCF)	Volume Fract. Btu
Hydrogen		2.016	0.0052	0.00000	0.0000	61100	0.00	325.0	0.000
Oxygen		32.000	0.0831	0.00000	0.0000	0	0.00	0.0	0.000
Nitrogen	2.075	28.016	0.0731	0.00152	3.3496	0	0.00	0.0	0.000
CO2	0.113	44.010	0.1149	0.00013	0.2868	0	0.00	0.0	0.000
CO		28.010	0.0727	0.00000	0.0000	4347	0.00	322.0	0.000
Methane	90.610	16.041	0.0417	0.03774	83.3623	23879	19906.09	1013.0	917.879
Ethane	6.744	30.067	0.0789	0.00532	11.7492	22320	2622.42	1792.0	120.852
Ethylene		28.051	0.0733	0.00000	0.0000	21644	0.00	1614.0	0.000
Propane	0.386	44.092	0.1175	0.00045	1.0016	21661	216.96	2590.0	9.997
propylene		42.077	0.1090	0.00000	0.0000	21041	0.00	2336.0	0.000
Isobutane	0.019	58.118	0.1554	0.00003	0.0652	21308	13.90	3363.0	0.639
n-butane	0.034	58.118	0.1554	0.00005	0.1167	21257	24.81	3370.0	1.146
Isobutene		56.102	0.1454	0.00000	0.0000	20840	0.00	3068.0	0.000
Isopentane	0.007	72.144	0.1870	0.00001	0.0289	21091	6.10	4008.0	0.281
n-pentane	0.006	72.144	0.1870	0.00001	0.0248	21052	5.22	4016.0	0.241
n-hexane +	0.003	86.169	0.2234	0.00001	0.0148	20940	3.10	4762.0	0.143
H2S		34.076	0.0895	0.00000	0.0000	7100	0.00	647.0	0.000
Totals	**100.00**	**731.25**	**1.91**	**0.05**	**100.00**	**Gross Heating Value**			
Average Density:		**0.0453**	**Specific Gravity:**		**0.592**	**Btu/lb:**	**22799**	**Btu/SCF:**	**1051**

CALCULATION OF F FACTORS

Component	Mol. Wt.	C Factor	H Factor	% volume	Fract. Wt.	Weight Percents				
						Carbon	Hydrogen	Nitrogen	Oxygen	Sulfur
Hydrogen	2.016	0.0000	1.0000	0.0000	0.0000		0.0000			
Oxygen	32.000	0.0000	0.0000	0.0000	0.0000				0.0000	
Nitrogen	28.016	0.0000	0.0000	2.0750	58.1332			3.3397		
CO2	44.010	0.2723	0.0000	0.1130	4.9731	0.0778			0.2077	
CO	28.010	0.4259	0.0000	0.0000	0.0000	0.0000			0.0000	
Methane	16.041	0.7500	0.2500	90.6100	1453.4750	62.6264	20.8755			
Ethane	30.067	0.8000	0.2000	6.7440	202.7718	9.3194	2.3298			
Ethylene	28.051	0.8571	0.1429	0.0000	0.0000	0.0000	0.0000			
Propane	44.092	0.8182	0.1818	0.3860	17.0195	0.8000	0.1778			
Propene	42.077	0.8571	0.1429	0.0000	0.0000	0.0000	0.0000			
Isobutane	58.118	0.8276	0.1725	0.0190	1.1042	0.0525	0.0109			
n-butane	58.118	0.8276	0.1725	0.0340	1.9760	0.0939	0.0196			
Isobutene	56.102	0.8571	0.1429	0.0000	0.0000	0.0000	0.0000			
Isopentane	72.144	0.8333	0.1667	0.0070	0.5050	0.0242	0.0048			
n-pentane	72.144	0.8333	0.1667	0.0060	0.4329	0.0207	0.0041			
n-hexane	86.169	0.8372	0.1628	0.0030	0.2585	0.0124	0.0024			
H2S	34.076	0.0000	0.0587	0.0000	0.0000	0.0000	0.0000			0.0000
Totals	**731.25**	**9.80**	**2.96**	**100.00**	**1740.649**	**73.027**	**23.425**	**3.340**	**0.208**	**0.000**

CALCULATED VALUES

O2 F Factor (dry)	**8657**	DSCF of Exhaust/MMBtu of Fuel Burned @ 0% excess air
O2 F Factor (wet)	**10640**	SCF of Exhaust/MMBtu of Fuel Burned @ 0% excess air
Moisture F Factor	**1983**	SCF of Water/MMBtu of Fuel Burned @ 0% excess air
Combust. Moisture	**18.64**	Volume % water in flue gas @ 0% excess air
CO2 F Factor	**1028**	DSCF of CO2/MMBtu of Fuel Burned @ 0% excess air
Carbon Dioxide	**11.88**	Volume % CO2 in flue gas @ 0% O2
Predicted Fo Factor	**1.76**	EPA Method 3b Fo value
Fuel VOC %	**13.37%**	Non-methane
Fuel VOC %	**1.29%**	Non-methane, non-ethane

FLOWSIC600-XT

Maintenance Report

ID_20221128112139

Device name		Company	NMGCO	Meter Date	11/28/2022
Station / Description	LA RESEARCH/GEN	Address		Meter Time	11:03:55 AM
Firmware Version	1.05.00	City		Firmware CRC	0x78E1
S/N device	20261007	ZIP Code		Adjust CRC	0x702A
S/N electronics	20080049	Country		Parameter CRC	0x68DE
S/N meterbody	20200005	GPS	Lat: 0.00 | Lon: 0.00	Metrology CRC	0xFD3C
				Created with	V1.21.0.8756

Description	sos		
Log duration [hh:mm:ss]	**Last report created**	**Service Technician**	**Units System Device**
00:03:00	11/28/2022	tapia	Imperial (US)

Parameter Data

Device Type	Pathlayout	Inner Diameter Meter [in]	Pipe Diameter [in]	Firmware Version
4 path	4+2D	2.87445	3.06693	1.05.00
Impulse Factor [Imp/ft³]	**Impulse Factor inv [ft³/Imp]**	**Temp. Value Source**	**Pressure Value Source**	**Stacking Factor**
100	0.010	Fixed temperature value 68 °F	Fixed pressure value 420 psi(g)	1

Calibration Data

Adjust Methode	Qmin [acf/h]	Qmax [acf/h]	Cali. Pressure [psi(g)]	Cali. Temperature [°F]
Piecewice linear	280	23000	0	68

Process Data

Speed of Sound (SOS) [ft/s]	SOS Theoretical [ft/s]	SOS Difference [%]	Pressure [psi(g)]	Temperature [°F]
1328.163	1351.528	-1.729	409.43	47.49
Flow Rate [acf/h]	**Flow Rate (norm.) [scf/h]**	**Profile Factor**	**Symmetry**	**Swirl [°]**
7382.526	0	1.15154	1.003824	0

Meter Status	State
Measure valid	●
Error	○
Check request	○
User warning	●
Parameter Lock Open	○
Compensated Path Failure	○
Active User Warning	●
Performance Error	○

System status	State
New Logbook Entries	○
Impulse Frequency > Fmax	○
External Power Failure	○
RTC Battery low	○
Event Log Full	○
Counter Checksum Error	○
Firmware Checksum Error	○
Archives Checksum Error	○
Date/Time Invalid	○
Systemtest Active	○
Battery Low	○
Battery Failure	○

Volume Conversion	State
P: Measurement Valid	●
P: Communication Error	○
P: Sensor Failure	○
P: Configuration Error	○
P: Value Implausible	○
T: Measurement Valid	●
T: Communication Error	○
T: Sensor Failure	○
T: Configuration Error	○
T: Value Implausible	○
Gas Composition Invalid	○
Conversion Failure	○

Operation Mode	State
Configuration Mode	○
Airtest Mode	○

Measurement	State
Adjust Range Exceeded	○
Internal PT-Sensor Failure	○
DSP Hardware Error	○
DSP Parameter Implausible	○
Flow Measurement Valid	●
Error Path Failure	○
Path Compensation Possible	●
Hardware Error	○
Zerocut Active	○

Parameter	State
Parameter Invalid	○
Logbooks	**State**
Metrology Log Full	○
Event Checksum Error	○
Parameter Checksum Error	○
Metrology Checksum Error	○
Diag. Archive Checksum Error	○
Data Archive 1 Checksum Error	○
Data Archive 2 Checksum Error	○

Legend

- ● OK (no alarm or warning)
- ● Warning active
- ● Alarm active
- ● Active
- ○ Disabled

Path status	1-1	1-2	1-3	1-4
SNR Limit	○	○	○	○
Warning Signal Acceptance	○	○	○	○
Warning SOS Deviation	○	○	○	○
Warning Turbulence	○	○	○	○
Warning AGC	○	○	○	○
Warning AGC Deviation	○	○	○	○
Warning SNR	○	○	○	○
Patherror	○	○	○	○
Sign. accept. rate [%]	100	100	100	100

VOG

Path	Average [ft/s]	Maximum [ft/s]	Minimum [ft/s]	Turbulence Average [%]	Velocity Ratio [%]
1-1	39.559	39.930	39.293	2.64	98.95
1-2	45.228	45.482	44.907	2.04	113.13
1-3	45.342	45.529	45.037	2.03	113.41
1-4	39.100	39.380	38.811	2.82	97.80
Average	39.979	40.103	39.833		

AGC / SNR

Path	SNR AB [dB]	SNR BA [dB]	AGC AB [dB]	AGC BA [dB]	AGC Diff.AB-BA [dB]
1-1	79.7	57.6	26.0	28.1	-2.1
1-2	68.3	58.5	28.3	28.7	-0.4
1-3	64.2	58.6	28.0	28.3	-0.3
1-4	58.5	55.3	26.7	29.3	-2.6
Average	67.7	57.5	27.2	28.6	-1.4

SOS

Path	Average [ft/s]	Maximum [ft/s]	Minimum [ft/s]
1-1	1328.44	1328.58	1328.27
1-2	1327.71	1327.81	1327.57
1-3	1327.68	1327.81	1327.57
1-4	1328.82	1328.99	1328.63
Average	1328.162	1328.240	1328.099

Totalizers

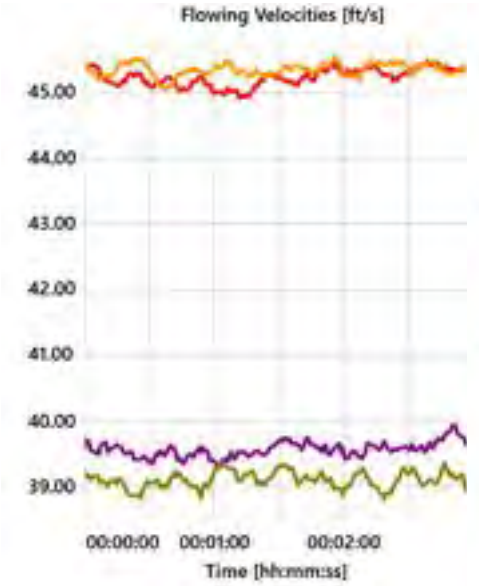
Volume	Normal [cft]	Error [cft]	Total [cft]
Forward	14673544	78	14691447
Reverse	52	1	54

Name _____ Signature _____ Date _____

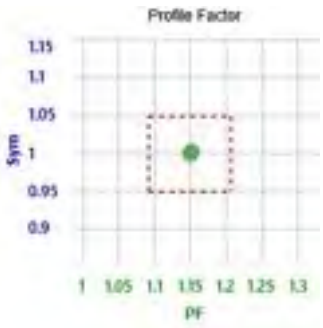
Witness name _____ Signature _____ Date _____

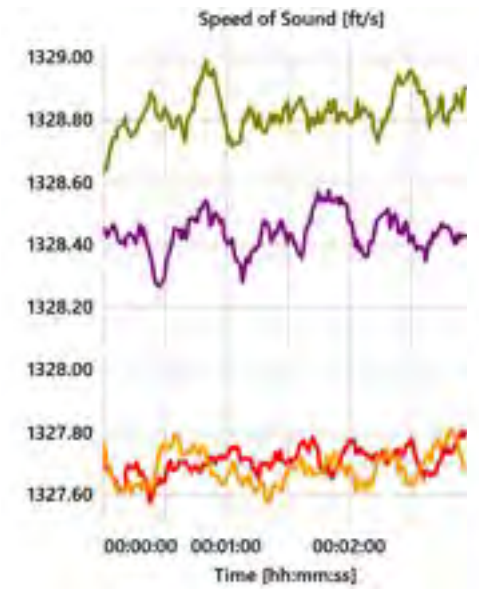
Legend

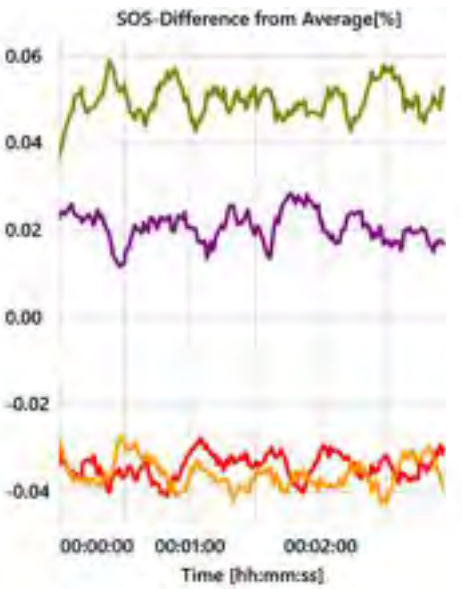
Path 1-1 Path 1-2 Path 1-3 Path 1-4

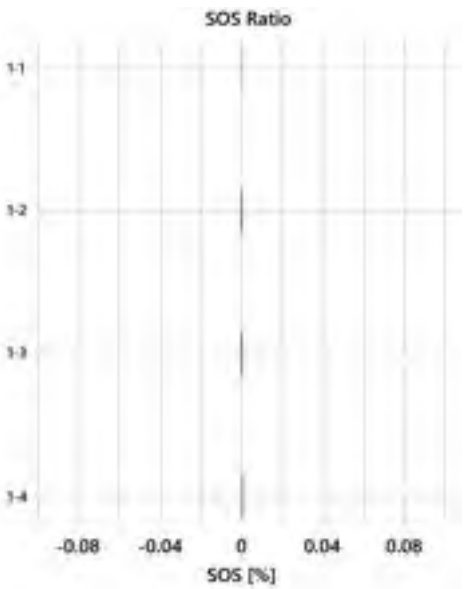


















Appendix D:
Quality Assurance Activities

Quality Assurance Report
Converter Efficiency Test, Interference Test, Response Time, and Bias Calibration Results

NOx Converter Effeciency Check

Method: *7E Section 8.2.4*
Frequency: *Before each field test*
Criteria: *Equal to or greater than 90% conversion efficiency*

Test Date: 11/29/22 Technician: CS

NO2	*Results*
Certified Value	49.00 ppmv
Observed Value	47.81 ppmv
Converter Effeciency	98%

Interference Response Checks

Method: *7E Section 8.2.7*
Frequency: *Prior to initial use in the field or after major alteration or modification*
Criteria: *Sum of responses < 2.5 % of calibration span*

Test Date: 11/29/22 Technician: CS

Interferrence Test Gases		**Analyzer Response (ppmv or % as applicable)**					
Type Gas	*Conc.*	*NOx*	*CO*	*SO2*	*THC*	*O2*	*CO2*
NOx in N2	25.0 ppm	---	N/A	---	---	0.00	-0.05
CO in N2	25.0 ppm	N/A	---	---	---	0.00	-0.05
SO2 in N2	---	---	---	---	---	---	---
THC in Air	---	---	---	---	---	---	---
O2 in N2	10.0 %	0.06	0.03	---	---	---	N/A
CO2 in N2	5.0 %	0.10	-0.67	---	---	N/A	---

Gas Dilution Calibration - 2 Mass Flow Controllers

Method: *205*
Frequency: *Before each field test.*
Criteria: *Produce Calibration gases whose measured values are within ± 2% of predicted values.*

Manufacturer: Environics Cal Gas: NOx
Model Number: Series 4040 Test Date: 11/29/22
Serial Number: 8439 Technician: CS

	MFC 3			*MFC 2*		
	Direct Inject	**Diluted Conc.**	**Diluted Conc.**	**Direct Inject**	**Diluted Conc.**	**Diluted Conc.**
Certified Value:	248.9	2979	2979	248.9	2979	2979
Ex. Dilution:	---	250	500	---	1000	2000
Injection 1	249.85	250.71	501.97	250.70	1003.47	2007.59
Injection 2	249.84	250.71	500.31	250.69	1002.17	2005.65
Injection 3	247.18	251.57	500.32	250.68	1003.90	2004.97
Average	**248.96**	**251.00**	**500.87**	**250.69**	**1003.18**	**2006.07**
% Variation	**0.62%**	**0.20%**	**0.19%**	**0.00%**	**0.09%**	**0.07%**
% Difference	**-0.02%**	**-0.40%**	**-0.17%**	**-0.72%**	**-0.32%**	**-0.30%**

Sample System Bias & Response Time Check

Method: *7E Section 8.2.5-6*
Frequency: *Before sampling begins*
Criteria: *5% of calibration span*
Criteria: *Note the longer of the two times as the response time*

Test Date: 11/29/22 Technician: CS

Sample System Bias Check

Introduction Technique	**NOx (ppmv)**	**CO (ppmv)**	**SO2 (ppmv)**	**THC (ppmv)**	**O2 (%)**	**CO2 (%)**
Direct Zero Input	0.06	0.03	---	---	0.00	0.00
Bias Input	0.07	0.02	---	---	-0.03	0.12
Zero Bias	0.02%	-0.02%			-0.15%	1.20%
Direct Span Input	25.05	25.07	---	---	10.00	5.06
Bias Input	25.05	24.57	---	---	9.99	5.01
Span Bias	0.00%	-1.00%			-0.05%	-0.50%

Sample System Response Time

Parameter	**NOx (ppmv)**	**CO (ppmv)**	**SO2 (ppmv)**	**THC (ppmv)**	**O2 (%)**	**CO2 (%)**
Upscale Response	35	50			45	40
Downscale Response	40	45			40	45
Purge Time	100 seconds					

Quality Assurance Worksheet
Instrument Calibration and Drift Correction

Company: Los Alamos National Laboratory
Location: TA-3 Power Station
Source: Siemens Energy SGT A35-DLE-GT SN: 1890D-2015
Engine Site Rating: 24.6 MW (32,989 Hp)
Test Date: Tuesday, November 29, 2022

UNIT TA-3-22					TEST RUN 1					TEST RUN 2					TEST RUN 3				
GAS LEVELS PER METHOD	CALIBRATION GAS CONCENTRATIONS		INITIAL CALIBRATION & LINEARITY CHECK		Start Run 12:57	ZERO and SPAN CALIBRATION CHECK				Start Run 13:18	ZERO and SPAN CALIBRATION CHECK				Start Run 13:39	ZERO and SPAN CALIBRATION CHECK			
	Certified Concentration	Target (% Span)	Analyzer Response	Calibration Error < 2%	Stop Run 13:17	Initial Response	Final Response	Drift < 3%	Bias < 5%	Stop Run 13:38	Initial Response	Final Response	Drift < 3%	Bias < 5%	Stop Run 13:59	Initial Response	Final Response	Drift < 3%	Bias < 5%
NOx					Avg. ppmv					Avg. ppmv					Avg. ppmv				
Zero	0.0 ppmv	0.0	0.06 ppmv	0.1%	19.31	0.07 ppmv	0.10 ppmv	0.1%	0.2%	19.04	0.07 ppmv	0.10 ppmv	0.1%	0.2%	18.83	0.07 ppmv	0.10 ppmv	0.1%	0.2%
					Corr. ppmv					Corr. ppmv					Corr. ppmv				
Mid	25.0 ppmv	50.0	25.05 ppmv	0.1%	19.06	25.05 ppmv	25.54 ppmv	2.0%	1.1%	18.79	25.05 ppmv	25.54 ppmv	2.0%	1.1%	18.59	25.05 ppmv	25.54 ppmv	2.0%	1.1%
High	50.0 ppmv	100.0	49.44 ppmv	-1.1%	Cal. Span					Cal. Span					Cal. Span				
Analyzer Range = 100 ppmv			Span = 50.0		50.0					50.0					50.0				
CO					Avg. ppmv					Avg. ppmv					Avg. ppmv				
Zero	0.0 ppmv	0.0	0.03 ppmv	0.1%	4.66	0.02 ppmv	-0.67 ppmv	1.4%	1.3%	3.96	0.02 ppmv	-0.67 ppmv	1.4%	1.3%	3.75	0.02 ppmv	-0.67 ppmv	1.4%	1.3%
					Corr. ppmv					Corr. ppmv					Corr. ppmv				
Mid	25.0 ppmv	50.0	25.07 ppmv	0.1%	4.96	24.57 ppmv	25.00 ppmv	1.7%	0.0%	4.26	24.57 ppmv	25.00 ppmv	1.7%	0.0%	4.02	25.00 ppmv	25.00 ppmv	0.0%	0.0%
High	50.0 ppmv	100.0	49.89 ppmv	-0.2%	Cal. Span					Cal. Span					Cal. Span				
Analyzer Range = 100 ppmv			Span = 50.0		50.0					50.0					50.0				
O2					Avg.%					Avg.%					Avg.%				
Zero	0.0%	0.0	0.00%	0.0%	14.83	-0.03%	0.04%	0.4%	0.2%	14.88	-0.03%	0.04%	0.4%	0.2%	14.92	-0.03%	0.04%	0.4%	0.2%
					Corr. %					Corr. %					Corr. %				
Mid	10.0%	50.0	10.00%	0.0%	14.83	9.99%	10.01%	0.2%	0.0%	14.88	9.99%	10.01%	0.2%	0.0%	14.92	9.99%	10.01%	0.2%	0.0%
High	20.0%	100.0	20.05%	0.3%	Cal. Span					Cal. Span					Cal. Span				
Analyzer Range = 25.0%			Span = 20.0		20.0					20.0					20.0				
CO2					Avg.%					Avg.%					Avg.%				
Zero	0.0%	0.0	0.00%	0.0%	3.47	0.12%	0.28%	1.6%	2.8%	3.44	0.12%	0.28%	1.6%	2.8%	3.39	0.12%	0.28%	1.6%	2.8%
					Corr. %					Corr. %					Corr. %				
Mid	5.0%	50.0	5.06%	0.6%	3.40	5.01%	5.02%	0.2%	0.2%	3.36	5.01%	5.02%	0.2%	0.2%	3.31	5.01%	5.02%	0.2%	0.2%
High	10.0%	100.0	10.02%	0.2%	Cal. Span					Cal. Span					Cal. Span				
Analyzer Range = 10.0%			Span = 10.0		10.0					10.0					10.0				

Appendix E:
Calibration Certifications

Mass Flow Controller Annual Calibration

Make: Environics
Model: 4040
Serial Number: 8439

Calibration Date: 2/9/22
Next Calibration Date: 2/9/23
Technician: MW

The mass flow controllers (MFC) in use with this gas dilution system was calibrated with a Bios Defender Model 530 High Flow. This calibration was performed with nitrogen and was corrected to standard reference temperature (68° F) and pressure (29.92" Hg). The data shown is performance data taken after the calibration of the gas dilution system. Acceptable criteria for pass/fail is a true flow value +/- 10% within the set flow.

MFC 1	*% Flow*	*Set Flow*	*True Flow*	*% Difference*
SN: 0604713001	20	6000	5556.2	7.40
Size: 30,000 SCCM	30	9000	8743	2.86
	40	12000	11885	0.96
	50	15000	15010	-0.07
	60	18000	18140	-0.78
	70	21000	21260	-1.24
	80	24000	24414	-1.73
	90	27000	27426	-1.58
	100	30000	29973	0.09

MFC 2	*% Flow*	*Set Flow*	*True Flow*	*% Difference*
SN: 0604713002	20	6000	6051.6	-0.86
Size: 30,000 SCCM	30	9000	9156.9	-1.74
	40	12000	12252	-2.10
	50	15000	15303	-2.02
	60	18000	18369	-2.05
	70	21000	21433	-2.06
	80	24000	24502	-2.09
	90	27000	27550	-2.04
	100	30000	30481	-1.60

MFC 3	*% Flow*	*Set Flow*	*True Flow*	*% Difference*
SN: 0604715001	20	600	573.18	4.47
Size: 3,000 SCCM	30	900	884	1.78
	40	1200	1193.5	0.54
	50	1500	1499.3	0.05
	60	1800	1809	-0.50
	70	2100	2117.6	-0.84
	80	2400	2430.6	-1.28
	90	2700	2740.2	-1.49
	100	3000	3045.7	-1.52

MATHESON
ask. . .The Gas Professionals™

1700 Scepter Rd
Waverly, TN 37185
931-296-3357

Certificate of Analysis - EPA Protocol Mixtures

Customer: Matheson
8200 Washington St NE
C S T
Albuquerque, NM 87113

Customer PO#: 2337282-00

Part # G2687907

Protocol:	Reference #:	Lot#:
G1	777584-01	9001407609

DO NOT USE THIS CYLINDER WHEN THE PRESSURE FALLS BELOW 100 PSIG

Cylinder Number: EB0138230
Cylinder Pressure: 2000 psig
Last Analysis Date: 1/19/2021
Expiration Date: 1/19/2024

Component: Nitrogen Dioxide

Certified Conc: 49.0 ppm +/- 0.9 ppm ABS

REPLICATE RESPONSES

Date:	1/12/2021	Date:	1/19/2021
	49.1		48.9
	49.0		49.1
	49.0		49.0

BALANCE GAS: NITROGEN

REFERENCE STANDARDS:

Component:	Nitrogen Dioxide	Component:	Nitrogen Dioxide
Reference Standard:	GMIS	Reference Standard:	PRM
Cylinder #:	EB0097397	Cylinder #:	D562925
Concentration:	47.8 +/- 0.8 ppm ABS	Concentration:	75.0 +/- 1.1 ppm ABS
Exp Date:	9/21/2021	Exp Date:	2/2/2019

CERTIFICATION INSTRUMENTS

Component:	Nitrogen Dioxide
Make/Model:	CAI 600
Serial Number:	Y09003
Measurement Principle:	CHEMI
Last Calibration:	1/19/2021

Notes:

The certification was performed by Global Calibration Gases, LLC, Sarasota, FL and according to EPA Traceability Protocol for Assay and Certification Standards May 2012, using procedure G1 and/or G2. U.S. EPA PGVP Vendor ID number: N22021
The expanded uncertainty listed for each component was calculated at a coverage factor of k=2 and at level of confidence of 95%

Analyst: Signature on file Date: 1/19/2021

QA: Ashley Smallwood Date: 1/28/2021

Ashley Smallwood

EPA PROTOCOL STANDARD

Certified Concentrations

Component	CASNumber	Concentration	Accuracy	Procedur
NOX		248.9 PPM	+/- 0.8%	G1
CARBON MONOXIDE	630-08-0	248.8 PPM	+/- 0.4%	G1
NITRIC OXIDE	10102-43-9	248.9 PPM	+/- 0.8%	G1
NITROGEN	7727-37-9	Balance		

Cylinder Number: **ALM-030943**
Cylinder Pressure: 2015 PSIG
Certification Date: Apr 04, 2022
Expiration Date: Apr 04, 2030
Reference Number: 122-402392569-1
Part Number: E03NI99E15A0360
PGVP Number: B22022
Gas Code: CO,NO,NOX,BALN

Notes:

Do not use cylinder below 100 psig.

Certification performed in accordance with "EPA Traceability Protocol (May 2012)" using assay procedures listed.

To reorder this mixture, use Part Number: E03NI99E15A0360

Empty Material: MT-15ASG660

630 United Drive Durham NC 27713

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
630 United Drive
Durham, NC 27713
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: EPA PROTOCOL STANDARD

Part Number:	E03NI99E15A1117	Reference Number:	122-402392570-1
Cylinder Number:	CC422056	Cylinder Volume:	144.0 CF
Laboratory:	124 - Durham (SAP) - NC	Cylinder Pressure:	2015 PSIG
PGVP Number:	B22022	Valve Outlet:	660
Gas Code:	CO,NO,NOX,BALN	Certification Date:	Apr 01, 2022

Expiration Date: Apr 01, 2030

Certification performed in accordance with "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards (May 2012)" document EPA 600/R-12/531, using the assay procedures listed. Analytical Methodology does not require correction for analytical interference. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a mole/mole basis unless otherwise noted.

Do Not Use This Cylinder below 100 psig, i.e. 6.7 megapascals

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty	Assay Dates
NOX	3000 PPM	3016 PPM	G1	+/- 0.9% NIST Traceable	03/25/2022, 04/01/2022
CARBON MONOXIDE	3000 PPM	2991 PPM	G1	+/- 0.8% NIST Traceable	03/25/2022
NITRIC OXIDE	3000 PPM	3009 PPM	G1	+/- 0.7% NIST Traceable	03/25/2022, 04/01/2022
NITROGEN	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
NTRM	08012232	KAL004628	2466 PPM CARBON MONOXIDE/NITROGEN	+/- 0.5%	May 09, 2024
PRM	C194051001	D887690	9.91 PPM NITROGEN DIOXIDE/AIR	+/- 2.0%	Feb 02, 2022
NTRM	KAL003318	KAL003318	3456 PPM NITRIC OXIDE/NITROGEN	+/- 0.4%	Jun 06, 2023
GMIS	1534002020105	EB0130069	4.912 PPM NITROGEN DIOXIDE/NITROGEN	+/- 2.0%	Apr 30, 2024

The SRM, PRM or RGM noted above is only in reference to the GMIS used in the assay and not part of the analysis.

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
Nicolet iS50 AUP2010249 CO	FTIR	Mar 02, 2022
Nicolet iS50 AUP2010249 NO	FTIR	Mar 30, 2022
Nicolet iS50 AUP2010249 NO2	FTIR	Mar 30, 2022

Triad Data Available Upon Request

Approved for Release

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
630 United Drive
Durham, NC 27713
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: EPA PROTOCOL STANDARD

Part Number:	E03NI50E15A6731	Reference Number:	122-402463183-1
Cylinder Number:	EB0115105	Cylinder Volume:	165.0 CF
Laboratory:	124 - Durham (SAP) - NC	Cylinder Pressure:	2015 PSIG
PGVP Number:	B22022	Valve Outlet:	296
Gas Code:	CO2,O2,BALN	Certification Date:	Jun 16, 2022

Expiration Date: Jun 16, 2030

Certification performed in accordance with "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards (May 2012)" document EPA 600/R-12/531, using the assay procedures listed. Analytical Methodology does not require correction for analytical interference. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a mole/mole basis unless otherwise noted.

Do Not Use This Cylinder below 100 psig, i.e. 0.7 megapascals

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty	Assay Dates
CARBON DIOXIDE	25.00 %	25.04 %	G2	+/- 0.6% NIST Traceable	06/16/2022
OXYGEN	25.00 %	24.94 %	G2	+/- 0.5% NIST Traceable	06/16/2022
NITROGEN	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
NTRM	12061508	CC354696	19.87 % CARBON DIOXIDE/NITROGEN	+/- 0.6%	Jan 11, 2024
NTRM	08019220	K013155	23.20 % OXYGEN/NITROGEN	+/- 0.4%	Jun 01, 2024

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
SIEMENS ULTRAMAT 6 N1P3228	Nondispersive Infrared (NDIR)	Jun 15, 2022
Siemens Oxymat 61 M3299 O2	Paramagnetic	Jun 14, 2022

Triad Data Available Upon Request

Approved for Release

Appendix F:
Datalog Record

Data Log Record
Unit TA-3-22-CT-1

Time	Date	NOx-1 PPMV	CO-1 PPMV	O2-1 %VOL	CO2-1 %VOL	Event
9:26	11/29/22	0.07				MFC Check
9:27	11/29/22	249.85				MFC 3
9:28	11/29/22	250.71				
9:29	11/29/22	501.97				
9:30	11/29/22	249.84				
9:31	11/29/22	250.71				
9:32	11/29/22	500.31				
9:33	11/29/22	247.18				
9:34	11/29/22	251.57				
9:35	11/29/22	500.32				
9:36	11/29/22	250.70				MFC 2
9:37	11/29/22	1003.47				
9:38	11/29/22	2007.59				
9:39	11/29/22	250.69				
9:40	11/29/22	1002.17				
9:41	11/29/22	2005.65				
9:42	11/29/22	250.68				
9:43	11/29/22	1003.90				
9:44	11/29/22	2004.97				
12:41	11/29/22	0.06	0.03	0.00	0.00	Initial Linearity
12:42	11/29/22	24.09	22.16	0.00	-0.04	
12:43	11/29/22	25.05	25.07	0.00	-0.06	NOx Converter
12:44	11/29/22	49.44	49.89	0.01	-0.08	
12:45	11/29/22	47.81	-0.61	5.16	5.06	Effiiciency Test
12:46	11/29/22	0.04	0.80	10.30	10.02	
12:47	11/29/22	0.07	0.03	10.00	9.66	
12:48	11/29/22	0.06	-0.81	20.05	17.83	
12:49	11/29/22	0.10	0.61	1.54	1.31	
12:50	11/29/22	0.07	0.02	-0.03	0.12	Response Time /
12:51	11/29/22	0.10	-0.67	5.22	5.01	Bias Calibration
12:52	11/29/22	25.05	24.57	0.00	-0.05	
12:53	11/29/22	0.06	0.03	9.99	9.09	
12:54	11/29/22	0.03	-0.44	0.09	0.25	
12:55	11/29/22	7.75	1.29	10.02	0.82	
12:56	11/29/22	19.47	3.18	14.80	3.50	
12:57	11/29/22	19.25	4.88	14.80	3.47	Start Run 1
12:58	11/29/22	19.37	4.81	14.83	3.47	
12:59	11/29/22	19.56	4.88	14.80	3.49	
13:00	11/29/22	19.37	4.88	14.80	3.48	
13:01	11/29/22	19.41	4.88	14.83	3.47	
13:02	11/29/22	19.58	4.53	14.82	3.49	
13:03	11/29/22	19.47	4.67	14.82	3.49	
13:04	11/29/22	19.47	4.88	14.80	3.49	
13:05	11/29/22	19.25	4.53	14.83	3.45	
13:06	11/29/22	19.37	4.81	14.83	3.48	
13:07	11/29/22	19.41	4.81	14.82	3.50	
13:08	11/29/22	19.25	4.88	14.80	3.49	
13:09	11/29/22	19.34	4.45	14.83	3.49	
13:10	11/29/22	19.34	4.60	14.83	3.49	
13:11	11/29/22	19.22	4.39	14.83	3.48	
13:12	11/29/22	19.19	4.52	14.84	3.47	
13:13	11/29/22	19.26	4.67	14.85	3.47	
13:14	11/29/22	19.16	4.53	14.85	3.47	
13:15	11/29/22	19.19	4.45	14.85	3.47	
13:16	11/29/22	19.07	4.10	14.84	3.44	
13:17	11/29/22	18.92	4.67	14.87	3.40	
Run 1 Average		**19.31**	**4.66**	**14.83**	**3.47**	

Time	Date	NOx-1 PPMV	CO-1 PPMV	O2-1 %VOL	CO2-1 %VOL	Event
13:18	11/29/22	19.07	4.25	14.88	3.42	Start Run 2
13:19	11/29/22	19.16	4.24	14.86	3.45	
13:20	11/29/22	19.20	4.24	14.86	3.46	
13:21	11/29/22	19.13	4.24	14.86	3.46	
13:22	11/29/22	19.07	4.18	14.86	3.46	
13:23	11/29/22	19.07	4.04	14.86	3.46	
13:24	11/29/22	18.92	4.38	14.86	3.42	
13:25	11/29/22	18.92	3.83	14.89	3.41	
13:26	11/29/22	19.16	4.10	14.88	3.45	
13:27	11/29/22	19.22	4.03	14.87	3.47	
13:28	11/29/22	19.16	4.10	14.86	3.46	
13:29	11/29/22	18.89	3.61	14.87	3.42	
13:30	11/29/22	18.77	3.68	14.92	3.38	
13:31	11/29/22	18.95	3.82	14.89	3.42	
13:32	11/29/22	19.01	3.68	14.89	3.42	
13:33	11/29/22	19.04	3.54	14.89	3.43	
13:34	11/29/22	19.04	3.83	14.88	3.44	
13:35	11/29/22	19.07	4.04	14.87	3.44	
13:36	11/29/22	19.07	3.83	14.88	3.44	
13:37	11/29/22	18.92	3.61	14.89	3.43	
13:38	11/29/22	18.86	3.83	14.89	3.43	
Run 2 Average		**19.04**	**3.96**	**14.88**	**3.44**	
13:39	11/29/22	18.98	3.68	14.89	3.42	Start Run 3
13:40	11/29/22	19.01	3.33	14.89	3.44	
13:41	11/29/22	19.01	3.33	14.89	3.43	
13:42	11/29/22	18.83	3.33	14.91	3.42	
13:43	11/29/22	18.83	3.82	14.91	3.41	
13:44	11/29/22	18.83	3.05	14.92	3.40	
13:45	11/29/22	18.80	4.04	14.91	3.41	
13:46	11/29/22	18.77	3.89	14.91	3.42	
13:47	11/29/22	18.86	4.24	14.92	3.41	
13:48	11/29/22	18.92	3.68	14.92	3.42	
13:49	11/29/22	18.95	3.89	14.92	3.41	
13:50	11/29/22	18.89	3.47	14.92	3.41	
13:51	11/29/22	18.68	3.40	14.93	3.39	
13:52	11/29/22	18.71	3.47	14.93	3.38	
13:53	11/29/22	18.71	4.24	14.94	3.36	
13:54	11/29/22	18.71	4.04	14.94	3.35	
13:55	11/29/22	18.71	3.92	14.94	3.36	
13:56	11/29/22	18.83	4.03	14.94	3.36	
13:57	11/29/22	18.89	3.68	14.95	3.35	
13:58	11/29/22	18.80	4.10	14.94	3.35	
13:59	11/29/22	18.74	4.11	14.93	3.34	
Run 3 Average		**18.83**	**3.75**	**14.92**	**3.39**	
14:00	11/29/22	19.25	4.17	14.87	3.17	
14:01	11/29/22	0.10	-0.67	0.04	-0.28	
14:02	11/29/22	25.32	39.19	0.02	-0.32	
14:03	11/29/22	25.54	25.00	0.00	0.00	
14:04	11/29/22	0.07	-0.88	4.46	5.02	
14:05	11/29/22	0.06	-0.67	8.54	9.71	
14:06	11/29/22	0.06	-0.32	10.01	9.79	

ATTACHMENT A1407.A.

Open Burning

There was no open burning conducted during this reporting period.

ATTACHMENT A1507.A.a

Evaporative Sprayers

The monitoring requirement for analysis of the evaporative sprayer basin water is required to be completed every two years beginning in 2018. Basin water sampling was conducted in December of 2022.

GEL Laboratories LLC
a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171
F 843.766.1178

gel.com

December 16, 2022

Mr. Stanislaw Marczak
Los Alamos National Laboratory
TA-00, SM1237, Rm104C
Los Alamos, New Mexico 87545

Re: LANL
Work Order: 604449
SDG: 2023-289

Dear Mr. Marczak:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on December 16, 2022, and analyzed for Explosives by LCMSMS, GC Semivolatile PCB, GC Semivolatile Pesticide, GC/MS Semivolatile, GC/MS Volatile, General Chemistry, Metals and Radiochemistry. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Test results for NELAP or ISO 17025 accredited tests are verified to meet the requirements of those standards, with any exceptions noted. The results reported relate only to the items tested and to the sample as received by the laboratory. These results may not be reproduced except as full reports without approval by the laboratory. Copies of GEL's accreditations and certifications can be found on our website at www.gel.com.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

Heather Millar

Heather Millar for
Valerie Davis
Project Manager

Chain of Custody: 2023-289
Enclosures

Table of Contents

Case Narrative.....3

Chain of Custody and Supporting Documentation.6

Data Review Qualifier Flag Definition Sheet..13

Volatile Analysis.....17

Case Narrative.....18

Sample Data Summary.....23

Quality Control Summary.....46

Sample Data.....66

Standards.....198

Quality Control Data.....238

Miscellaneous.....300

Semi-Volatile Analysis.....304

Case Narrative.....305

Sample Data Summary.....310

Quality Control Summary.....324

Sample Data.....339

Standards.....486

Quality Control Data.....545

Miscellaneous.....595

Explosives by LCMSMS Analysis.....602

Case Narrative.....603
Sample Data Summary.....607
Quality Control Summary.....613
Sample Data.....618
Standards.....679
Quality Control Data.....772
Miscellaneous.....869
Pesticide Analysis.....878
Case Narrative.....879
Sample Data Summary.....883
Quality Control Summary.....889
Sample Data.....906
Standards.....950
Quality Control Data.....1143
Miscellaneous.....1200
PCB Analysis.....1209
Case Narrative.....1210
Sample Data Summary.....1215
Quality Control Summary.....1226
Sample Data.....1235
Standards.....1307

Quality Control Data.....1421
Miscellaneous.....1489
Metals Analysis.....1496
Case Narrative.....1497
Sample Data Summary.....1503
Quality Control Summary.....1514
Standards.....1557
Raw Data.....1570
Miscellaneous.....1847
General Chem Analysis.....1897
Case Narrative.....1898
Sample Data Summary.....1903
Quality Control Summary.....1914
Instrument QC Data Summary.....1917
Cyanide, Total Raw Data.....1920
Ion Chromatography Raw Data.....1928
Radiological Analysis.....1978
Case Narrative.....1979
Sample Data Summary.....1984
Quality Control Summary.....1990
Gas Flow Raw Data.....1993

Background and Efficiency Data.....2004
RAD Standards Traceability.....2023
Runlogs.....2036
Lucas Cell Raw Data.....2038
Efficiency Data.....2045
RAD Standards Traceability.....2054
Runlogs.....2060

Triad National Security, LLC (620266)
LANL
Work Order #: 604449
SDG: 2023-289

Case Narrative

Case Narrative for
Triad National Security, LLC (620266)
LANL
Workorder #: 604449
SDG # : 2023-289

December 16, 2022

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on December 16, 2022 for analysis. The samples were delivered with proper chain of custody documentation and signatures. The samples were screened according to GEL Standard Operating Procedure. All sample containers arrived without any visible signs of tampering or breakage. Five sample containers with nitric preservation did not hold preservation. Client was contacted and directed to proceed with analysis as received. *604449010(SMEB03-23-265373).* Shipping container temperatures were checked, documented, and within specifications. Shipping container temperature was within specification (0 - 6C). There are no additional comments concerning sample receipt.

Sample Identification The laboratory received the following samples:

Laboratory ID	Client ID
604449001	SMEB01-23-265344
604449002	SMEB01-23-265371
604449003	SMEB01-23-265376
604449004	SMEB01-23-265381
604449005	SMEB02-23-265345
604449006	SMEB02-23-265372
604449007	SMEB02-23-265377
604449008	SMEB02-23-265382
604449009	SMEB03-23-265346
604449010	SMEB03-23-265373
604449011	SMEB03-23-265378
604449012	SMEB03-23-265383
604449013	SMEB04-23-265347
604449014	SMEB04-23-265374
604449015	SMEB04-23-265379
604449016	SMEB04-23-265384
604449017	SMEB05-23-265348
604449018	SMEB05-23-265375
604449019	SMEB05-23-265380
604449020	SMEB05-23-265385

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package

The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: Explosives by LCMSMS, GC Semivolatile PCB, GC Semivolatile Pesticide, GC/MS Semivolatile, GC/MS Volatile, General Chemistry, Metals and Radiochemistry.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

Heather Millar

Heather Millar for
Valerie Davis
Project Manager

Chain of Custody and Supporting Documentation

604449

General Engineering Laboratories, Inc., Charleston, SC.
Charleston SC

Chain of Custody/Analysis Request

COC/Lab Request #: 2023-289
Page 1 of 2

Client Contact:

Lab Agreement #: 620266
Project Number: LANL
Site Name: Los Alamos National Laboratory

Analysis Turnaround Time:
24 Hour - ☐ Other - ☐
7 Days - ☒
14 Days - ☐
21 Days - ☐
28 Days - ☐

Event ID: 14952

SDG: 2023-289

Rad Screening Info: Acceptable knowledge identifies no DOT hazard classification

Lab Reporting Limit Type: Method Detection Limit

Field Sample ID	Sample Date	Sample Time	Sample Matrix	DP-8082-PCBs	DP-CN(TOTAL)	DP-F+SO4	DP-Hg	DP-Metals	DP-Ra226+228	DP-TP-8081-PEST	DP-TP-8260-VOCs	DP-TP-8270-SVOCs	DP-TP-8330-HEXP
SMEB01-23-265344	12/14/2022	09:28	W			1		1					
SMEB01-23-265371	12/14/2022	09:28	W	2	1		1		4	3	2	2	3
SMEB01-23-265376	12/14/2022	09:28	W								2		
SMEB01-23-265381	12/14/2022	09:28	W	2									
SMEB02-23-265345	12/14/2022	09:36	W			1		1					
SMEB02-23-265372	12/14/2022	09:36	W	2	1		1		4	3	2	2	3
SMEB02-23-265377	12/14/2022	09:36	W								2		
SMEB02-23-265382	12/14/2022	09:36	W	2									
SMEB03-23-265346	12/14/2022	09:35	W			1		1					
SMEB03-23-265373	12/14/2022	09:35	W	2	1		1		4	3	2	2	3
SMEB03-23-265378	12/14/2022	09:35	W								2		
SMEB03-23-265383	12/14/2022	09:35	W	2									
SMEB04-23-265347	12/14/2022	13:01	W			1		1					
SMEB04-23-265374	12/14/2022	13:01	W	2	1		1		4	3	2	2	3
SMEB04-23-265379	12/14/2022	13:01	W								2		
SMEB04-23-265384	12/14/2022	13:01	W	2									
SMEB05-23-265348	12/14/2022	13:12	W			1		1					

Special Instructions:

Relinquished by:	Print Name: Melissa Martinez	Date/Time: 12/15/22 15:20	Received by: Matt	Print Name: Melissa Vanhaagg	Date/Time: 12.16.2022
Relinquished by:	Print Name:	Date/Time:	Received by:	Print Name:	Date/Time:
Relinquished by:	Print Name:	Date/Time:	Received by:	Print Name:	Date/Time:

General Engineering Laboratories, Inc., Charleston, SC.
Charleston SC

Chain of Custody/Analysis Request

COC/Lab Request #: 2023-289
Page 2 of 2

Client Contact:

Lab Agreement #: 620266

Site Name: Los Alamos National Laboratory

Project Number: LANL

Analysis Turnaround Time:
24 Hour - ☐ Other - ☐
7 Days - ☒
14 Days - ☐
21 Days - ☐
28 Days - ☐

Event ID: 14952

Rad Screening Info: Acceptable knowledge identifies no DOT hazard classification

Lab Reporting Limit Type: Method Detection Limit

Field Sample ID	Sample Date	Sample Time	Sample Matrix	DP-8082-PCBs	DP-CN(TOTAL)	DP-F+SO4	DP-Hg	DP-Metals		DP-TP-8081-PEST	DP-TP-8260-VOCs	DP-TP-8270-SVOCs	DP-TP-8330-HEXP
SMEB05-23-265375	12/14/2022	13:12	W	2	1		1		4	3	2	2	3
SMEB05-23-265380	12/14/2022	13:12	W								2		
SMEB05-23-265385	12/14/2022	13:12	W	2									

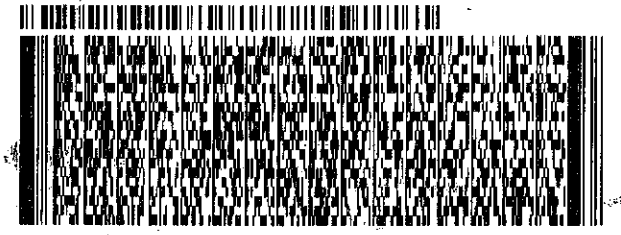
Special Instructions:

Relinquished by:	Print Name:	Date/Time:	Received by:	Print Name:	Date/Time:
[signature]	Melissa M[signature]	12/15/22 1500	[signature]	Madeena Vanhagg	12.16.2022
Relinquished by:	Print Name:	Date/Time:	Received by:	Print Name:	Date/Time:
Relinquished by:	Print Name:	Date/Time:	Received by:	Print Name:	Date/Time:

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE ROAD

CHARLESTON SC 29407
(843) 556-8171
REF: 8A030AWE71NRAQ0000

2



FedEx Express

1 of 3
TRK# 0201 5730 2250 4492
MASTER

FRI - 16 DEC 10:30A
PRIORITY OVERNIGHT

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE ROAD

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REF: 8A030AWE71NRAQ0000

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1 of 2
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GENERAL ENGINEERING LAB
2040 SAVAGE ROAD

CHARLESTON SC 29407
(843) 556-8171
REF: 8A030AWE71NRAQ0000

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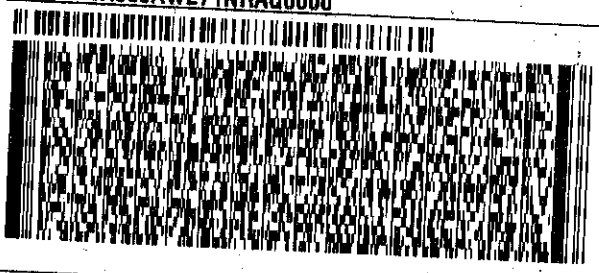

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2 of 3
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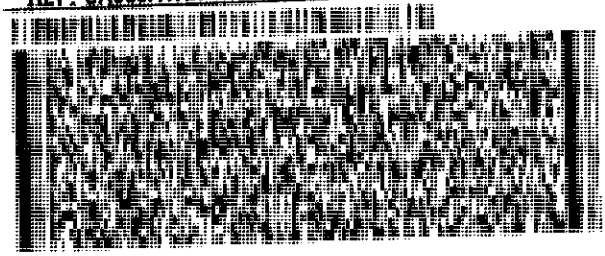
TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE ROAD

CHARLESTON SC 29407
(843) 556-8171
REF: 8A030AWE71NRAQ0000

3



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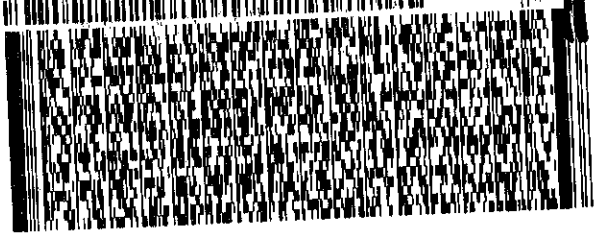
TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE ROAD

CHARLESTON SC 29407
(843) 556-8171
REF: 8A030AWE71NRAQ0000

4



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PRIORITY OVERNIGHT

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE ROAD

CHARLESTON SC 29407
(843) 556-8171
REF: 8A030AWE71NRAQ0000

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FedEx Express

1 of 2
TRK# 0201 5730 2250 4529
MASTER

FRI - 16 DEC 10:30A
PRIORITY OVERNIGHT

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE ROAD

CHARLESTON SC 29407
(843) 556-8171
REF: 8A030AWE71NRAQ0000

6

FedEx Express

3 of 3
MPS# 0263 5730 2250 4518
Mstr# 5730 2250 4492

FRI - 16 DEC 10:30A
PRIORITY OVERNIGHT
0201

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: TNSL	**SDG/AR/COC/Work Order:** 604449/604430/604425/604420
Received By: MVH	**Date Received:** 12.16.2022
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other

Suspected Hazard Information	Yes	No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): ___ CPM mR/Hr **Classified as: Rad 1 Rad 2 Rad 3**
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓			Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius **TEMP:**_____
4	Daily check performed and passed on IR temperature gun?	✓			**Temperature Device Serial #:** IR2-21 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?			✓	Circle Applicable: Seals broken Damaged container Leaking container Other (describe) SMEB05-23-265375 glass 1000mL
6	Samples requiring chemical preservation at proper pH?			✓	Sample ID's and Containers Affected: SMEB03-23-265373 All Nitrics pm said Ecore runs as is If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?	✓			If Yes, are Encores or Soil Kits present for solids? Yes___ No✓ NA___(If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes✓ No___ NA___(If unknown, select No) Are liquid VOA vials free of headspace? Yes✓ No___ NA___ Sample ID's and containers affected:
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?			✓	Circle Applicable: No container count on COC Other (describe) WST03-23-265156 Combined tests on 1 container
12	Are sample containers identifiable as GEL provided by use of GEL labels?			✓	
13	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):
received a cooler with no Shipping tag - @2°c

PM (or PMA) review: Initials SW Date 12/16/22 Page 1 of 1

GL-CHL-SR-001 Rev 7

Jessica Ward

From: Marczak, Stanislaw <stas@lanl.gov>
Sent: Friday, December 16, 2022 11:46 AM
To: Jessica Ward; Montoya, Melissa Denise
Cc: Team Davis
Subject: RE: Samples for 2023-289 did not hold preservation

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Please not this in the case narrative and proceed with analysis.

Thanks

Stas

From: Jessica Ward <Jessica.Ward@gel.com>
Sent: Friday, December 16, 2022 9:42 AM
To: Marczak, Stanislaw <stas@lanl.gov>; Montoya, Melissa Denise <missy@lanl.gov>
Cc: Team Davis <Team.Davis@gel.com>
Subject: [EXTERNAL] Samples for 2023-289 did not hold preservation

Stas, Melissa,
Upon receipt for samples associated with COC 2023-289 our receiving team notified us that sample ID SMEB03-23-265373 did not hold preservation in 5 of the containers received. How would you like to proceed with this sample?

Thank you,
Jessica Ward

Project Manager Assistant

GEL Laboratories LLC 40

2040 Savage Road, Charleston, SC 29407 | P.O. Box 30712, Charleston, SC 29417
Office Main: 843.556.8171 | Office Direct: 843.556.8171 ext. 4523 | Office Fax: 843.769.7383
E-Mail: Jessica.Ward@gel.com | Website: www.gel.com

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Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

P Organics-The concentrations between the primary and confirmation columns/detectors is >40% difference. For HPLC, the difference is >70%.

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

List of current GEL Certifications as of 16 December 2022

State	Certification
Alabama	42200
Alaska	17−018
Alaska Drinking Water	SC00012
Arkansas	88−0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH−0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330−15−00283, P330−15−00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C−SC−01
Kansas NELAP	E−10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2019020
Maryland	270
Massachusetts	M−SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE−OS−26−13
Nevada	SC000122023−3
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R−158
Oklahoma	2022−160
Pennsylvania NELAP	68−00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235−22−20
Utah NELAP	SC000122022−37
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

Volatile Analysis

Case Narrative

GC/MS Volatile
Technical Case Narrative
Triad National Security, LLC
SDG #: 2023-289
Work Order #: 604449

Product: **Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer**
Analytical Method: SW846 8260D
Analytical Procedure: GL-OA-E-038 REV# 28
Analytical Batch: 2358452

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
604449002	SMEB01-23-265371
604449003	SMEB01-23-265376
604449006	SMEB02-23-265372
604449007	SMEB02-23-265377
604449010	SMEB03-23-265373
604449011	SMEB03-23-265378
604449014	SMEB04-23-265374
604449015	SMEB04-23-265379
604449018	SMEB05-23-265375
604449019	SMEB05-23-265380
1205275615	Laboratory Control Sample (LCS)
1205275616	Laboratory Control Sample (LCS)
1205275617	Method Blank (MB)
1205275618	604449002(SMEB01-23-265371) Post Spike (PS)
1205275619	604449002(SMEB01-23-265371) Post Spike (PS)
1205275620	604449002(SMEB01-23-265371) Post Spike Duplicate (PSD)
1205275621	604449002(SMEB01-23-265371) Post Spike Duplicate (PSD)
1205276791	Laboratory Control Sample (LCS)
1205276793	Method Blank (MB)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Calibration Information

Continuing Calibration Verification Requirements
All Calibration Verification Standards (CCV) did not meet the acceptance criteria as outlined in Method 8260D for samples and the associated QC. However, the method allows for a designated number of outliers dependent on the requested analyte list. This SDG satisfied the 8260D outlier acceptance criteria. The results are reported.

Quality Control (QC) Information

Blank (MB) Statement
Target analytes were detected in the blank 1205275617 (MB) below the reporting limit. The data are qualified and reported.

Laboratory Control Sample (LCS) Recovery
The LCS/and or LCSD (See Below) recovery was not within the acceptance limits for all analytes. The unacceptable analyte was not detected in the samples associated with the laboratory control sample. Therefore, the data were reported.

Sample	Analyte	Value
1205275615 (LCS)	Benzene	119* (74%-118%)
	Bromoform	138* (69%-130%)

Matrix Spike/Matrix Spike Duplicate Recovery Statement
The spike and/or spike duplicate (See Below) recoveries were not all within the acceptance limits. The recoveries were similar. It is believed possible matrix interference has been demonstrated.

Sample	Analyte	Value
1205275618 (SMEB01-23-265371PS)	Benzene	128* (65%-122%)
1205275619 (SMEB01-23-265371PS)	Acrolein	3* (51%-142%)
1205275620 (SMEB01-23-265371PSD)	Benzene	125* (65%-122%)
1205275621 (SMEB01-23-265371PSD)	Acrolein	3* (51%-142%)

The spike and/or spike duplicate (See Below) recoveries were not all within the acceptance limits. The associated spike and/or spike duplicate passed recoveries near the lower/upper end of the limits.

Sample	Analyte	Value
1205275618 (SMEB01-23-265371PS)	Toluene	124* (63%-121%)

Relative Percent Difference (RPD) Statement
The RPD between the matrix spike pair (See Below) were not all within the acceptance limits. The unacceptable RPD may be attributed to matrix interference and/or sample non-homogeneity.

Sample	Analyte	Value
1205275619PS and 1205275621PSD (SMEB01-23-265371)	Acrolein	RPD 28* (0%-20%)

The RPD between the matrix spike pair (See Below) were not all within the acceptance limits. However, the spike recoveries passed. The unacceptable RPD may be attributed to matrix interference and/or sample non-homogeneity.

Sample	Analyte	Value
1205275619PS and 1205275621PSD (SMEB01-23-265371)	Acrylonitrile	RPD 22* (0%-20%)

Technical Information

Sample Re-extraction/Re-analysis
Samples 1205275618 (SMEB01-23-265371PS), 1205275620 (SMEB01-23-265371PSD), 604449002 (SMEB01-23-265371) and 604449006 (SMEB02-23-265372) were reanalyzed due to unacceptable LCS recoveries in the initial analysis. The re-analyses passed and are reported.

Miscellaneous Information

TIC Comment

Tentatively identified compounds (TIC) were requested for samples 604449002 (SMEB01-23-265371), 604449003 (SMEB01-23-265376), 604449006 (SMEB02-23-265372), 604449007 (SMEB02-23-265377), 604449010 (SMEB03-23-265373), 604449011 (SMEB03-23-265378), 604449014 (SMEB04-23-265374), 604449015 (SMEB04-23-265379), 604449018 (SMEB05-23-265375) and 604449019 (SMEB05-23-265380) in this delivery group/work order. Please note that non-requested calibrated analytes detected in a client sample may be reported on the Form 1/Certificate of Analysis as TICs. TIC data, if requested, were included on the Sample Data Summary (Form 1) and included with the sample raw data.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Qualifier Definition Report
for

TNSL001 Triad National Security, LLC (620266)

Client SDG: 2023-289 GEL Work Order: 604449

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria
** Analyte is a surrogate compound
B The target analyte was detected in the associated blank.
E Concentration of the target analyte exceeds the instrument calibration range
J Value is estimated
U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

DL Indicates that sample is diluted.
RA Indicates that sample is re-analyzed without re-extraction.
RE Indicates that sample is re-extracted.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature: Erin Haubert **Name: Erin Haubert**

Date: 22 DEC 2022 **Title: Data Validator**

Sample Data Summary

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**604449002**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265371**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 14:47**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 14:47**				
Data File:	**121922V3\3W110.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
107-02-8	Acrolein	U	1.67	ug/L	1.67	5.00
107-13-1	Acrylonitrile	U	1.67	ug/L	1.67	5.00

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	54.8	50.0	ug/L	110	(73%-129%)
Bromofluorobenzene	45.4	50.0	ug/L	91	(72%-125%)
Toluene-d8	49.1	50.0	ug/L	98	(75%-123%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.931	34.8	ug/L	0	J
	unknown	4.278	5.45	ug/L	0	J
000556-67-2	Cyclotetrasiloxane, octamethyl-	14.139	5.13	ug/L	90	NJ

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**604449002**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265371RA**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 23:47**	**Analyst:**	**JM6**	**Purge Vol:**	**5 mL**
Prep Date:	**12/20/2022 23:47**				
Data File:	**122022V3\3W238.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
542-75-6	1,3-Dichloropropylene	U	0.500	ug/L	0.500	2.00
75-71-8	Dichlorodifluoromethane	U	0.355	ug/L	0.355	1.00
74-87-3	Chloromethane	U	0.333	ug/L	0.333	1.00
75-01-4	Vinyl chloride	U	0.333	ug/L	0.333	1.00
74-83-9	Bromomethane	U	0.337	ug/L	0.337	1.00
75-69-4	Trichlorofluoromethane	U	0.333	ug/L	0.333	1.00
75-35-4	1,1-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-09-2	Methylene chloride	J	2.59	ug/L	0.500	5.00
1634-04-4	tert-Butyl methyl ether	U	0.333	ug/L	0.333	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-34-3	1,1-Dichloroethane	U	0.333	ug/L	0.333	1.00
156-59-2	cis-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
67-66-3	Chloroform	U	0.333	ug/L	0.333	1.00
71-55-6	1,1,1-Trichloroethane	U	0.333	ug/L	0.333	1.00
56-23-5	Carbon tetrachloride	U	0.333	ug/L	0.333	1.00
107-06-2	1,2-Dichloroethane	U	0.333	ug/L	0.333	1.00
71-43-2	Benzene	U	0.333	ug/L	0.333	1.00
79-01-6	Trichloroethylene	U	0.333	ug/L	0.333	1.00
78-87-5	1,2-Dichloropropane	U	0.333	ug/L	0.333	1.00
74-95-3	Dibromomethane	U	0.333	ug/L	0.333	1.00
75-27-4	Bromodichloromethane		1.05	ug/L	0.333	1.00
108-88-3	Toluene	U	0.333	ug/L	0.333	1.00
79-00-5	1,1,2-Trichloroethane	U	0.333	ug/L	0.333	1.00
127-18-4	Tetrachloroethylene	U	0.333	ug/L	0.333	1.00
106-93-4	1,2-Dibromoethane	U	0.333	ug/L	0.333	1.00
108-90-7	Chlorobenzene	U	0.333	ug/L	0.333	1.00
100-41-4	Ethylbenzene	U	0.333	ug/L	0.333	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.333	ug/L	0.333	1.00
100-42-5	Styrene	U	0.333	ug/L	0.333	1.00
75-25-2	Bromoform		6.45	ug/L	0.333	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.333	ug/L	0.333	1.00
106-46-7	1,4-Dichlorobenzene	U	0.333	ug/L	0.333	1.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	1.00	3.00
120-82-1	1,2,4-Trichlorobenzene	U	0.333	ug/L	0.333	1.00
95-50-1	1,2-Dichlorobenzene	U	0.333	ug/L	0.333	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**604449002**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265371RA**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 23:47**	**Analyst:**	**JM6**	**Purge Vol:**	**5 mL**
Prep Date:	**12/20/2022 23:47**				
Data File:	**122022V3\3W238.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	52.1	50.0	ug/L	104	(73%-129%)
Bromofluorobenzene	46.8	50.0	ug/L	94	(72%-125%)
Toluene-d8	53.4	50.0	ug/L	107	(75%-123%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.931	85.5	ug/L	0	J
	unknown	4.278	14.9	ug/L	0	J
	unknown	14.139	42.2	ug/L	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**604449003**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265376**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 15:13**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 15:13**				
Data File:	**121922V3\3W111.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
542-75-6	1,3-Dichloropropylene	U	0.500	ug/L	0.500	2.00
75-71-8	Dichlorodifluoromethane	U	0.355	ug/L	0.355	1.00
74-87-3	Chloromethane	U	0.333	ug/L	0.333	1.00
75-01-4	Vinyl chloride	U	0.333	ug/L	0.333	1.00
74-83-9	Bromomethane	U	0.337	ug/L	0.337	1.00
75-69-4	Trichlorofluoromethane	U	0.333	ug/L	0.333	1.00
75-35-4	1,1-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-09-2	Methylene chloride	BJ	2.69	ug/L	0.500	5.00
1634-04-4	tert-Butyl methyl ether	U	0.333	ug/L	0.333	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-34-3	1,1-Dichloroethane	U	0.333	ug/L	0.333	1.00
156-59-2	cis-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
67-66-3	Chloroform	U	0.333	ug/L	0.333	1.00
71-55-6	1,1,1-Trichloroethane	U	0.333	ug/L	0.333	1.00
56-23-5	Carbon tetrachloride	U	0.333	ug/L	0.333	1.00
107-06-2	1,2-Dichloroethane	U	0.333	ug/L	0.333	1.00
71-43-2	Benzene	U	0.333	ug/L	0.333	1.00
79-01-6	Trichloroethylene	U	0.333	ug/L	0.333	1.00
78-87-5	1,2-Dichloropropane	U	0.333	ug/L	0.333	1.00
74-95-3	Dibromomethane	U	0.333	ug/L	0.333	1.00
75-27-4	Bromodichloromethane	U	0.333	ug/L	0.333	1.00
108-88-3	Toluene	U	0.333	ug/L	0.333	1.00
79-00-5	1,1,2-Trichloroethane	U	0.333	ug/L	0.333	1.00
127-18-4	Tetrachloroethylene	U	0.333	ug/L	0.333	1.00
106-93-4	1,2-Dibromoethane	U	0.333	ug/L	0.333	1.00
108-90-7	Chlorobenzene	U	0.333	ug/L	0.333	1.00
100-41-4	Ethylbenzene	U	0.333	ug/L	0.333	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.333	ug/L	0.333	1.00
100-42-5	Styrene	U	0.333	ug/L	0.333	1.00
75-25-2	Bromoform	U	0.333	ug/L	0.333	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.333	ug/L	0.333	1.00
106-46-7	1,4-Dichlorobenzene	U	0.333	ug/L	0.333	1.00
107-02-8	Acrolein	U	1.67	ug/L	1.67	5.00
107-13-1	Acrylonitrile	U	1.67	ug/L	1.67	5.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	1.00	3.00
120-82-1	1,2,4-Trichlorobenzene	U	0.333	ug/L	0.333	1.00
95-50-1	1,2-Dichlorobenzene	U	0.333	ug/L	0.333	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**604449003**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265376**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 15:13**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 15:13**				
Data File:	**121922V3\3W111.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	49.1	50.0	ug/L	98	(73%-129%)
Bromofluorobenzene	45.1	50.0	ug/L	90	(72%-125%)
Toluene-d8	50.1	50.0	ug/L	100	(75%-123%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.95	9.68	ug/L	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:36**	**Matrix:**	**W**
Lab Sample ID:	**604449006**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB02-23-265372**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 16:06**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 16:06**				
Data File:	**121922V3\3W113.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
107-02-8	Acrolein	U	1.67	ug/L	1.67	5.00
107-13-1	Acrylonitrile	U	1.67	ug/L	1.67	5.00

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	54.5	50.0	ug/L	109	(73%-129%)
Bromofluorobenzene	46.2	50.0	ug/L	92	(72%-125%)
Toluene-d8	50.2	50.0	ug/L	100	(75%-123%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.931	8.11	ug/L	0	J
	unknown	14.139	7.84	ug/L	0	J
	unknown	16.072	6.21	ug/L	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:36**	**Matrix:**	**W**
Lab Sample ID:	**604449006**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB02-23-265372RA**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/21/2022 00:13**	**Analyst:**	**JM6**	**Purge Vol:**	**5 mL**
Prep Date:	**12/21/2022 00:13**				
Data File:	**122022V3\3W239.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
542-75-6	1,3-Dichloropropylene	U	0.500	ug/L	0.500	2.00
75-71-8	Dichlorodifluoromethane	U	0.355	ug/L	0.355	1.00
74-87-3	Chloromethane	U	0.333	ug/L	0.333	1.00
75-01-4	Vinyl chloride	U	0.333	ug/L	0.333	1.00
74-83-9	Bromomethane	U	0.337	ug/L	0.337	1.00
75-69-4	Trichlorofluoromethane	U	0.333	ug/L	0.333	1.00
75-35-4	1,1-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-09-2	Methylene chloride	J	2.66	ug/L	0.500	5.00
1634-04-4	tert-Butyl methyl ether	U	0.333	ug/L	0.333	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-34-3	1,1-Dichloroethane	U	0.333	ug/L	0.333	1.00
156-59-2	cis-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
67-66-3	Chloroform	U	0.333	ug/L	0.333	1.00
71-55-6	1,1,1-Trichloroethane	U	0.333	ug/L	0.333	1.00
56-23-5	Carbon tetrachloride	U	0.333	ug/L	0.333	1.00
107-06-2	1,2-Dichloroethane	U	0.333	ug/L	0.333	1.00
71-43-2	Benzene	U	0.333	ug/L	0.333	1.00
79-01-6	Trichloroethylene	U	0.333	ug/L	0.333	1.00
78-87-5	1,2-Dichloropropane	U	0.333	ug/L	0.333	1.00
74-95-3	Dibromomethane	U	0.333	ug/L	0.333	1.00
75-27-4	Bromodichloromethane	U	0.333	ug/L	0.333	1.00
108-88-3	Toluene	U	0.333	ug/L	0.333	1.00
79-00-5	1,1,2-Trichloroethane	U	0.333	ug/L	0.333	1.00
127-18-4	Tetrachloroethylene	U	0.333	ug/L	0.333	1.00
106-93-4	1,2-Dibromoethane	U	0.333	ug/L	0.333	1.00
108-90-7	Chlorobenzene	U	0.333	ug/L	0.333	1.00
100-41-4	Ethylbenzene	U	0.333	ug/L	0.333	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.333	ug/L	0.333	1.00
100-42-5	Styrene	U	0.333	ug/L	0.333	1.00
75-25-2	Bromoform	J	0.890	ug/L	0.333	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.333	ug/L	0.333	1.00
106-46-7	1,4-Dichlorobenzene	U	0.333	ug/L	0.333	1.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	1.00	3.00
120-82-1	1,2,4-Trichlorobenzene	U	0.333	ug/L	0.333	1.00
95-50-1	1,2-Dichlorobenzene	U	0.333	ug/L	0.333	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:36**	**Matrix:**	**W**
Lab Sample ID:	**604449006**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB02-23-265372RA**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/21/2022 00:13**	**Analyst:**	**JM6**	**Purge Vol:**	**5 mL**
Prep Date:	**12/21/2022 00:13**				
Data File:	**122022V3\3W239.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	51.2	50.0	ug/L	102	(73%-129%)
Bromofluorobenzene	48.3	50.0	ug/L	97	(72%-125%)
Toluene-d8	53.7	50.0	ug/L	107	(75%-123%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.931	12.7	ug/L	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:36**	**Matrix:**	**W**
Lab Sample ID:	**604449007**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB02-23-265377**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 16:32**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 16:32**				
Data File:	**121922V3\3W114.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
542-75-6	1,3-Dichloropropylene	U	0.500	ug/L	0.500	2.00
75-71-8	Dichlorodifluoromethane	U	0.355	ug/L	0.355	1.00
74-87-3	Chloromethane	U	0.333	ug/L	0.333	1.00
75-01-4	Vinyl chloride	U	0.333	ug/L	0.333	1.00
74-83-9	Bromomethane	U	0.337	ug/L	0.337	1.00
75-69-4	Trichlorofluoromethane	U	0.333	ug/L	0.333	1.00
75-35-4	1,1-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-09-2	Methylene chloride	BJ	2.51	ug/L	0.500	5.00
1634-04-4	tert-Butyl methyl ether	U	0.333	ug/L	0.333	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-34-3	1,1-Dichloroethane	U	0.333	ug/L	0.333	1.00
156-59-2	cis-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
67-66-3	Chloroform	U	0.333	ug/L	0.333	1.00
71-55-6	1,1,1-Trichloroethane	U	0.333	ug/L	0.333	1.00
56-23-5	Carbon tetrachloride	U	0.333	ug/L	0.333	1.00
107-06-2	1,2-Dichloroethane	U	0.333	ug/L	0.333	1.00
71-43-2	Benzene	U	0.333	ug/L	0.333	1.00
79-01-6	Trichloroethylene	U	0.333	ug/L	0.333	1.00
78-87-5	1,2-Dichloropropane	U	0.333	ug/L	0.333	1.00
74-95-3	Dibromomethane	U	0.333	ug/L	0.333	1.00
75-27-4	Bromodichloromethane	U	0.333	ug/L	0.333	1.00
108-88-3	Toluene	U	0.333	ug/L	0.333	1.00
79-00-5	1,1,2-Trichloroethane	U	0.333	ug/L	0.333	1.00
127-18-4	Tetrachloroethylene	U	0.333	ug/L	0.333	1.00
106-93-4	1,2-Dibromoethane	U	0.333	ug/L	0.333	1.00
108-90-7	Chlorobenzene	U	0.333	ug/L	0.333	1.00
100-41-4	Ethylbenzene	U	0.333	ug/L	0.333	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.333	ug/L	0.333	1.00
100-42-5	Styrene	U	0.333	ug/L	0.333	1.00
75-25-2	Bromoform	U	0.333	ug/L	0.333	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.333	ug/L	0.333	1.00
106-46-7	1,4-Dichlorobenzene	U	0.333	ug/L	0.333	1.00
107-02-8	Acrolein	U	1.67	ug/L	1.67	5.00
107-13-1	Acrylonitrile	U	1.67	ug/L	1.67	5.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	1.00	3.00
120-82-1	1,2,4-Trichlorobenzene	U	0.333	ug/L	0.333	1.00
95-50-1	1,2-Dichlorobenzene	U	0.333	ug/L	0.333	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:36**	**Matrix:**	**W**
Lab Sample ID:	**604449007**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB02-23-265377**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 16:32**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 16:32**				
Data File:	**121922V3\3W114.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	49.7	50.0	ug/L	99	(73%-129%)
Bromofluorobenzene	44.4	50.0	ug/L	89	(72%-125%)
Toluene-d8	49.6	50.0	ug/L	99	(75%-123%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.931	9.46	ug/L	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:35**	**Matrix:**	**W**
Lab Sample ID:	**604449010**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB03-23-265373**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 17:26**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 17:26**				
Data File:	**121922V3\3W116.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
542-75-6	1,3-Dichloropropylene	U	0.500	ug/L	0.500	2.00
75-71-8	Dichlorodifluoromethane	U	0.355	ug/L	0.355	1.00
74-87-3	Chloromethane	U	0.333	ug/L	0.333	1.00
75-01-4	Vinyl chloride	U	0.333	ug/L	0.333	1.00
74-83-9	Bromomethane	U	0.337	ug/L	0.337	1.00
75-69-4	Trichlorofluoromethane	U	0.333	ug/L	0.333	1.00
75-35-4	1,1-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-09-2	Methylene chloride	BJ	3.05	ug/L	0.500	5.00
1634-04-4	tert-Butyl methyl ether	U	0.333	ug/L	0.333	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-34-3	1,1-Dichloroethane	U	0.333	ug/L	0.333	1.00
156-59-2	cis-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
67-66-3	Chloroform	U	0.333	ug/L	0.333	1.00
71-55-6	1,1,1-Trichloroethane	U	0.333	ug/L	0.333	1.00
56-23-5	Carbon tetrachloride	U	0.333	ug/L	0.333	1.00
107-06-2	1,2-Dichloroethane	U	0.333	ug/L	0.333	1.00
71-43-2	Benzene	U	0.333	ug/L	0.333	1.00
79-01-6	Trichloroethylene	U	0.333	ug/L	0.333	1.00
78-87-5	1,2-Dichloropropane	U	0.333	ug/L	0.333	1.00
74-95-3	Dibromomethane	U	0.333	ug/L	0.333	1.00
75-27-4	Bromodichloromethane	U	0.333	ug/L	0.333	1.00
108-88-3	Toluene	U	0.333	ug/L	0.333	1.00
79-00-5	1,1,2-Trichloroethane	U	0.333	ug/L	0.333	1.00
127-18-4	Tetrachloroethylene	U	0.333	ug/L	0.333	1.00
106-93-4	1,2-Dibromoethane	U	0.333	ug/L	0.333	1.00
108-90-7	Chlorobenzene	U	0.333	ug/L	0.333	1.00
100-41-4	Ethylbenzene	U	0.333	ug/L	0.333	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.333	ug/L	0.333	1.00
100-42-5	Styrene	U	0.333	ug/L	0.333	1.00
75-25-2	Bromoform	U	0.333	ug/L	0.333	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.333	ug/L	0.333	1.00
106-46-7	1,4-Dichlorobenzene	U	0.333	ug/L	0.333	1.00
107-02-8	Acrolein	U	1.67	ug/L	1.67	5.00
107-13-1	Acrylonitrile	U	1.67	ug/L	1.67	5.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	1.00	3.00
120-82-1	1,2,4-Trichlorobenzene	U	0.333	ug/L	0.333	1.00
95-50-1	1,2-Dichlorobenzene	U	0.333	ug/L	0.333	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:35**	**Matrix:**	**W**
Lab Sample ID:	**604449010**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB03-23-265373**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 17:26**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 17:26**				
Data File:	**121922V3\3W116.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	55.5	50.0	ug/L	111	(73%-129%)
Bromofluorobenzene	47.6	50.0	ug/L	95	(72%-125%)
Toluene-d8	53.2	50.0	ug/L	106	(75%-123%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.931	14.3	ug/L	0	J
	unknown	14.139	12.1	ug/L	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:35**	**Matrix:**	**W**
Lab Sample ID:	**604449011**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB03-23-265378**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 17:52**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 17:52**				
Data File:	**121922V3\3W117.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
542-75-6	1,3-Dichloropropylene	U	0.500	ug/L	0.500	2.00
75-71-8	Dichlorodifluoromethane	U	0.355	ug/L	0.355	1.00
74-87-3	Chloromethane	U	0.333	ug/L	0.333	1.00
75-01-4	Vinyl chloride	U	0.333	ug/L	0.333	1.00
74-83-9	Bromomethane	U	0.337	ug/L	0.337	1.00
75-69-4	Trichlorofluoromethane	U	0.333	ug/L	0.333	1.00
75-35-4	1,1-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-09-2	Methylene chloride	BJ	2.39	ug/L	0.500	5.00
1634-04-4	tert-Butyl methyl ether	U	0.333	ug/L	0.333	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-34-3	1,1-Dichloroethane	U	0.333	ug/L	0.333	1.00
156-59-2	cis-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
67-66-3	Chloroform	U	0.333	ug/L	0.333	1.00
71-55-6	1,1,1-Trichloroethane	U	0.333	ug/L	0.333	1.00
56-23-5	Carbon tetrachloride	U	0.333	ug/L	0.333	1.00
107-06-2	1,2-Dichloroethane	U	0.333	ug/L	0.333	1.00
71-43-2	Benzene	U	0.333	ug/L	0.333	1.00
79-01-6	Trichloroethylene	U	0.333	ug/L	0.333	1.00
78-87-5	1,2-Dichloropropane	U	0.333	ug/L	0.333	1.00
74-95-3	Dibromomethane	U	0.333	ug/L	0.333	1.00
75-27-4	Bromodichloromethane	U	0.333	ug/L	0.333	1.00
108-88-3	Toluene	U	0.333	ug/L	0.333	1.00
79-00-5	1,1,2-Trichloroethane	U	0.333	ug/L	0.333	1.00
127-18-4	Tetrachloroethylene	U	0.333	ug/L	0.333	1.00
106-93-4	1,2-Dibromoethane	U	0.333	ug/L	0.333	1.00
108-90-7	Chlorobenzene	U	0.333	ug/L	0.333	1.00
100-41-4	Ethylbenzene	U	0.333	ug/L	0.333	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.333	ug/L	0.333	1.00
100-42-5	Styrene	U	0.333	ug/L	0.333	1.00
75-25-2	Bromoform	U	0.333	ug/L	0.333	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.333	ug/L	0.333	1.00
106-46-7	1,4-Dichlorobenzene	U	0.333	ug/L	0.333	1.00
107-02-8	Acrolein	U	1.67	ug/L	1.67	5.00
107-13-1	Acrylonitrile	U	1.67	ug/L	1.67	5.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	1.00	3.00
120-82-1	1,2,4-Trichlorobenzene	U	0.333	ug/L	0.333	1.00
95-50-1	1,2-Dichlorobenzene	U	0.333	ug/L	0.333	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:35**	**Matrix:**	**W**
Lab Sample ID:	**604449011**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB03-23-265378**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 17:52**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 17:52**				
Data File:	**121922V3\3W117.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	48.4	50.0	ug/L	97	(73%-129%)
Bromofluorobenzene	46.4	50.0	ug/L	93	(72%-125%)
Toluene-d8	50.3	50.0	ug/L	101	(75%-123%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.95	9.8	ug/L	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:01**	**Matrix:**	**W**
Lab Sample ID:	**604449014**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB04-23-265374**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 18:19**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 18:19**				
Data File:	**121922V3\3W118.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
542-75-6	1,3-Dichloropropylene	U	0.500	ug/L	0.500	2.00
75-71-8	Dichlorodifluoromethane	U	0.355	ug/L	0.355	1.00
74-87-3	Chloromethane	U	0.333	ug/L	0.333	1.00
75-01-4	Vinyl chloride	U	0.333	ug/L	0.333	1.00
74-83-9	Bromomethane	U	0.337	ug/L	0.337	1.00
75-69-4	Trichlorofluoromethane	U	0.333	ug/L	0.333	1.00
75-35-4	1,1-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-09-2	Methylene chloride	BJ	2.67	ug/L	0.500	5.00
1634-04-4	tert-Butyl methyl ether	U	0.333	ug/L	0.333	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-34-3	1,1-Dichloroethane	U	0.333	ug/L	0.333	1.00
156-59-2	cis-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
67-66-3	Chloroform	U	0.333	ug/L	0.333	1.00
71-55-6	1,1,1-Trichloroethane	U	0.333	ug/L	0.333	1.00
56-23-5	Carbon tetrachloride	U	0.333	ug/L	0.333	1.00
107-06-2	1,2-Dichloroethane	U	0.333	ug/L	0.333	1.00
71-43-2	Benzene	U	0.333	ug/L	0.333	1.00
79-01-6	Trichloroethylene	U	0.333	ug/L	0.333	1.00
78-87-5	1,2-Dichloropropane	U	0.333	ug/L	0.333	1.00
74-95-3	Dibromomethane	U	0.333	ug/L	0.333	1.00
75-27-4	Bromodichloromethane	U	0.333	ug/L	0.333	1.00
108-88-3	Toluene	U	0.333	ug/L	0.333	1.00
79-00-5	1,1,2-Trichloroethane	U	0.333	ug/L	0.333	1.00
127-18-4	Tetrachloroethylene	U	0.333	ug/L	0.333	1.00
106-93-4	1,2-Dibromoethane	U	0.333	ug/L	0.333	1.00
108-90-7	Chlorobenzene	U	0.333	ug/L	0.333	1.00
100-41-4	Ethylbenzene	U	0.333	ug/L	0.333	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.333	ug/L	0.333	1.00
100-42-5	Styrene	U	0.333	ug/L	0.333	1.00
75-25-2	Bromoform	U	0.333	ug/L	0.333	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.333	ug/L	0.333	1.00
106-46-7	1,4-Dichlorobenzene	U	0.333	ug/L	0.333	1.00
107-02-8	Acrolein	U	1.67	ug/L	1.67	5.00
107-13-1	Acrylonitrile	U	1.67	ug/L	1.67	5.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	1.00	3.00
120-82-1	1,2,4-Trichlorobenzene	U	0.333	ug/L	0.333	1.00
95-50-1	1,2-Dichlorobenzene	U	0.333	ug/L	0.333	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:01**	**Matrix:**	**W**
Lab Sample ID:	**604449014**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB04-23-265374**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 18:19**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 18:19**				
Data File:	**121922V3\3W118.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	54.5	50.0	ug/L	109	(73%-129%)
Bromofluorobenzene	45.1	50.0	ug/L	90	(72%-125%)
Toluene-d8	50.4	50.0	ug/L	101	(75%-123%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.931	21.1	ug/L	0	J
	unknown	14.139	8.65	ug/L	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:01**	**Matrix:**	**W**
Lab Sample ID:	**604449015**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB04-23-265379**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 18:45**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 18:45**				
Data File:	**121922V3\3W119.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
542-75-6	1,3-Dichloropropylene	U	0.500	ug/L	0.500	2.00
75-71-8	Dichlorodifluoromethane	U	0.355	ug/L	0.355	1.00
74-87-3	Chloromethane	U	0.333	ug/L	0.333	1.00
75-01-4	Vinyl chloride	U	0.333	ug/L	0.333	1.00
74-83-9	Bromomethane	U	0.337	ug/L	0.337	1.00
75-69-4	Trichlorofluoromethane	U	0.333	ug/L	0.333	1.00
75-35-4	1,1-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-09-2	Methylene chloride	BJ	2.30	ug/L	0.500	5.00
1634-04-4	tert-Butyl methyl ether	U	0.333	ug/L	0.333	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-34-3	1,1-Dichloroethane	U	0.333	ug/L	0.333	1.00
156-59-2	cis-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
67-66-3	Chloroform	U	0.333	ug/L	0.333	1.00
71-55-6	1,1,1-Trichloroethane	U	0.333	ug/L	0.333	1.00
56-23-5	Carbon tetrachloride	U	0.333	ug/L	0.333	1.00
107-06-2	1,2-Dichloroethane	U	0.333	ug/L	0.333	1.00
71-43-2	Benzene	U	0.333	ug/L	0.333	1.00
79-01-6	Trichloroethylene	U	0.333	ug/L	0.333	1.00
78-87-5	1,2-Dichloropropane	U	0.333	ug/L	0.333	1.00
74-95-3	Dibromomethane	U	0.333	ug/L	0.333	1.00
75-27-4	Bromodichloromethane	U	0.333	ug/L	0.333	1.00
108-88-3	Toluene	U	0.333	ug/L	0.333	1.00
79-00-5	1,1,2-Trichloroethane	U	0.333	ug/L	0.333	1.00
127-18-4	Tetrachloroethylene	U	0.333	ug/L	0.333	1.00
106-93-4	1,2-Dibromoethane	U	0.333	ug/L	0.333	1.00
108-90-7	Chlorobenzene	U	0.333	ug/L	0.333	1.00
100-41-4	Ethylbenzene	U	0.333	ug/L	0.333	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.333	ug/L	0.333	1.00
100-42-5	Styrene	U	0.333	ug/L	0.333	1.00
75-25-2	Bromoform	U	0.333	ug/L	0.333	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.333	ug/L	0.333	1.00
106-46-7	1,4-Dichlorobenzene	U	0.333	ug/L	0.333	1.00
107-02-8	Acrolein	U	1.67	ug/L	1.67	5.00
107-13-1	Acrylonitrile	U	1.67	ug/L	1.67	5.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	1.00	3.00
120-82-1	1,2,4-Trichlorobenzene	U	0.333	ug/L	0.333	1.00
95-50-1	1,2-Dichlorobenzene	U	0.333	ug/L	0.333	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:01**	**Matrix:**	**W**
Lab Sample ID:	**604449015**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB04-23-265379**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 18:45**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 18:45**				
Data File:	**121922V3\3W119.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	48.7	50.0	ug/L	97	(73%-129%)
Bromofluorobenzene	46.9	50.0	ug/L	94	(72%-125%)
Toluene-d8	50.2	50.0	ug/L	100	(75%-123%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.95	8.11	ug/L	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:12**	**Matrix:**	**W**
Lab Sample ID:	**604449018**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB05-23-265375**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 19:12**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 19:12**				
Data File:	**121922V3\3W120.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
542-75-6	1,3-Dichloropropylene	U	0.500	ug/L	0.500	2.00
75-71-8	Dichlorodifluoromethane	U	0.355	ug/L	0.355	1.00
74-87-3	Chloromethane	U	0.333	ug/L	0.333	1.00
75-01-4	Vinyl chloride	U	0.333	ug/L	0.333	1.00
74-83-9	Bromomethane	U	0.337	ug/L	0.337	1.00
75-69-4	Trichlorofluoromethane	U	0.333	ug/L	0.333	1.00
75-35-4	1,1-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-09-2	Methylene chloride	BJ	2.04	ug/L	0.500	5.00
1634-04-4	tert-Butyl methyl ether	U	0.333	ug/L	0.333	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-34-3	1,1-Dichloroethane	U	0.333	ug/L	0.333	1.00
156-59-2	cis-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
67-66-3	Chloroform	U	0.333	ug/L	0.333	1.00
71-55-6	1,1,1-Trichloroethane	U	0.333	ug/L	0.333	1.00
56-23-5	Carbon tetrachloride	U	0.333	ug/L	0.333	1.00
107-06-2	1,2-Dichloroethane	U	0.333	ug/L	0.333	1.00
71-43-2	Benzene	U	0.333	ug/L	0.333	1.00
79-01-6	Trichloroethylene	U	0.333	ug/L	0.333	1.00
78-87-5	1,2-Dichloropropane	U	0.333	ug/L	0.333	1.00
74-95-3	Dibromomethane	U	0.333	ug/L	0.333	1.00
75-27-4	Bromodichloromethane	U	0.333	ug/L	0.333	1.00
108-88-3	Toluene	U	0.333	ug/L	0.333	1.00
79-00-5	1,1,2-Trichloroethane	U	0.333	ug/L	0.333	1.00
127-18-4	Tetrachloroethylene	U	0.333	ug/L	0.333	1.00
106-93-4	1,2-Dibromoethane	U	0.333	ug/L	0.333	1.00
108-90-7	Chlorobenzene	U	0.333	ug/L	0.333	1.00
100-41-4	Ethylbenzene	U	0.333	ug/L	0.333	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.333	ug/L	0.333	1.00
100-42-5	Styrene	U	0.333	ug/L	0.333	1.00
75-25-2	Bromoform	U	0.333	ug/L	0.333	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.333	ug/L	0.333	1.00
106-46-7	1,4-Dichlorobenzene	U	0.333	ug/L	0.333	1.00
107-02-8	Acrolein	U	1.67	ug/L	1.67	5.00
107-13-1	Acrylonitrile	U	1.67	ug/L	1.67	5.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	1.00	3.00
120-82-1	1,2,4-Trichlorobenzene	U	0.333	ug/L	0.333	1.00
95-50-1	1,2-Dichlorobenzene	U	0.333	ug/L	0.333	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:12**	**Matrix:**	**W**
Lab Sample ID:	**604449018**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB05-23-265375**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 19:12**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 19:12**				
Data File:	**121922V3\3W120.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	54.8	50.0	ug/L	110	(73%-129%)
Bromofluorobenzene	46.4	50.0	ug/L	93	(72%-125%)
Toluene-d8	49.6	50.0	ug/L	99	(75%-123%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.95	26.9	ug/L	0	J
	unknown	14.139	9.73	ug/L	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:12**	**Matrix:**	**W**
Lab Sample ID:	**604449019**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB05-23-265380**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 19:38**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 19:38**				
Data File:	**121922V3\3W121.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
542-75-6	1,3-Dichloropropylene	U	0.500	ug/L	0.500	2.00
75-71-8	Dichlorodifluoromethane	U	0.355	ug/L	0.355	1.00
74-87-3	Chloromethane	U	0.333	ug/L	0.333	1.00
75-01-4	Vinyl chloride	U	0.333	ug/L	0.333	1.00
74-83-9	Bromomethane	U	0.337	ug/L	0.337	1.00
75-69-4	Trichlorofluoromethane	U	0.333	ug/L	0.333	1.00
75-35-4	1,1-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-09-2	Methylene chloride	BJ	2.30	ug/L	0.500	5.00
1634-04-4	tert-Butyl methyl ether	U	0.333	ug/L	0.333	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-34-3	1,1-Dichloroethane	U	0.333	ug/L	0.333	1.00
156-59-2	cis-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
67-66-3	Chloroform	U	0.333	ug/L	0.333	1.00
71-55-6	1,1,1-Trichloroethane	U	0.333	ug/L	0.333	1.00
56-23-5	Carbon tetrachloride	U	0.333	ug/L	0.333	1.00
107-06-2	1,2-Dichloroethane	U	0.333	ug/L	0.333	1.00
71-43-2	Benzene	U	0.333	ug/L	0.333	1.00
79-01-6	Trichloroethylene	U	0.333	ug/L	0.333	1.00
78-87-5	1,2-Dichloropropane	U	0.333	ug/L	0.333	1.00
74-95-3	Dibromomethane	U	0.333	ug/L	0.333	1.00
75-27-4	Bromodichloromethane	U	0.333	ug/L	0.333	1.00
108-88-3	Toluene	U	0.333	ug/L	0.333	1.00
79-00-5	1,1,2-Trichloroethane	U	0.333	ug/L	0.333	1.00
127-18-4	Tetrachloroethylene	U	0.333	ug/L	0.333	1.00
106-93-4	1,2-Dibromoethane	U	0.333	ug/L	0.333	1.00
108-90-7	Chlorobenzene	U	0.333	ug/L	0.333	1.00
100-41-4	Ethylbenzene	U	0.333	ug/L	0.333	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.333	ug/L	0.333	1.00
100-42-5	Styrene	U	0.333	ug/L	0.333	1.00
75-25-2	Bromoform	U	0.333	ug/L	0.333	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.333	ug/L	0.333	1.00
106-46-7	1,4-Dichlorobenzene	U	0.333	ug/L	0.333	1.00
107-02-8	Acrolein	U	1.67	ug/L	1.67	5.00
107-13-1	Acrylonitrile	U	1.67	ug/L	1.67	5.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	1.00	3.00
120-82-1	1,2,4-Trichlorobenzene	U	0.333	ug/L	0.333	1.00
95-50-1	1,2-Dichlorobenzene	U	0.333	ug/L	0.333	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:12**	**Matrix:**	**W**
Lab Sample ID:	**604449019**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB05-23-265380**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 19:38**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 19:38**				
Data File:	**121922V3\3W121.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	48.0	50.0	ug/L	96	(73%-129%)
Bromofluorobenzene	45.5	50.0	ug/L	91	(72%-125%)
Toluene-d8	49.9	50.0	ug/L	100	(75%-123%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.931	8.52	ug/L	0	J

Quality Control Summary

Volatile

Surrogate Recovery Report

SDG Number: 2023-289

Matrix Type: LIQUID

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1205275615	LCS for batch 2358452	97	100	93
1205275616	LCS for batch 2358452	98	103	94
1205275617	MB for batch 2358452	96	100	92
604449002	SMEB01-23-265371	110	98	91
604449003	SMEB01-23-265376	98	100	90
604449006	SMEB02-23-265372	109	100	92
604449007	SMEB02-23-265377	99	99	89
604449010	SMEB03-23-265373	111	106	95
604449011	SMEB03-23-265378	97	101	93
604449014	SMEB04-23-265374	109	101	90
604449015	SMEB04-23-265379	97	100	94
604449018	SMEB05-23-265375	110	99	93
604449019	SMEB05-23-265380	96	100	91
1205275619	SMEB01-23-265371PS	105	104	96
1205275621	SMEB01-23-265371PSD	107	106	100
1205276791	LCS for batch 2358452	92	101	94
1205276793	MB for batch 2358452	93	102	95
1205275618	SMEB01-23-265371RAPS	101	107	99
1205275620	SMEB01-23-265371RAPSD	104	108	96
604449002	SMEB01-23-265371RA	104	107	94
604449006	SMEB02-23-265372RA	102	107	97

Surrogate	Parmname	Acceptance Limits
DCED4	= 1,2-Dichloroethane-d4	(73%-129%)
TOL	= Toluene-d8	(75%-123%)
BFB	= Bromofluorobenzene	(72%-125%)

* Recovery outside Acceptance Limits

Column to be used to flag recovery values

D Sample Diluted

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 2023-289 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 2358452 **Matrix:** WATER

Lab Sample ID 1205275615

Instrument: VOA3.I **Analysis Date:** 12/19/2022 10:52 **Dilution:** 1

Analyst: KP2

Purge Vol: 5 mL **Batch ID:** 2358452

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L	Spike Conc. ug/L	Recovery %	Acceptance Limits
542-75-6	LCS	1,3-Dichloropropylene	100	0.0	110	110	75-129
179601-23-1	LCS	m,p-Xylenes	100	0.0	111	111	75-122
1330-20-7	LCS	Xylenes (total)	150	0.0	166	110	72-126
75-71-8	LCS	Dichlorodifluoromethane	50.0	0.0	54.2	108	58-150
74-87-3	LCS	Chloromethane	50.0	0.0	62.7	125	60-139
75-01-4	LCS	Vinyl chloride	50.0	0.0	67.2	134	67-134
74-83-9	LCS	Bromomethane	50.0	0.0	67.4	135	68-140
75-69-4	LCS	Trichlorofluoromethane	50.0	0.0	56.2	112	68-134
75-35-4	LCS	1,1-Dichloroethylene	50.0	0.0	55.3	111	67-133
75-09-2	LCS	Methylene chloride	50.0	0.0	50.3	101	69-120
1634-04-4	LCS	tert-Butyl methyl ether	50.0	0.0	47.5	95	64-127
156-60-5	LCS	trans-1,2-Dichloroethylene	50.0	0.0	53.7	107	71-127
75-34-3	LCS	1,1-Dichloroethane	50.0	0.0	56.1	112	76-123
156-59-2	LCS	cis-1,2-Dichloroethylene	50.0	0.0	53.1	106	73-119
67-66-3	LCS	Chloroform	50.0	0.0	55.3	111	77-126
71-55-6	LCS	1,1,1-Trichloroethane	50.0	0.0	57.1	114	75-136
56-23-5	LCS	Carbon tetrachloride	50.0	0.0	59.0	118	73-140
107-06-2	LCS	1,2-Dichloroethane	50.0	0.0	53.7	107	68-124
71-43-2	LCS	Benzene	50.0	0.0	59.4	119 *	74-118
79-01-6	LCS	Trichloroethylene	50.0	0.0	55.9	112	76-124
78-87-5	LCS	1,2-Dichloropropane	50.0	0.0	54.5	109	74-121
74-95-3	LCS	Dibromomethane	50.0	0.0	55.1	110	75-123

Quality Control Summary
Spike Recovery Report

SDG Number: **2023-289**
Sample Type: **Laboratory Control Sample**
Client ID: **LCS for batch 2358452**
Matrix: **WATER**
Lab Sample ID **1205275615**
Instrument: **VOA3.I**
Analvsis Date: **12/19/2022 10:52**
Dilution: **1**
Analvst: **KP2**
Purge Vol: **5 mL**
Batch ID: **2358452**

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L	Spike Conc. ug/L	Recovery %	Acceptance Limits
75-27-4	LCS	Bromodichloromethane	50.0	0.0	60.0	120	73-133
108-88-3	LCS	Toluene	50.0	0.0	54.8	110	74-118
79-00-5	LCS	1,1,2-Trichloroethane	50.0	0.0	52.4	105	73-120
127-18-4	LCS	Tetrachloroethylene	50.0	0.0	56.8	114	74-124
106-93-4	LCS	1,2-Dibromoethane	50.0	0.0	54.4	109	78-123
108-90-7	LCS	Chlorobenzene	50.0	0.0	55.4	111	76-120
100-41-4	LCS	Ethylbenzene	50.0	0.0	53.6	107	75-121
95-47-6	LCS	o-Xylene	50.0	0.0	55.2	110	74-122
100-42-5	LCS	Styrene	50.0	0.0	53.3	107	72-130
75-25-2	LCS	Bromoform	50.0	0.0	68.9	138 *	69-130
79-34-5	LCS	1,1,2,2-Tetrachloroethane	50.0	0.0	55.0	110	68-126
106-46-7	LCS	1,4-Dichlorobenzene	50.0	0.0	55.1	110	75-118
120-82-1	LCS	1,2,4-Trichlorobenzene	50.0	0.0	51.0	102	67-127
95-50-1	LCS	1,2-Dichlorobenzene	50.0	0.0	54.1	108	76-119

Quality Control Summary
Spike Recovery Report

SDG Number: **2023-289**
Sample Type: **Laboratory Control Sample**
Client ID: **LCS for batch 2358452**
Matrix: **WATER**
Lab Sample ID **1205275616**
Instrument: **VOA3.I**
Analysis Date: **12/19/2022 11:45**
Dilution: **1**
Analyst: **KP2**
Purge Vol: **5 mL**
Batch ID: **2358452**

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L	Spike Conc. ug/L	Recovery %	Acceptance Limits
107-02-8	LCS	Acrolein	250	0.0	180	72	63-141
107-13-1	LCS	Acrylonitrile	250	0.0	280	112	67-128

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 2023-289 **Sample Type:** Post Spike

Client ID: SMEB01-23-265371RAPS **Matrix:** W

Lab Sample ID 1205275618

Instrument: VOA3.I **Analysis Date:** 12/20/2022 22:29 **Dilution:** 1

Analyst: JM6

Purge Vol: 5 mL **Batch ID:** 2358452

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits
542-75-6	PS	1,3-Dichloropropylene	100	0.000	U	104	104	74-123
179601-23-1	PS	m,p-Xylenes	100	0.000	U	122	122	60-126
1330-20-7	PS	Xylenes (total)	150	0.000	U	182	121	52-132
75-09-2	PS	Methylene chloride	50.0	2.59	J	48.4	92	62-125
75-71-8	PS	Dichlorodifluoromethane	50.0	0.000	U	47.5	95	42-155
74-87-3	PS	Chloromethane	50.0	0.000	U	59.9	120	45-142
75-01-4	PS	Vinyl chloride	50.0	0.000	U	64.6	129	58-139
74-83-9	PS	Bromomethane	50.0	0.000	U	60.2	120	61-142
75-69-4	PS	Trichlorofluoromethane	50.0	0.000	U	55.2	110	59-135
75-35-4	PS	1,1-Dichloroethylene	50.0	0.000	U	55.2	110	61-137
1634-04-4	PS	tert-Butyl methyl ether	50.0	0.000	U	46.7	93	60-133
156-60-5	PS	trans-1,2-Dichloroethylene	50.0	0.000	U	61.3	123	65-130
75-34-3	PS	1,1-Dichloroethane	50.0	0.000	U	62.0	124	70-126
156-59-2	PS	cis-1,2-Dichloroethylene	50.0	0.000	U	55.9	112	63-131
67-66-3	PS	Chloroform	50.0	0.000	U	58.4	117	69-133
71-55-6	PS	1,1,1-Trichloroethane	50.0	0.000	U	60.9	122	67-135
56-23-5	PS	Carbon tetrachloride	50.0	0.000	U	59.9	120	63-144
107-06-2	PS	1,2-Dichloroethane	50.0	0.000	U	54.2	108	64-129
71-43-2	PS	Benzene	50.0	0.000	U	64.2	128 *	65-122
79-01-6	PS	Trichloroethylene	50.0	0.000	U	62.4	125	66-126
78-87-5	PS	1,2-Dichloropropane	50.0	0.000	U	56.6	113	68-127
74-95-3	PS	Dibromomethane	50.0	0.000	U	53.5	107	70-129

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 2023-289 **Sample Type:** Post Spike

Client ID: SMEB01-23-265371RAPS **Matrix:** W

Lab Sample ID 1205275618

Instrument: VOA3.I **Analysis Date:** 12/20/2022 22:29 **Dilution:** 1

Analyst: JM6

Purge Vol: 5 mL **Batch ID:** 2358452

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits
108-88-3	PS	Toluene	50.0	0.000	U	62.0	124 *	63-121
79-00-5	PS	1,1,2-Trichloroethane	50.0	0.000	U	55.6	111	70-126
127-18-4	PS	Tetrachloroethylene	50.0	0.000	U	64.1	128	64-129
106-93-4	PS	1,2-Dibromoethane	50.0	0.000	U	54.7	109	75-128
108-90-7	PS	Chlorobenzene	50.0	0.000	U	60.7	121	63-123
100-41-4	PS	Ethylbenzene	50.0	0.000	U	61.1	122	65-124
95-47-6	PS	o-Xylene	50.0	0.000	U	59.8	120	62-125
100-42-5	PS	Styrene	50.0	0.000	U	52.3	105	60-131
79-34-5	PS	1,1,2,2-Tetrachloroethane	50.0	0.000	U	57.7	115	58-138
106-46-7	PS	1,4-Dichlorobenzene	50.0	0.000	U	54.6	109	51-125
120-82-1	PS	1,2,4-Trichlorobenzene	50.0	0.000	U	43.4	87	48-134
95-50-1	PS	1,2-Dichlorobenzene	50.0	0.000	U	52.9	106	60-128
75-27-4	PS	Bromodichloromethane	50.0	1.05		57.7	113	68-137
75-25-2	PS	Bromoform	50.0	6.45		63.1	113	62-138

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 2023-289 **Sample Type:** Post Spike Duplicate

Client ID: SMEB01-23-265371RAPSD **Matrix:** W

Lab Sample ID 1205275620

Instrument: VOA3.I **Analysis Date:** 12/20/2022 22:55 **Dilution:** 1

Analyst: JM6

Purge Vol: 5 mL **Batch ID:** 2358452

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
542-75-6	PSD	1,3-Dichloropropylene	100	0.000	U	95.0	95	74-123	9	0-20
179601-23-1	PSD	m,p-Xylenes	100	0.000	U	117	117	60-126	4	0-20
1330-20-7	PSD	Xylenes (total)	150	0.000	U	175	117	52-132	4	0-20
75-09-2	PSD	Methylene chloride	50.0	2.59	J	46.9	89	62-125	3	0-20
75-71-8	PSD	Dichlorodifluoromethane	50.0	0.000	U	52.0	104	42-155	9	0-20
74-87-3	PSD	Chloromethane	50.0	0.000	U	63.1	126	45-142	5	0-20
75-01-4	PSD	Vinyl chloride	50.0	0.000	U	67.5	135	58-139	4	0-20
74-83-9	PSD	Bromomethane	50.0	0.000	U	62.0	124	61-142	3	0-20
75-69-4	PSD	Trichlorofluoromethane	50.0	0.000	U	58.3	117	59-135	5	0-20
75-35-4	PSD	1,1-Dichloroethylene	50.0	0.000	U	59.4	119	61-137	7	0-20
1634-04-4	PSD	tert-Butyl methyl ether	50.0	0.000	U	44.2	88	60-133	5	0-20
156-60-5	PSD	trans-1,2-Dichloroethylene	50.0	0.000	U	59.8	120	65-130	3	0-20
75-34-3	PSD	1,1-Dichloroethane	50.0	0.000	U	60.3	121	70-126	3	0-20
156-59-2	PSD	cis-1,2-Dichloroethylene	50.0	0.000	U	54.5	109	63-131	2	0-20
67-66-3	PSD	Chloroform	50.0	0.000	U	56.4	113	69-133	3	0-20
71-55-6	PSD	1,1,1-Trichloroethane	50.0	0.000	U	62.4	125	67-135	2	0-20
56-23-5	PSD	Carbon tetrachloride	50.0	0.000	U	61.4	123	63-144	3	0-20
107-06-2	PSD	1,2-Dichloroethane	50.0	0.000	U	49.5	99	64-129	9	0-20
71-43-2	PSD	Benzene	50.0	0.000	U	62.6	125 *	65-122	3	0-20
79-01-6	PSD	Trichloroethylene	50.0	0.000	U	61.9	124	66-126	1	0-20
78-87-5	PSD	1,2-Dichloropropane	50.0	0.000	U	54.3	109	68-127	4	0-20
74-95-3	PSD	Dibromomethane	50.0	0.000	U	48.2	96	70-129	10	0-20

Quality Control Summary
Spike Recovery Report

SDG Number: 2023-289 **Sample Type:** Post Spike Duplicate

Client ID: SMEB01-23-265371RAPSD **Matrix:** W

Lab Sample ID 1205275620

Instrument: VOA3.I **Analysis Date:** 12/20/2022 22:55 **Dilution:** 1

Analyst: JM6

Purge Vol: 5 mL **Batch ID:** 2358452

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
108-88-3	PSD	Toluene	50.0	0.000	U	60.1	120	63-121	3	0-20
79-00-5	PSD	1,1,2-Trichloroethane	50.0	0.000	U	48.4	97	70-126	14	0-20
127-18-4	PSD	Tetrachloroethylene	50.0	0.000	U	62.7	125	64-129	2	0-20
106-93-4	PSD	1,2-Dibromoethane	50.0	0.000	U	48.0	96	75-128	13	0-20
108-90-7	PSD	Chlorobenzene	50.0	0.000	U	57.3	115	63-123	6	0-20
100-41-4	PSD	Ethylbenzene	50.0	0.000	U	59.5	119	65-124	3	0-20
95-47-6	PSD	o-Xylene	50.0	0.000	U	58.1	116	62-125	3	0-20
100-42-5	PSD	Styrene	50.0	0.000	U	49.1	98	60-131	6	0-20
79-34-5	PSD	1,1,2,2-Tetrachloroethane	50.0	0.000	U	51.6	103	58-138	11	0-20
106-46-7	PSD	1,4-Dichlorobenzene	50.0	0.000	U	50.2	100	51-125	9	0-20
120-82-1	PSD	1,2,4-Trichlorobenzene	50.0	0.000	U	42.6	85	48-134	2	0-20
95-50-1	PSD	1,2-Dichlorobenzene	50.0	0.000	U	49.7	99	60-128	6	0-20
75-27-4	PSD	Bromodichloromethane	50.0	1.05		54.0	106	68-137	7	0-20
75-25-2	PSD	Bromoform	50.0	6.45		53.9	95	62-138	16	0-20

Quality Control Summary
Spike Recovery Report

SDG Number: **2023-289**
Sample Type: **Post Spike**
Client ID: **SMEB01-23-265371PS**
Matrix: **W**
Lab Sample ID **1205275619**
Instrument: **VOA3.I**
Analysis Date: **12/19/2022 20:57**
Dilution: **1**
Analyst: **KP2**
Purge Vol: **5 mL**
Batch ID: **2358452**

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits
107-02-8	PS	Acrolein	250	0.000	U	8.61	3 *	51-142
107-13-1	PS	Acrylonitrile	250	0.000	U	309	124	60-135

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 2023-289 **Sample Type:** Post Spike Duplicate

Client ID: SMEB01-23-265371PSD **Matrix:** W

Lab Sample ID 1205275621

Instrument: VOA3.I **Analysis Date:** 12/19/2022 21:23 **Dilution:** 1

Analyst: KP2

Purge Vol: 5 mL **Batch ID:** 2358452

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
107-02-8	PSD	Acrolein	250	0.000	U	6.49	3 *	51-142	28 *	0-20
107-13-1	PSD	Acrylonitrile	250	0.000	U	247	99	60-135	22 *	0-20

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 2023-289
Sample Type: Laboratory Control Sample
Client ID: LCS for batch 2358452
Matrix: WATER
Lab Sample ID 1205276791
Instrument: VOA3.I
Analysis Date: 12/20/2022 20:17
Dilution: 1
Analyst: JM6
Purge Vol: 5 mL
Batch ID: 2358452

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L	Spike Conc. ug/L	Recovery %	Acceptance Limits
542-75-6	LCS	1,3-Dichloropropylene	100	0.0	94.3	94	75-129
179601-23-1	LCS	m,p-Xylenes	100	0.0	99.9	100	75-122
1330-20-7	LCS	Xylenes (total)	150	0.0	151	101	72-126
75-71-8	LCS	Dichlorodifluoromethane	50.0	0.0	42.6	85	58-150
74-87-3	LCS	Chloromethane	50.0	0.0	52.9	106	60-139
75-01-4	LCS	Vinyl chloride	50.0	0.0	56.2	112	67-134
74-83-9	LCS	Bromomethane	50.0	0.0	57.9	116	68-140
75-69-4	LCS	Trichlorofluoromethane	50.0	0.0	47.5	95	68-134
75-35-4	LCS	1,1-Dichloroethylene	50.0	0.0	49.3	99	67-133
75-09-2	LCS	Methylene chloride	50.0	0.0	44.5	89	69-120
1634-04-4	LCS	tert-Butyl methyl ether	50.0	0.0	42.0	84	64-127
156-60-5	LCS	trans-1,2-Dichloroethylene	50.0	0.0	50.7	101	71-127
75-34-3	LCS	1,1-Dichloroethane	50.0	0.0	52.7	105	76-123
156-59-2	LCS	cis-1,2-Dichloroethylene	50.0	0.0	48.3	97	73-119
67-66-3	LCS	Chloroform	50.0	0.0	50.7	101	77-126
71-55-6	LCS	1,1,1-Trichloroethane	50.0	0.0	51.7	103	75-136
56-23-5	LCS	Carbon tetrachloride	50.0	0.0	50.2	100	73-140
107-06-2	LCS	1,2-Dichloroethane	50.0	0.0	47.2	94	68-124
71-43-2	LCS	Benzene	50.0	0.0	53.9	108	74-118
79-01-6	LCS	Trichloroethylene	50.0	0.0	52.5	105	76-124
78-87-5	LCS	1,2-Dichloropropane	50.0	0.0	50.0	100	74-121
74-95-3	LCS	Dibromomethane	50.0	0.0	47.3	95	75-123

Quality Control Summary
Spike Recovery Report

SDG Number: **2023-289**
Sample Type: **Laboratory Control Sample**
Client ID: **LCS for batch 2358452**
Matrix: **WATER**
Lab Sample ID **1205276791**
Instrument: **VOA3.I**
Analvsis Date: **12/20/2022 20:17**
Dilution: **1**
Analvst: **JM6**
Purge Vol: **5 mL**
Batch ID: **2358452**

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L	Spike Conc. ug/L	Recovery %	Acceptance Limits
75-27-4	LCS	Bromodichloromethane	50.0	0.0	50.0	100	73-133
108-88-3	LCS	Toluene	50.0	0.0	51.3	103	74-118
79-00-5	LCS	1,1,2-Trichloroethane	50.0	0.0	47.5	95	73-120
127-18-4	LCS	Tetrachloroethylene	50.0	0.0	50.5	101	74-124
106-93-4	LCS	1,2-Dibromoethane	50.0	0.0	46.5	93	78-123
108-90-7	LCS	Chlorobenzene	50.0	0.0	50.7	101	76-120
100-41-4	LCS	Ethylbenzene	50.0	0.0	49.7	99	75-121
95-47-6	LCS	o-Xylene	50.0	0.0	51.1	102	74-122
100-42-5	LCS	Styrene	50.0	0.0	48.0	96	72-130
75-25-2	LCS	Bromoform	50.0	0.0	45.5	91	69-130
79-34-5	LCS	1,1,2,2-Tetrachloroethane	50.0	0.0	48.2	96	68-126
106-46-7	LCS	1,4-Dichlorobenzene	50.0	0.0	48.6	97	75-118
120-82-1	LCS	1,2,4-Trichlorobenzene	50.0	0.0	42.6	85	67-127
95-50-1	LCS	1,2-Dichlorobenzene	50.0	0.0	48.3	97	76-119

Method Blank Summary

SDG Number:	**2023-289**	**Client:**	**TNSL001**	**Matrix:**	**WATER**
Client ID:	**MB for batch 2358452**	**Instrument ID:**	**VOA3.I**	**Data File:**	**121922V3\3W106BR.D**
Lab Sample ID:	**1205275617**	**Prep Date:**	**12/19/2022 12:39**	**Analyzed:**	**12/19/22 12:39**
Column:	**Serial Number: AB001**				

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 2358452	1205275615	121922V3\3W102BR.D	12/19/22	1052
02	LCS for batch 2358452	1205275616	121922V3\3W104BR.D	12/19/22	1145
03	SMEB01-23-265371	604449002	121922V3\3W110.D	12/19/22	1447
04	SMEB01-23-265376	604449003	121922V3\3W111.D	12/19/22	1513
05	SMEB02-23-265372	604449006	121922V3\3W113.D	12/19/22	1606
06	SMEB02-23-265377	604449007	121922V3\3W114.D	12/19/22	1632
07	SMEB03-23-265373	604449010	121922V3\3W116.D	12/19/22	1726
08	SMEB03-23-265378	604449011	121922V3\3W117.D	12/19/22	1752
09	SMEB04-23-265374	604449014	121922V3\3W118.D	12/19/22	1819
10	SMEB04-23-265379	604449015	121922V3\3W119.D	12/19/22	1845
11	SMEB05-23-265375	604449018	121922V3\3W120.D	12/19/22	1912
12	SMEB05-23-265380	604449019	121922V3\3W121.D	12/19/22	1938
13	SMEB01-23-265371PS	1205275619	121922V3\3W124.D	12/19/22	2057
14	SMEB01-23-265371PSD	1205275621	121922V3\3W125.D	12/19/22	2123

Method Blank Summary

SDG Number:	**2023-289**	**Client:**	**TNSL001**	**Matrix:**	**WATER**
Client ID:	**MB for batch 2358452**	**Instrument ID:**	**VOA3.I**	**Data File:**	**122022V3\3W233T.D**
Lab Sample ID:	**1205276793**	**Prep Date:**	**12/20/2022 21:36**	**Analyzed:**	**12/20/22 21:36**
Column:	**Serial Number: AB001**				

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
16	LCS for batch 2358452	1205276791	122022V3\3W230T.D	12/20/22	2017
17	SMEB01-23-265371RAPS	1205275618	122022V3\3W235.D	12/20/22	2229
18	SMEB01-23-265371RAPSD	1205275620	122022V3\3W236.D	12/20/22	2255
19	SMEB01-23-265371RA	604449002	122022V3\3W238.D	12/20/22	2347
20	SMEB02-23-265372RA	604449006	122022V3\3W239.D	12/21/22	0013

Instrument Performance Check

BROMOFLUOROBENZENE

Lab Name GEL Laboratories LLC **Client SDG:** 2023-289

Instrument ID: VOA3.I **Injection Date/Time:** 30-NOV-22 11:39

Column Description: Serial Number: AB001 **Lab File ID** 113022V3_ICAL\3T301.D

m/e	Ion Abundance Criteria	% Relative Abundance
95	50 - 200% of mass 174	139.6
96	5.0 - 9.0% of mass 95	7.3
173	Less than 2.0% of mass 174	0.5
174	50 - 200% of mass 95	71.6
175	5.0 -9.0% of mass 174	6.9
176	95.0 - 105.0% of mass 174	103.6
177	5.0 - 10.0% of mass 176	6.9

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
ICALMIX[A]	W3VM221130-01	113022V3_ICAL\3T302.D	30-NOV-22 12:04
ICALMIX[A]	W3VM221130-02	113022V3_ICAL\3T303.D	30-NOV-22 12:32
ICALMIX[A]	W3VM221130-03	113022V3_ICAL\3T304.D	30-NOV-22 12:59
ICALMIX[A]	W3VM221130-04	113022V3_ICAL\3T305.D	30-NOV-22 13:26
ICALMIX[A]	W3VM221130-05	113022V3_ICAL\3T306.D	30-NOV-22 13:53
ICALMIX[A]	W3VM221130-06	113022V3_ICAL\3T307.D	30-NOV-22 14:21
ICALMIX[A]	W3VM221130-07	113022V3_ICAL\3T308.D	30-NOV-22 14:48
ICALMIX[A]	W3VM221130-08	113022V3_ICAL\3T309.D	30-NOV-22 15:16
ICALMIX[A]	W3VM221130-09	113022V3_ICAL\3T310.D	30-NOV-22 15:43
ICVMIX[A]01	W3VM221130-10	113022V3_ICAL\3T312.D	30-NOV-22 16:38
ICALMIX[B]	W3VM221130-11	113022V3_ICAL\3T313.D	30-NOV-22 17:05
ICALMIX[B]	W3VM221130-12	113022V3_ICAL\3T314.D	30-NOV-22 17:32
ICALMIX[B]	W3VM221130-13	113022V3_ICAL\3T315.D	30-NOV-22 17:59
ICALMIX[B]	W3VM221130-14	113022V3_ICAL\3T316.D	30-NOV-22 18:26
ICALMIX[B]	W3VM221130-15	113022V3_ICAL\3T317.D	30-NOV-22 18:53
ICALMIX[B]	W3VM221130-16	113022V3_ICAL\3T318.D	30-NOV-22 19:20
ICALMIX[B]	W3VM221130-17	113022V3_ICAL\3T319.D	30-NOV-22 19:47
ICALMIX[B]	W3VM221130-18	113022V3_ICAL\3T320.D	30-NOV-22 20:13

Instrument Performance Check

BROMOFLUOROBENZENE

Lab Name GEL Laboratories LLC **Client SDG:** 2023-289

Instrument ID: VOA3.I **Injection Date/Time:** 01-DEC-22 07:47

Column Description: Serial Number: AB001 **Lab File ID** 113022V3_ICAL\3T324.D

m/e	Ion Abundance Criteria	% Relative Abundance
95	50 - 200% of mass 174	133.5
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.5
174	50 - 200% of mass 95	74.9
175	5.0 -9.0% of mass 174	8
176	95.0 - 105.0% of mass 174	102.5
177	5.0 - 10.0% of mass 176	6.3

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
ICVMIX[B]02	W3VM221201-01	113022V3_ICAL\3T325.D	01-DEC-22 08:12
CCVMIX[A]01	W3VM221219-01	121922V3\3W102.D	19-DEC-22 10:52
BLK01LCS	1205275615	121922V3\3W102BR.D	19-DEC-22 10:52
CCVMIX[B]02	W3VM221219-03	121922V3\3W104.D	19-DEC-22 11:45
BLK01SLCS	1205275616	121922V3\3W104BR.D	19-DEC-22 11:45
BLK01	1205275617	121922V3\3W106BR.D	19-DEC-22 12:39
SMEB01-23-265371	604449002	121922V3\3W110.D	19-DEC-22 14:47
SMEB01-23-265376	604449003	121922V3\3W111.D	19-DEC-22 15:13
SMEB02-23-265372	604449006	121922V3\3W113.D	19-DEC-22 16:06
SMEB02-23-265377	604449007	121922V3\3W114.D	19-DEC-22 16:32
SMEB03-23-265373	604449010	121922V3\3W116.D	19-DEC-22 17:26
SMEB03-23-265378	604449011	121922V3\3W117.D	19-DEC-22 17:52
SMEB04-23-265374	604449014	121922V3\3W118.D	19-DEC-22 18:19
SMEB04-23-265379	604449015	121922V3\3W119.D	19-DEC-22 18:45
SMEB05-23-265375	604449018	121922V3\3W120.D	19-DEC-22 19:12
SMEB05-23-265380	604449019	121922V3\3W121.D	19-DEC-22 19:38
SMEB01-23-265371MS	1205275619	121922V3\3W124.D	19-DEC-22 20:57
SMEB01-23-265371MSD	1205275621	121922V3\3W125.D	19-DEC-22 21:23
CCVMIX[A]03	W3VM221220-07	122022V3\3W230.D	20-DEC-22 20:17
BLK02LCS	1205276791	122022V3\3W230T.D	20-DEC-22 20:17

Instrument Performance Check

BROMOFLUOROBENZENE

Lab Name GEL Laboratories LLC **Client SDG:** 2023-289

Instrument ID: VOA3.I **Injection Date/Time:** 01-DEC-22 07:47

Column Description: Serial Number: AB001 **Lab File ID** 113022V3_ICAL\3T324.D

m/e	Ion Abundance Criteria	% Relative Abundance
95	50 - 200% of mass 174	133.5
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.5
174	50 - 200% of mass 95	74.9
175	5.0 -9.0% of mass 174	8
176	95.0 - 105.0% of mass 174	102.5
177	5.0 - 10.0% of mass 176	6.3

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
BLK02	1205276793	122022V3\3W233T.D	20-DEC-22 21:36
SMEB01-23-265371RAMS	1205275618	122022V3\3W235.D	20-DEC-22 22:29
SMEB01-23-265371RAMSD	1205275620	122022V3\3W236.D	20-DEC-22 22:55
SMEB01-23-265371RA	604449002	122022V3\3W238.D	20-DEC-22 23:47
SMEB02-23-265372RA	604449006	122022V3\3W239.D	21-DEC-22 00:13

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 2023-289

Instrument: VOA3.I

STD Analysis Time: 19-DEC-22 10:52

GC Column: DB-624

Data File: 121922V3\3W102.D

	Fluorobenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
	Area #	RT #	Area #	RT #	Area #	RT #
12 Hour STD	1213829	9.88	903394	13.1	529603	15.5
Upper Limit	2427658	10.4	1806788	13.6	1059206	16.0
Lower Limit	606915	9.38	451697	12.6	264802	15.0
Sample ID						
BLK01LCS	1213829	9.88	903394	13.1	529603	15.5
BLK01SLCS	1133304	9.88	809035	13.1	481293	15.5
BLK01	1036794	9.88	758949	13.1	455201	15.5
SMEB01-23-265371	798549	9.88	607098	13.1	368861	15.5
SMEB01-23-265376	913404	9.88	674669	13.1	406626	15.5
SMEB02-23-265372	805339	9.88	605911	13.1	375371	15.5
SMEB02-23-265377	968960	9.88	722872	13.1	447301	15.5
SMEB03-23-265373	672974	9.89	496650	13.1	306893	15.5
SMEB03-23-265378	1017590	9.88	754630	13.1	449353	15.5
SMEB04-23-265374	729383	9.88	549795	13.1	335087	15.5
SMEB04-23-265379	1140697	9.88	848193	13.1	489218	15.5
SMEB05-23-265375	876951	9.88	666334	13.1	398616	15.5
SMEB05-23-265380	986570	9.88	729577	13.1	436675	15.5
SMEB01-23-265371MS	767557	9.88	550241	13.1	333086	15.5
SMEB01-23-265371MSD	903687	9.88	649505	13.1	386064	15.5

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 2023-289

Instrument: VOA3.I

STD Analysis Time: 20-DEC-22 20:17

GC Column: DB-624

Data File: 122022V3\3W230.D

	Fluorobenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
	Area #	RT #	Area #	RT #	Area #	RT #
12 Hour STD	1379286	9.88	1003262	13.1	594458	15.5
Upper Limit	2758572	10.4	2006524	13.6	1188916	16.0
Lower Limit	689643	9.38	501631	12.6	297229	15.0
Sample ID						
BLK02LCS	1379286	9.88	1003262	13.1	594458	15.5
BLK02	1320329	9.88	956683	13.1	556670	15.5
SMEB01-23-265371RAMS	1063769	9.88	771091	13.1	458483	15.5
SMEB01-23-265371RAMSD	970143	9.88	698661	13.1	424657	15.5
SMEB01-23-265371RA	829576	9.88	583960	13.1	363785	15.5
SMEB02-23-265372RA	841476	9.88	598393	13.1	361327	15.5

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**604449002**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265371**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 14:47**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 14:47**				
Data File:	**121922V3\3W110.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
107-02-8	Acrolein	U	1.67	ug/L	1.67	5.00
107-13-1	Acrylonitrile	U	1.67	ug/L	1.67	5.00

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	54.8	50.0	ug/L	110	(73%-129%)
Bromofluorobenzene	45.4	50.0	ug/L	91	(72%-125%)
Toluene-d8	49.1	50.0	ug/L	98	(75%-123%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.931	34.8	ug/L	0	J
	unknown	4.278	5.45	ug/L	0	J
000556-67-2	Cyclotetrasiloxane, octamethyl-	14.139	5.13	ug/L	90	NJ

Quantitation Report
GEL Laboratories, LLC

12/21/2022

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W110.D
Acq On : 19 Dec 2022 14:47
Operator : KP2
InstName : VOA3
Sample : |604449002|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 10 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 20 08:10:12 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	96	9.884	9.884	1.000	798549	50.00	ug/L	0.00
43) Chlorobenzene-d5	117	13.060	13.066	1.000	607098	50.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	152	15.481	15.480	1.000	368861	50.00	ug/L	0.00
84) B Fluorobenzene	96	9.884	9.884	1.000	798776	50.00	ug/L	0.00
103) B Chlorobenzene-d5	117	13.060	13.060	1.000	607098	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	15.481	15.481	1.000	368861	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
30) 1,2-Dichloroethane-d4	67	9.549	9.549	0.966	133434	54.76	ug/L	0.00
45) Toluene-d8	98	11.530	11.530	0.883	799302	49.08	ug/L	0.00
63) Bromofluorobenzene	95	14.261	14.261	0.921	313699	45.35	ug/L	0.00

Compound	Amount	Range	Recovery
30) 1,2-Dichloroethane-d4	50.000	73 - 129	110%
45) Toluene-d8	50.000	75 - 123	98%
63) Bromofluorobenzene	50.000	72 - 125	91%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		0.000	4.260	0.000	0	N.D.		
3) Chloromethane	50	4.644	4.644	0.470	1305	N.D.		
4) Vinyl chloride		0.000	4.826	0.000	0	N.D.		
5) Bromomethane		0.000	5.411	0.000	0	N.D.		
6) Chloroethane		0.000	5.557	0.000	0	N.D.		
7) Trichlorofluoromethane		0.000	5.904	0.000	0	N.D.		
8) Ethyl ether		0.000	6.232	0.000	0	N.D.		
9) Acetone	43	6.653	6.647	0.673	80740	90.41	ug/L	96
10) 1,1-Dichloroethylene		0.000	6.616	0.000	0m	N.D.	d	
11) Iodomethane		0.000	6.866	0.000	0	N.D.		
12) Acetonitrile	41	7.031	7.013	0.711	710	N.D.		
13) Methyl acetate		0.000	7.025	0.000	0	N.D.		
14) Carbon disulfide	76	6.982	6.982	0.706	63922	4.38	ug/L	98
15) Methylene chloride	84	7.202	7.202	0.729	12409	2.64	ug/L	89
16) tert-Butyl methyl ether		0.000	7.482	0.000	0	N.D.		
17) trans-1,2-Dichloroethy...		0.000	7.531	0.000	0	N.D.		
18) Hexane	57	7.787	7.799	0.788	320	N.D.		
19) Vinyl acetate	43	7.787	7.988	0.788	182	N.D.		
20) 1,1-Dichloroethane		0.000	8.018	0.000	0	N.D.		
21) 2-Butanone	43	8.640	8.622	0.874	1738	N.D.		
22) cis-1,2-Dichloroethylene		0.000	8.659	0.000	0	N.D.		
23) 2,2-Dichloropropane		0.000	8.671	0.000	0	N.D.		
24) Bromochloromethane		0.000	8.933	0.000	0	N.D.		
25) Chloroform	83	8.970	8.970	0.907	1613	N.D.		
26) 1,1,1-Trichloroethane		0.000	9.226	0.000	0	N.D.		
27) Cyclohexane		0.000	9.305	0.000	0	N.D.		
28) 1,1-Dichloropropene		0.000	9.384	0.000	0	N.D.		
29) Carbon tetrachloride		0.000	9.415	0.000	0	N.D.		
31) 1,2-Dichloroethane		0.000	9.628	0.000	0	N.D.		
32) Benzene		0.000	9.628	0.000	0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W110.D
Acq On : 19 Dec 2022 14:47
Operator : KP2
InstName : VOA3
Sample : |604449002|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 20 08:10:12 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
33) Cyclohexene		0.000	9.732	0.000	0	N.D.		
34) n-Butyl alcohol		0.000	10.012	0.000	0	N.D.		
35) Trichloroethylene		0.000	10.268	0.000	0	N.D.		
36) 2-Pentanone	43	10.390	10.378	1.051	129	N.D.		
37) 1,2-Dichloropropane		0.000	10.530	0.000	0	N.D.		
38) Methylcyclohexane		0.000	10.494	0.000	0	N.D.		
39) Dibromomethane		0.000	10.664	0.000	0	N.D.		
40) Bromodichloromethane	83	10.774	10.780	1.090	4262	0.89	ug/L #	91
41) 2-Chloroethylvinyl ether		0.000	11.006	0.000	0	N.D.		
42) cis-1,3-Dichloropropylene		0.000	11.231	0.000	0	N.D.		
44) 4-Methyl-2-pentanone	43	11.329	11.329	0.867	703	N.D.		
46) Toluene	91	11.609	11.603	0.889	279	N.D.		
47) trans-1,3-Dichloroprop...		0.000	11.780	0.000	0	N.D.		
48) 1,1,2-Trichloroethane	97	11.920	11.999	0.913	743	N.D.		
49) 2-Hexanone		0.000	12.182	0.000	0	N.D.		
50) 1,3-Dichloropropane		0.000	12.188	0.000	0	N.D.		
51) Tetrachloroethylene		0.000	12.188	0.000	0	N.D.		
52) Dibromochloromethane	129	12.457	12.457	0.954	9410	3.08	ug/L	100
53) 1,2-Dibromoethane		0.000	12.621	0.000	0	N.D.		
54) Chlorobenzene		0.000	13.097	0.000	0	N.D.		
55) 1,1,1,2-Tetrachloroethane		0.000	13.152	0.000	0	N.D.		
56) Ethylbenzene	91	13.060	13.158	1.000	1060	N.D.		
57) m,p-Xylenes	106	13.280	13.267	1.017	106	N.D.		
58) o-Xylene		0.000	13.700	0.000	0	N.D.		
59) Styrene		0.000	13.706	0.000	0	N.D.		
61) Bromoform	173	13.975	13.975	0.903	11017	6.45	ug/L	94
62) Isopropylbenzene		0.000	14.060	0.000	0	N.D.		
64) 1,1,2,2-Tetrachloroethane	83	14.261	14.359	0.921	242	N.D.		
65) 1,2,3-Trichloropropane		0.000	14.444	0.000	0	N.D.		
66) Bromobenzene		0.000	14.468	0.000	0	N.D.		
67) n-Propylbenzene		0.000	14.487	0.000	0	N.D.		
68) 1,3,5-Trimethylbenzene		0.000	14.639	0.000	0	N.D.		
69) 2-Chlorotoluene		0.000	14.633	0.000	0	N.D.		
70) 4-Chlorotoluene		0.000	14.743	0.000	0	N.D.		
71) tert-Butylbenzene		0.000	15.011	0.000	0	N.D.		
72) 1,2,4-Trimethylbenzene		0.000	15.054	0.000	0	N.D.		
73) sec-Butylbenzene	105	15.322	15.237	0.990	321	N.D.		
74) 4-Isopropyltoluene	119	15.322	15.359	0.990	1095	N.D.		
75) 1,3-Dichlorobenzene	146	15.420	15.419	0.996	732	N.D.		
76) 1,4-Dichlorobenzene	146	15.505	15.505	1.002	385	N.D.		
77) n-Butylbenzene	91	15.798	15.791	1.020	214	N.D.		
78) 1,2-Dichlorobenzene	146	15.926	15.919	1.029	176	N.D.		
79) 1,2-Dibromo-3-chloropr...		0.000	16.785	0.000	0	N.D.		
80) 1,2,4-Trichlorobenzene		0.000	17.791	0.000	0	N.D.		
81) Hexachlorobutadiene		0.000	17.949	0.000	0	N.D.		
82) Naphthalene	128	18.181	18.163	1.174	1009	N.D.		
83) 1,2,3-Trichlorobenzene		0.000	18.492	0.000	0	N.D.		
85) Acrolein		0.000	6.470	0.000	0	N.D.		
86) Trichlorotrifluoroethane		0.000	6.586	0.000	0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W110.D
Acq On : 19 Dec 2022 14:47
Operator : KP2
InstName : VOA3
Sample : |604449002|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 20 08:10:12 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

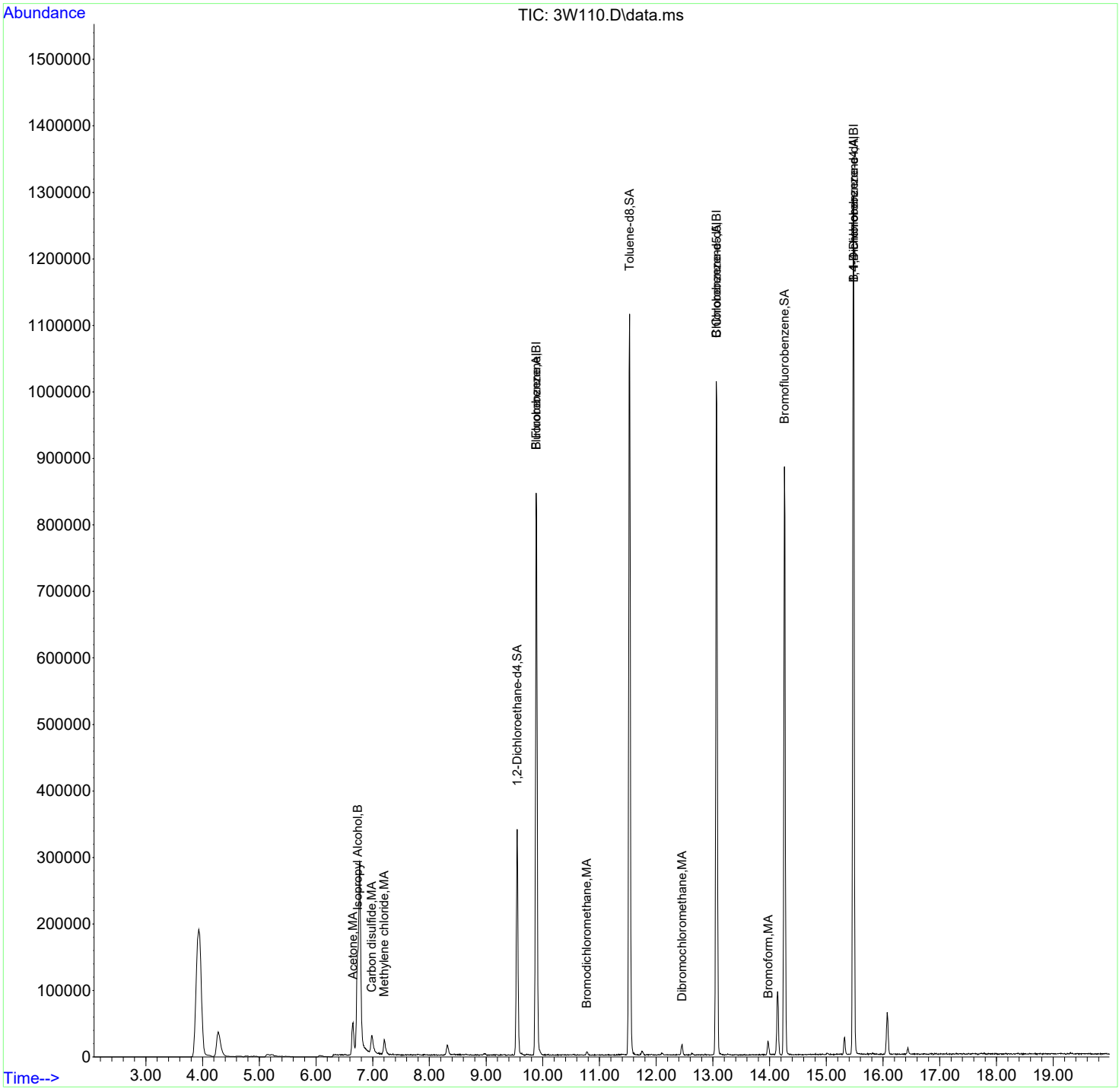
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
87) Isopropyl Alcohol	45	6.732	6.732	0.681	388770	1618.74	ug/L #	56
88) Allyl chloride		0.000	7.062	0.000	0m	N.D.	d	
89) tert-Butyl Alcohol		0.000	7.220	0.000	0	N.D.		
90) Acrylonitrile		0.000	7.482	0.000	0	N.D.		
91) Isopropyl ether	45	7.915	7.988	0.801	351	N.D.		
92) 2-Chloro-1,3-butadiene		0.000	8.122	0.000	0	N.D.		
93) Ethyl tert-butyl ether	59	8.317	8.391	0.841	426	N.D.		
94) Ethyl acetate	43	8.640	8.628	0.874	1738	N.D.		
95) Propionitrile		0.000	8.720	0.000	0	N.D.		
96) Methacrylonitrile		0.000	8.884	0.000	0	N.D.		
97) Tetrahydrofuran		0.000	8.976	0.000	0	N.D.		
98) Isobutyl alcohol		0.000	9.323	0.000	0	N.D.		
99) Methyl tert-amyl ether		0.000	9.640	0.000	0	N.D.		
100) Methyl methacrylate		0.000	10.506	0.000	0	N.D.		
101) 1,4-Dioxane		0.000	10.616	0.000	0	N.D.		
102) 2-Nitropropane	43	11.006	11.006	1.113	117	N.D.		
104) Ethyl methacrylate		0.000	11.774	0.000	0	N.D.		
106) 1-Chlorohexane		0.000	12.963	0.000	0	N.D.		
107) cis-1,4-Dichloro-2-butene		0.000	14.121	0.000	0	N.D.		
108) Cyclohexanone		0.000	14.237	0.000	0	N.D.		
109) trans-1,4-Dichloro-2-b...		0.000	14.408	0.000	0	N.D.		
110) Pentachloroethane		0.000	15.084	0.000	0	N.D.		
111) Benzyl chloride	91	15.487	15.627	1.000	866	N.D.		
112) bis(2-Chloroisopropyl)...		0.000	16.023	0.000	0	N.D.		

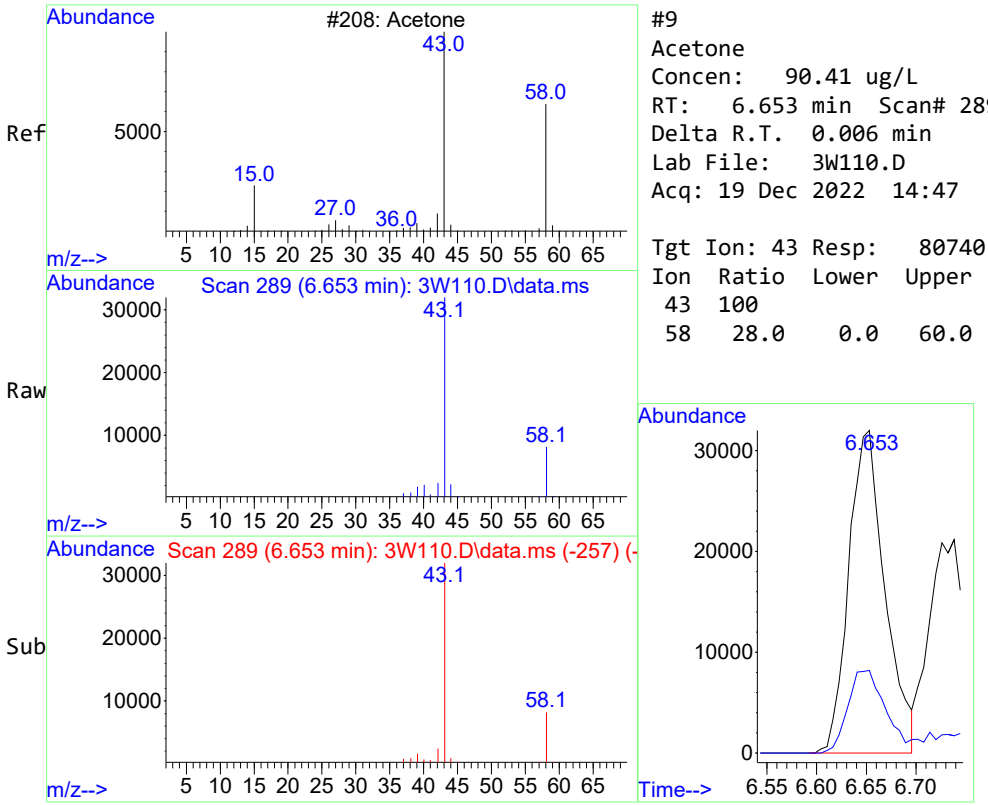
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W110.D
Acq On : 19 Dec 2022 14:47
Operator : KP2
InstName : VOA3
Sample : |604449002|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 20 08:10:12 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

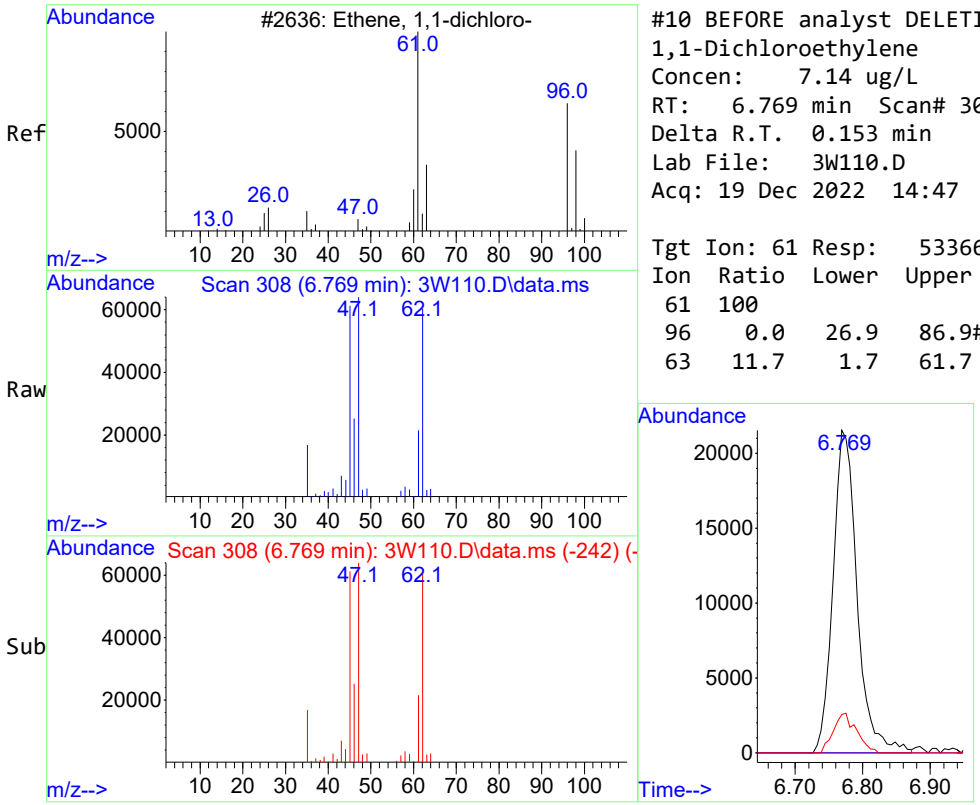




#9
Acetone
Concen: 90.41 ug/L
RT: 6.653 min Scan# 289
Delta R.T. 0.006 min
Lab File: 3W110.D
Acq: 19 Dec 2022 14:47

Tgt Ion: 43 Resp: 80740

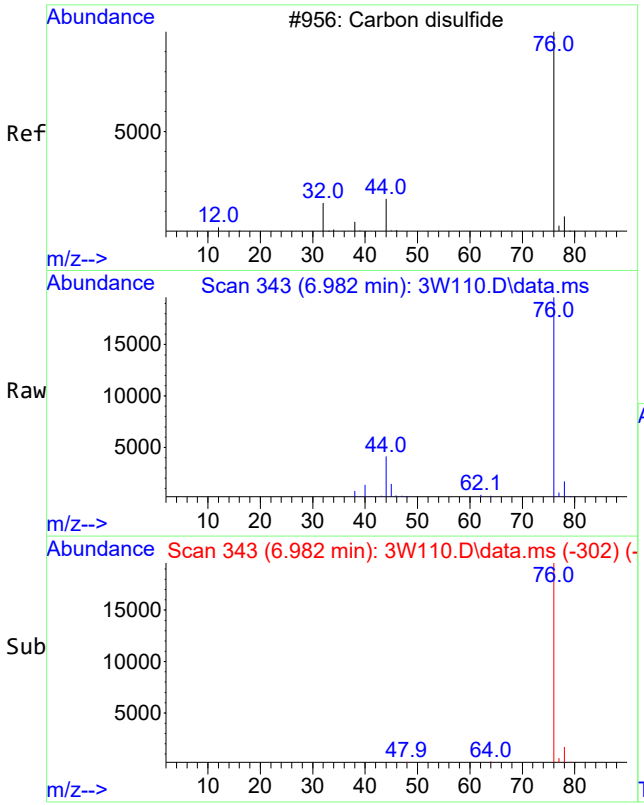
Ion	Ratio	Lower	Upper
43	100		
58	28.0	0.0	60.0



#10 BEFORE analyst DELETION
1,1-Dichloroethylene
Concen: 7.14 ug/L
RT: 6.769 min Scan# 308
Delta R.T. 0.153 min
Lab File: 3W110.D
Acq: 19 Dec 2022 14:47

Tgt Ion: 61 Resp: 53366

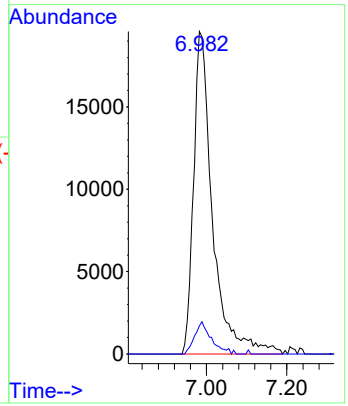
Ion	Ratio	Lower	Upper
61	100		
96	0.0	26.9	86.9#
63	11.7	1.7	61.7

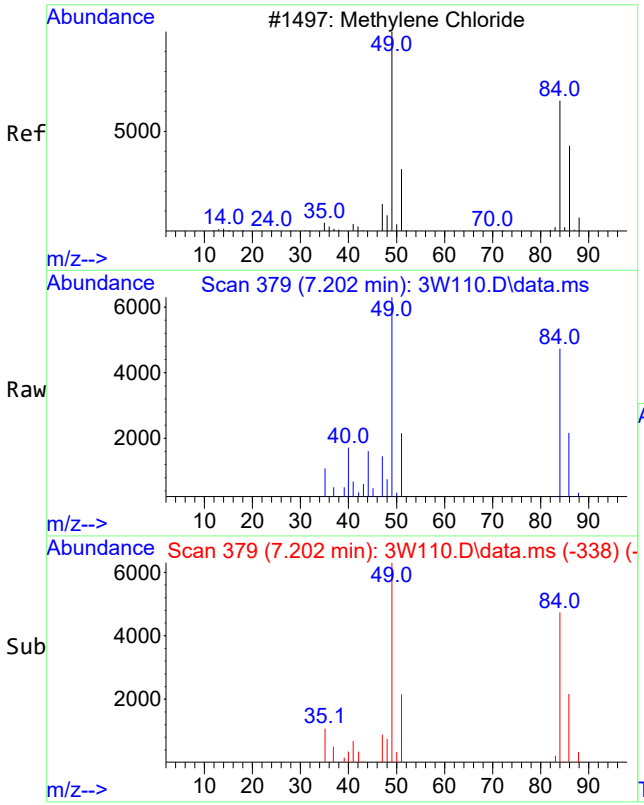


#14
Carbon disulfide
Concen: 4.38 ug/L
RT: 6.982 min Scan# 343
Delta R.T. 0.000 min
Lab File: 3W110.D
Acq: 19 Dec 2022 14:47

Tgt Ion: 76 Resp: 63922

Ion	Ratio	Lower	Upper
76	100		
78	8.8	0.0	39.5

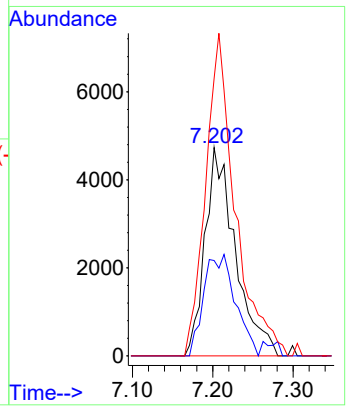


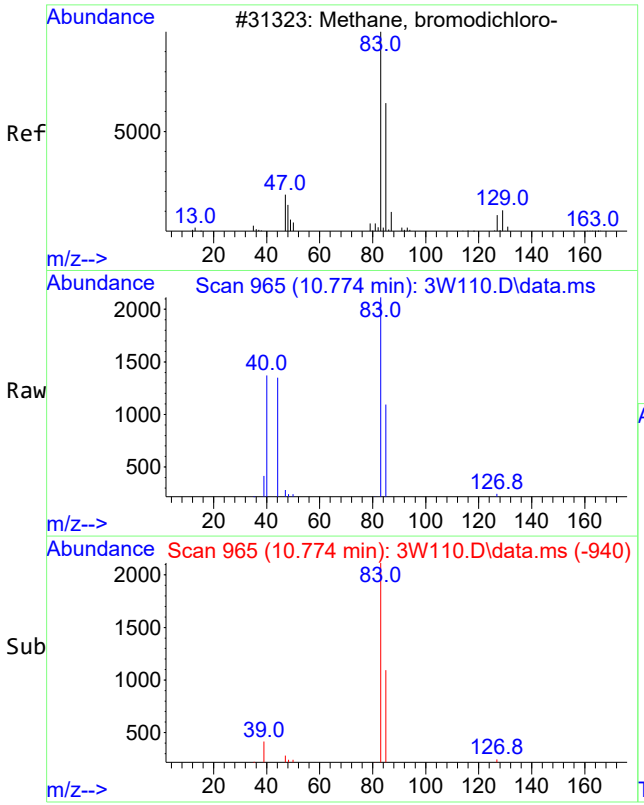


#15
Methylene chloride
Concen: 2.64 ug/L
RT: 7.202 min Scan# 379
Delta R.T. -0.000 min
Lab File: 3W110.D
Acq: 19 Dec 2022 14:47

Tgt Ion: 84 Resp: 12409

Ion	Ratio	Lower	Upper
84	100		
86	50.7	34.2	94.2
49	150.7	110.5	170.5

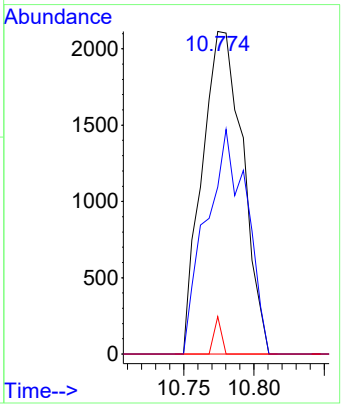


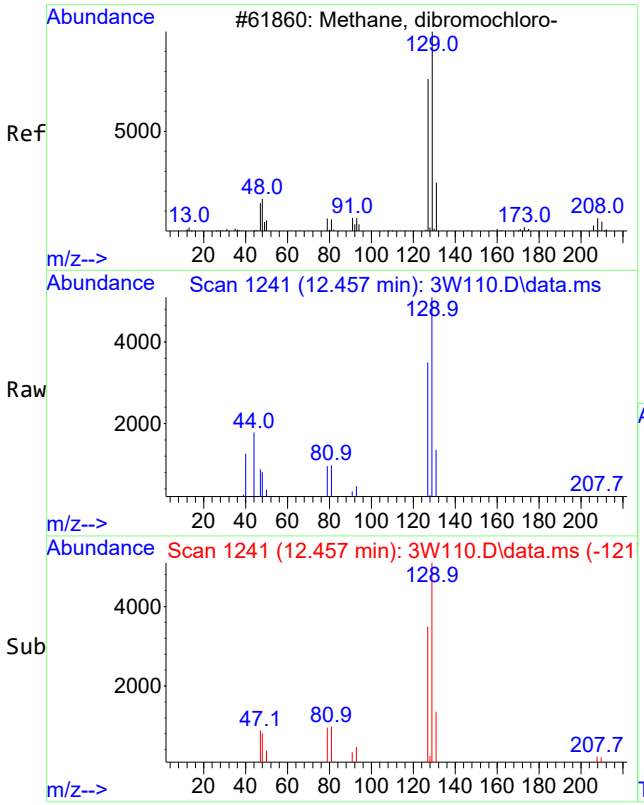


#40
Bromodichloromethane
Concen: 0.89 ug/L
RT: 10.774 min Scan# 965
Delta R.T. -0.006 min
Lab File: 3W110.D
Acq: 19 Dec 2022 14:47

Tgt Ion: 83 Resp: 4262

Ion	Ratio	Lower	Upper
83	100		
85	69.5	34.0	94.0
127	0.0	0.0	28.2

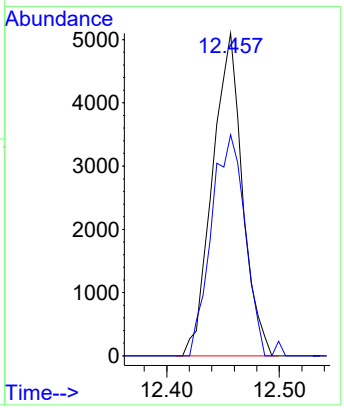


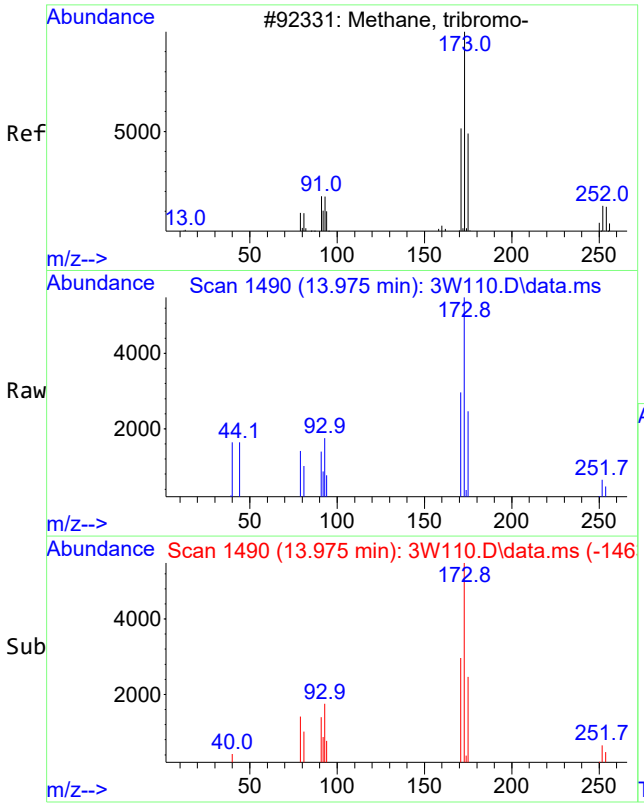


#52
Dibromochloromethane
Concen: 3.08 ug/L
RT: 12.457 min Scan# 1241
Delta R.T. -0.000 min
Lab File: 3W110.D
Acq: 19 Dec 2022 14:47

Tgt Ion:129 Resp: 9410

Ion	Ratio	Lower	Upper
129	100		
127	77.0	47.0	107.0

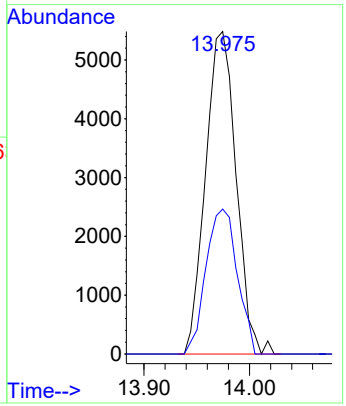


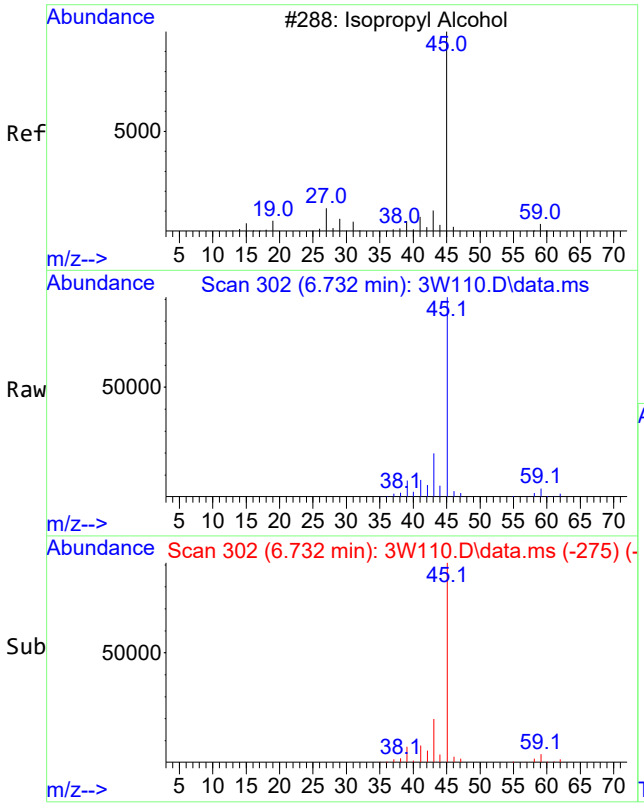


#61
Bromoform
Concen: 6.45 ug/L
RT: 13.975 min Scan# 1490
Delta R.T. -0.000 min
Lab File: 3W110.D
Acq: 19 Dec 2022 14:47

Tgt Ion:173 Resp: 11017

Ion	Ratio	Lower	Upper
173	100		
175	46.0	19.9	79.9

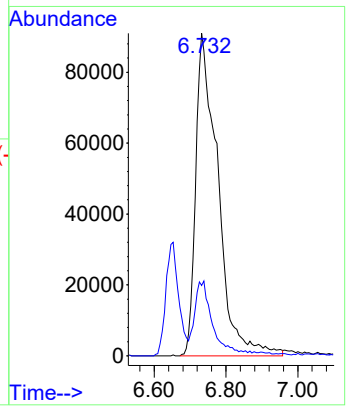


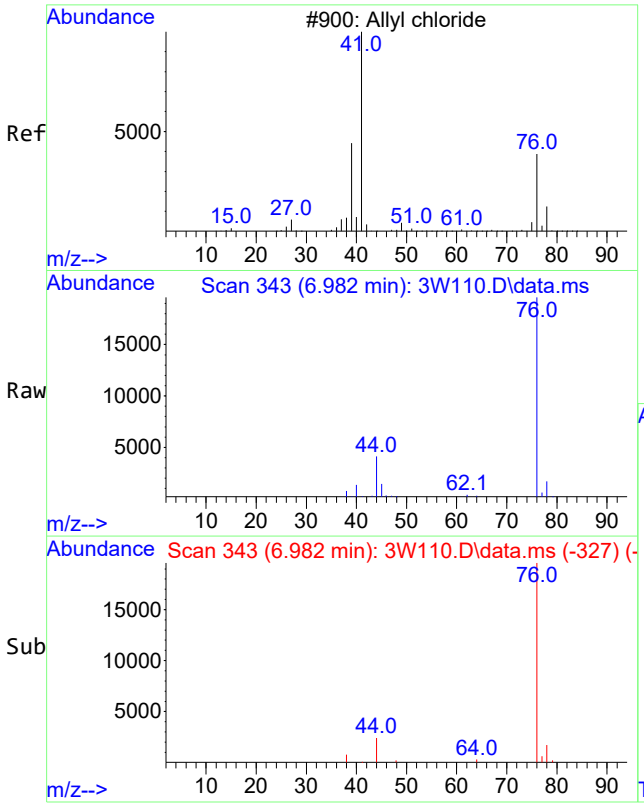


#87
Isopropyl Alcohol
Concen: 1618.74 ug/L
RT: 6.732 min Scan# 302
Delta R.T. 0.000 min
Lab File: 3W110.D
Acq: 19 Dec 2022 14:47

Tgt Ion: 45 Resp: 388770

Ion	Ratio	Lower	Upper
45	100		
43	0.0	0.0	50.0

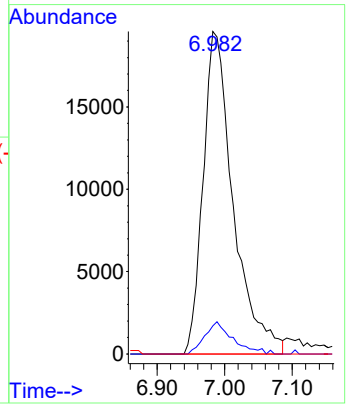




#88 BEFORE analyst DELETION
Allyl chloride
Concen: 27.02 ug/L
RT: 6.982 min Scan# 343
Delta R.T. -0.080 min
Lab File: 3W110.D
Acq: 19 Dec 2022 14:47

Tgt Ion: 76 Resp: 60636

Ion	Ratio	Lower	Upper
76	100		
78	9.3	2.8	62.8
49	0.0	0.0	44.7



Library Search Compound Report
GEL Laboratories, LLC

12/21/2022

12/22/2022

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W110.D
Acq On : 19 Dec 2022 14:47
Operator : KP2
Sample : |604449002|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 10 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

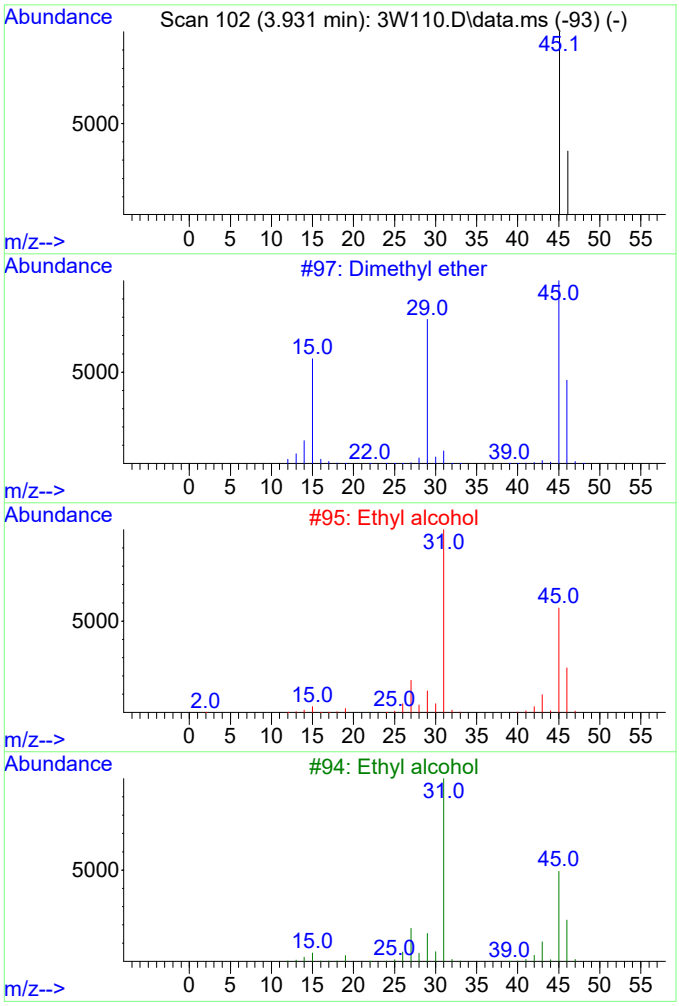
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

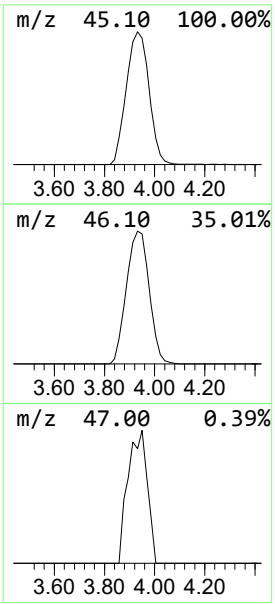
****

Peak Number 1 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.931	34.82 ug/L	1225780	Fluorobenzene	9.884

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dimethyl ether	46	C2H6O	000115-10-6	5
2	Ethyl alcohol	46	C2H6O	000064-17-5	4
3	Ethyl alcohol	46	C2H6O	000064-17-5	4
4	Ethyl alcohol	46	C2H6O	000064-17-5	4
5	Formic acid	46	CH2O2	000064-18-6	3





Library Search Compound Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W110.D
Acq On : 19 Dec 2022 14:47
Operator : KP2
Sample : |604449002|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 10 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

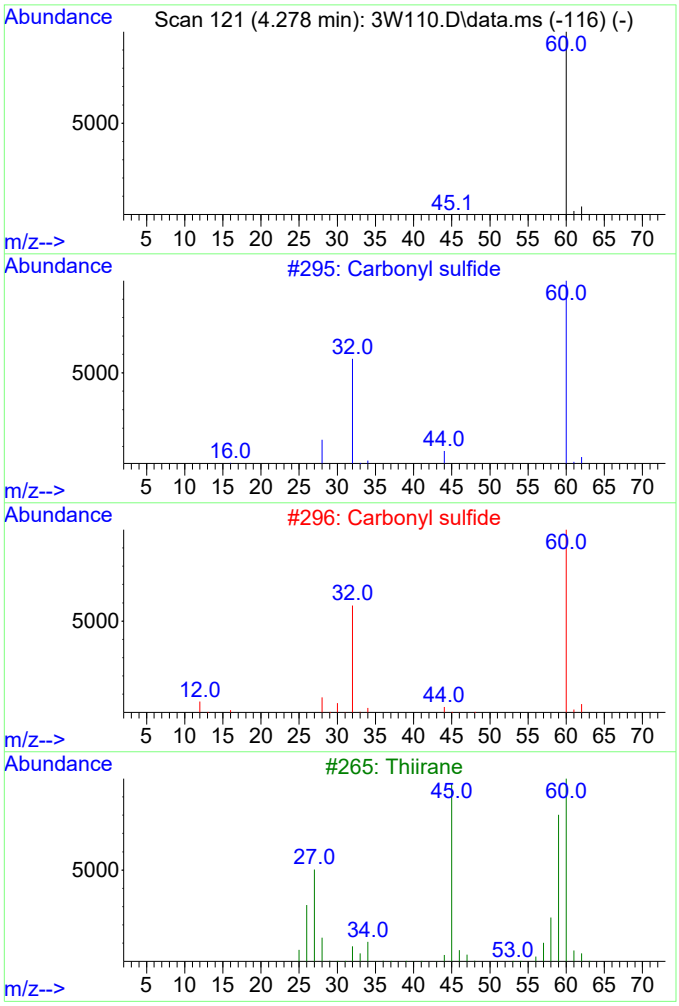
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

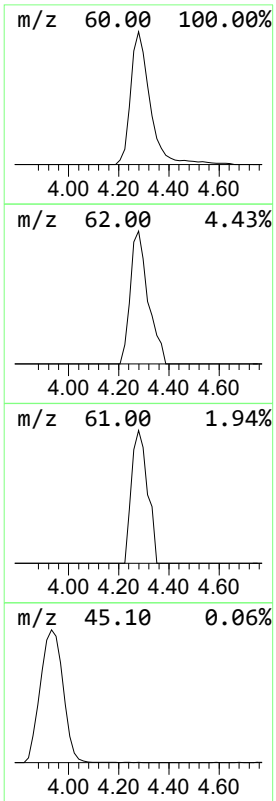
****

Peak Number 2 unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.278	5.45 ug/L	191896	Fluorobenzene	9.884

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Carbonyl sulfide	60	COS	000463-58-1	5
2	Carbonyl sulfide	60	COS	000463-58-1	5
3	Thiirane	60	C2H4S	000420-12-2	4
4	Hydrazine, 1,1-dimethyl-	60	C2H8N2	000057-14-7	4
5	Urea	60	CH4N2O	000057-13-6	4





Library Search Compound Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W110.D
Acq On : 19 Dec 2022 14:47
Operator : KP2
Sample : |604449002|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 10 Sample Multiplier: 1

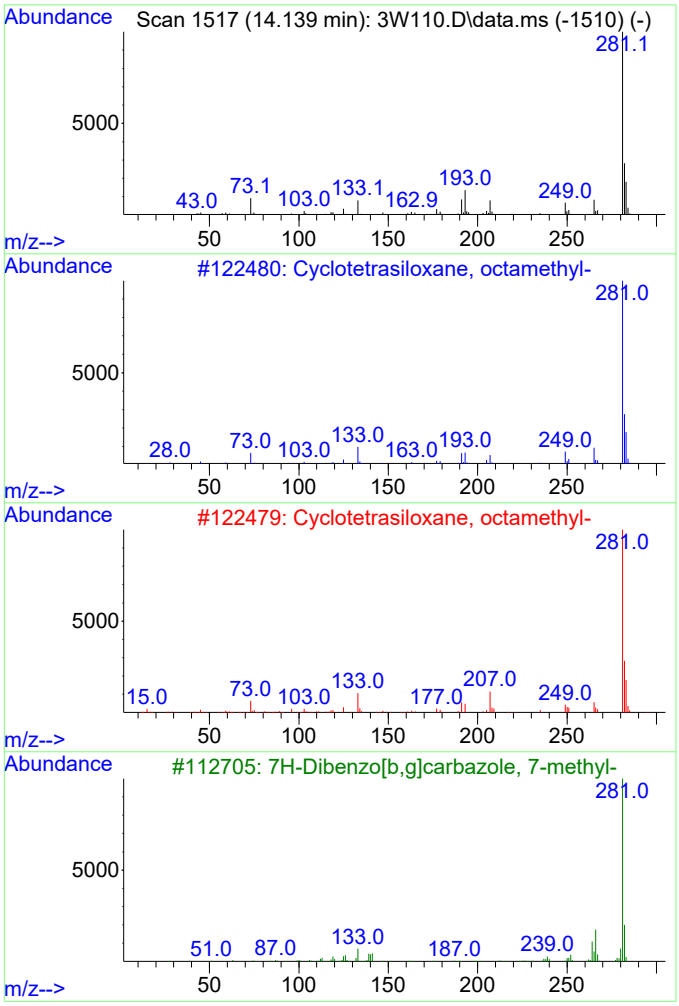
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

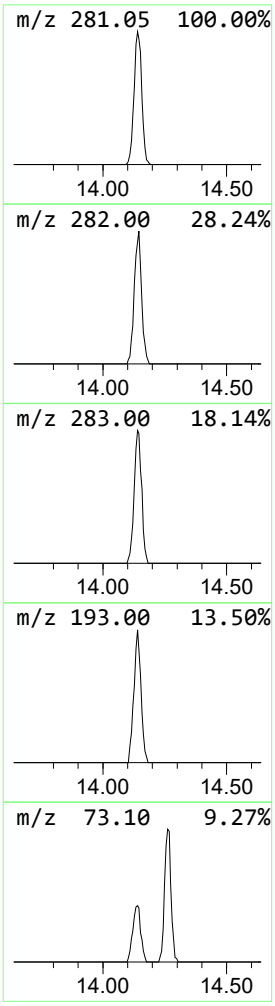
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

****
Peak Number 3 Cyclotetrasiloxane, octamet... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.139	5.13 ug/L	200740	B Chlorobenzene-d5	13.060

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	90
2	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	86
3	7H-Dibenzo[b,g]carbazole, 7-methyl-	281	C21H15N	003557-49-1	53
4	Benzoic acid, 4-methyl-2-trimeth...	296	C14H24O3Si2	1000153-59-3	50
5	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	49





Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W110.D
Acq On : 19 Dec 2022 14:47
Operator : KP2
Sample : |604449002|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 10 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

			(ug/L)		Internal Standard		
TIC Top Hit name	CAS #	RT	EstConc	Response	#	RT	Resp	Conc
unknown		3.931	34.8	1225780	1	9.884	1760060	50.0
unknown		4.278	5.5	191896	1	9.884	1760060	50.0
Cyclotetrasiloxane, octamet...	000556-67-2	14.139	5.1	200740	4	13.060	1956760	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**604449002**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265371RA**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 23:47**	**Analyst:**	**JM6**	**Purge Vol:**	**5 mL**
Prep Date:	**12/20/2022 23:47**				
Data File:	**122022V3\3W238.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
542-75-6	1,3-Dichloropropylene	U	0.500	ug/L	0.500	2.00
75-71-8	Dichlorodifluoromethane	U	0.355	ug/L	0.355	1.00
74-87-3	Chloromethane	U	0.333	ug/L	0.333	1.00
75-01-4	Vinyl chloride	U	0.333	ug/L	0.333	1.00
74-83-9	Bromomethane	U	0.337	ug/L	0.337	1.00
75-69-4	Trichlorofluoromethane	U	0.333	ug/L	0.333	1.00
75-35-4	1,1-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-09-2	Methylene chloride	J	2.59	ug/L	0.500	5.00
1634-04-4	tert-Butyl methyl ether	U	0.333	ug/L	0.333	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-34-3	1,1-Dichloroethane	U	0.333	ug/L	0.333	1.00
156-59-2	cis-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
67-66-3	Chloroform	U	0.333	ug/L	0.333	1.00
71-55-6	1,1,1-Trichloroethane	U	0.333	ug/L	0.333	1.00
56-23-5	Carbon tetrachloride	U	0.333	ug/L	0.333	1.00
107-06-2	1,2-Dichloroethane	U	0.333	ug/L	0.333	1.00
71-43-2	Benzene	U	0.333	ug/L	0.333	1.00
79-01-6	Trichloroethylene	U	0.333	ug/L	0.333	1.00
78-87-5	1,2-Dichloropropane	U	0.333	ug/L	0.333	1.00
74-95-3	Dibromomethane	U	0.333	ug/L	0.333	1.00
75-27-4	Bromodichloromethane		1.05	ug/L	0.333	1.00
108-88-3	Toluene	U	0.333	ug/L	0.333	1.00
79-00-5	1,1,2-Trichloroethane	U	0.333	ug/L	0.333	1.00
127-18-4	Tetrachloroethylene	U	0.333	ug/L	0.333	1.00
106-93-4	1,2-Dibromoethane	U	0.333	ug/L	0.333	1.00
108-90-7	Chlorobenzene	U	0.333	ug/L	0.333	1.00
100-41-4	Ethylbenzene	U	0.333	ug/L	0.333	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.333	ug/L	0.333	1.00
100-42-5	Styrene	U	0.333	ug/L	0.333	1.00
75-25-2	Bromoform		6.45	ug/L	0.333	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.333	ug/L	0.333	1.00
106-46-7	1,4-Dichlorobenzene	U	0.333	ug/L	0.333	1.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	1.00	3.00
120-82-1	1,2,4-Trichlorobenzene	U	0.333	ug/L	0.333	1.00
95-50-1	1,2-Dichlorobenzene	U	0.333	ug/L	0.333	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**604449002**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265371RA**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 23:47**	**Analyst:**	**JM6**	**Purge Vol:**	**5 mL**
Prep Date:	**12/20/2022 23:47**				
Data File:	**122022V3\3W238.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	52.1	50.0	ug/L	104	(73%-129%)
Bromofluorobenzene	46.8	50.0	ug/L	94	(72%-125%)
Toluene-d8	53.4	50.0	ug/L	107	(75%-123%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.931	85.5	ug/L	0	J
	unknown	4.278	14.9	ug/L	0	J
	unknown	14.139	42.2	ug/L	0	J

Quantitation Report
GEL Laboratories, LLC

12/21/2022

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W238.D
Acq On : 20 Dec 2022 23:47
Operator : JM6
InstName : VOA3
Sample : |604449002|2358452|1|VOA|2|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 38 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 21 06:40:16 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	96	9.884	9.884	1.000	829576	50.00	ug/L	0.00
43) Chlorobenzene-d5	117	13.060	13.066	1.000	583960	50.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	152	15.480	15.480	1.000	363785	50.00	ug/L	0.00
84) B Fluorobenzene	96	9.884	9.884	1.000	829514	50.00	ug/L	0.00
103) B Chlorobenzene-d5	117	13.060	13.060	1.000	583960	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	15.480	15.481	1.000	363785	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
30) 1,2-Dichloroethane-d4	67	9.549	9.549	0.966	131981	52.13	ug/L	0.00
45) Toluene-d8	98	11.530	11.530	0.883	836249	53.38	ug/L	0.00
63) Bromofluorobenzene	95	14.261	14.261	0.921	319293	46.80	ug/L	0.00

Compound	Amount	Range	Recovery
30) 1,2-Dichloroethane-d4	50.000	73 - 129	104%
45) Toluene-d8	50.000	75 - 123	107%
63) Bromofluorobenzene	50.000	72 - 125	94%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		0.000	4.260	0.000	0	N.D.		
3) Chloromethane	50	4.662	4.644	0.472	2045	N.D.		
4) Vinyl chloride		0.000	4.826	0.000	0	N.D.		
5) Bromomethane		0.000	5.411	0.000	0	N.D.		
6) Chloroethane		0.000	5.557	0.000	0	N.D.		
7) Trichlorofluoromethane		0.000	5.904	0.000	0	N.D.		
8) Ethyl ether	59	6.251	6.232	0.632	685	N.D.		
9) Acetone	43	6.653	6.647	0.673	67264	72.50	ug/L	97
10) 1,1-Dichloroethylene		0.000	6.616	0.000	0m	N.D.	d	
11) Iodomethane	142	6.854	6.866	0.693	330	N.D.		
12) Acetonitrile	41	7.031	7.013	0.711	2894	N.D.		
13) Methyl acetate		0.000	7.025	0.000	0	N.D.		
14) Carbon disulfide	76	6.988	6.982	0.707	69900	4.61	ug/L	95
15) Methylene chloride	84	7.202	7.202	0.729	12651	2.59	ug/L	92
16) tert-Butyl methyl ether		0.000	7.482	0.000	0	N.D.		
17) trans-1,2-Dichloroethy...		0.000	7.531	0.000	0	N.D.		
18) Hexane	57	7.793	7.799	0.788	5733	N.D.		
19) Vinyl acetate	43	7.805	7.988	0.790	3911	N.D.		
20) 1,1-Dichloroethane		0.000	8.018	0.000	0	N.D.		
21) 2-Butanone		0.000	8.622	0.000	0m	N.D.	d	
22) cis-1,2-Dichloroethylene		0.000	8.659	0.000	0	N.D.		
23) 2,2-Dichloropropane		0.000	8.671	0.000	0	N.D.		
24) Bromochloromethane		0.000	8.933	0.000	0	N.D.		
25) Chloroform	83	8.982	8.970	0.909	2238	N.D.		
26) 1,1,1-Trichloroethane		0.000	9.226	0.000	0	N.D.		
27) Cyclohexane		0.000	9.305	0.000	0	N.D.		
28) 1,1-Dichloropropene	75	9.415	9.384	0.953	114	N.D.		
29) Carbon tetrachloride		0.000	9.415	0.000	0	N.D.		
31) 1,2-Dichloroethane		0.000	9.628	0.000	0	N.D.		
32) Benzene	78	9.622	9.628	0.973	729	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W238.D
Acq On : 20 Dec 2022 23:47
Operator : JM6
InstName : VOA3
Sample : |604449002|2358452|1|VOA|2|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Dec 21 06:40:16 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
33) Cyclohexene		0.000	9.732	0.000	0	N.D.		
34) n-Butyl alcohol	56	10.024	10.012	1.014	1853	N.D.		
35) Trichloroethylene		0.000	10.268	0.000	0	N.D.		
36) 2-Pentanone	43	10.390	10.378	1.051	109	N.D.		
37) 1,2-Dichloropropane		0.000	10.530	0.000	0	N.D.		
38) Methylcyclohexane		0.000	10.494	0.000	0	N.D.		
39) Dibromomethane		0.000	10.664	0.000	0	N.D.		
40) Bromodichloromethane	83	10.780	10.780	1.091	5240	1.05	ug/L	94
41) 2-Chloroethylvinyl ether		0.000	11.006	0.000	0	N.D.		
42) cis-1,3-Dichloropropylene		0.000	11.231	0.000	0	N.D.		
44) 4-Methyl-2-pentanone	43	11.335	11.329	0.868	2574	N.D.		
46) Toluene	91	11.603	11.603	0.888	1086	N.D.		
47) trans-1,3-Dichloroprop...	75	11.762	11.780	0.901	183	N.D.		
48) 1,1,2-Trichloroethane		0.000	11.999	0.000	0m	N.D.	d	
49) 2-Hexanone	43	12.195	12.182	0.934	516	N.D.		
50) 1,3-Dichloropropane		0.000	12.188	0.000	0	N.D.		
51) Tetrachloroethylene		0.000	12.188	0.000	0	N.D.		
52) Dibromochloromethane	129	12.457	12.457	0.954	9261	3.15	ug/L	92
53) 1,2-Dibromoethane		0.000	12.621	0.000	0	N.D.		
54) Chlorobenzene	112	13.109	13.097	1.004	497	N.D.		
55) 1,1,1,2-Tetrachloroethane		0.000	13.152	0.000	0	N.D.		
56) Ethylbenzene	91	13.158	13.158	1.007	789	N.D.		
57) m,p-Xylenes	106	13.268	13.267	1.016	632	N.D.		
58) o-Xylene		0.000	13.700	0.000	0	N.D.		
59) Styrene	104	13.719	13.706	1.050	425	N.D.		
61) Bromoform	173	13.975	13.975	0.903	10858	6.45	ug/L	100
62) Isopropylbenzene	105	14.145	14.060	0.914	2432	N.D.		
64) 1,1,2,2-Tetrachloroethane		0.000	14.359	0.000	0	N.D.		
65) 1,2,3-Trichloropropane		0.000	14.444	0.000	0	N.D.		
66) Bromobenzene		0.000	14.468	0.000	0	N.D.		
67) n-Propylbenzene	91	14.493	14.487	0.936	1033	N.D.		
68) 1,3,5-Trimethylbenzene	105	14.651	14.639	0.946	193	N.D.		
69) 2-Chlorotoluene		0.000	14.633	0.000	0	N.D.		
70) 4-Chlorotoluene	126	14.749	14.743	0.953	259	N.D.		
71) tert-Butylbenzene		0.000	15.011	0.000	0	N.D.		
72) 1,2,4-Trimethylbenzene	105	15.048	15.054	0.972	427	N.D.		
73) sec-Butylbenzene	105	15.316	15.237	0.989	575	N.D.		
74) 4-Isopropyltoluene	119	15.316	15.359	0.989	849	N.D.		
75) 1,3-Dichlorobenzene	146	15.426	15.419	0.996	1685	N.D.		
76) 1,4-Dichlorobenzene	146	15.505	15.505	1.002	1793	N.D.		
77) n-Butylbenzene	91	15.785	15.791	1.020	1315	N.D.		
78) 1,2-Dichlorobenzene	146	15.926	15.919	1.029	719	N.D.		
79) 1,2-Dibromo-3-chloropr...		0.000	16.785	0.000	0	N.D.		
80) 1,2,4-Trichlorobenzene	180	17.785	17.791	1.149	1753	N.D.		
81) Hexachlorobutadiene		0.000	17.949	0.000	0	N.D.		
82) Naphthalene	128	18.169	18.163	1.174	5130	N.D.		
83) 1,2,3-Trichlorobenzene	180	18.504	18.492	1.195	1942	N.D.		
85) Acrolein		0.000	6.470	0.000	0	N.D.		
86) Trichlorotrifluoroethane		0.000	6.586	0.000	0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W238.D
Acq On : 20 Dec 2022 23:47
Operator : JM6
InstName : VOA3
Sample : |604449002|2358452|1|VOA|2|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Dec 21 06:40:16 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

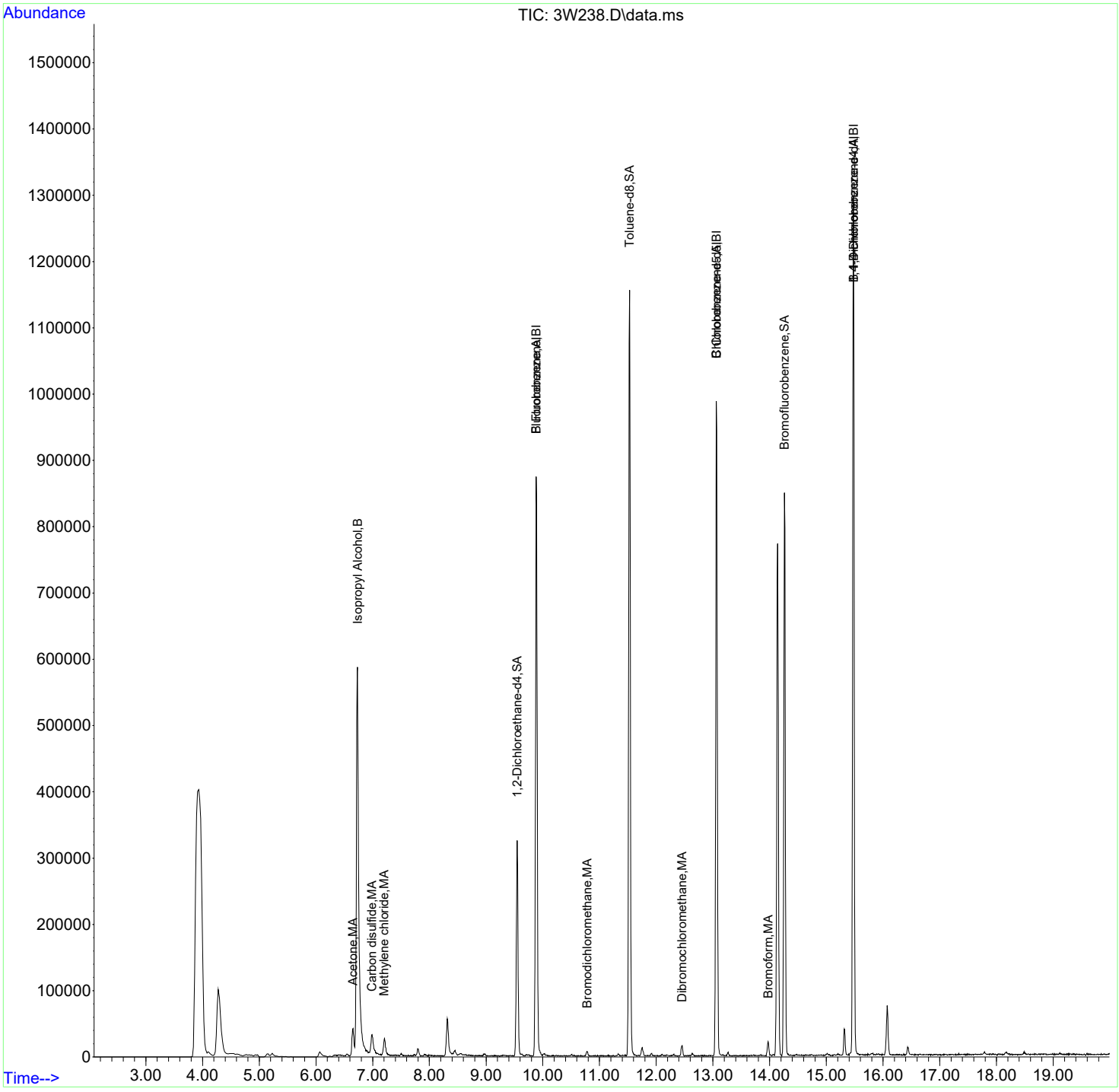
	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
87)	Isopropyl Alcohol	45	6.732	6.732	0.681	1066877	4277.60	ug/L	95
88)	Allyl chloride		0.000	7.062	0.000	0m	N.D.	d	
89)	tert-Butyl Alcohol	59	7.214	7.220	0.730	607	N.D.		
90)	Acrylonitrile		0.000	7.482	0.000	0	N.D.		
91)	Isopropyl ether	45	7.988	7.988	0.808	285	N.D.		
92)	2-Chloro-1,3-butadiene	53	8.293	8.122	0.839	367	N.D.		
93)	Ethyl tert-butyl ether	59	8.317	8.391	0.841	2266	N.D.		
94)	Ethyl acetate	43	8.622	8.628	0.872	2593	N.D.		
95)	Propionitrile		0.000	8.720	0.000	0	N.D.		
96)	Methacrylonitrile		0.000	8.884	0.000	0	N.D.		
97)	Tetrahydrofuran		0.000	8.976	0.000	0	N.D.		
98)	Isobutyl alcohol	43	9.348	9.323	0.946	320	N.D.		
99)	Methyl tert-amyl ether		0.000	9.640	0.000	0	N.D.		
100)	Methyl methacrylate		0.000	10.506	0.000	0	N.D.		
101)	1,4-Dioxane		0.000	10.616	0.000	0	N.D.		
102)	2-Nitropropane		0.000	11.006	0.000	0	N.D.		
104)	Ethyl methacrylate	69	11.743	11.774	0.899	109	N.D.		
106)	1-Chlorohexane		0.000	12.963	0.000	0	N.D.		
107)	cis-1,4-Dichloro-2-butene		0.000	14.121	0.000	0	N.D.		
108)	Cyclohexanone		0.000	14.237	0.000	0	N.D.		
109)	trans-1,4-Dichloro-2-b...		0.000	14.408	0.000	0	N.D.		
110)	Pentachloroethane		0.000	15.084	0.000	0	N.D.		
111)	Benzyl chloride	91	15.627	15.627	1.009	177	N.D.		
112)	bis(2-Chloroisopropyl)...		0.000	16.023	0.000	0	N.D.		

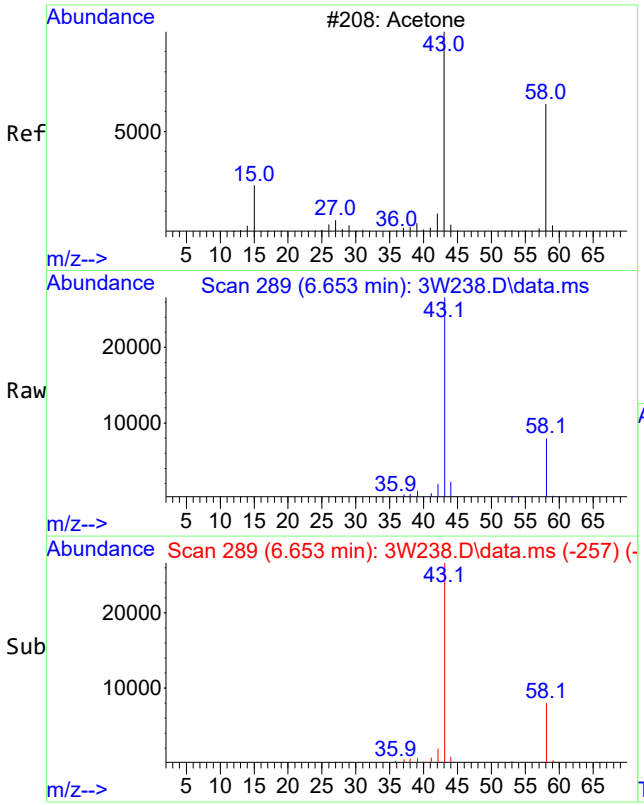
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W238.D
Acq On : 20 Dec 2022 23:47
Operator : JM6
InstName : VOA3
Sample : |604449002|2358452|1|VOA|2|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Dec 21 06:40:16 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

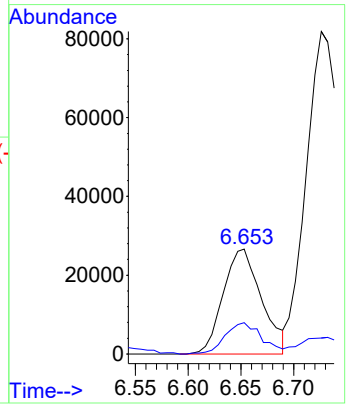


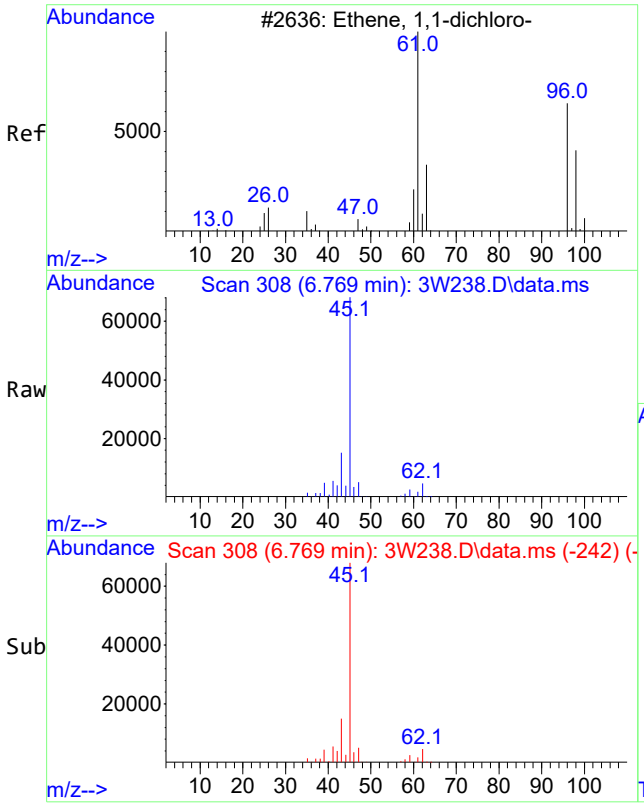


#9
Acetone
Concen: 72.50 ug/L
RT: 6.653 min Scan# 289
Delta R.T. 0.006 min
Lab File: 3W238.D
Acq: 20 Dec 2022 23:47

Tgt Ion: 43 Resp: 67264

Ion	Ratio	Lower	Upper
43	100		
58	28.4	0.0	60.0

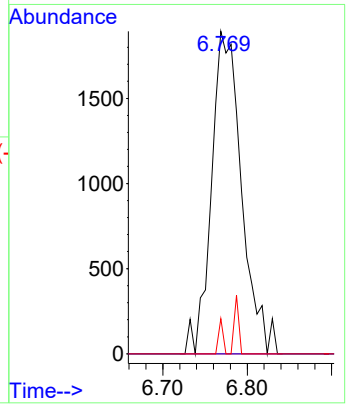


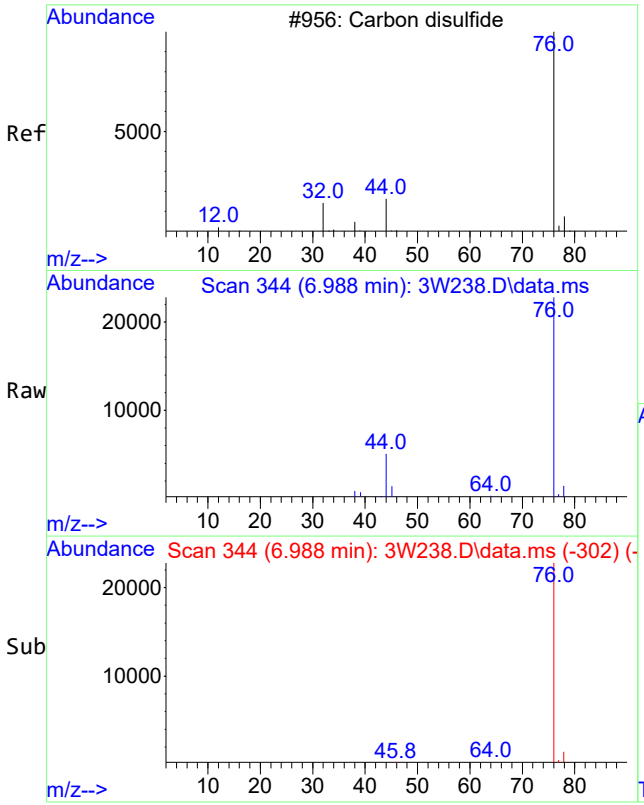


#10 BEFORE analyst DELETION
1,1-Dichloroethylene
Concen: 0.60 ug/L
RT: 6.769 min Scan# 308
Delta R.T. 0.153 min
Lab File: 3W238.D
Acq: 20 Dec 2022 23:47

Tgt Ion: 61 Resp: 4686

Ion	Ratio	Lower	Upper
61	100		
96	0.0	26.9	86.9#
63	2.7	1.7	61.7

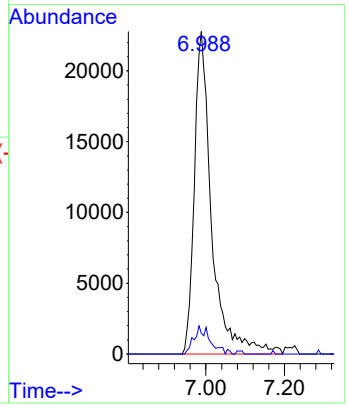


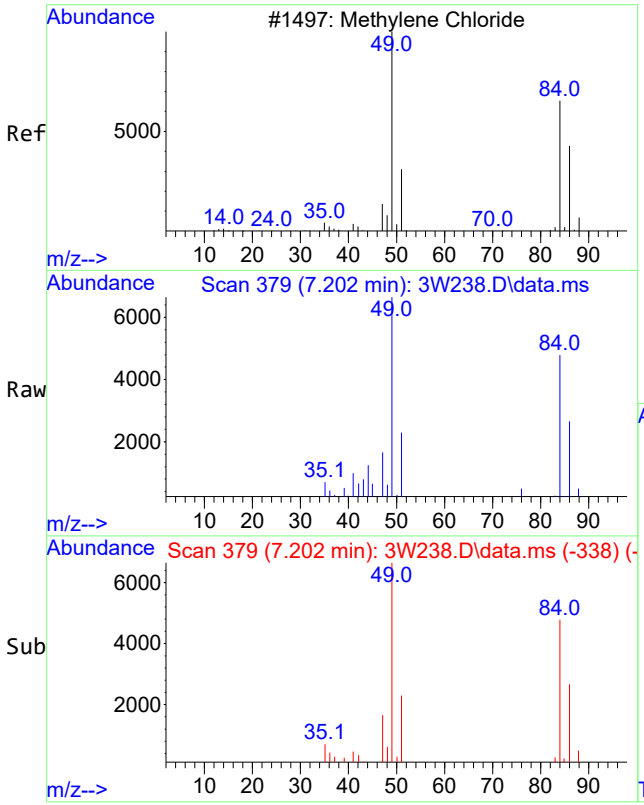


#14
Carbon disulfide
Concen: 4.61 ug/L
RT: 6.988 min Scan# 344
Delta R.T. 0.006 min
Lab File: 3W238.D
Acq: 20 Dec 2022 23:47

Tgt Ion: 76 Resp: 69900

Ion	Ratio	Lower	Upper
76	100		
78	7.8	0.0	39.5

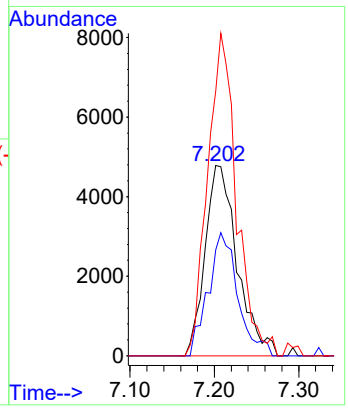


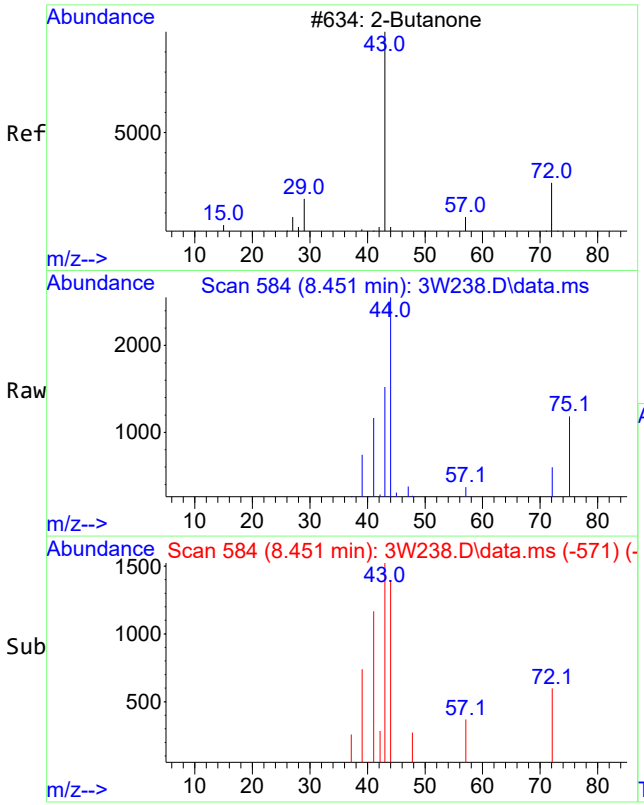


#15
Methylene chloride
Concen: 2.59 ug/L
RT: 7.202 min Scan# 379
Delta R.T. -0.000 min
Lab File: 3W238.D
Acq: 20 Dec 2022 23:47

Tgt Ion: 84 Resp: 12651

Ion	Ratio	Lower	Upper
84	100		
86	59.7	34.2	94.2
49	151.8	110.5	170.5

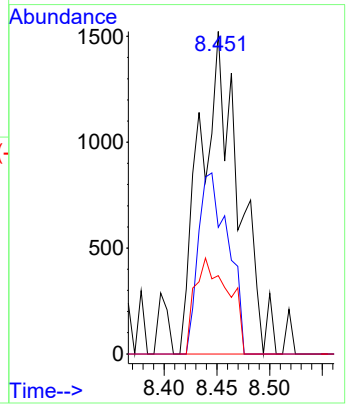


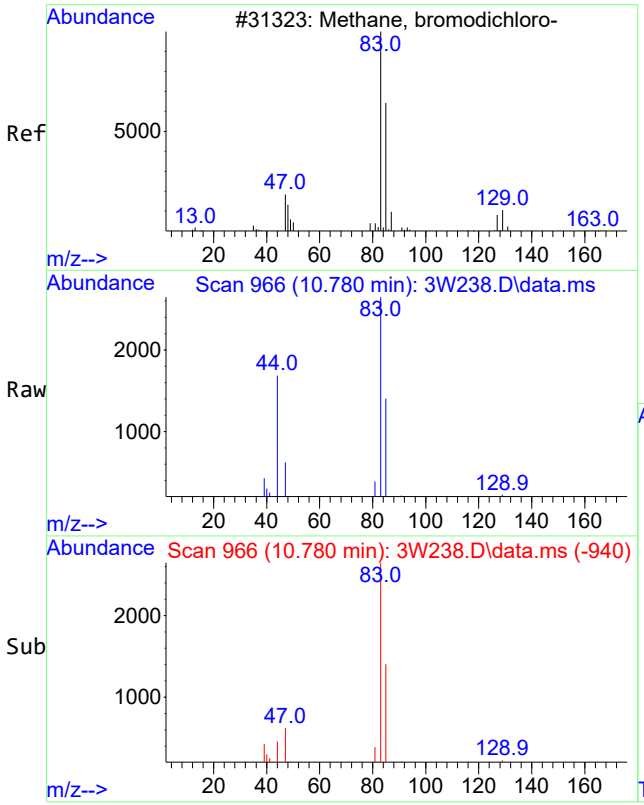


#21 BEFORE analyst DELETION
2-Butanone
Concen: 2.47 ug/L
RT: 8.451 min Scan# 584
Delta R.T. -0.171 min
Lab File: 3W238.D
Acq: 20 Dec 2022 23:47

Tgt Ion: 43 Resp: 3834

Ion	Ratio	Lower	Upper
43	100		
72	43.9	0.0	53.7
57	26.0	0.0	27.7

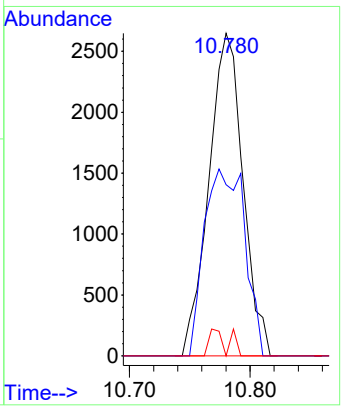


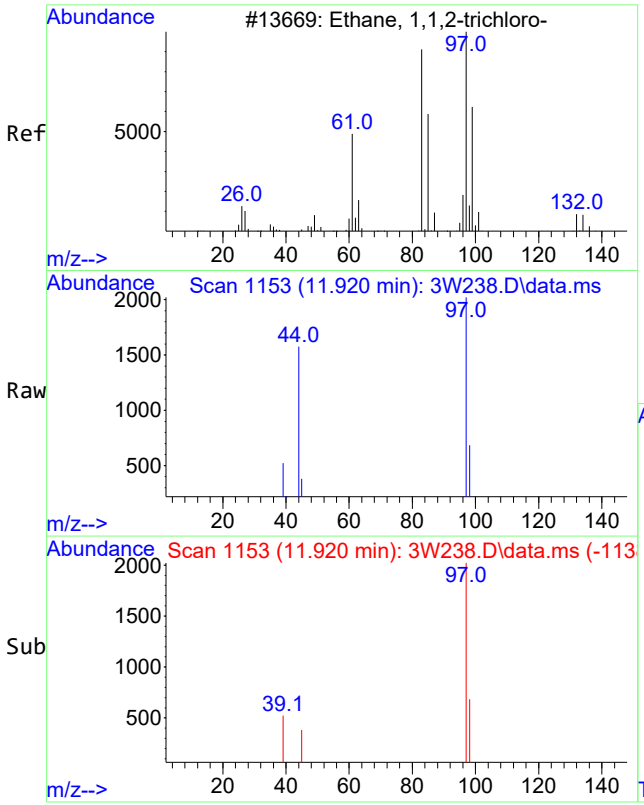


#40
Bromodichloromethane
Concen: 1.05 ug/L
RT: 10.780 min Scan# 966
Delta R.T. 0.000 min
Lab File: 3W238.D
Acq: 20 Dec 2022 23:47

Tgt Ion: 83 Resp: 5240

Ion	Ratio	Lower	Upper
83	100		
85	68.6	34.0	94.0
127	4.5	0.0	28.2

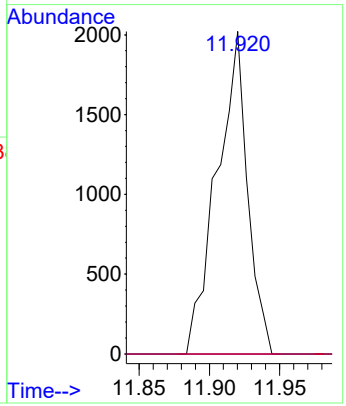


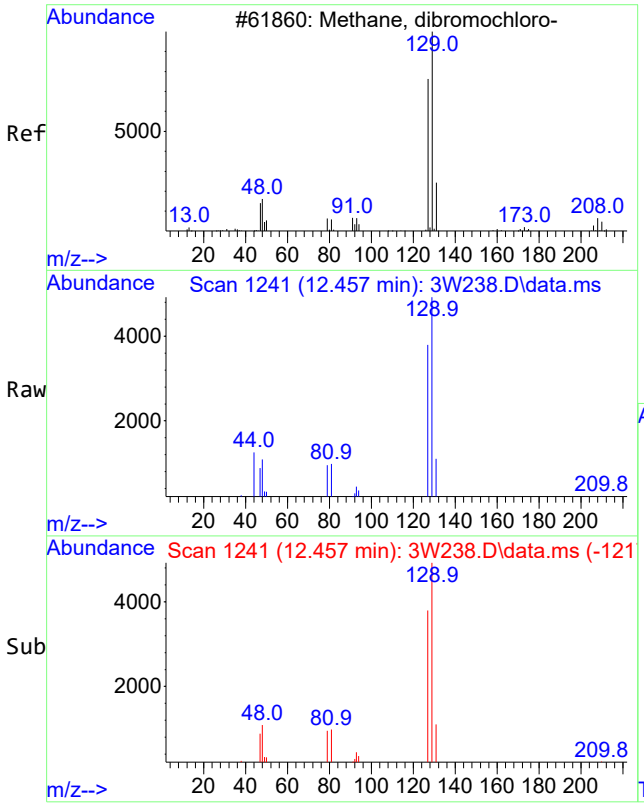


#48 BEFORE analyst DELETION
1,1,2-Trichloroethane
Concen: 1.06 ug/L
RT: 11.920 min Scan# 1153
Delta R.T. -0.079 min
Lab File: 3W238.D
Acq: 20 Dec 2022 23:47

Tgt Ion: 97 Resp: 3068

Ion	Ratio	Lower	Upper
97	100		
83	0.0	55.3	115.3#
85	0.0	24.8	84.8#

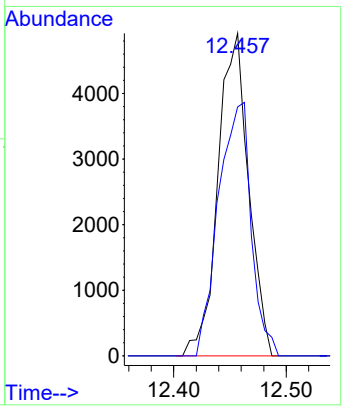


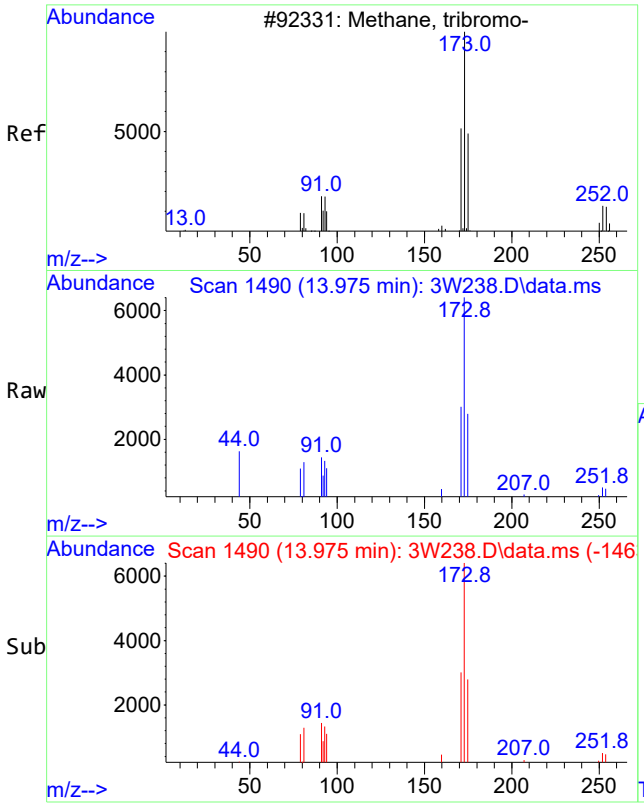


#52
Dibromochloromethane
Concen: 3.15 ug/L
RT: 12.457 min Scan# 1241
Delta R.T. -0.000 min
Lab File: 3W238.D
Acq: 20 Dec 2022 23:47

Tgt Ion:129 Resp: 9261

Ion	Ratio	Lower	Upper
129	100		
127	84.0	47.0	107.0

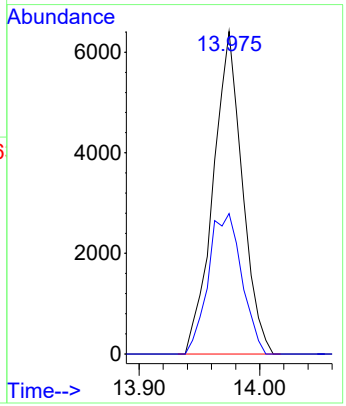


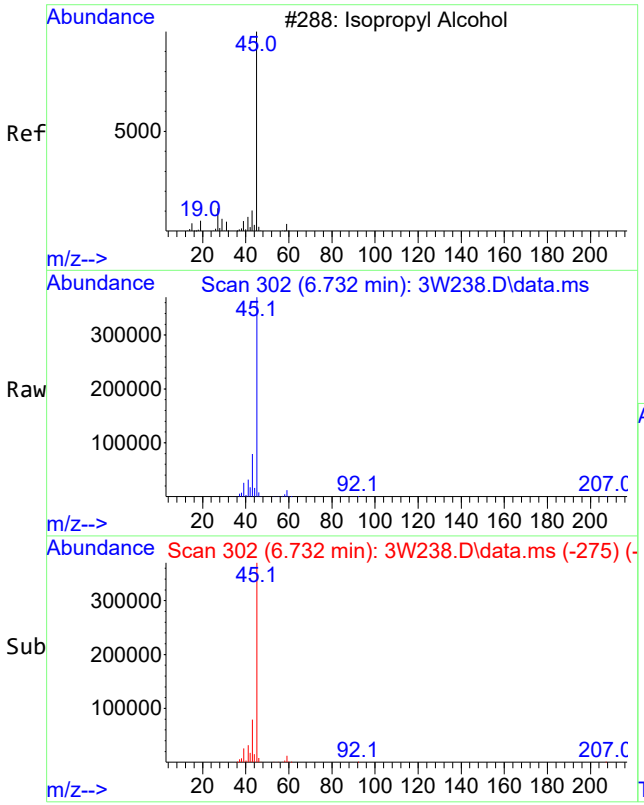


#61
Bromoform
Concen: 6.45 ug/L
RT: 13.975 min Scan# 1490
Delta R.T. -0.000 min
Lab File: 3W238.D
Acq: 20 Dec 2022 23:47

Tgt Ion:173 Resp: 10858

Ion	Ratio	Lower	Upper
173	100		
175	49.9	19.9	79.9

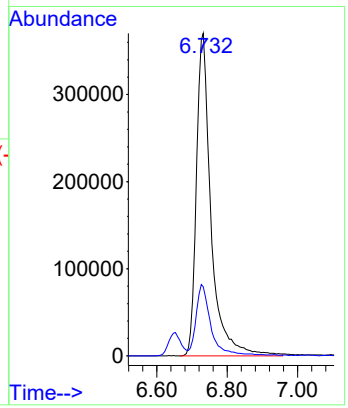


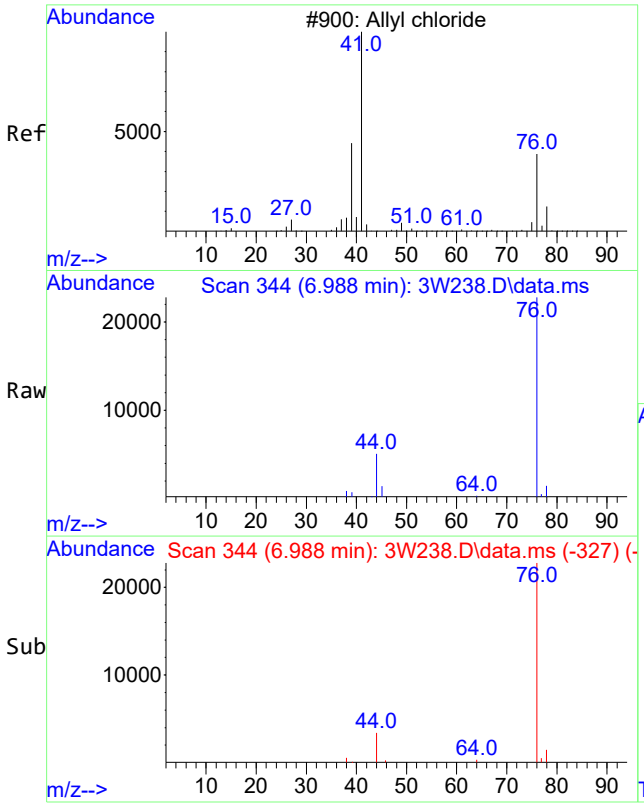


#87
Isopropyl Alcohol
Concen: 4277.60 ug/L
RT: 6.732 min Scan# 302
Delta R.T. 0.000 min
Lab File: 3W238.D
Acq: 20 Dec 2022 23:47

Tgt Ion: 45 Resp: 1066877

Ion	Ratio	Lower	Upper
45	100		
43	22.1	0.0	50.0

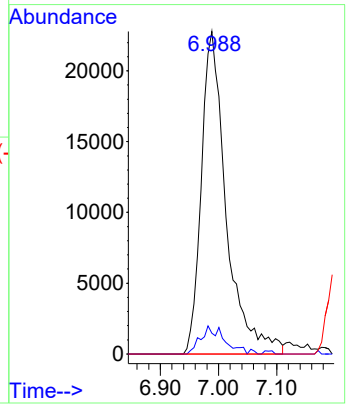




#88 BEFORE analyst DELETION
Allyl chloride
Concen: 28.93 ug/L
RT: 6.988 min Scan# 344
Delta R.T. -0.074 min
Lab File: 3W238.D
Acq: 20 Dec 2022 23:47

Tgt Ion: 76 Resp: 67428

Ion	Ratio	Lower	Upper
76	100		
78	8.1	2.8	62.8
49	0.0	0.0	44.7



Library Search Compound Report
GEL Laboratories, LLC

12/21/2022

12/22/2022

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W238.D
Acq On : 20 Dec 2022 23:47
Operator : JM6
Sample : |604449002|2358452|1|VOA|2|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 38 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

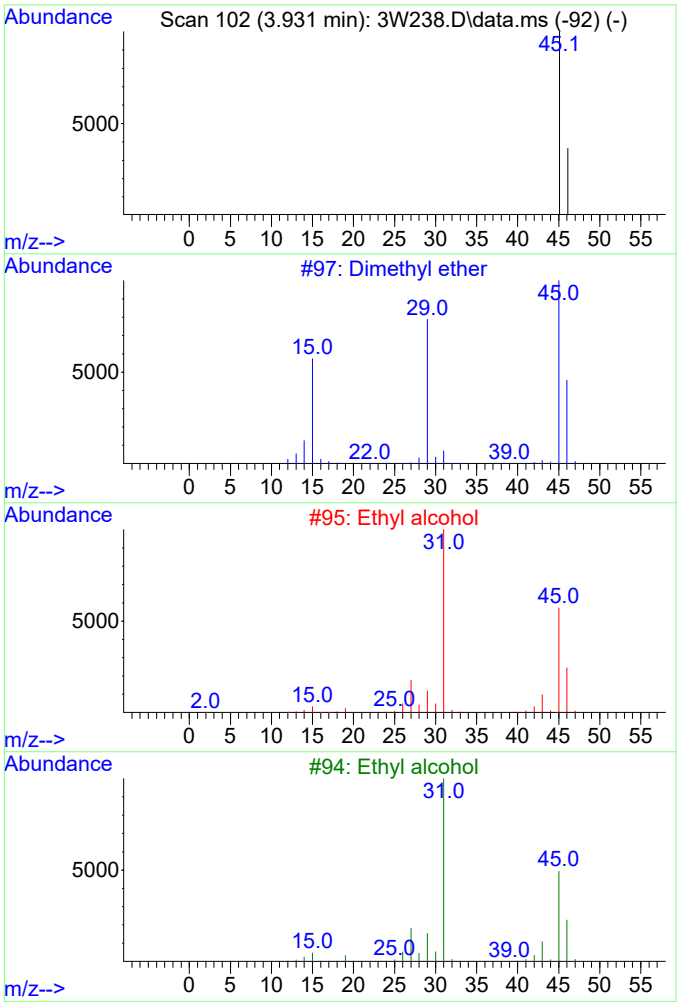
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

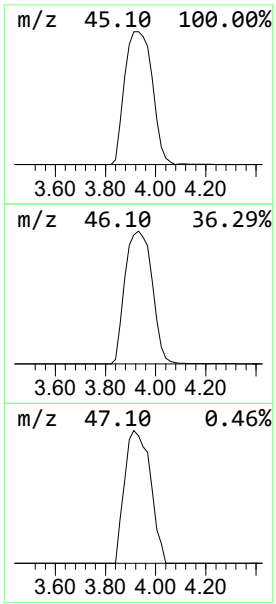
****

Peak Number 1 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.931	85.53 ug/L	3114820	Fluorobenzene	9.884

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dimethyl ether	46	C2H6O	000115-10-6	5
2	Ethyl alcohol	46	C2H6O	000064-17-5	4
3	Ethyl alcohol	46	C2H6O	000064-17-5	4
4	Ethyl alcohol	46	C2H6O	000064-17-5	4
5	Formic acid	46	CH2O2	000064-18-6	3





Library Search Compound Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W238.D
Acq On : 20 Dec 2022 23:47
Operator : JM6
Sample : |604449002|2358452|1|VOA|2|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 38 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

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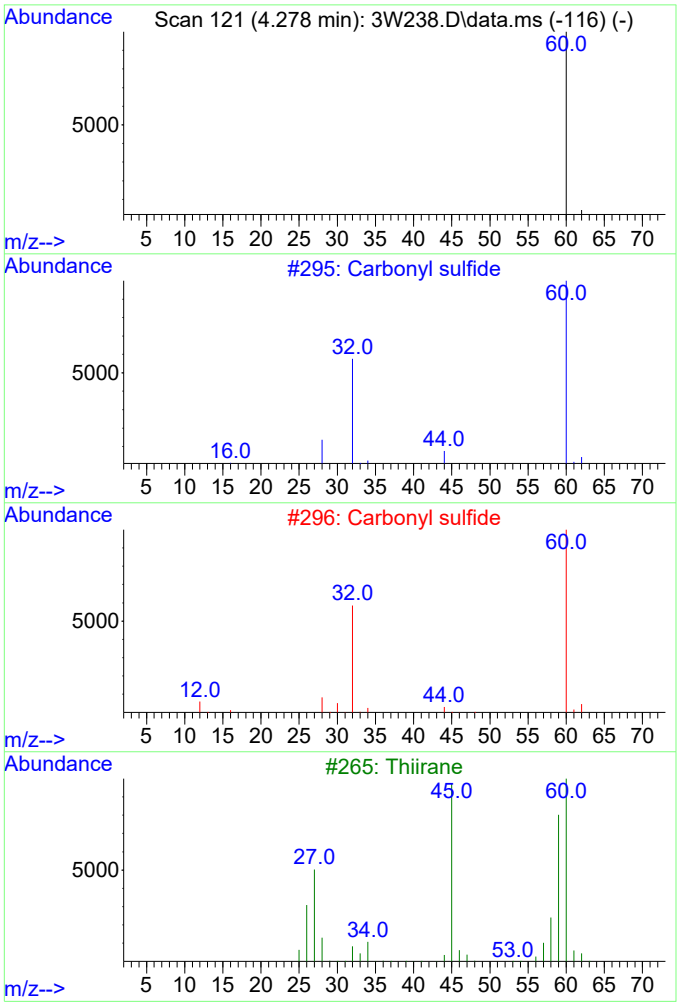
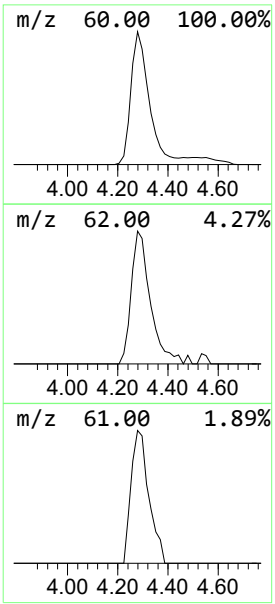
Peak Number 2 unknown Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.278	14.92 ug/L	543467	Fluorobenzene	9.884

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Carbonyl sulfide	60	COS	000463-58-1	5
2	Carbonyl sulfide	60	COS	000463-58-1	5
3	Thiirane	60	C2H4S	000420-12-2	4
4	Acetic acid	60	C2H4O2	000064-19-7	4
5	Urea	60	CH4N2O	000057-13-6	4





Library Search Compound Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W238.D
Acq On : 20 Dec 2022 23:47
Operator : JM6
Sample : |604449002|2358452|1|VOA|2|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 38 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

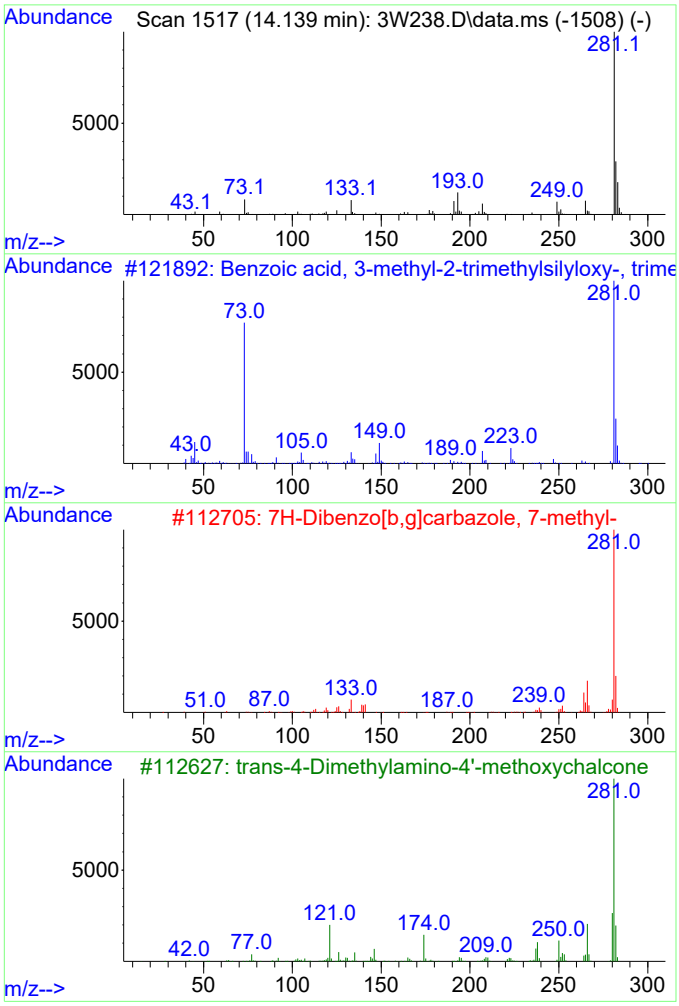
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

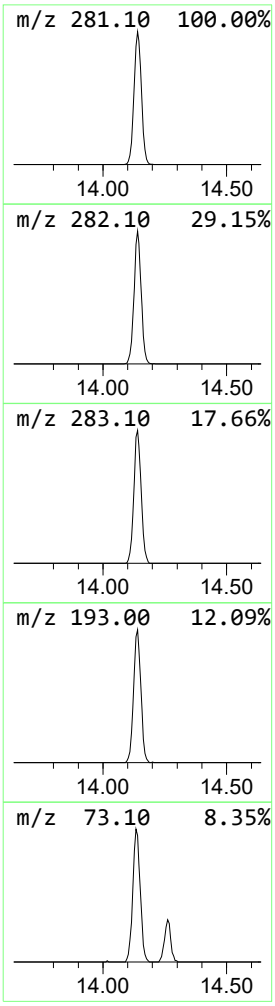
****

Peak Number 3 unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.139	42.23 ug/L	1600110	B Chlorobenzene-d5	13.060

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzoic acid, 3-methyl-2-trimeth...	296	C14H24O3Si2	1000153-57-1	59
2	7H-Dibenzo[b,g]carbazole, 7-methyl-	281	C21H15N	003557-49-1	53
3	trans-4-Dimethylamino-4'-methoxy...	281	C18H19NO2	052119-37-6	50
4	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	49
5	5H-Naphtho[2,3-c]carbazole, 5-me...	281	C21H15N	100025-44-3	45





Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W238.D
Acq On : 20 Dec 2022 23:47
Operator : JM6
Sample : |604449002|2358452|1|VOA|2|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 38 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

			(ug/L)		Internal Standard		
TIC Top Hit name	CAS #	RT	EstConc	Response	# RT	Resp	Conc
unknown		3.931	85.5	3114820	1 9.884	1820860	50.0
unknown		4.278	14.9	543467	1 9.884	1820860	50.0
unknown		14.139	42.2	1600110	4 13.060	1894730	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**604449003**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265376**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 15:13**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 15:13**				
Data File:	**121922V3\3W111.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
542-75-6	1,3-Dichloropropylene	U	0.500	ug/L	0.500	2.00
75-71-8	Dichlorodifluoromethane	U	0.355	ug/L	0.355	1.00
74-87-3	Chloromethane	U	0.333	ug/L	0.333	1.00
75-01-4	Vinyl chloride	U	0.333	ug/L	0.333	1.00
74-83-9	Bromomethane	U	0.337	ug/L	0.337	1.00
75-69-4	Trichlorofluoromethane	U	0.333	ug/L	0.333	1.00
75-35-4	1,1-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-09-2	Methylene chloride	BJ	2.69	ug/L	0.500	5.00
1634-04-4	tert-Butyl methyl ether	U	0.333	ug/L	0.333	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-34-3	1,1-Dichloroethane	U	0.333	ug/L	0.333	1.00
156-59-2	cis-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
67-66-3	Chloroform	U	0.333	ug/L	0.333	1.00
71-55-6	1,1,1-Trichloroethane	U	0.333	ug/L	0.333	1.00
56-23-5	Carbon tetrachloride	U	0.333	ug/L	0.333	1.00
107-06-2	1,2-Dichloroethane	U	0.333	ug/L	0.333	1.00
71-43-2	Benzene	U	0.333	ug/L	0.333	1.00
79-01-6	Trichloroethylene	U	0.333	ug/L	0.333	1.00
78-87-5	1,2-Dichloropropane	U	0.333	ug/L	0.333	1.00
74-95-3	Dibromomethane	U	0.333	ug/L	0.333	1.00
75-27-4	Bromodichloromethane	U	0.333	ug/L	0.333	1.00
108-88-3	Toluene	U	0.333	ug/L	0.333	1.00
79-00-5	1,1,2-Trichloroethane	U	0.333	ug/L	0.333	1.00
127-18-4	Tetrachloroethylene	U	0.333	ug/L	0.333	1.00
106-93-4	1,2-Dibromoethane	U	0.333	ug/L	0.333	1.00
108-90-7	Chlorobenzene	U	0.333	ug/L	0.333	1.00
100-41-4	Ethylbenzene	U	0.333	ug/L	0.333	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.333	ug/L	0.333	1.00
100-42-5	Styrene	U	0.333	ug/L	0.333	1.00
75-25-2	Bromoform	U	0.333	ug/L	0.333	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.333	ug/L	0.333	1.00
106-46-7	1,4-Dichlorobenzene	U	0.333	ug/L	0.333	1.00
107-02-8	Acrolein	U	1.67	ug/L	1.67	5.00
107-13-1	Acrylonitrile	U	1.67	ug/L	1.67	5.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	1.00	3.00
120-82-1	1,2,4-Trichlorobenzene	U	0.333	ug/L	0.333	1.00
95-50-1	1,2-Dichlorobenzene	U	0.333	ug/L	0.333	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**604449003**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265376**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 15:13**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 15:13**				
Data File:	**121922V3\3W111.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	49.1	50.0	ug/L	98	(73%-129%)
Bromofluorobenzene	45.1	50.0	ug/L	90	(72%-125%)
Toluene-d8	50.1	50.0	ug/L	100	(75%-123%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.95	9.68	ug/L	0	J

Quantitation Report
GEL Laboratories, LLC

12/21/2022

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W111.D
Acq On : 19 Dec 2022 15:13
Operator : KP2
InstName : VOA3
Sample : |604449003|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 11 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 20 08:10:25 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	96	9.884	9.884	1.000	913404	50.00	ug/L	0.00
43) Chlorobenzene-d5	117	13.060	13.066	1.000	674669	50.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	152	15.481	15.480	1.000	406626	50.00	ug/L	0.00
84) B Fluorobenzene	96	9.884	9.884	1.000	913856	50.00	ug/L	0.00
103) B Chlorobenzene-d5	117	13.060	13.060	1.000	674669	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	15.481	15.481	1.000	406626	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
30) 1,2-Dichloroethane-d4	67	9.549	9.549	0.966	136851	49.10	ug/L	0.00
45) Toluene-d8	98	11.530	11.530	0.883	906388	50.08	ug/L	0.00
63) Bromofluorobenzene	95	14.261	14.261	0.921	344180	45.13	ug/L	0.00

Compound	Amount	Range	Recovery
30) 1,2-Dichloroethane-d4	50.000	73 - 129	98%
45) Toluene-d8	50.000	75 - 123	100%
63) Bromofluorobenzene	50.000	72 - 125	90%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		0.000	4.260	0.000	0	N.D.		
3) Chloromethane	50	4.644	4.644	0.470	1066	N.D.		
4) Vinyl chloride		0.000	4.826	0.000	0	N.D.		
5) Bromomethane		0.000	5.411	0.000	0	N.D.		
6) Chloroethane		0.000	5.557	0.000	0	N.D.		
7) Trichlorofluoromethane		0.000	5.904	0.000	0	N.D.		
8) Ethyl ether		0.000	6.232	0.000	0	N.D.		
9) Acetone	43	6.653	6.647	0.673	2243	2.20	ug/L	74
10) 1,1-Dichloroethylene		0.000	6.616	0.000	0	N.D.		
11) Iodomethane		0.000	6.866	0.000	0	N.D.		
12) Acetonitrile	41	7.183	7.013	0.727	164	N.D.		
13) Methyl acetate		0.000	7.025	0.000	0	N.D.		
14) Carbon disulfide	76	6.988	6.982	0.707	1213	N.D.		
15) Methylene chloride	84	7.214	7.202	0.730	14479	2.69	ug/L	93
16) tert-Butyl methyl ether		0.000	7.482	0.000	0	N.D.		
17) trans-1,2-Dichloroethy...		0.000	7.531	0.000	0	N.D.		
18) Hexane	57	7.793	7.799	0.788	478	N.D.		
19) Vinyl acetate		0.000	7.988	0.000	0	N.D.		
20) 1,1-Dichloroethane		0.000	8.018	0.000	0	N.D.		
21) 2-Butanone	43	8.445	8.622	0.854	110	N.D.		
22) cis-1,2-Dichloroethylene		0.000	8.659	0.000	0	N.D.		
23) 2,2-Dichloropropane		0.000	8.671	0.000	0	N.D.		
24) Bromochloromethane		0.000	8.933	0.000	0	N.D.		
25) Chloroform		0.000	8.970	0.000	0	N.D.		
26) 1,1,1-Trichloroethane		0.000	9.226	0.000	0	N.D.		
27) Cyclohexane		0.000	9.305	0.000	0	N.D.		
28) 1,1-Dichloropropene		0.000	9.384	0.000	0	N.D.		
29) Carbon tetrachloride		0.000	9.415	0.000	0	N.D.		
31) 1,2-Dichloroethane		0.000	9.628	0.000	0	N.D.		
32) Benzene		0.000	9.628	0.000	0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W111.D
Acq On : 19 Dec 2022 15:13
Operator : KP2
InstName : VOA3
Sample : |604449003|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 20 08:10:25 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
33) Cyclohexene	67	9.872	9.732	0.999	253	N.D.	
34) n-Butyl alcohol		0.000	10.012	0.000	0	N.D.	
35) Trichloroethylene		0.000	10.268	0.000	0	N.D.	
36) 2-Pentanone		0.000	10.378	0.000	0	N.D.	
37) 1,2-Dichloropropane		0.000	10.530	0.000	0	N.D.	
38) Methylcyclohexane		0.000	10.494	0.000	0	N.D.	
39) Dibromomethane		0.000	10.664	0.000	0	N.D.	
40) Bromodichloromethane		0.000	10.780	0.000	0	N.D.	
41) 2-Chloroethylvinyl ether		0.000	11.006	0.000	0	N.D.	
42) cis-1,3-Dichloropropylene		0.000	11.231	0.000	0	N.D.	
44) 4-Methyl-2-pentanone		0.000	11.329	0.000	0	N.D.	
46) Toluene		0.000	11.603	0.000	0	N.D.	
47) trans-1,3-Dichloroprop...		0.000	11.780	0.000	0	N.D.	
48) 1,1,2-Trichloroethane		0.000	11.999	0.000	0	N.D.	
49) 2-Hexanone		0.000	12.182	0.000	0	N.D.	
50) 1,3-Dichloropropane		0.000	12.188	0.000	0	N.D.	
51) Tetrachloroethylene		0.000	12.188	0.000	0	N.D.	
52) Dibromochloromethane		0.000	12.457	0.000	0	N.D.	
53) 1,2-Dibromoethane		0.000	12.621	0.000	0	N.D.	
54) Chlorobenzene	112	13.091	13.097	1.002	185	N.D.	
55) 1,1,1,2-Tetrachloroethane		0.000	13.152	0.000	0	N.D.	
56) Ethylbenzene	91	13.164	13.158	1.008	110	N.D.	
57) m,p-Xylenes		0.000	13.267	0.000	0	N.D.	
58) o-Xylene		0.000	13.700	0.000	0	N.D.	
59) Styrene		0.000	13.706	0.000	0	N.D.	
61) Bromoform		0.000	13.975	0.000	0	N.D.	
62) Isopropylbenzene		0.000	14.060	0.000	0	N.D.	
64) 1,1,2,2-Tetrachloroethane		0.000	14.359	0.000	0	N.D.	
65) 1,2,3-Trichloropropane		0.000	14.444	0.000	0	N.D.	
66) Bromobenzene		0.000	14.468	0.000	0	N.D.	
67) n-Propylbenzene		0.000	14.487	0.000	0	N.D.	
68) 1,3,5-Trimethylbenzene		0.000	14.639	0.000	0	N.D.	
69) 2-Chlorotoluene		0.000	14.633	0.000	0	N.D.	
70) 4-Chlorotoluene		0.000	14.743	0.000	0	N.D.	
71) tert-Butylbenzene		0.000	15.011	0.000	0	N.D.	
72) 1,2,4-Trimethylbenzene		0.000	15.054	0.000	0	N.D.	
73) sec-Butylbenzene		0.000	15.237	0.000	0	N.D.	
74) 4-Isopropyltoluene		0.000	15.359	0.000	0	N.D.	
75) 1,3-Dichlorobenzene	146	15.420	15.419	0.996	179	N.D.	
76) 1,4-Dichlorobenzene	146	15.499	15.505	1.001	467	N.D.	
77) n-Butylbenzene	91	15.785	15.791	1.020	328	N.D.	
78) 1,2-Dichlorobenzene		0.000	15.919	0.000	0	N.D.	
79) 1,2-Dibromo-3-chloropr...		0.000	16.785	0.000	0	N.D.	
80) 1,2,4-Trichlorobenzene	180	17.803	17.791	1.150	178	N.D.	
81) Hexachlorobutadiene		0.000	17.949	0.000	0	N.D.	
82) Naphthalene	128	18.181	18.163	1.174	728	N.D.	
83) 1,2,3-Trichlorobenzene		0.000	18.492	0.000	0	N.D.	
85) Acrolein		0.000	6.470	0.000	0	N.D.	
86) Trichlorotrifluoroethane		0.000	6.586	0.000	0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W111.D
Acq On : 19 Dec 2022 15:13
Operator : KP2
InstName : VOA3
Sample : |604449003|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 20 08:10:25 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

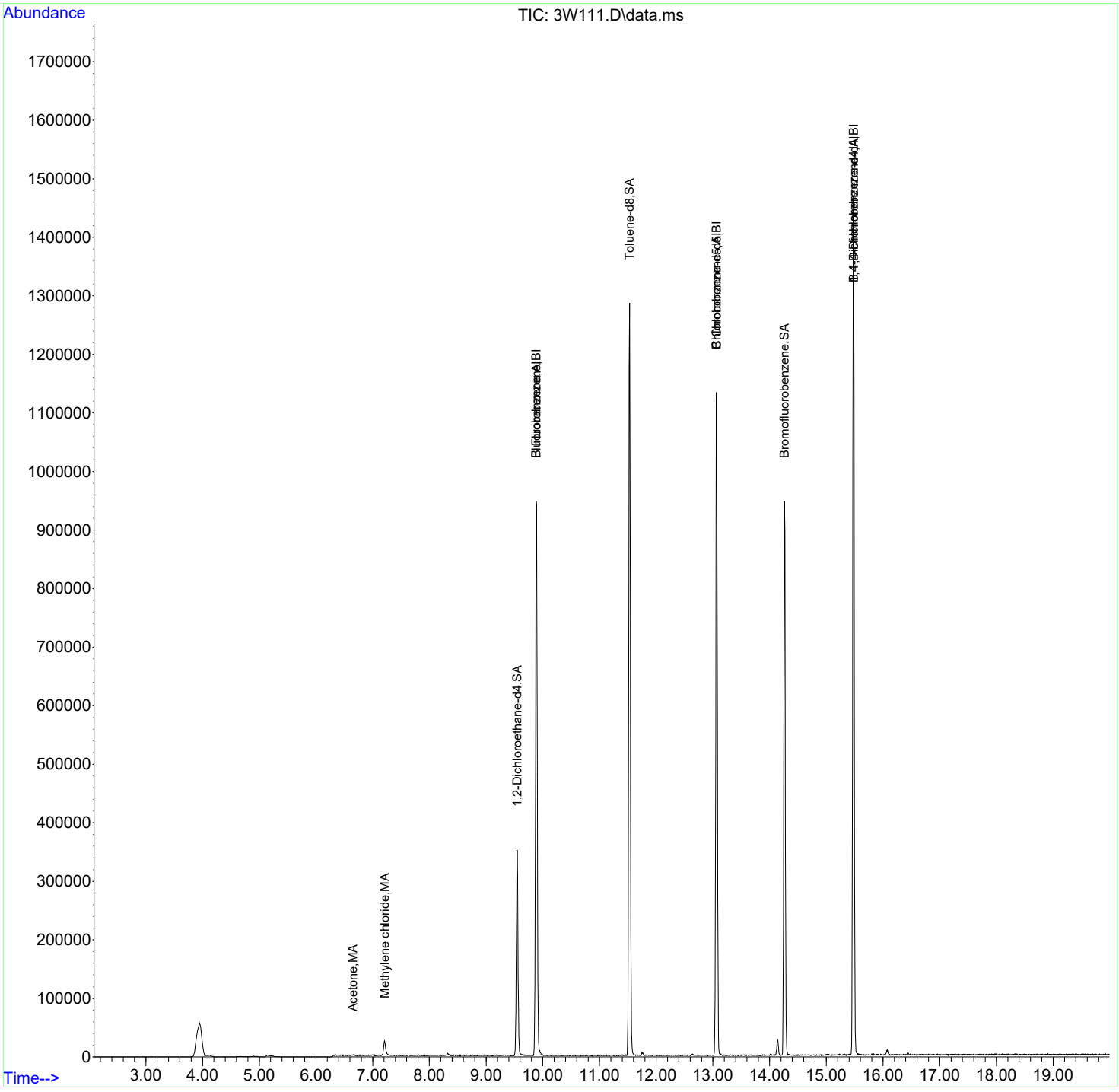
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
87) Isopropyl Alcohol		0.000	6.732	0.000	0	N.D.	
88) Allyl chloride		0.000	7.062	0.000	0	N.D.	
89) tert-Butyl Alcohol		0.000	7.220	0.000	0	N.D.	
90) Acrylonitrile		0.000	7.482	0.000	0	N.D.	
91) Isopropyl ether		0.000	7.988	0.000	0	N.D.	
92) 2-Chloro-1,3-butadiene		0.000	8.122	0.000	0	N.D.	
93) Ethyl tert-butyl ether		0.000	8.391	0.000	0	N.D.	
94) Ethyl acetate		0.000	8.628	0.000	0	N.D.	
95) Propionitrile		0.000	8.720	0.000	0	N.D.	
96) Methacrylonitrile		0.000	8.884	0.000	0	N.D.	
97) Tetrahydrofuran		0.000	8.976	0.000	0	N.D.	
98) Isobutyl alcohol		0.000	9.323	0.000	0	N.D.	
99) Methyl tert-amyl ether		0.000	9.640	0.000	0	N.D.	
100) Methyl methacrylate		0.000	10.506	0.000	0	N.D.	
101) 1,4-Dioxane		0.000	10.616	0.000	0	N.D.	
102) 2-Nitropropane		0.000	11.006	0.000	0	N.D.	
104) Ethyl methacrylate		0.000	11.774	0.000	0	N.D.	
106) 1-Chlorohexane		0.000	12.963	0.000	0	N.D.	
107) cis-1,4-Dichloro-2-butene		0.000	14.121	0.000	0	N.D.	
108) Cyclohexanone		0.000	14.237	0.000	0	N.D.	
109) trans-1,4-Dichloro-2-b...		0.000	14.408	0.000	0	N.D.	
110) Pentachloroethane		0.000	15.084	0.000	0	N.D.	
111) Benzyl chloride	91	15.481	15.627	1.000	1041	N.D.	
112) bis(2-Chloroisopropyl)...		0.000	16.023	0.000	0	N.D.	

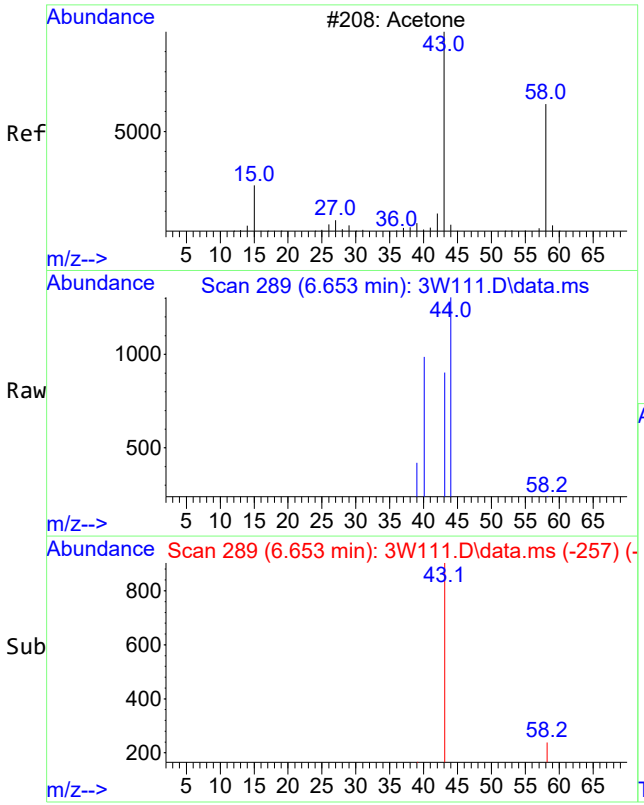
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W111.D
Acq On : 19 Dec 2022 15:13
Operator : KP2
InstName : VOA3
Sample : |604449003|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 20 08:10:25 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

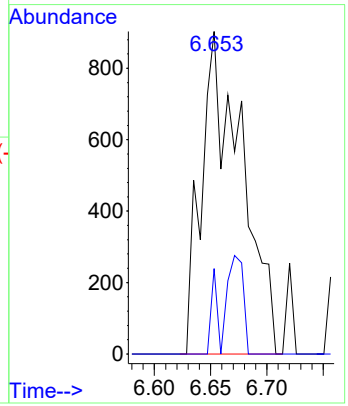


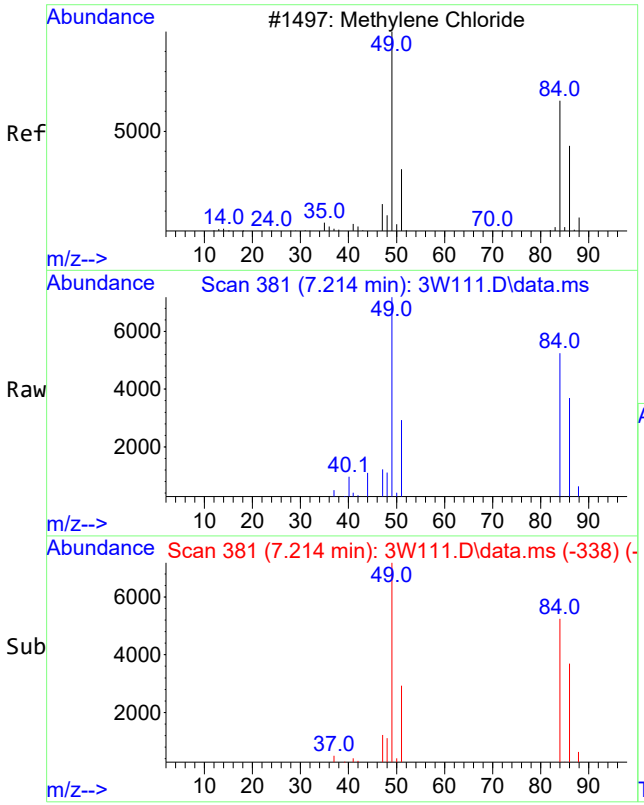


#9
Acetone
Concen: 2.20 ug/L
RT: 6.653 min Scan# 289
Delta R.T. 0.006 min
Lab File: 3W111.D
Acq: 19 Dec 2022 15:13

Tgt Ion: 43 Resp: 2243

Ion	Ratio	Lower	Upper
43	100		
58	15.9	0.0	60.0

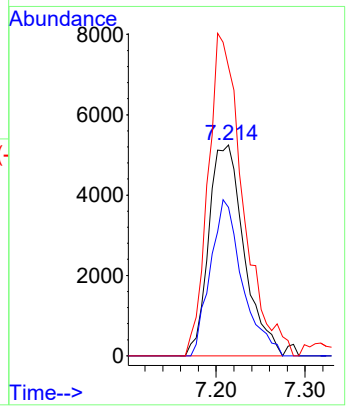




#15
Methylene chloride
Concen: 2.69 ug/L
RT: 7.214 min Scan# 381
Delta R.T. 0.012 min
Lab File: 3W111.D
Acq: 19 Dec 2022 15:13

Tgt Ion: 84 Resp: 14479

Ion	Ratio	Lower	Upper
84	100		
86	67.1	34.2	94.2
49	150.6	110.5	170.5



Library Search Compound Report
GEL Laboratories, LLC

12/21/2022

12/22/2022

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W111.D
Acq On : 19 Dec 2022 15:13
Operator : KP2
Sample : |604449003|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 11 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

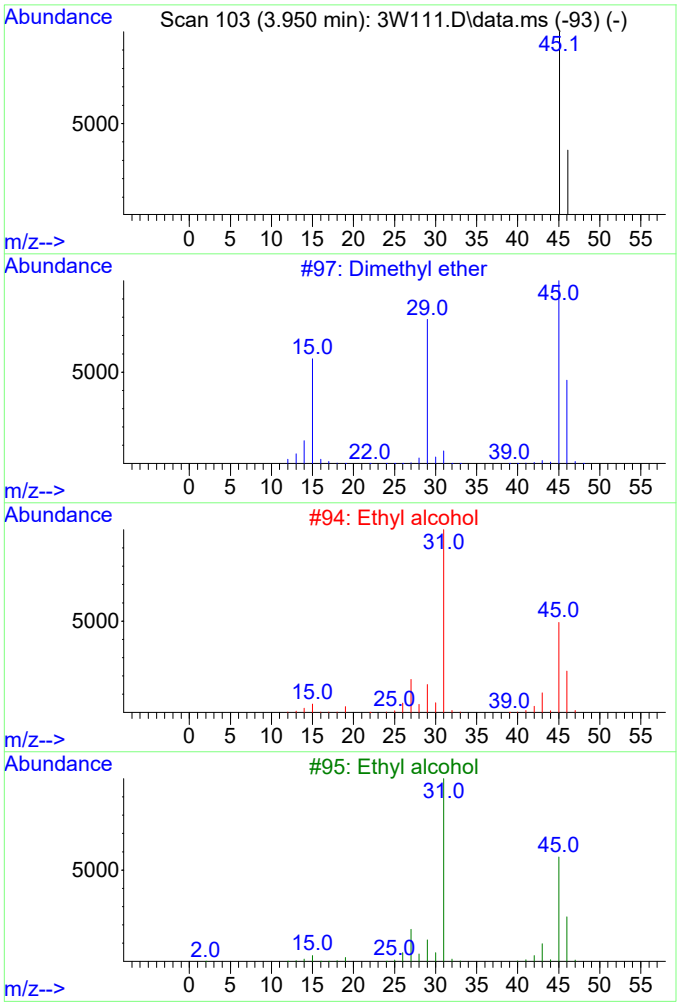
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

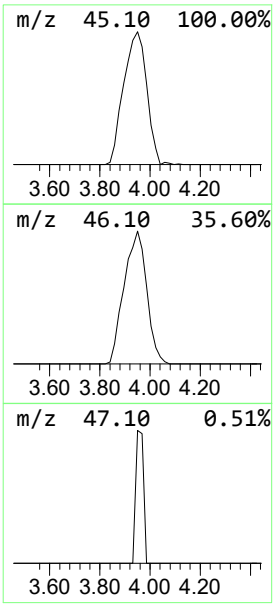
****

Peak Number 1 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.950	9.68 ug/L	385912	Fluorobenzene	9.884

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dimethyl ether	46	C2H6O	000115-10-6	5
2	Ethyl alcohol	46	C2H6O	000064-17-5	4
3	Ethyl alcohol	46	C2H6O	000064-17-5	4
4	Ethyl alcohol	46	C2H6O	000064-17-5	4
5	Formic acid	46	CH2O2	000064-18-6	4





Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W111.D
Acq On : 19 Dec 2022 15:13
Operator : KP2
Sample : |604449003|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 11 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

			(ug/L)		Internal Standard		
TIC Top Hit name	CAS #	RT	EstConc	Response	#	RT	Resp	Conc
unknown		3.950	9.7	385912	1	9.884	1993070	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:36**	**Matrix:**	**W**
Lab Sample ID:	**604449006**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB02-23-265372**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 16:06**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 16:06**				
Data File:	**121922V3\3W113.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
107-02-8	Acrolein	U	1.67	ug/L	1.67	5.00
107-13-1	Acrylonitrile	U	1.67	ug/L	1.67	5.00

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	54.5	50.0	ug/L	109	(73%-129%)
Bromofluorobenzene	46.2	50.0	ug/L	92	(72%-125%)
Toluene-d8	50.2	50.0	ug/L	100	(75%-123%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.931	8.11	ug/L	0	J
	unknown	14.139	7.84	ug/L	0	J
	unknown	16.072	6.21	ug/L	0	J

12/21/2022

12/22/2022

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W113.D
Acq On : 19 Dec 2022 16:06
Operator : KP2
InstName : VOA3
Sample : |604449006|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 20 08:10:51 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	96	9.884	9.884	1.000	805339	50.00	ug/L	0.00
43) Chlorobenzene-d5	117	13.066	13.066	1.000	605911	50.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	152	15.480	15.480	1.000	375371	50.00	ug/L	0.00
84) B Fluorobenzene	96	9.884	9.884	1.000	806024	50.00	ug/L	0.00
103) B Chlorobenzene-d5	117	13.066	13.060	1.000	605911	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	15.480	15.481	1.000	375371	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
30) 1,2-Dichloroethane-d4	67	9.549	9.549	0.966	134039	54.54	ug/L	0.00
45) Toluene-d8	98	11.530	11.530	0.882	815738	50.19	ug/L	0.00
63) Bromofluorobenzene	95	14.261	14.261	0.921	325344	46.21	ug/L	0.00

Compound	Amount	Range	Recovery
30) 1,2-Dichloroethane-d4	50.000	73 - 129	109%
45) Toluene-d8	50.000	75 - 123	100%
63) Bromofluorobenzene	50.000	72 - 125	92%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		0.000	4.260	0.000	0	N.D.		
3) Chloromethane	50	4.643	4.644	0.470	1038	N.D.		
4) Vinyl chloride		0.000	4.826	0.000	0	N.D.		
5) Bromomethane		0.000	5.411	0.000	0	N.D.		
6) Chloroethane		0.000	5.557	0.000	0	N.D.		
7) Trichlorofluoromethane		0.000	5.904	0.000	0	N.D.		
8) Ethyl ether		0.000	6.232	0.000	0	N.D.		
9) Acetone	43	6.647	6.647	0.672	273135	303.27	ug/L	100
10) 1,1-Dichloroethylene		0.000	6.616	0.000	0m	N.D.	d	
11) Iodomethane	142	6.854	6.866	0.693	197	N.D.		
12) Acetonitrile	41	7.104	7.013	0.719	544	N.D.		
13) Methyl acetate		0.000	7.025	0.000	0	N.D.		
14) Carbon disulfide	76	6.988	6.982	0.707	222	N.D.		
15) Methylene chloride	84	7.208	7.202	0.729	12533	2.65	ug/L	95
16) tert-Butyl methyl ether		0.000	7.482	0.000	0	N.D.		
17) trans-1,2-Dichloroethy...		0.000	7.531	0.000	0	N.D.		
18) Hexane	57	7.793	7.799	0.788	476	N.D.		
19) Vinyl acetate	43	7.982	7.988	0.808	160	N.D.		
20) 1,1-Dichloroethane		0.000	8.018	0.000	0	N.D.		
21) 2-Butanone	43	8.634	8.622	0.874	2296	N.D.		
22) cis-1,2-Dichloroethylene		0.000	8.659	0.000	0	N.D.		
23) 2,2-Dichloropropane		0.000	8.671	0.000	0	N.D.		
24) Bromochloromethane		0.000	8.933	0.000	0	N.D.		
25) Chloroform		0.000	8.970	0.000	0	N.D.		
26) 1,1,1-Trichloroethane		0.000	9.226	0.000	0	N.D.		
27) Cyclohexane		0.000	9.305	0.000	0	N.D.		
28) 1,1-Dichloropropene	75	9.494	9.384	0.961	139	N.D.		
29) Carbon tetrachloride		0.000	9.415	0.000	0	N.D.		
31) 1,2-Dichloroethane		0.000	9.628	0.000	0	N.D.		
32) Benzene		0.000	9.628	0.000	0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W113.D
Acq On : 19 Dec 2022 16:06
Operator : KP2
InstName : VOA3
Sample : |604449006|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 20 08:10:51 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
33) Cyclohexene		0.000	9.732	0.000	0	N.D.		
34) n-Butyl alcohol		0.000	10.012	0.000	0	N.D.		
35) Trichloroethylene		0.000	10.268	0.000	0	N.D.		
36) 2-Pentanone	43	10.366	10.378	1.049	188	N.D.		
37) 1,2-Dichloropropane		0.000	10.530	0.000	0	N.D.		
38) Methylcyclohexane		0.000	10.494	0.000	0	N.D.		
39) Dibromomethane		0.000	10.664	0.000	0	N.D.		
40) Bromodichloromethane	83	10.780	10.780	1.091	604	N.D.		
41) 2-Chloroethylvinyl ether		0.000	11.006	0.000	0	N.D.		
42) cis-1,3-Dichloropropylene		0.000	11.231	0.000	0	N.D.		
44) 4-Methyl-2-pentanone	43	11.341	11.329	0.868	764	N.D.		
46) Toluene	91	11.603	11.603	0.888	208	N.D.		
47) trans-1,3-Dichloroprop...	75	11.749	11.780	0.899	199	N.D.		
48) 1,1,2-Trichloroethane		0.000	11.999	0.000	0	N.D.		
49) 2-Hexanone	43	12.225	12.182	0.936	201	N.D.		
50) 1,3-Dichloropropane		0.000	12.188	0.000	0	N.D.		
51) Tetrachloroethylene		0.000	12.188	0.000	0	N.D.		
52) Dibromochloromethane	129	12.457	12.457	0.953	989	N.D.		
53) 1,2-Dibromoethane		0.000	12.621	0.000	0	N.D.		
54) Chlorobenzene		0.000	13.097	0.000	0	N.D.		
55) 1,1,1,2-Tetrachloroethane		0.000	13.152	0.000	0	N.D.		
56) Ethylbenzene	91	13.158	13.158	1.007	103	N.D.		
57) m,p-Xylenes		0.000	13.267	0.000	0	N.D.		
58) o-Xylene		0.000	13.700	0.000	0	N.D.		
59) Styrene		0.000	13.706	0.000	0	N.D.		
61) Bromoform	173	13.962	13.975	0.902	1381	0.79	ug/L	81
62) Isopropylbenzene	105	14.139	14.060	0.913	681	N.D.		
64) 1,1,2,2-Tetrachloroethane	83	14.255	14.359	0.921	882	N.D.		
65) 1,2,3-Trichloropropane		0.000	14.444	0.000	0	N.D.		
66) Bromobenzene		0.000	14.468	0.000	0	N.D.		
67) n-Propylbenzene	91	14.475	14.487	0.935	172	N.D.		
68) 1,3,5-Trimethylbenzene	105	14.639	14.639	0.946	175	N.D.		
69) 2-Chlorotoluene		0.000	14.633	0.000	0	N.D.		
70) 4-Chlorotoluene		0.000	14.743	0.000	0	N.D.		
71) tert-Butylbenzene		0.000	15.011	0.000	0	N.D.		
72) 1,2,4-Trimethylbenzene	105	15.054	15.054	0.972	208	N.D.		
73) sec-Butylbenzene	105	15.322	15.237	0.990	179	N.D.		
74) 4-Isopropyltoluene	119	15.328	15.359	0.990	266	N.D.		
75) 1,3-Dichlorobenzene	146	15.426	15.419	0.996	1475	N.D.		
76) 1,4-Dichlorobenzene	146	15.499	15.505	1.001	339	N.D.		
77) n-Butylbenzene	91	15.779	15.791	1.019	114	N.D.		
78) 1,2-Dichlorobenzene	146	15.932	15.919	1.029	154	N.D.		
79) 1,2-Dibromo-3-chloropr...		0.000	16.785	0.000	0	N.D.		
80) 1,2,4-Trichlorobenzene	180	17.779	17.791	1.148	109	N.D.		
81) Hexachlorobutadiene		0.000	17.949	0.000	0	N.D.		
82) Naphthalene	128	18.175	18.163	1.174	1061	N.D.		
83) 1,2,3-Trichlorobenzene		0.000	18.492	0.000	0	N.D.		
85) Acrolein		0.000	6.470	0.000	0	N.D.		
86) Trichlorotrifluoroethane		0.000	6.586	0.000	0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W113.D
Acq On : 19 Dec 2022 16:06
Operator : KP2
InstName : VOA3
Sample : |604449006|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 20 08:10:51 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

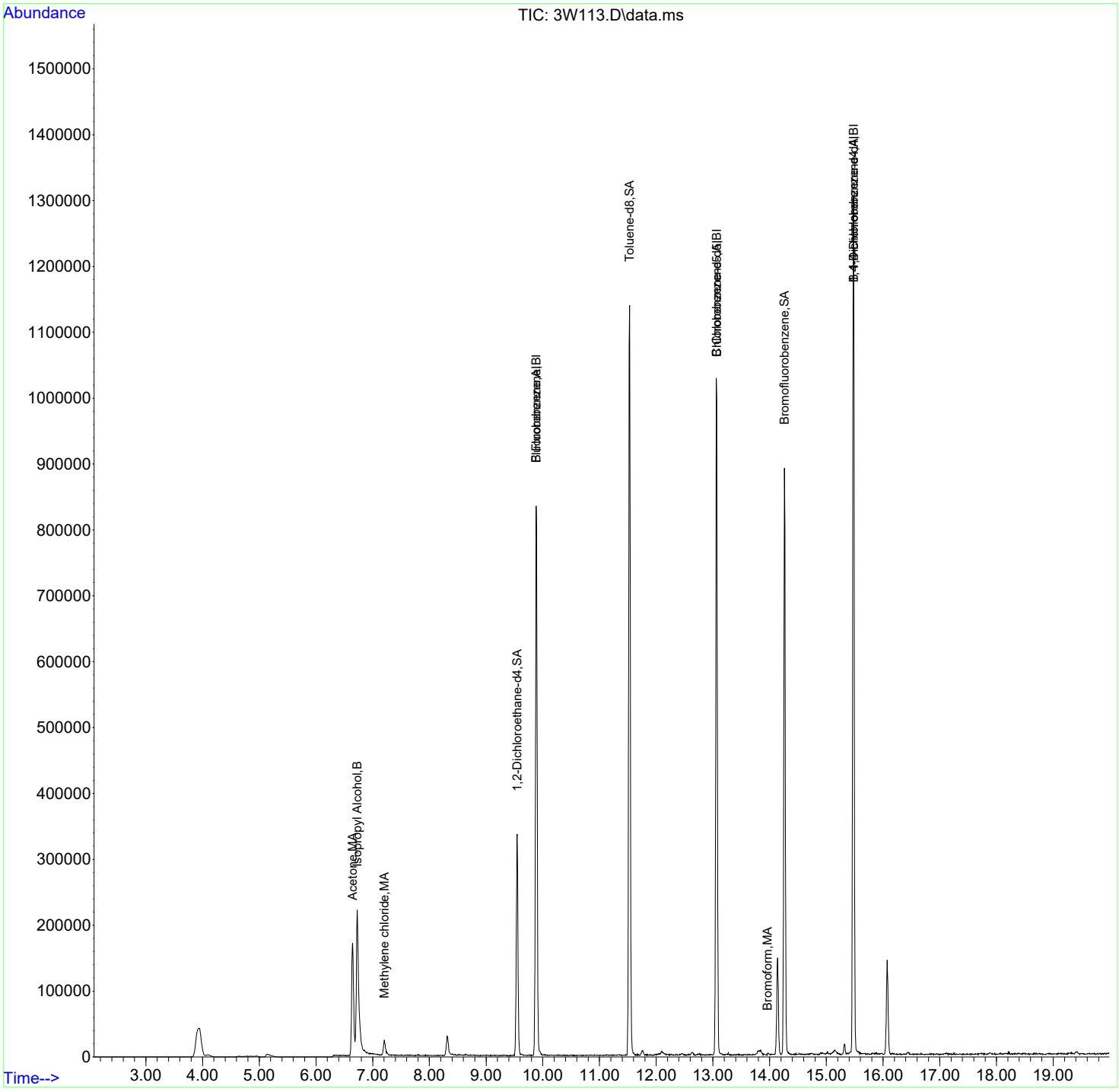
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
87) Isopropyl Alcohol	45	6.726	6.732	0.681	392155	1618.15	ug/L	# 56
88) Allyl chloride		0.000	7.062	0.000	0	N.D.		
89) tert-Butyl Alcohol	59	7.232	7.220	0.732	130	N.D.		
90) Acrylonitrile		0.000	7.482	0.000	0	N.D.		
91) Isopropyl ether	45	7.982	7.988	0.808	121	N.D.		
92) 2-Chloro-1,3-butadiene	53	8.311	8.122	0.841	102	N.D.		
93) Ethyl tert-butyl ether	59	8.323	8.391	0.842	1362	N.D.		
94) Ethyl acetate	43	8.634	8.628	0.874	2296	N.D.		
95) Propionitrile		0.000	8.720	0.000	0	N.D.		
96) Methacrylonitrile		0.000	8.884	0.000	0	N.D.		
97) Tetrahydrofuran		0.000	8.976	0.000	0	N.D.		
98) Isobutyl alcohol		0.000	9.323	0.000	0	N.D.		
99) Methyl tert-amyl ether		0.000	9.640	0.000	0	N.D.		
100) Methyl methacrylate		0.000	10.506	0.000	0	N.D.		
101) 1,4-Dioxane		0.000	10.616	0.000	0	N.D.		
102) 2-Nitropropane		0.000	11.006	0.000	0	N.D.		
104) Ethyl methacrylate	69	11.780	11.774	0.902	228	N.D.		
106) 1-Chlorohexane	55	12.975	12.963	0.838	386	N.D.		
107) cis-1,4-Dichloro-2-butene		0.000	14.121	0.000	0	N.D.		
108) Cyclohexanone	42	14.237	14.237	0.920	100	N.D.		
109) trans-1,4-Dichloro-2-b...		0.000	14.408	0.000	0	N.D.		
110) Pentachloroethane		0.000	15.084	0.000	0	N.D.		
111) Benzyl chloride	91	15.554	15.627	1.005	199	N.D.		
112) bis(2-Chloroisopropyl)...	121	16.035	16.023	1.036	106	N.D.		

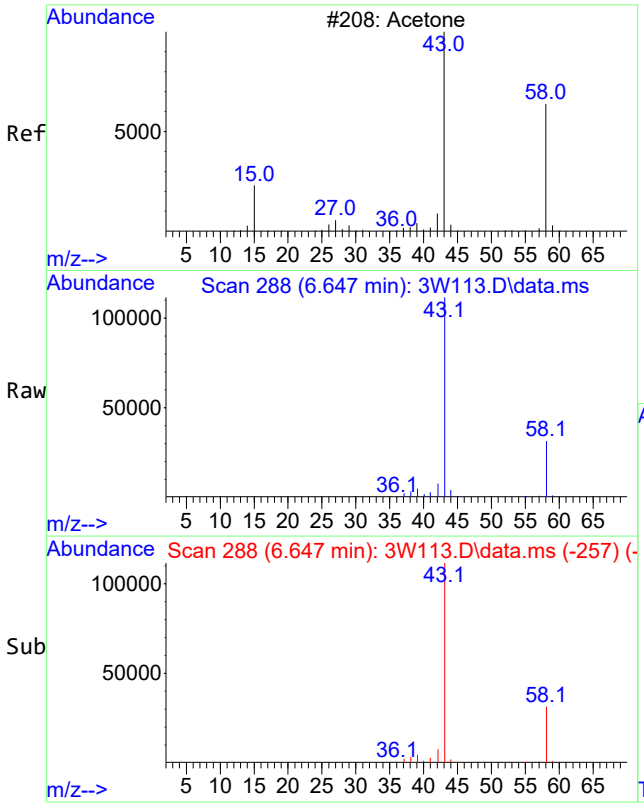
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W113.D
Acq On : 19 Dec 2022 16:06
Operator : KP2
InstName : VOA3
Sample : |604449006|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 20 08:10:51 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

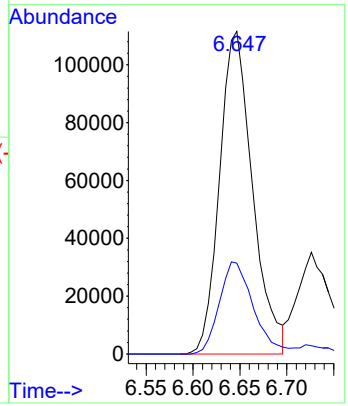


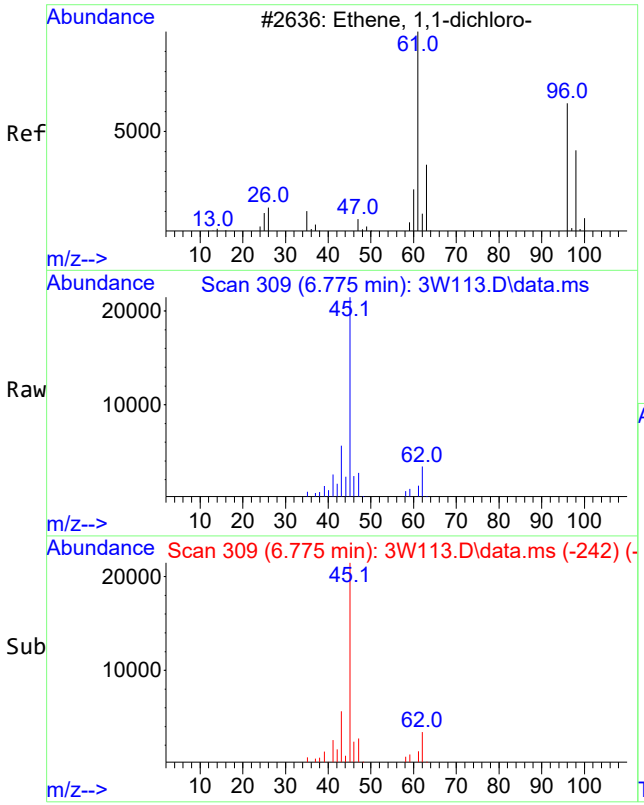


#9
Acetone
Concen: 303.27 ug/L
RT: 6.647 min Scan# 288
Delta R.T. -0.000 min
Lab File: 3W113.D
Acq: 19 Dec 2022 16:06

Tgt Ion: 43 Resp: 273135

Ion	Ratio	Lower	Upper
43	100		
58	29.9	0.0	60.0

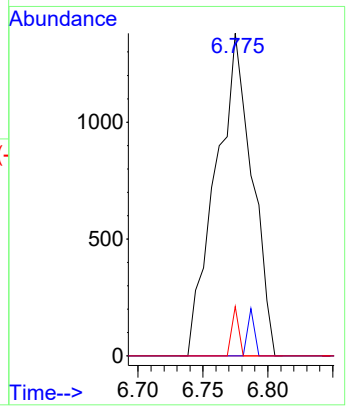


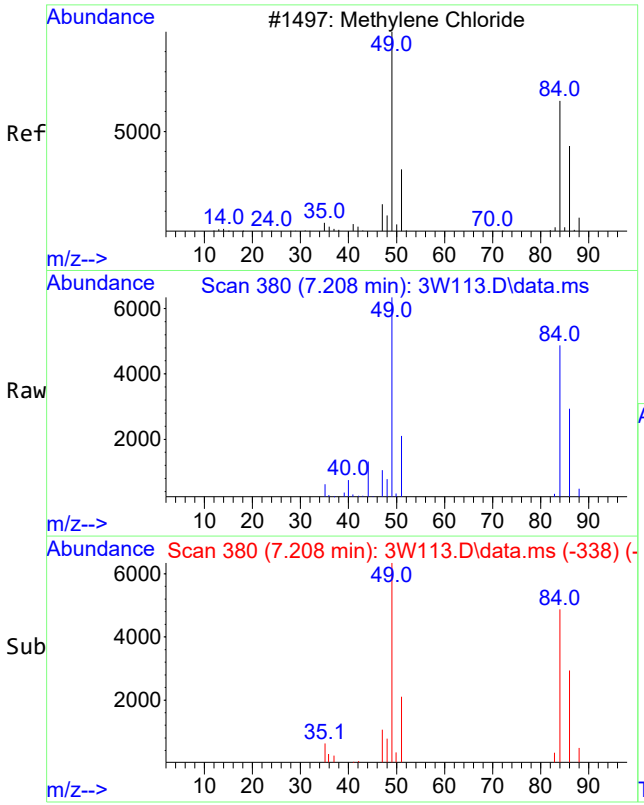


#10 BEFORE analyst DELETION
1,1-Dichloroethylene
Concen: 0.36 ug/L
RT: 6.775 min Scan# 309
Delta R.T. 0.159 min
Lab File: 3W113.D
Acq: 19 Dec 2022 16:06

Tgt Ion: 61 Resp: 2679

Ion	Ratio	Lower	Upper
61	100		
96	0.0	26.9	86.9#
63	0.0	1.7	61.7#

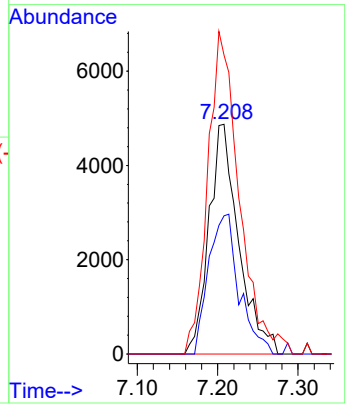


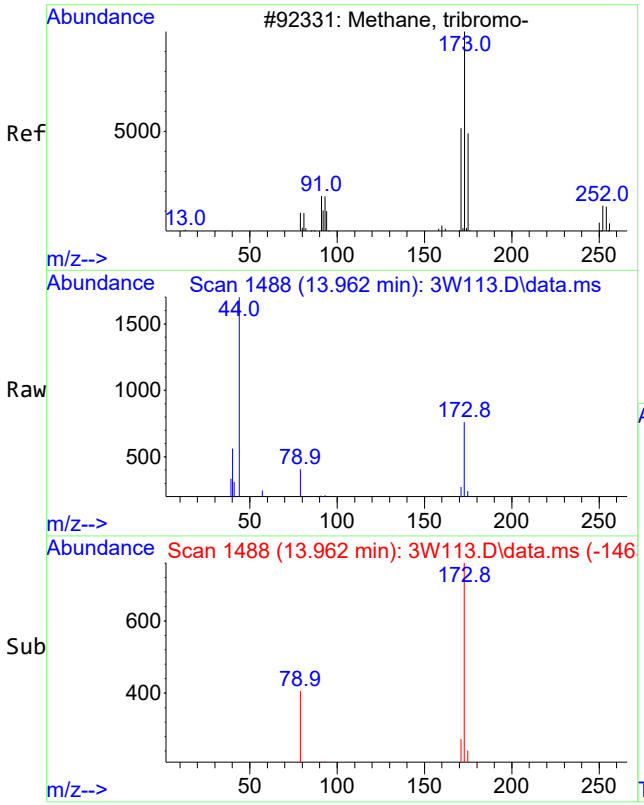


#15
Methylene chloride
Concen: 2.65 ug/L
RT: 7.208 min Scan# 380
Delta R.T. 0.006 min
Lab File: 3W113.D
Acq: 19 Dec 2022 16:06

Tgt Ion: 84 Resp: 12533

Ion	Ratio	Lower	Upper
84	100		
86	62.4	34.2	94.2
49	148.5	110.5	170.5

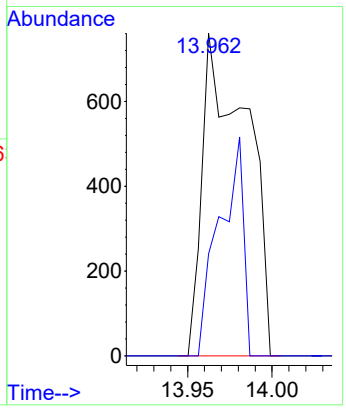


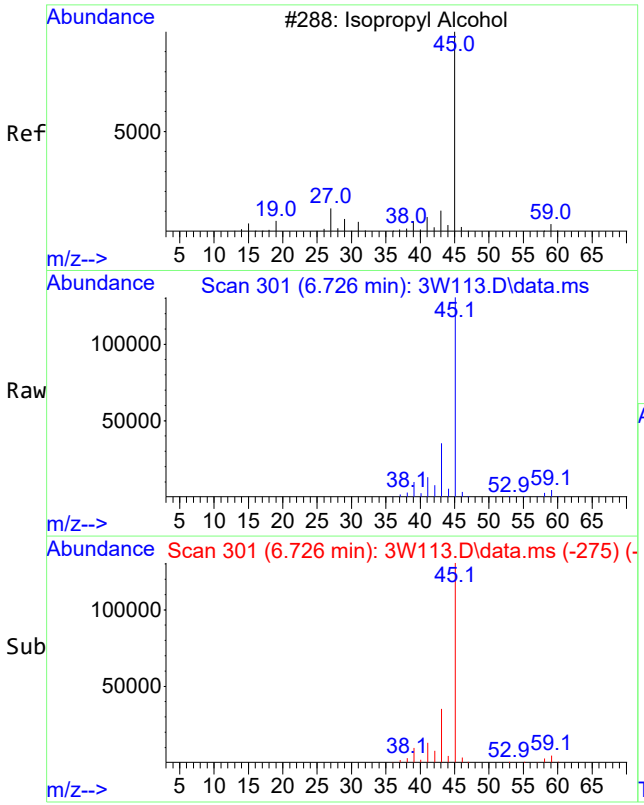


#61
Bromoform
Concen: 0.79 ug/L
RT: 13.962 min Scan# 1488
Delta R.T. -0.013 min
Lab File: 3W113.D
Acq: 19 Dec 2022 16:06

Tgt Ion:173 Resp: 1381

Ion	Ratio	Lower	Upper
173	100		
175	37.1	19.9	79.9

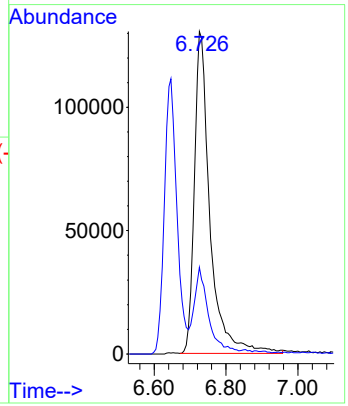




#87
Isopropyl Alcohol
Concen: 1618.15 ug/L
RT: 6.726 min Scan# 301
Delta R.T. -0.006 min
Lab File: 3W113.D
Acq: 19 Dec 2022 16:06

Tgt Ion: 45 Resp: 392155

Ion	Ratio	Lower	Upper
45	100		
43	0.0	0.0	50.0



Library Search Compound Report
GEL Laboratories, LLC

12/21/2022

12/22/2022

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W113.D
Acq On : 19 Dec 2022 16:06
Operator : KP2
Sample : |604449006|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 13 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

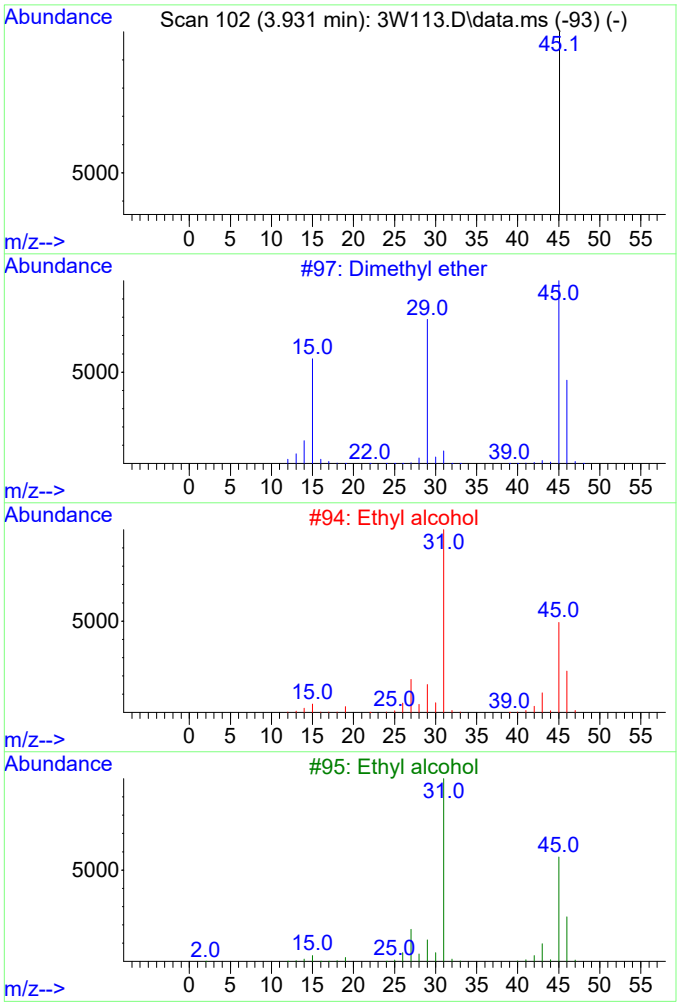
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

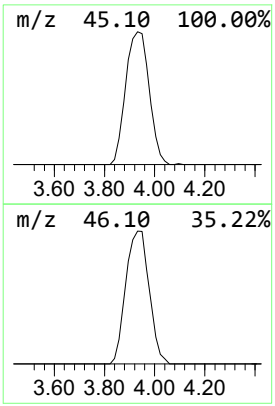
****

Peak Number 1 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.931	8.11 ug/L	289245	Fluorobenzene	9.884

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dimethyl ether	46	C2H6O	000115-10-6	5
2	Ethyl alcohol	46	C2H6O	000064-17-5	4
3	Ethyl alcohol	46	C2H6O	000064-17-5	4
4	Ethyl alcohol	46	C2H6O	000064-17-5	4
5	Dimethyl ether	46	C2H6O	000115-10-6	2





Library Search Compound Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W113.D
Acq On : 19 Dec 2022 16:06
Operator : KP2
Sample : |604449006|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 13 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

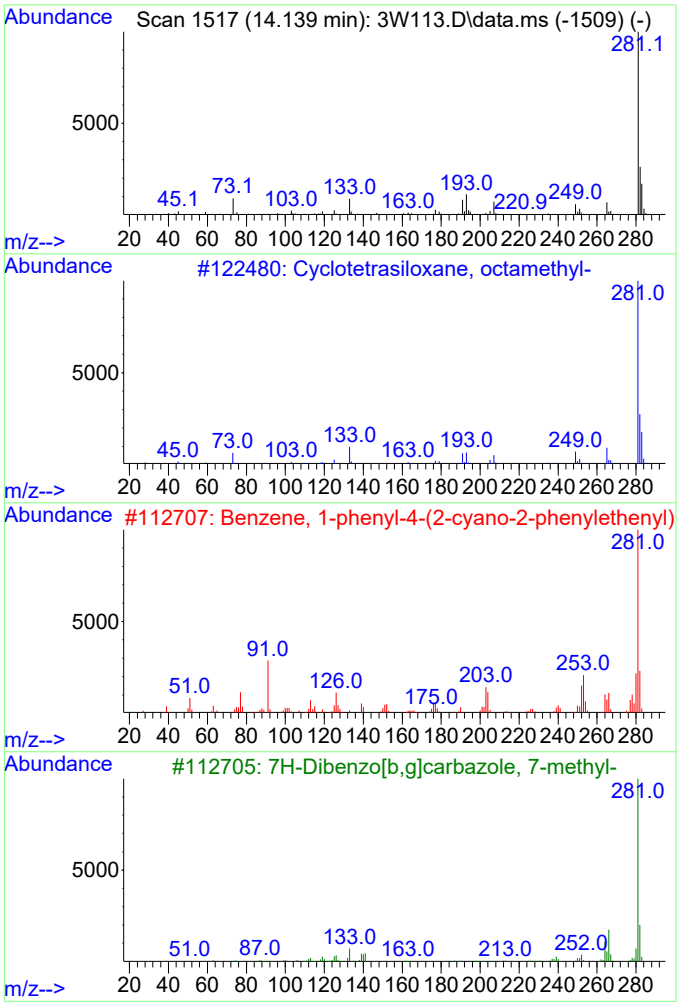
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

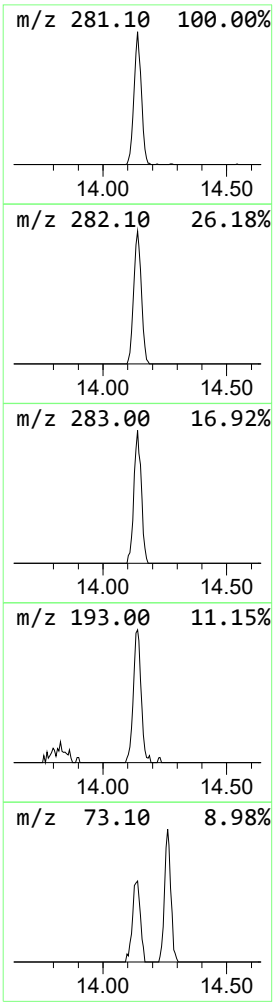
****

Peak Number 2 unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.139	7.84 ug/L	305879	B Chlorobenzene-d5	13.066

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	64
2	Benzene, 1-phenyl-4-(2-cyano-2-p...	281	C21H15N	027869-56-3	59
3	7H-Dibenzo[b,g]carbazole, 7-methyl-	281	C21H15N	003557-49-1	59
4	trans-4-(2-(5-Nitro-2-furyl)viny...	281	C15H11N3O3	000847-10-9	53
5	Dithiocarbonic acid, S-(2,3-diph...	402	C25H22OS2	1000287-50-5	45





Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W113.D
Acq On : 19 Dec 2022 16:06
Operator : KP2
Sample : |604449006|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 13 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

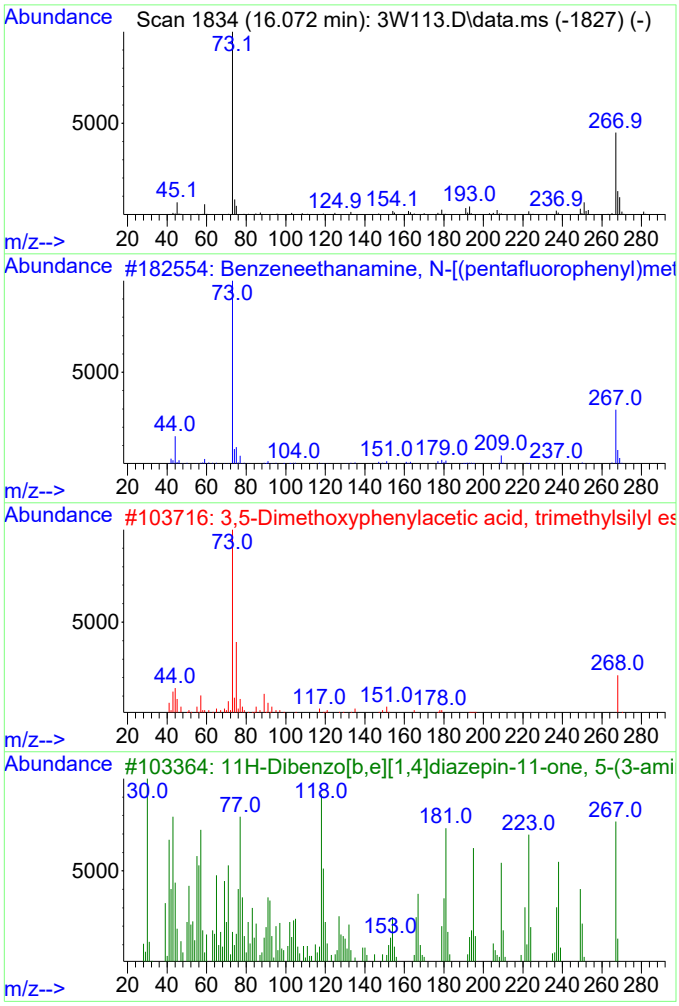
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

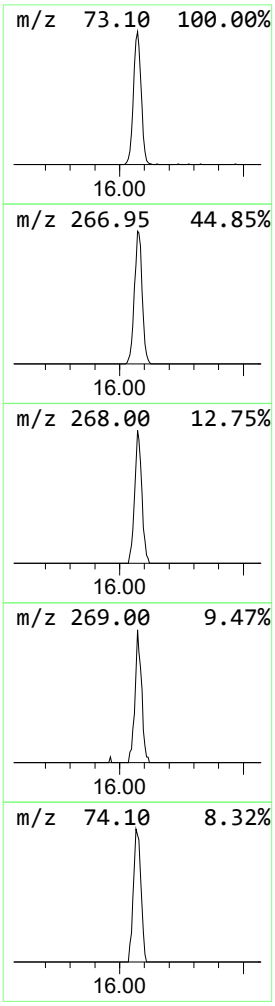
****

Peak Number 3 unknown Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.072	6.21 ug/L	299983	B 1,4-Dichlorobenzene-d4	15.480

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzeneethanamine, N-[(pentafluo...	475	C21H26F5NO2Si2	055429-85-1	10
2	3,5-Dimethoxyphenylacetic acid, ...	268	C13H20O4Si	1000071-82-4	10
3	11H-Dibenzo[b,e][1,4]diazepin-11...	267	C16H17N3O	013450-73-2	9
4	Tetrasiloxane, 1,1,3,3,5,5,7,7-o...	282	C8H26O3Si4	001000-05-1	9
5	2-(O-Trimethylsilyloxyphenyl)-1-...	282	C14H26O2Si2	1000079-07-9	9





Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W113.D
Acq On : 19 Dec 2022 16:06
Operator : KP2
Sample : |604449006|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 13 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

			(ug/L)		Internal Standard		
TIC Top Hit name	CAS #	RT	EstConc	Response	#	RT	Resp	Conc
unknown		3.931	8.1	289245	1	9.884	1783060	50.0
unknown		14.139	7.8	305879	4	13.066	1951910	50.0
unknown		16.072	6.2	299983	6	15.480	2416280	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:36**	**Matrix:**	**W**
Lab Sample ID:	**604449006**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB02-23-265372RA**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/21/2022 00:13**	**Analyst:**	**JM6**	**Purge Vol:**	**5 mL**
Prep Date:	**12/21/2022 00:13**				
Data File:	**122022V3\3W239.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
542-75-6	1,3-Dichloropropylene	U	0.500	ug/L	0.500	2.00
75-71-8	Dichlorodifluoromethane	U	0.355	ug/L	0.355	1.00
74-87-3	Chloromethane	U	0.333	ug/L	0.333	1.00
75-01-4	Vinyl chloride	U	0.333	ug/L	0.333	1.00
74-83-9	Bromomethane	U	0.337	ug/L	0.337	1.00
75-69-4	Trichlorofluoromethane	U	0.333	ug/L	0.333	1.00
75-35-4	1,1-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-09-2	Methylene chloride	J	2.66	ug/L	0.500	5.00
1634-04-4	tert-Butyl methyl ether	U	0.333	ug/L	0.333	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-34-3	1,1-Dichloroethane	U	0.333	ug/L	0.333	1.00
156-59-2	cis-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
67-66-3	Chloroform	U	0.333	ug/L	0.333	1.00
71-55-6	1,1,1-Trichloroethane	U	0.333	ug/L	0.333	1.00
56-23-5	Carbon tetrachloride	U	0.333	ug/L	0.333	1.00
107-06-2	1,2-Dichloroethane	U	0.333	ug/L	0.333	1.00
71-43-2	Benzene	U	0.333	ug/L	0.333	1.00
79-01-6	Trichloroethylene	U	0.333	ug/L	0.333	1.00
78-87-5	1,2-Dichloropropane	U	0.333	ug/L	0.333	1.00
74-95-3	Dibromomethane	U	0.333	ug/L	0.333	1.00
75-27-4	Bromodichloromethane	U	0.333	ug/L	0.333	1.00
108-88-3	Toluene	U	0.333	ug/L	0.333	1.00
79-00-5	1,1,2-Trichloroethane	U	0.333	ug/L	0.333	1.00
127-18-4	Tetrachloroethylene	U	0.333	ug/L	0.333	1.00
106-93-4	1,2-Dibromoethane	U	0.333	ug/L	0.333	1.00
108-90-7	Chlorobenzene	U	0.333	ug/L	0.333	1.00
100-41-4	Ethylbenzene	U	0.333	ug/L	0.333	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.333	ug/L	0.333	1.00
100-42-5	Styrene	U	0.333	ug/L	0.333	1.00
75-25-2	Bromoform	J	0.890	ug/L	0.333	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.333	ug/L	0.333	1.00
106-46-7	1,4-Dichlorobenzene	U	0.333	ug/L	0.333	1.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	1.00	3.00
120-82-1	1,2,4-Trichlorobenzene	U	0.333	ug/L	0.333	1.00
95-50-1	1,2-Dichlorobenzene	U	0.333	ug/L	0.333	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:36**	**Matrix:**	**W**
Lab Sample ID:	**604449006**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB02-23-265372RA**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/21/2022 00:13**	**Analyst:**	**JM6**	**Purge Vol:**	**5 mL**
Prep Date:	**12/21/2022 00:13**				
Data File:	**122022V3\3W239.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	51.2	50.0	ug/L	102	(73%-129%)
Bromofluorobenzene	48.3	50.0	ug/L	97	(72%-125%)
Toluene-d8	53.7	50.0	ug/L	107	(75%-123%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.931	12.7	ug/L	0	J

Quantitation Report
GEL Laboratories, LLC

12/21/2022

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W239.D
Acq On : 21 Dec 2022 00:13
Operator : JM6
InstName : VOA3
Sample : |604449006|2358452|1|VOA|2|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 39 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 21 06:40:26 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	96	9.884	9.884	1.000	841476	50.00	ug/L	0.00
43) Chlorobenzene-d5	117	13.060	13.066	1.000	598393	50.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	152	15.474	15.480	1.000	361327	50.00	ug/L	0.00
84) B Fluorobenzene	96	9.884	9.884	1.000	841491	50.00	ug/L	0.00
103) B Chlorobenzene-d5	117	13.060	13.060	1.000	598393	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	15.474	15.481	1.000	361327	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
30) 1,2-Dichloroethane-d4	67	9.543	9.549	0.965	131466	51.20	ug/L	0.00
45) Toluene-d8	98	11.530	11.530	0.883	862197	53.71	ug/L	0.00
63) Bromofluorobenzene	95	14.261	14.261	0.922	327554	48.34	ug/L	0.00

Compound	Amount	Range	Recovery
30) 1,2-Dichloroethane-d4	50.000	73 - 129	102%
45) Toluene-d8	50.000	75 - 123	107%
63) Bromofluorobenzene	50.000	72 - 125	97%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		0.000	4.260	0.000	0	N.D.		
3) Chloromethane	50	4.662	4.644	0.472	1542	N.D.		
4) Vinyl chloride		0.000	4.826	0.000	0	N.D.		
5) Bromomethane		0.000	5.411	0.000	0	N.D.		
6) Chloroethane		0.000	5.557	0.000	0	N.D.		
7) Trichlorofluoromethane		0.000	5.904	0.000	0	N.D.		
8) Ethyl ether	59	6.232	6.232	0.631	322	N.D.		
9) Acetone	43	6.641	6.647	0.672	657839	699.04	ug/L	99 A
10) 1,1-Dichloroethylene		0.000	6.616	0.000	0m	N.D.	d	
11) Iodomethane	142	6.860	6.866	0.694	119	N.D.		
12) Acetonitrile	41	7.019	7.013	0.710	1171	N.D.		
13) Methyl acetate		0.000	7.025	0.000	0	N.D.		
14) Carbon disulfide	76	6.976	6.982	0.706	2591	N.D.		
15) Methylene chloride	84	7.208	7.202	0.729	13180	2.66	ug/L	91
16) tert-Butyl methyl ether		0.000	7.482	0.000	0	N.D.		
17) trans-1,2-Dichloroethy...		0.000	7.531	0.000	0	N.D.		
18) Hexane	57	7.799	7.799	0.789	5922	N.D.		
19) Vinyl acetate	43	7.793	7.988	0.788	4113	N.D.		
20) 1,1-Dichloroethane		0.000	8.018	0.000	0	N.D.		
21) 2-Butanone	43	8.634	8.622	0.874	2392	N.D.		
22) cis-1,2-Dichloroethylene		0.000	8.659	0.000	0	N.D.		
23) 2,2-Dichloropropane	77	8.689	8.671	0.879	110	N.D.		
24) Bromochloromethane		0.000	8.933	0.000	0	N.D.		
25) Chloroform	83	8.957	8.970	0.906	190	N.D.		
26) 1,1,1-Trichloroethane		0.000	9.226	0.000	0	N.D.		
27) Cyclohexane		0.000	9.305	0.000	0	N.D.		
28) 1,1-Dichloropropene	75	9.421	9.384	0.953	112	N.D.		
29) Carbon tetrachloride		0.000	9.415	0.000	0	N.D.		
31) 1,2-Dichloroethane		0.000	9.628	0.000	0	N.D.		
32) Benzene	78	9.616	9.628	0.973	105	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W239.D
Acq On : 21 Dec 2022 00:13
Operator : JM6
InstName : VOA3
Sample : |604449006|2358452|1|VOA|2|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Dec 21 06:40:26 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
33) Cyclohexene	67	9.872	9.732	0.999	287	N.D.		
34) n-Butyl alcohol	56	10.030	10.012	1.015	682	N.D.		
35) Trichloroethylene		0.000	10.268	0.000	0	N.D.		
36) 2-Pentanone	43	10.433	10.378	1.056	176	N.D.		
37) 1,2-Dichloropropane		0.000	10.530	0.000	0	N.D.		
38) Methylcyclohexane		0.000	10.494	0.000	0	N.D.		
39) Dibromomethane		0.000	10.664	0.000	0	N.D.		
40) Bromodichloromethane		0.000	10.780	0.000	0	N.D.		
41) 2-Chloroethylvinyl ether		0.000	11.006	0.000	0	N.D.		
42) cis-1,3-Dichloropropylene		0.000	11.231	0.000	0	N.D.		
44) 4-Methyl-2-pentanone	43	11.341	11.329	0.868	831	N.D.		
46) Toluene	91	11.597	11.603	0.888	626	N.D.		
47) trans-1,3-Dichloroprop...		0.000	11.780	0.000	0	N.D.		
48) 1,1,2-Trichloroethane		0.000	11.999	0.000	0	N.D.		
49) 2-Hexanone	43	12.195	12.182	0.934	341	N.D.		
50) 1,3-Dichloropropane		0.000	12.188	0.000	0	N.D.		
51) Tetrachloroethylene	164	12.188	12.188	0.933	127	N.D.		
52) Dibromochloromethane	129	12.444	12.457	0.953	1158	0.38	ug/L	93
53) 1,2-Dibromoethane		0.000	12.621	0.000	0	N.D.		
54) Chlorobenzene	112	13.097	13.097	1.003	138	N.D.		
55) 1,1,1,2-Tetrachloroethane		0.000	13.152	0.000	0	N.D.		
56) Ethylbenzene	91	13.158	13.158	1.007	160	N.D.		
57) m,p-Xylenes		0.000	13.267	0.000	0	N.D.		
58) o-Xylene		0.000	13.700	0.000	0	N.D.		
59) Styrene		0.000	13.706	0.000	0	N.D.		
61) Bromoform	173	13.969	13.975	0.903	1496	0.89	ug/L	97
62) Isopropylbenzene	105	14.133	14.060	0.913	115	N.D.		
64) 1,1,2,2-Tetrachloroethane	83	14.267	14.359	0.922	120	N.D.		
65) 1,2,3-Trichloropropane		0.000	14.444	0.000	0	N.D.		
66) Bromobenzene		0.000	14.468	0.000	0	N.D.		
67) n-Propylbenzene	91	14.487	14.487	0.936	544	N.D.		
68) 1,3,5-Trimethylbenzene		0.000	14.639	0.000	0	N.D.		
69) 2-Chlorotoluene		0.000	14.633	0.000	0	N.D.		
70) 4-Chlorotoluene		0.000	14.743	0.000	0	N.D.		
71) tert-Butylbenzene	134	15.023	15.011	0.971	176	N.D.		
72) 1,2,4-Trimethylbenzene	105	15.048	15.054	0.972	424	N.D.		
73) sec-Butylbenzene	105	15.237	15.237	0.985	240	N.D.		
74) 4-Isopropyltoluene	119	15.365	15.359	0.993	497	N.D.		
75) 1,3-Dichlorobenzene	146	15.413	15.419	0.996	2246	N.D.		
76) 1,4-Dichlorobenzene	146	15.505	15.505	1.002	955	N.D.		
77) n-Butylbenzene	91	15.804	15.791	1.021	483	N.D.		
78) 1,2-Dichlorobenzene	146	15.925	15.919	1.029	487	N.D.		
79) 1,2-Dibromo-3-chloropr...		0.000	16.785	0.000	0	N.D.		
80) 1,2,4-Trichlorobenzene	180	17.785	17.791	1.149	854	N.D.		
81) Hexachlorobutadiene		0.000	17.949	0.000	0	N.D.		
82) Naphthalene	128	18.163	18.163	1.174	2422	N.D.		
83) 1,2,3-Trichlorobenzene	180	18.498	18.492	1.195	514	N.D.		
85) Acrolein		0.000	6.470	0.000	0	N.D.		
86) Trichlorotrifluoroethane		0.000	6.586	0.000	0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W239.D
Acq On : 21 Dec 2022 00:13
Operator : JM6
InstName : VOA3
Sample : |604449006|2358452|1|VOA|2|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Dec 21 06:40:26 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

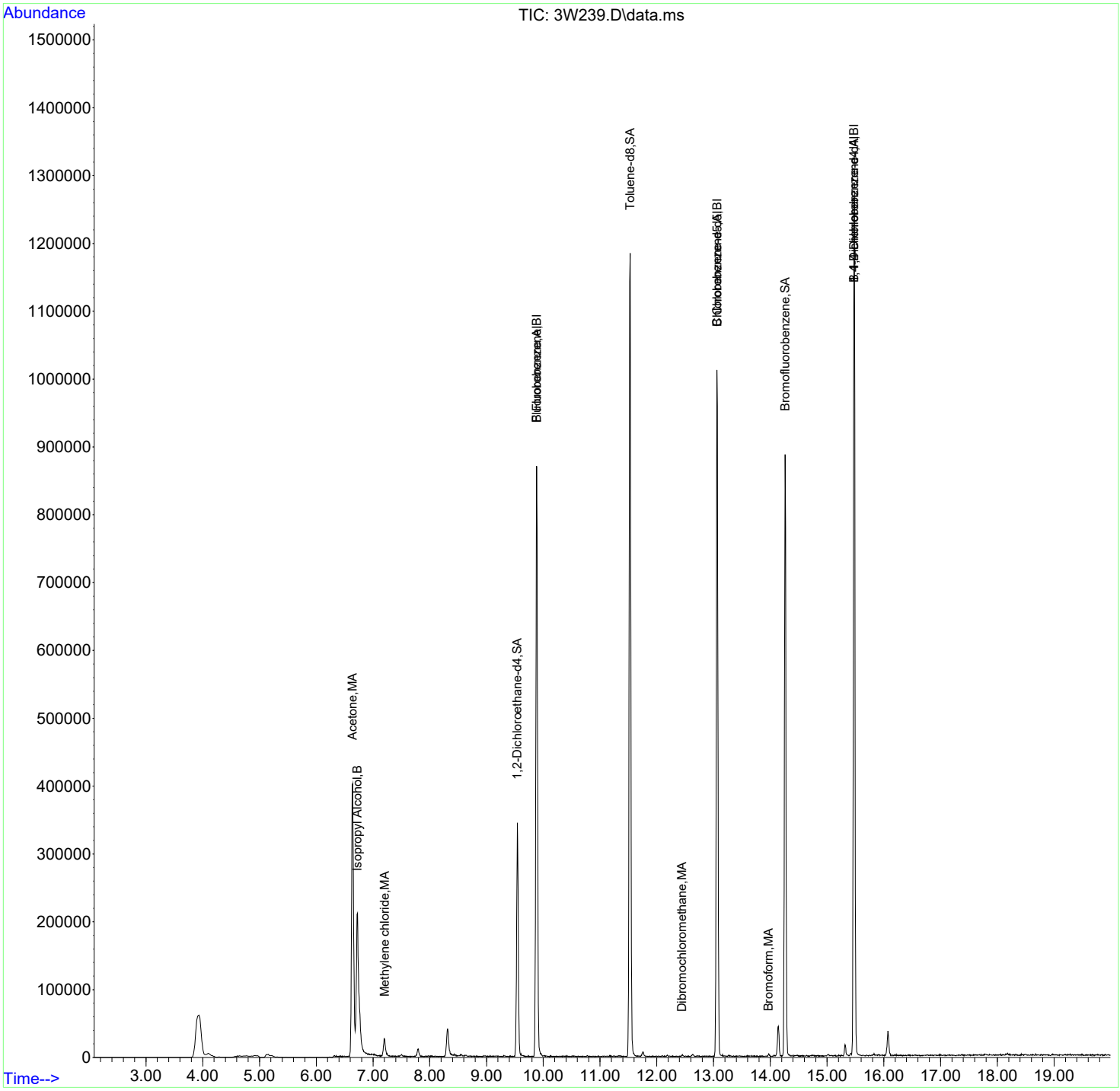
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
87) Isopropyl Alcohol	45	6.720	6.732	0.680	384147	1518.30	ug/L #	56
88) Allyl chloride	76	6.976	7.062	0.706	2591	N.D.		
89) tert-Butyl Alcohol	59	7.263	7.220	0.735	477	N.D.		
90) Acrylonitrile		0.000	7.482	0.000	0	N.D.		
91) Isopropyl ether		0.000	7.988	0.000	0	N.D.		
92) 2-Chloro-1,3-butadiene	53	8.281	8.122	0.838	279	N.D.		
93) Ethyl tert-butyl ether	59	8.305	8.391	0.840	1582	N.D.		
94) Ethyl acetate	43	8.634	8.628	0.874	2392	N.D.		
95) Propionitrile		0.000	8.720	0.000	0	N.D.		
96) Methacrylonitrile		0.000	8.884	0.000	0	N.D.		
97) Tetrahydrofuran		0.000	8.976	0.000	0	N.D.		
98) Isobutyl alcohol		0.000	9.323	0.000	0	N.D.		
99) Methyl tert-amyl ether		0.000	9.640	0.000	0	N.D.		
100) Methyl methacrylate		0.000	10.506	0.000	0	N.D.		
101) 1,4-Dioxane		0.000	10.616	0.000	0	N.D.		
102) 2-Nitropropane		0.000	11.006	0.000	0	N.D.		
104) Ethyl methacrylate		0.000	11.774	0.000	0	N.D.		
106) 1-Chlorohexane		0.000	12.963	0.000	0	N.D.		
107) cis-1,4-Dichloro-2-butene		0.000	14.121	0.000	0	N.D.		
108) Cyclohexanone		0.000	14.237	0.000	0	N.D.		
109) trans-1,4-Dichloro-2-b...		0.000	14.408	0.000	0	N.D.		
110) Pentachloroethane		0.000	15.084	0.000	0	N.D.		
111) Benzyl chloride	91	15.627	15.627	1.010	321	N.D.		
112) bis(2-Chloroisopropyl)...		0.000	16.023	0.000	0	N.D.		

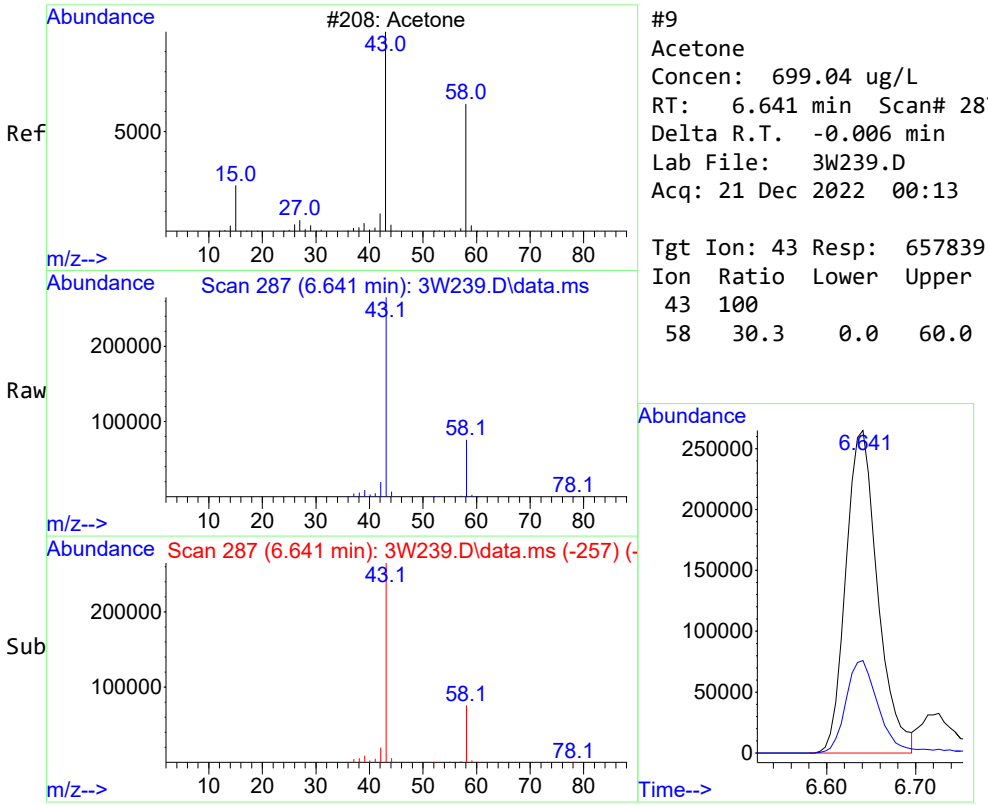
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W239.D
Acq On : 21 Dec 2022 00:13
Operator : JM6
InstName : VOA3
Sample : |604449006|2358452|1|VOA|2|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Dec 21 06:40:26 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

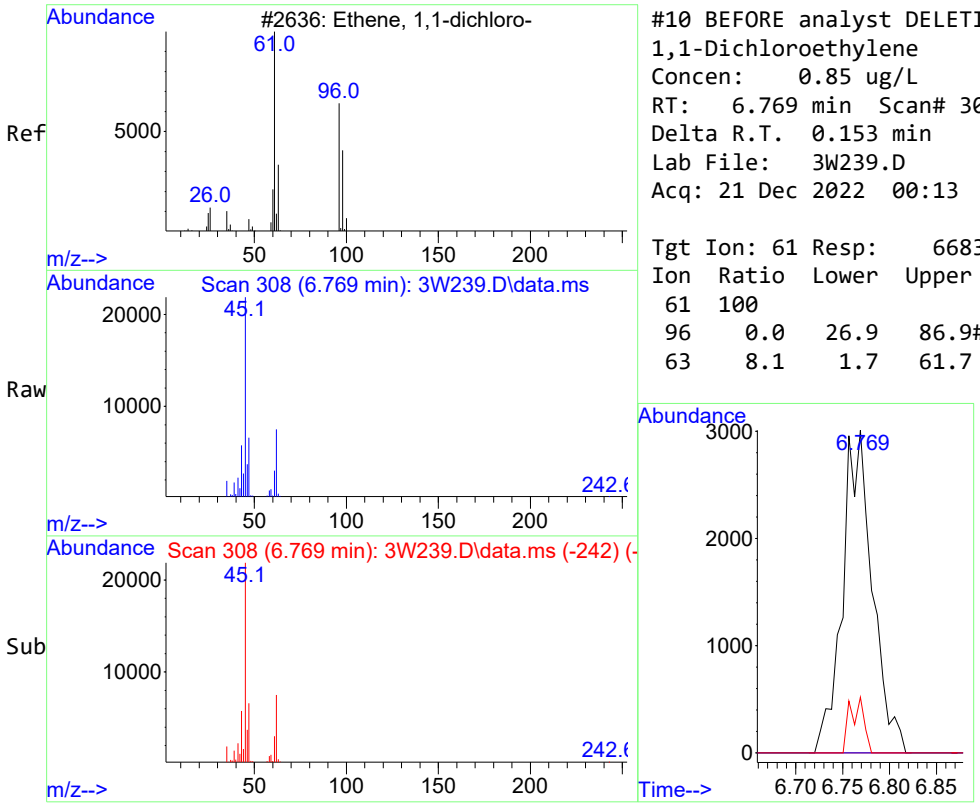




#9
Acetone
Concen: 699.04 ug/L
RT: 6.641 min Scan# 287
Delta R.T. -0.006 min
Lab File: 3W239.D
Acq: 21 Dec 2022 00:13

Tgt Ion: 43 Resp: 657839

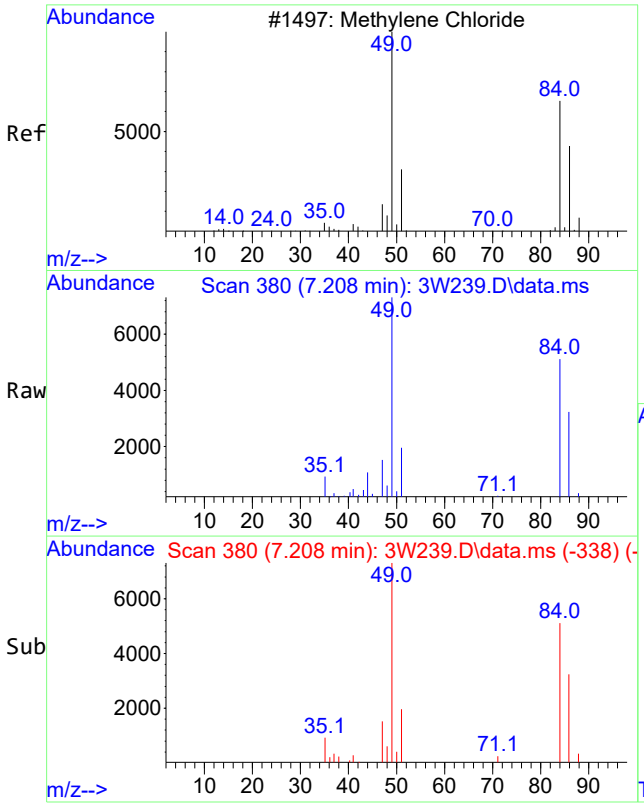
Ion	Ratio	Lower	Upper
43	100		
58	30.3	0.0	60.0



#10 BEFORE analyst DELETION
1,1-Dichloroethylene
Concen: 0.85 ug/L
RT: 6.769 min Scan# 308
Delta R.T. 0.153 min
Lab File: 3W239.D
Acq: 21 Dec 2022 00:13

Tgt Ion: 61 Resp: 6683

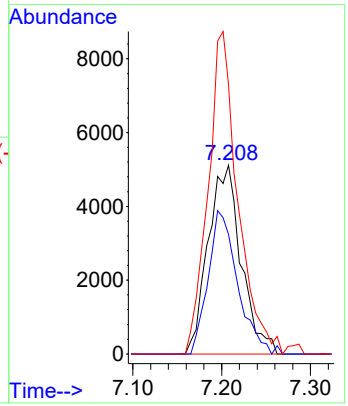
Ion	Ratio	Lower	Upper
61	100		
96	0.0	26.9	86.9#
63	8.1	1.7	61.7

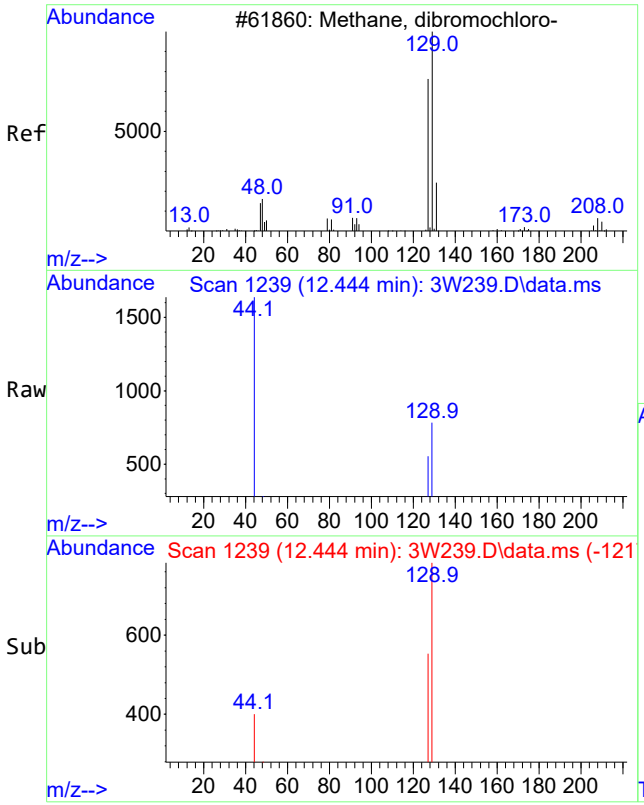


#15
Methylene chloride
Concen: 2.66 ug/L
RT: 7.208 min Scan# 380
Delta R.T. 0.006 min
Lab File: 3W239.D
Acq: 21 Dec 2022 00:13

Tgt Ion: 84 Resp: 13180

Ion	Ratio	Lower	Upper
84	100		
86	67.7	34.2	94.2
49	154.1	110.5	170.5

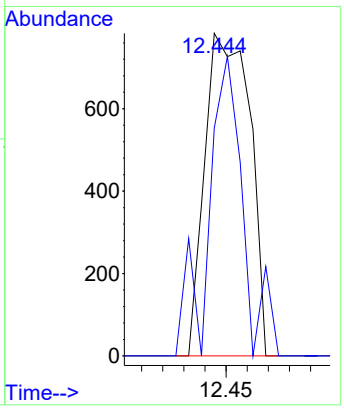


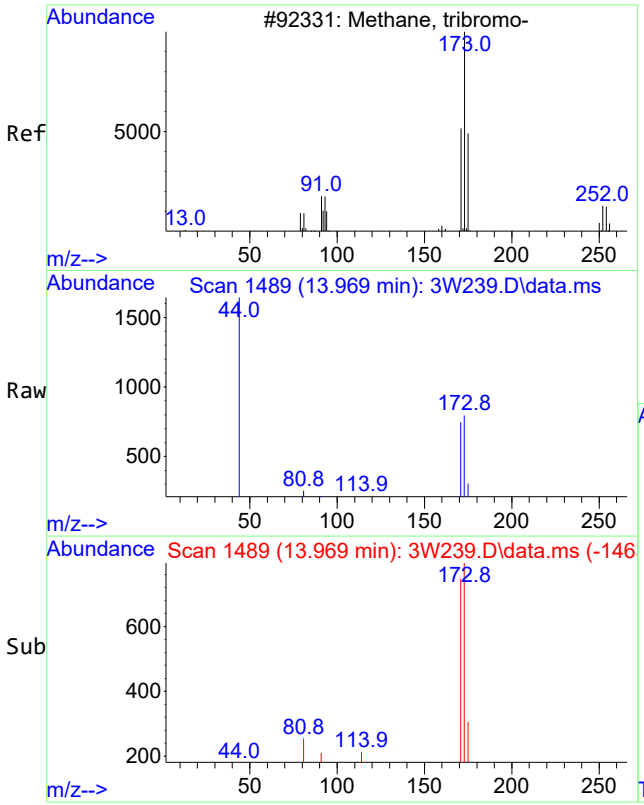


#52
Dibromochloromethane
Concen: 0.38 ug/L
RT: 12.444 min Scan# 1239
Delta R.T. -0.013 min
Lab File: 3W239.D
Acq: 21 Dec 2022 00:13

Tgt Ion:129 Resp: 1158

Ion	Ratio	Lower	Upper
129	100		
127	71.2	47.0	107.0

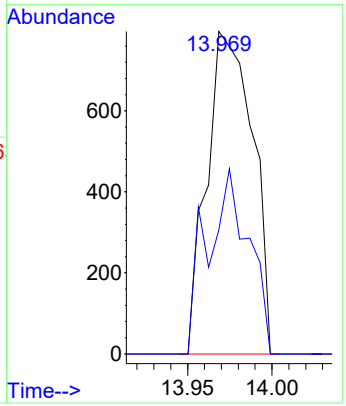


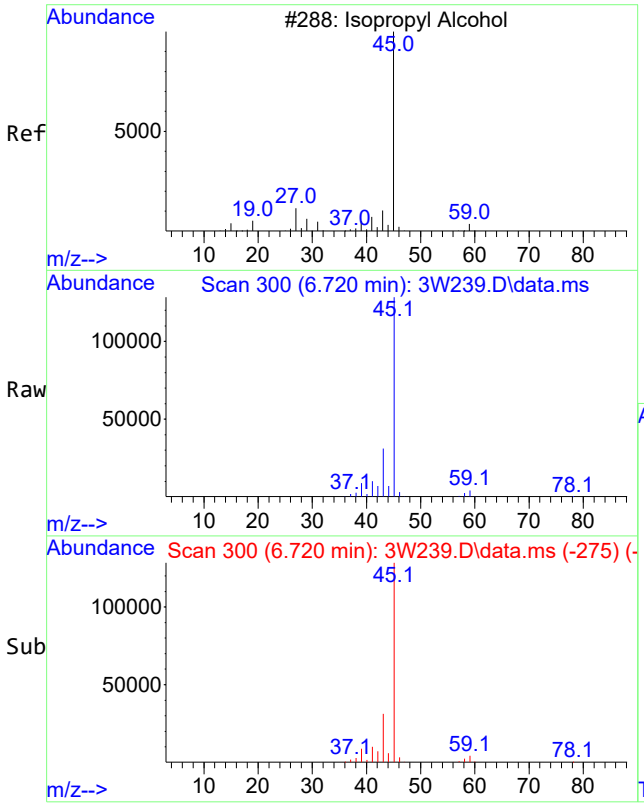


#61
Bromoform
Concen: 0.89 ug/L
RT: 13.969 min Scan# 1489
Delta R.T. -0.006 min
Lab File: 3W239.D
Acq: 21 Dec 2022 00:13

Tgt Ion:173 Resp: 1496

Ion	Ratio	Lower	Upper
173	100		
175	52.2	19.9	79.9

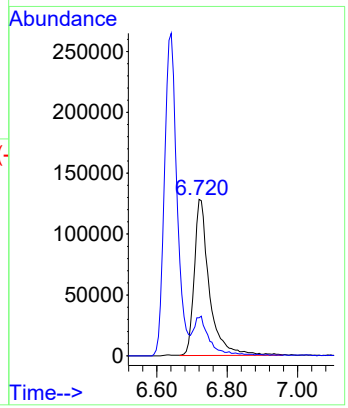




#87
Isopropyl Alcohol
Concen: 1518.30 ug/L
RT: 6.720 min Scan# 300
Delta R.T. -0.012 min
Lab File: 3W239.D
Acq: 21 Dec 2022 00:13

Tgt Ion: 45 Resp: 384147

Ion	Ratio	Lower	Upper
45	100		
43	0.0	0.0	50.0



Library Search Compound Report
GEL Laboratories, LLC

12/21/2022

12/22/2022

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W239.D
Acq On : 21 Dec 2022 00:13
Operator : JM6
Sample : |604449006|2358452|1|VOA|2|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 39 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

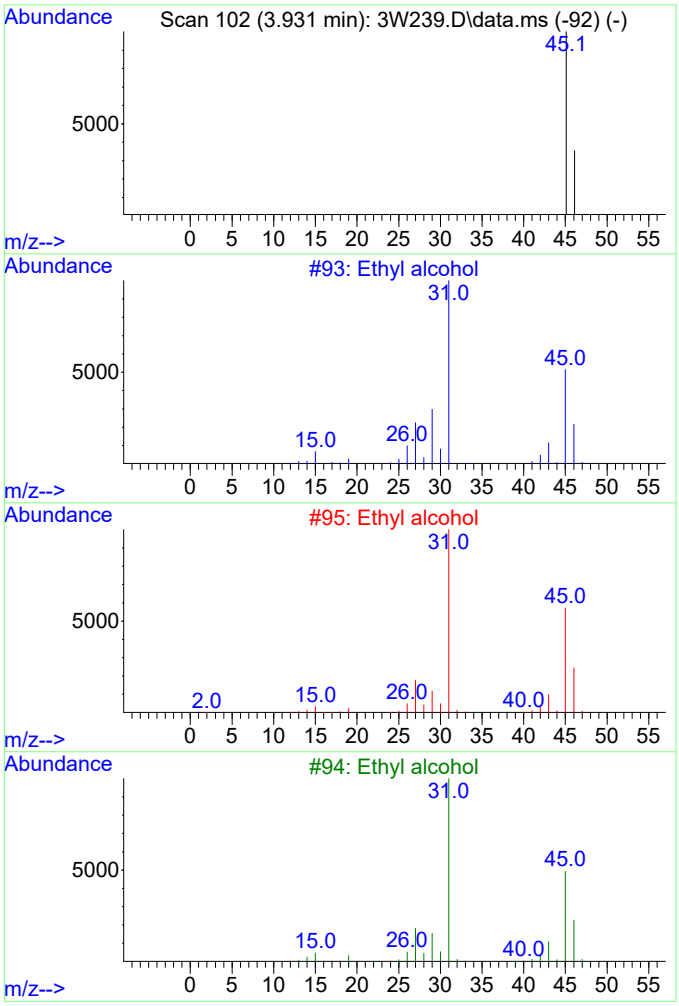
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

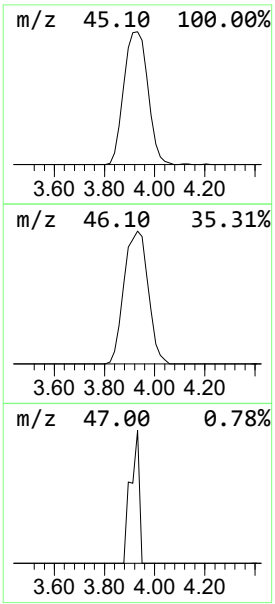
****

Peak Number 1 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.931	12.69 ug/L	464720	Fluorobenzene	9.884

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Ethyl alcohol	46	C2H6O	000064-17-5	4
2	Ethyl alcohol	46	C2H6O	000064-17-5	4
3	Ethyl alcohol	46	C2H6O	000064-17-5	4
4	Dimethyl ether	46	C2H6O	000115-10-6	4
5	Dimethyl ether	46	C2H6O	000115-10-6	4





Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W239.D
Acq On : 21 Dec 2022 00:13
Operator : JM6
Sample : |604449006|2358452|1|VOA|2|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 39 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

			(ug/L)		Internal Standard		
TIC Top Hit name	CAS #	RT	EstConc	Response	#	RT	Resp	Conc
unknown		3.931	12.7	464720	1	9.884	1831200	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:36**	**Matrix:**	**W**
Lab Sample ID:	**604449007**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB02-23-265377**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 16:32**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 16:32**				
Data File:	**121922V3\3W114.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
542-75-6	1,3-Dichloropropylene	U	0.500	ug/L	0.500	2.00
75-71-8	Dichlorodifluoromethane	U	0.355	ug/L	0.355	1.00
74-87-3	Chloromethane	U	0.333	ug/L	0.333	1.00
75-01-4	Vinyl chloride	U	0.333	ug/L	0.333	1.00
74-83-9	Bromomethane	U	0.337	ug/L	0.337	1.00
75-69-4	Trichlorofluoromethane	U	0.333	ug/L	0.333	1.00
75-35-4	1,1-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-09-2	Methylene chloride	BJ	2.51	ug/L	0.500	5.00
1634-04-4	tert-Butyl methyl ether	U	0.333	ug/L	0.333	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-34-3	1,1-Dichloroethane	U	0.333	ug/L	0.333	1.00
156-59-2	cis-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
67-66-3	Chloroform	U	0.333	ug/L	0.333	1.00
71-55-6	1,1,1-Trichloroethane	U	0.333	ug/L	0.333	1.00
56-23-5	Carbon tetrachloride	U	0.333	ug/L	0.333	1.00
107-06-2	1,2-Dichloroethane	U	0.333	ug/L	0.333	1.00
71-43-2	Benzene	U	0.333	ug/L	0.333	1.00
79-01-6	Trichloroethylene	U	0.333	ug/L	0.333	1.00
78-87-5	1,2-Dichloropropane	U	0.333	ug/L	0.333	1.00
74-95-3	Dibromomethane	U	0.333	ug/L	0.333	1.00
75-27-4	Bromodichloromethane	U	0.333	ug/L	0.333	1.00
108-88-3	Toluene	U	0.333	ug/L	0.333	1.00
79-00-5	1,1,2-Trichloroethane	U	0.333	ug/L	0.333	1.00
127-18-4	Tetrachloroethylene	U	0.333	ug/L	0.333	1.00
106-93-4	1,2-Dibromoethane	U	0.333	ug/L	0.333	1.00
108-90-7	Chlorobenzene	U	0.333	ug/L	0.333	1.00
100-41-4	Ethylbenzene	U	0.333	ug/L	0.333	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.333	ug/L	0.333	1.00
100-42-5	Styrene	U	0.333	ug/L	0.333	1.00
75-25-2	Bromoform	U	0.333	ug/L	0.333	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.333	ug/L	0.333	1.00
106-46-7	1,4-Dichlorobenzene	U	0.333	ug/L	0.333	1.00
107-02-8	Acrolein	U	1.67	ug/L	1.67	5.00
107-13-1	Acrylonitrile	U	1.67	ug/L	1.67	5.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	1.00	3.00
120-82-1	1,2,4-Trichlorobenzene	U	0.333	ug/L	0.333	1.00
95-50-1	1,2-Dichlorobenzene	U	0.333	ug/L	0.333	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:36**	**Matrix:**	**W**
Lab Sample ID:	**604449007**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB02-23-265377**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 16:32**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 16:32**				
Data File:	**121922V3\3W114.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	49.7	50.0	ug/L	99	(73%-129%)
Bromofluorobenzene	44.4	50.0	ug/L	89	(72%-125%)
Toluene-d8	49.6	50.0	ug/L	99	(75%-123%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.931	9.46	ug/L	0	J

Quantitation Report
GEL Laboratories, LLC

12/21/2022

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W114.D
Acq On : 19 Dec 2022 16:32
Operator : KP2
InstName : VOA3
Sample : |604449007|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 14 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 20 08:11:05 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	96	9.884	9.884	1.000	968960	50.00	ug/L	0.00
43) Chlorobenzene-d5	117	13.060	13.066	1.000	722872	50.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	152	15.481	15.480	1.000	447301	50.00	ug/L	0.00
84) B Fluorobenzene	96	9.884	9.884	1.000	968980	50.00	ug/L	0.00
103) B Chlorobenzene-d5	117	13.060	13.060	1.000	722872	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	15.481	15.481	1.000	447301	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
30) 1,2-Dichloroethane-d4	67	9.543	9.549	0.965	146811	49.65	ug/L	0.00
45) Toluene-d8	98	11.530	11.530	0.883	961512	49.59	ug/L	0.00
63) Bromofluorobenzene	95	14.261	14.261	0.921	372120	44.36	ug/L	0.00

Compound	Amount	Range	Recovery
30) 1,2-Dichloroethane-d4	50.000	73 - 129	99%
45) Toluene-d8	50.000	75 - 123	99%
63) Bromofluorobenzene	50.000	72 - 125	89%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		0.000	4.260	0.000	0	N.D.		
3) Chloromethane	50	4.662	4.644	0.472	1123	N.D.		
4) Vinyl chloride		0.000	4.826	0.000	0	N.D.		
5) Bromomethane	94	5.319	5.411	0.538	224	N.D.		
6) Chloroethane		0.000	5.557	0.000	0	N.D.		
7) Trichlorofluoromethane		0.000	5.904	0.000	0	N.D.		
8) Ethyl ether		0.000	6.232	0.000	0	N.D.		
9) Acetone		0.000	6.647	0.000	0m	N.D.	d	
10) 1,1-Dichloroethylene		0.000	6.616	0.000	0	N.D.		
11) Iodomethane		0.000	6.866	0.000	0	N.D.		
12) Acetonitrile	41	7.019	7.013	0.710	217	N.D.		
13) Methyl acetate		0.000	7.025	0.000	0	N.D.		
14) Carbon disulfide	76	6.976	6.982	0.706	433	N.D.		
15) Methylene chloride	84	7.202	7.202	0.729	14316	2.51	ug/L	90
16) tert-Butyl methyl ether		0.000	7.482	0.000	0	N.D.		
17) trans-1,2-Dichloroethy...		0.000	7.531	0.000	0	N.D.		
18) Hexane	57	7.799	7.799	0.789	215	N.D.		
19) Vinyl acetate	43	7.793	7.988	0.788	118	N.D.		
20) 1,1-Dichloroethane		0.000	8.018	0.000	0	N.D.		
21) 2-Butanone	43	8.640	8.622	0.874	320	N.D.		
22) cis-1,2-Dichloroethylene		0.000	8.659	0.000	0	N.D.		
23) 2,2-Dichloropropane		0.000	8.671	0.000	0	N.D.		
24) Bromochloromethane		0.000	8.933	0.000	0	N.D.		
25) Chloroform		0.000	8.970	0.000	0	N.D.		
26) 1,1,1-Trichloroethane		0.000	9.226	0.000	0	N.D.		
27) Cyclohexane		0.000	9.305	0.000	0	N.D.		
28) 1,1-Dichloropropene		0.000	9.384	0.000	0	N.D.		
29) Carbon tetrachloride		0.000	9.415	0.000	0	N.D.		
31) 1,2-Dichloroethane		0.000	9.628	0.000	0	N.D.		
32) Benzene		0.000	9.628	0.000	0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W114.D
Acq On : 19 Dec 2022 16:32
Operator : KP2
InstName : VOA3
Sample : |604449007|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 20 08:11:05 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
33) Cyclohexene	67	9.890	9.732	1.001	165	N.D.	
34) n-Butyl alcohol	56	10.030	10.012	1.015	105	N.D.	
35) Trichloroethylene		0.000	10.268	0.000	0	N.D.	
36) 2-Pentanone		0.000	10.378	0.000	0	N.D.	
37) 1,2-Dichloropropane		0.000	10.530	0.000	0	N.D.	
38) Methylcyclohexane		0.000	10.494	0.000	0	N.D.	
39) Dibromomethane		0.000	10.664	0.000	0	N.D.	
40) Bromodichloromethane		0.000	10.780	0.000	0	N.D.	
41) 2-Chloroethylvinyl ether		0.000	11.006	0.000	0	N.D.	
42) cis-1,3-Dichloropropylene		0.000	11.231	0.000	0	N.D.	
44) 4-Methyl-2-pentanone		0.000	11.329	0.000	0	N.D.	
46) Toluene		0.000	11.603	0.000	0	N.D.	
47) trans-1,3-Dichloroprop...		0.000	11.780	0.000	0	N.D.	
48) 1,1,2-Trichloroethane		0.000	11.999	0.000	0	N.D.	
49) 2-Hexanone	43	12.195	12.182	0.934	313	N.D.	
50) 1,3-Dichloropropane		0.000	12.188	0.000	0	N.D.	
51) Tetrachloroethylene		0.000	12.188	0.000	0	N.D.	
52) Dibromochloromethane		0.000	12.457	0.000	0	N.D.	
53) 1,2-Dibromoethane		0.000	12.621	0.000	0	N.D.	
54) Chlorobenzene		0.000	13.097	0.000	0	N.D.	
55) 1,1,1,2-Tetrachloroethane		0.000	13.152	0.000	0	N.D.	
56) Ethylbenzene	91	13.060	13.158	1.000	1328	N.D.	
57) m,p-Xylenes		0.000	13.267	0.000	0	N.D.	
58) o-Xylene		0.000	13.700	0.000	0	N.D.	
59) Styrene		0.000	13.706	0.000	0	N.D.	
61) Bromoform		0.000	13.975	0.000	0	N.D.	
62) Isopropylbenzene		0.000	14.060	0.000	0	N.D.	
64) 1,1,2,2-Tetrachloroethane	83	14.255	14.359	0.921	169	N.D.	
65) 1,2,3-Trichloropropane		0.000	14.444	0.000	0	N.D.	
66) Bromobenzene		0.000	14.468	0.000	0	N.D.	
67) n-Propylbenzene		0.000	14.487	0.000	0	N.D.	
68) 1,3,5-Trimethylbenzene		0.000	14.639	0.000	0	N.D.	
69) 2-Chlorotoluene		0.000	14.633	0.000	0	N.D.	
70) 4-Chlorotoluene		0.000	14.743	0.000	0	N.D.	
71) tert-Butylbenzene		0.000	15.011	0.000	0	N.D.	
72) 1,2,4-Trimethylbenzene	105	15.060	15.054	0.973	123	N.D.	
73) sec-Butylbenzene	105	15.151	15.237	0.979	250	N.D.	
74) 4-Isopropyltoluene		0.000	15.359	0.000	0	N.D.	
75) 1,3-Dichlorobenzene		0.000	15.419	0.000	0	N.D.	
76) 1,4-Dichlorobenzene		0.000	15.505	0.000	0	N.D.	
77) n-Butylbenzene	91	15.779	15.791	1.019	203	N.D.	
78) 1,2-Dichlorobenzene		0.000	15.919	0.000	0	N.D.	
79) 1,2-Dibromo-3-chloropr...		0.000	16.785	0.000	0	N.D.	
80) 1,2,4-Trichlorobenzene		0.000	17.791	0.000	0	N.D.	
81) Hexachlorobutadiene		0.000	17.949	0.000	0	N.D.	
82) Naphthalene	128	18.163	18.163	1.173	1057	N.D.	
83) 1,2,3-Trichlorobenzene		0.000	18.492	0.000	0	N.D.	
85) Acrolein		0.000	6.470	0.000	0	N.D.	
86) Trichlorotrifluoroethane		0.000	6.586	0.000	0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W114.D
Acq On : 19 Dec 2022 16:32
Operator : KP2
InstName : VOA3
Sample : |604449007|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 20 08:11:05 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

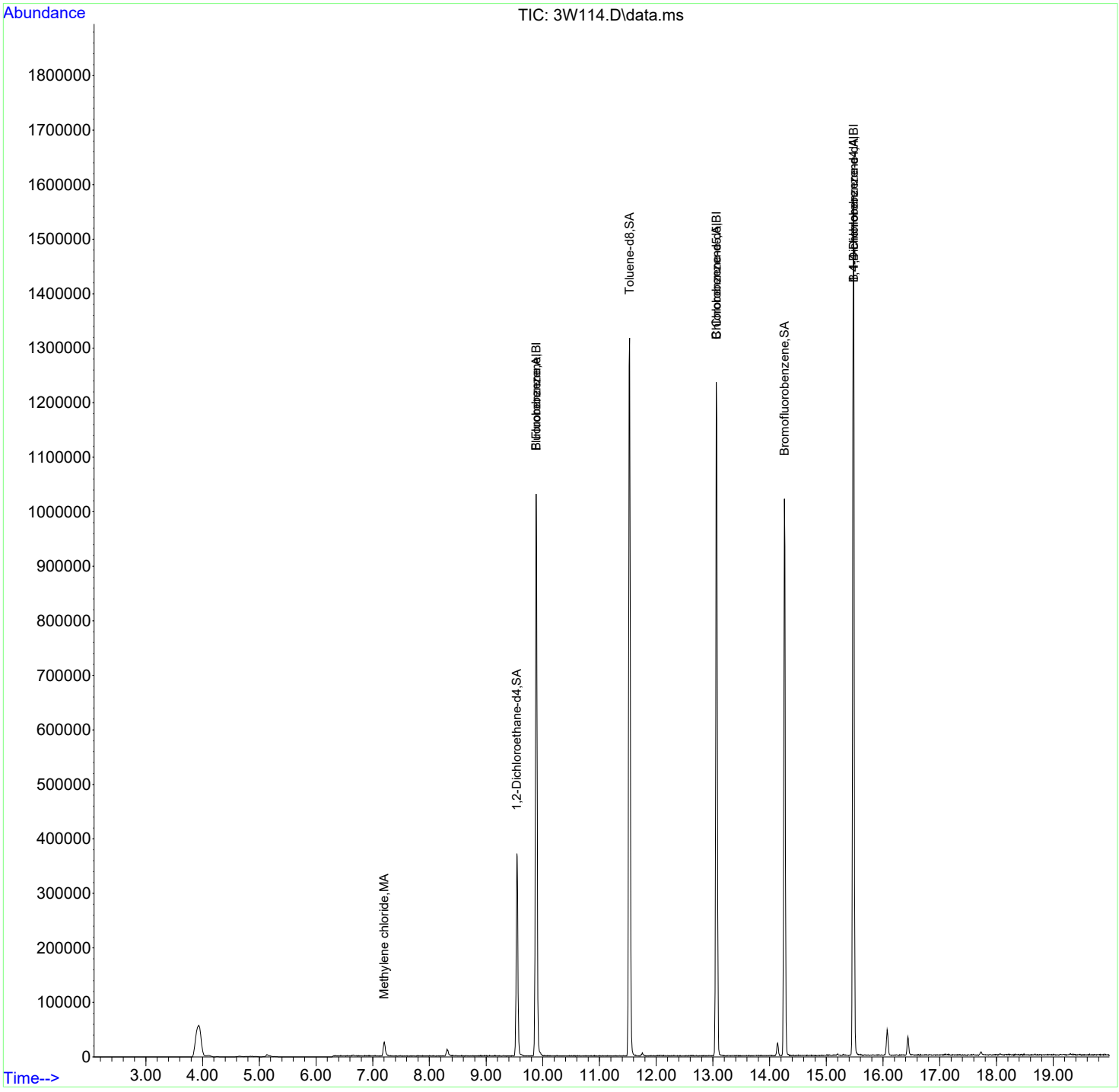
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
87) Isopropyl Alcohol		0.000	6.732	0.000	0	N.D.	
88) Allyl chloride		0.000	7.062	0.000	0	N.D.	
89) tert-Butyl Alcohol		0.000	7.220	0.000	0	N.D.	
90) Acrylonitrile		0.000	7.482	0.000	0	N.D.	
91) Isopropyl ether		0.000	7.988	0.000	0	N.D.	
92) 2-Chloro-1,3-butadiene		0.000	8.122	0.000	0	N.D.	
93) Ethyl tert-butyl ether	59	8.317	8.391	0.841	283	N.D.	
94) Ethyl acetate	43	8.640	8.628	0.874	320	N.D.	
95) Propionitrile		0.000	8.720	0.000	0	N.D.	
96) Methacrylonitrile		0.000	8.884	0.000	0	N.D.	
97) Tetrahydrofuran		0.000	8.976	0.000	0	N.D.	
98) Isobutyl alcohol		0.000	9.323	0.000	0	N.D.	
99) Methyl tert-amyl ether		0.000	9.640	0.000	0	N.D.	
100) Methyl methacrylate		0.000	10.506	0.000	0	N.D.	
101) 1,4-Dioxane		0.000	10.616	0.000	0	N.D.	
102) 2-Nitropropane		0.000	11.006	0.000	0	N.D.	
104) Ethyl methacrylate		0.000	11.774	0.000	0	N.D.	
106) 1-Chlorohexane		0.000	12.963	0.000	0	N.D.	
107) cis-1,4-Dichloro-2-butene		0.000	14.121	0.000	0	N.D.	
108) Cyclohexanone		0.000	14.237	0.000	0	N.D.	
109) trans-1,4-Dichloro-2-b...		0.000	14.408	0.000	0	N.D.	
110) Pentachloroethane		0.000	15.084	0.000	0	N.D.	
111) Benzyl chloride	91	15.779	15.627	1.019	203	N.D.	
112) bis(2-Chloroisopropyl)...		0.000	16.023	0.000	0	N.D.	

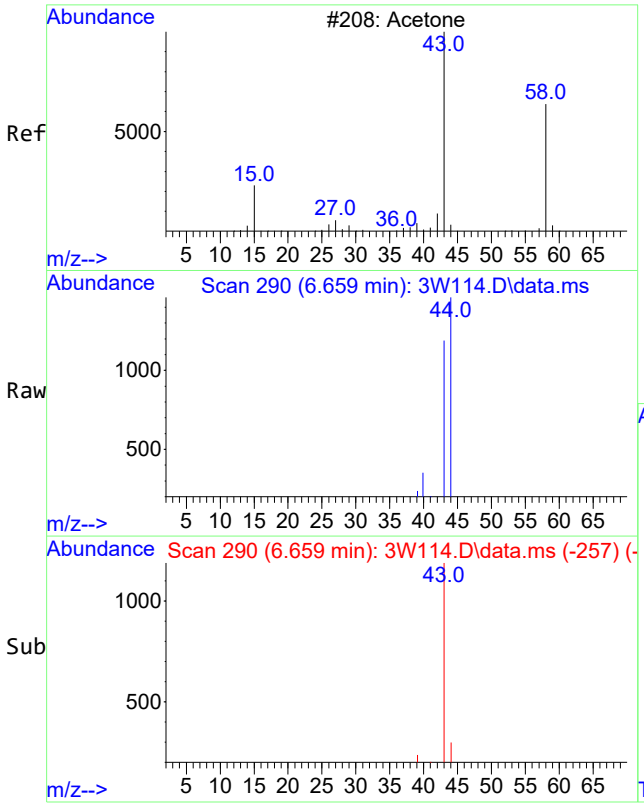
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W114.D
Acq On : 19 Dec 2022 16:32
Operator : KP2
InstName : VOA3
Sample : |604449007|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 20 08:11:05 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

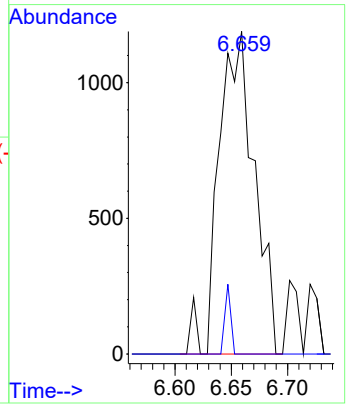


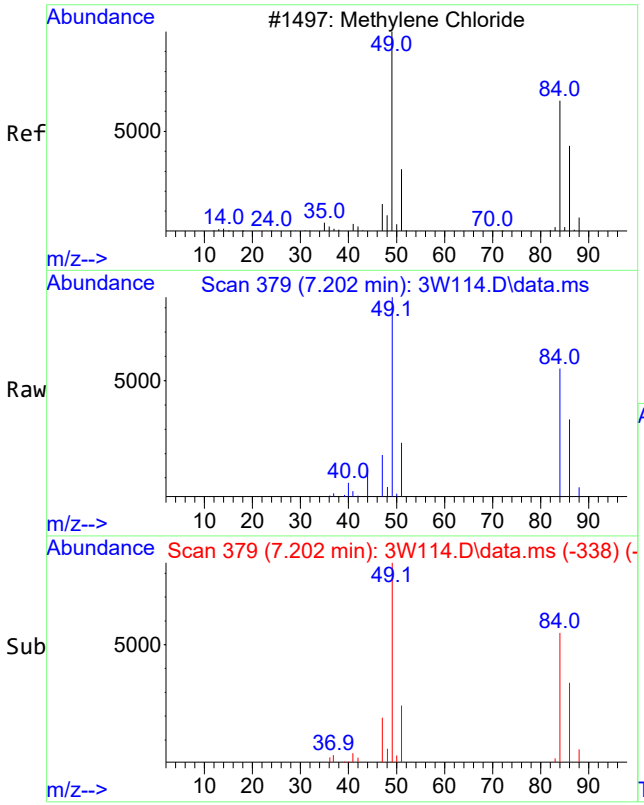


#9 BEFORE analyst DELETION
Acetone
Concen: 2.41 ug/L
RT: 6.659 min Scan# 290
Delta R.T. 0.012 min
Lab File: 3W114.D
Acq: 19 Dec 2022 16:32

Tgt Ion: 43 Resp: 2607

Ion	Ratio	Lower	Upper
43	100		
58	0.0	0.0	60.0

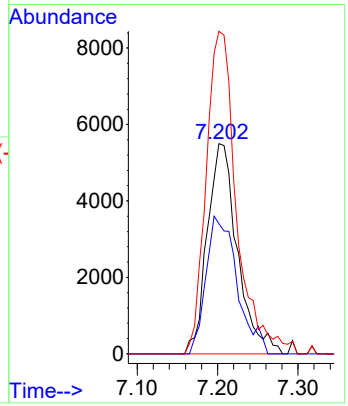




#15
Methylene chloride
Concen: 2.51 ug/L
RT: 7.202 min Scan# 379
Delta R.T. -0.000 min
Lab File: 3W114.D
Acq: 19 Dec 2022 16:32

Tgt Ion: 84 Resp: 14316

Ion	Ratio	Lower	Upper
84	100		
86	67.5	34.2	94.2
49	155.3	110.5	170.5



Library Search Compound Report
GEL Laboratories, LLC

12/21/2022

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W114.D
Acq On : 19 Dec 2022 16:32
Operator : KP2
Sample : |604449007|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 14 Sample Multiplier: 1

12/22/2022

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

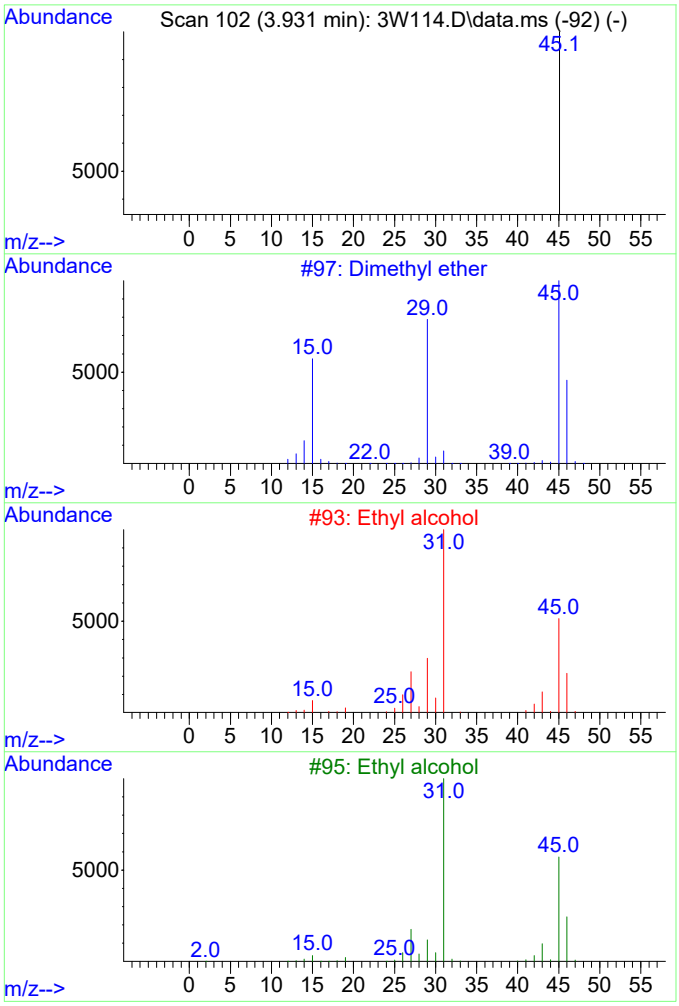
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

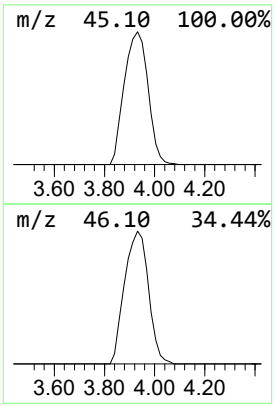
****

Peak Number 1 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.931	9.46 ug/L	401745	Fluorobenzene	9.884

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dimethyl ether	46	C2H6O	000115-10-6	5
2	Ethyl alcohol	46	C2H6O	000064-17-5	4
3	Ethyl alcohol	46	C2H6O	000064-17-5	4
4	Ethyl alcohol	46	C2H6O	000064-17-5	4
5	Dimethyl ether	46	C2H6O	000115-10-6	2





Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W114.D
Acq On : 19 Dec 2022 16:32
Operator : KP2
Sample : |604449007|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 14 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

			(ug/L)		Internal Standard		
TIC Top Hit name	CAS #	RT	EstConc	Response	#	RT	Resp	Conc
unknown		3.931	9.5	401745	1	9.884	2123980	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:35**	**Matrix:**	**W**
Lab Sample ID:	**604449010**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB03-23-265373**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 17:26**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 17:26**				
Data File:	**121922V3\3W116.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
542-75-6	1,3-Dichloropropylene	U	0.500	ug/L	0.500	2.00
75-71-8	Dichlorodifluoromethane	U	0.355	ug/L	0.355	1.00
74-87-3	Chloromethane	U	0.333	ug/L	0.333	1.00
75-01-4	Vinyl chloride	U	0.333	ug/L	0.333	1.00
74-83-9	Bromomethane	U	0.337	ug/L	0.337	1.00
75-69-4	Trichlorofluoromethane	U	0.333	ug/L	0.333	1.00
75-35-4	1,1-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-09-2	Methylene chloride	BJ	3.05	ug/L	0.500	5.00
1634-04-4	tert-Butyl methyl ether	U	0.333	ug/L	0.333	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-34-3	1,1-Dichloroethane	U	0.333	ug/L	0.333	1.00
156-59-2	cis-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
67-66-3	Chloroform	U	0.333	ug/L	0.333	1.00
71-55-6	1,1,1-Trichloroethane	U	0.333	ug/L	0.333	1.00
56-23-5	Carbon tetrachloride	U	0.333	ug/L	0.333	1.00
107-06-2	1,2-Dichloroethane	U	0.333	ug/L	0.333	1.00
71-43-2	Benzene	U	0.333	ug/L	0.333	1.00
79-01-6	Trichloroethylene	U	0.333	ug/L	0.333	1.00
78-87-5	1,2-Dichloropropane	U	0.333	ug/L	0.333	1.00
74-95-3	Dibromomethane	U	0.333	ug/L	0.333	1.00
75-27-4	Bromodichloromethane	U	0.333	ug/L	0.333	1.00
108-88-3	Toluene	U	0.333	ug/L	0.333	1.00
79-00-5	1,1,2-Trichloroethane	U	0.333	ug/L	0.333	1.00
127-18-4	Tetrachloroethylene	U	0.333	ug/L	0.333	1.00
106-93-4	1,2-Dibromoethane	U	0.333	ug/L	0.333	1.00
108-90-7	Chlorobenzene	U	0.333	ug/L	0.333	1.00
100-41-4	Ethylbenzene	U	0.333	ug/L	0.333	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.333	ug/L	0.333	1.00
100-42-5	Styrene	U	0.333	ug/L	0.333	1.00
75-25-2	Bromoform	U	0.333	ug/L	0.333	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.333	ug/L	0.333	1.00
106-46-7	1,4-Dichlorobenzene	U	0.333	ug/L	0.333	1.00
107-02-8	Acrolein	U	1.67	ug/L	1.67	5.00
107-13-1	Acrylonitrile	U	1.67	ug/L	1.67	5.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	1.00	3.00
120-82-1	1,2,4-Trichlorobenzene	U	0.333	ug/L	0.333	1.00
95-50-1	1,2-Dichlorobenzene	U	0.333	ug/L	0.333	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:35**	**Matrix:**	**W**
Lab Sample ID:	**604449010**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB03-23-265373**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 17:26**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 17:26**				
Data File:	**121922V3\3W116.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	55.5	50.0	ug/L	111	(73%-129%)
Bromofluorobenzene	47.6	50.0	ug/L	95	(72%-125%)
Toluene-d8	53.2	50.0	ug/L	106	(75%-123%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.931	14.3	ug/L	0	J
	unknown	14.139	12.1	ug/L	0	J

Quantitation Report
GEL Laboratories, LLC

12/21/2022

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W116.D
Acq On : 19 Dec 2022 17:26
Operator : KP2
InstName : VOA3
Sample : |604449010|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 16 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 20 08:11:29 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	96	9.890	9.884	1.000	672974	50.00	ug/L	0.00
43) Chlorobenzene-d5	117	13.066	13.066	1.000	496650	50.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	152	15.481	15.480	1.000	306893	50.00	ug/L	0.00
84) B Fluorobenzene	96	9.890	9.884	1.000	672931	50.00	ug/L	0.00
103) B Chlorobenzene-d5	117	13.066	13.060	1.000	496650	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	15.481	15.481	1.000	306893	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
30) 1,2-Dichloroethane-d4	67	9.549	9.549	0.965	113972	55.50	ug/L	0.00
45) Toluene-d8	98	11.530	11.530	0.882	708393	53.17	ug/L	0.00
63) Bromofluorobenzene	95	14.261	14.261	0.921	273722	47.56	ug/L	0.00

Compound	Amount	Range	Recovery
30) 1,2-Dichloroethane-d4	50.000	73 - 129	111%
45) Toluene-d8	50.000	75 - 123	106%
63) Bromofluorobenzene	50.000	72 - 125	95%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		0.000	4.260	0.000	0	N.D.		
3) Chloromethane	50	4.644	4.644	0.470	1114	N.D.		
4) Vinyl chloride		0.000	4.826	0.000	0	N.D.		
5) Bromomethane		0.000	5.411	0.000	0	N.D.		
6) Chloroethane		0.000	5.557	0.000	0	N.D.		
7) Trichlorofluoromethane		0.000	5.904	0.000	0	N.D.		
8) Ethyl ether		0.000	6.232	0.000	0	N.D.		
9) Acetone	43	6.647	6.647	0.672	161672	214.81	ug/L	96
10) 1,1-Dichloroethylene		0.000	6.616	0.000	0m	N.D.	d	
11) Iodomethane	142	6.866	6.866	0.694	255	N.D.		
12) Acetonitrile	41	7.019	7.013	0.710	382	N.D.		
13) Methyl acetate		0.000	7.025	0.000	0	N.D.		
14) Carbon disulfide	76	7.001	6.982	0.708	3165	N.D.		
15) Methylene chloride	84	7.208	7.202	0.729	12056	3.05	ug/L	93
16) tert-Butyl methyl ether		0.000	7.482	0.000	0	N.D.		
17) trans-1,2-Dichloroethy...		0.000	7.531	0.000	0	N.D.		
18) Hexane	57	7.787	7.799	0.787	669	N.D.		
19) Vinyl acetate	43	7.836	7.988	0.792	162	N.D.		
20) 1,1-Dichloroethane		0.000	8.018	0.000	0	N.D.		
21) 2-Butanone	43	8.634	8.622	0.873	1741	N.D.		
22) cis-1,2-Dichloroethylene		0.000	8.659	0.000	0	N.D.		
23) 2,2-Dichloropropane		0.000	8.671	0.000	0	N.D.		
24) Bromochloromethane		0.000	8.933	0.000	0	N.D.		
25) Chloroform		0.000	8.970	0.000	0	N.D.		
26) 1,1,1-Trichloroethane		0.000	9.226	0.000	0	N.D.		
27) Cyclohexane		0.000	9.305	0.000	0	N.D.		
28) 1,1-Dichloropropene		0.000	9.384	0.000	0	N.D.		
29) Carbon tetrachloride		0.000	9.415	0.000	0	N.D.		
31) 1,2-Dichloroethane		0.000	9.628	0.000	0	N.D.		
32) Benzene		0.000	9.628	0.000	0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W116.D
Acq On : 19 Dec 2022 17:26
Operator : KP2
InstName : VOA3
Sample : |604449010|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 20 08:11:29 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
33) Cyclohexene	67	9.890	9.732	1.000	158	N.D.	
34) n-Butyl alcohol		0.000	10.012	0.000	0	N.D.	
35) Trichloroethylene		0.000	10.268	0.000	0	N.D.	
36) 2-Pentanone	43	10.402	10.378	1.052	490	N.D.	
37) 1,2-Dichloropropane		0.000	10.530	0.000	0	N.D.	
38) Methylcyclohexane		0.000	10.494	0.000	0	N.D.	
39) Dibromomethane		0.000	10.664	0.000	0	N.D.	
40) Bromodichloromethane		0.000	10.780	0.000	0	N.D.	
41) 2-Chloroethylvinyl ether		0.000	11.006	0.000	0	N.D.	
42) cis-1,3-Dichloropropylene		0.000	11.231	0.000	0	N.D.	
44) 4-Methyl-2-pentanone	43	11.341	11.329	0.868	502	N.D.	
46) Toluene		0.000	11.603	0.000	0	N.D.	
47) trans-1,3-Dichloroprop...	75	11.725	11.780	0.897	116	N.D.	
48) 1,1,2-Trichloroethane	97	12.042	11.999	0.922	104	N.D.	
49) 2-Hexanone	43	12.298	12.182	0.941	191	N.D.	
50) 1,3-Dichloropropane		0.000	12.188	0.000	0	N.D.	
51) Tetrachloroethylene		0.000	12.188	0.000	0	N.D.	
52) Dibromochloromethane		0.000	12.457	0.000	0	N.D.	
53) 1,2-Dibromoethane		0.000	12.621	0.000	0	N.D.	
54) Chlorobenzene	112	13.091	13.097	1.002	259	N.D.	
55) 1,1,1,2-Tetrachloroethane		0.000	13.152	0.000	0	N.D.	
56) Ethylbenzene	91	13.176	13.158	1.008	261	N.D.	
57) m,p-Xylenes		0.000	13.267	0.000	0	N.D.	
58) o-Xylene		0.000	13.700	0.000	0	N.D.	
59) Styrene		0.000	13.706	0.000	0	N.D.	
61) Bromoform		0.000	13.975	0.000	0	N.D.	
62) Isopropylbenzene	105	14.072	14.060	0.909	645	N.D.	
64) 1,1,2,2-Tetrachloroethane	83	14.359	14.359	0.928	114	N.D.	
65) 1,2,3-Trichloropropane		0.000	14.444	0.000	0	N.D.	
66) Bromobenzene		0.000	14.468	0.000	0	N.D.	
67) n-Propylbenzene		0.000	14.487	0.000	0	N.D.	
68) 1,3,5-Trimethylbenzene		0.000	14.639	0.000	0	N.D.	
69) 2-Chlorotoluene		0.000	14.633	0.000	0	N.D.	
70) 4-Chlorotoluene		0.000	14.743	0.000	0	N.D.	
71) tert-Butylbenzene		0.000	15.011	0.000	0	N.D.	
72) 1,2,4-Trimethylbenzene	105	15.145	15.054	0.978	299	N.D.	
73) sec-Butylbenzene	105	15.218	15.237	0.983	165	N.D.	
74) 4-Isopropyltoluene	119	15.359	15.359	0.992	237	N.D.	
75) 1,3-Dichlorobenzene	146	15.420	15.419	0.996	520	N.D.	
76) 1,4-Dichlorobenzene	146	15.505	15.505	1.002	238	N.D.	
77) n-Butylbenzene	91	15.804	15.791	1.021	101	N.D.	
78) 1,2-Dichlorobenzene		0.000	15.919	0.000	0	N.D.	
79) 1,2-Dibromo-3-chloropr...		0.000	16.785	0.000	0	N.D.	
80) 1,2,4-Trichlorobenzene	180	17.785	17.791	1.149	245	N.D.	
81) Hexachlorobutadiene		0.000	17.949	0.000	0	N.D.	
82) Naphthalene	128	18.157	18.163	1.173	902	N.D.	
83) 1,2,3-Trichlorobenzene		0.000	18.492	0.000	0	N.D.	
85) Acrolein		0.000	6.470	0.000	0	N.D.	
86) Trichlorotrifluoroethane		0.000	6.586	0.000	0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W116.D
Acq On : 19 Dec 2022 17:26
Operator : KP2
InstName : VOA3
Sample : |604449010|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 20 08:11:29 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

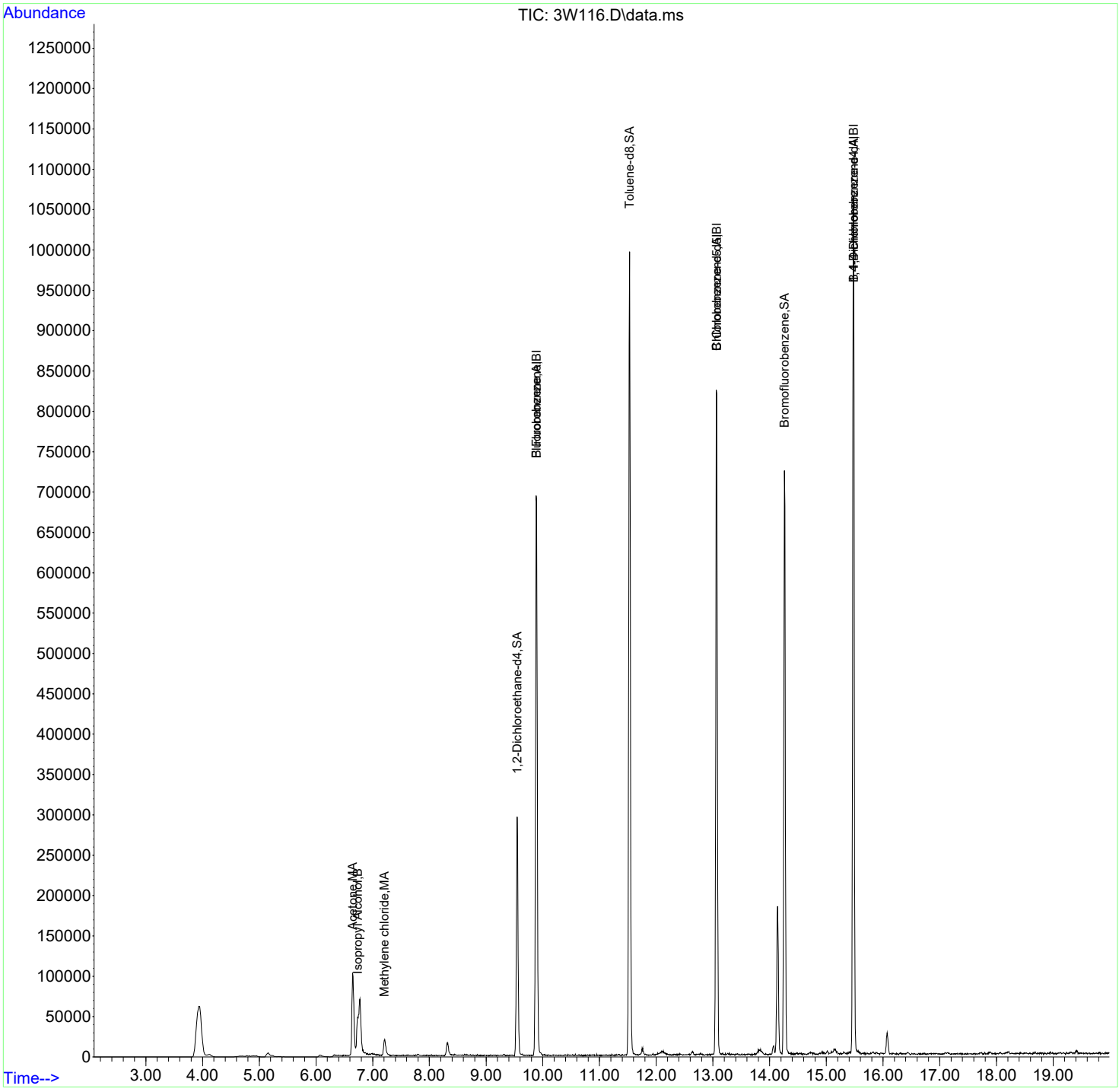
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
87) Isopropyl Alcohol	45	6.738	6.732	0.681	107479	531.21	ug/L	# 56
88) Allyl chloride	76	7.001	7.062	0.708	2658	N.D.		
89) tert-Butyl Alcohol	59	7.226	7.220	0.731	129	N.D.		
90) Acrylonitrile		0.000	7.482	0.000	0	N.D.		
91) Isopropyl ether		0.000	7.988	0.000	0	N.D.		
92) 2-Chloro-1,3-butadiene		0.000	8.122	0.000	0	N.D.		
93) Ethyl tert-butyl ether	59	8.305	8.391	0.840	183	N.D.		
94) Ethyl acetate	43	8.634	8.628	0.873	1741	N.D.		
95) Propionitrile		0.000	8.720	0.000	0	N.D.		
96) Methacrylonitrile		0.000	8.884	0.000	0	N.D.		
97) Tetrahydrofuran		0.000	8.976	0.000	0	N.D.		
98) Isobutyl alcohol	43	9.366	9.323	0.947	174	N.D.		
99) Methyl tert-amyl ether		0.000	9.640	0.000	0	N.D.		
100) Methyl methacrylate	69	10.536	10.506	1.065	129	N.D.		
101) 1,4-Dioxane		0.000	10.616	0.000	0	N.D.		
102) 2-Nitropropane		0.000	11.006	0.000	0	N.D.		
104) Ethyl methacrylate	69	11.762	11.774	0.900	135	N.D.		
106) 1-Chlorohexane	55	12.938	12.963	0.836	176	N.D.		
107) cis-1,4-Dichloro-2-butene	53	14.060	14.121	0.908	450	N.D.		
108) Cyclohexanone	42	14.243	14.237	0.920	184	N.D.		
109) trans-1,4-Dichloro-2-b...		0.000	14.408	0.000	0	N.D.		
110) Pentachloroethane		0.000	15.084	0.000	0	N.D.		
111) Benzyl chloride	91	15.737	15.627	1.017	103	N.D.		
112) bis(2-Chloroisopropyl)...		0.000	16.023	0.000	0	N.D.		

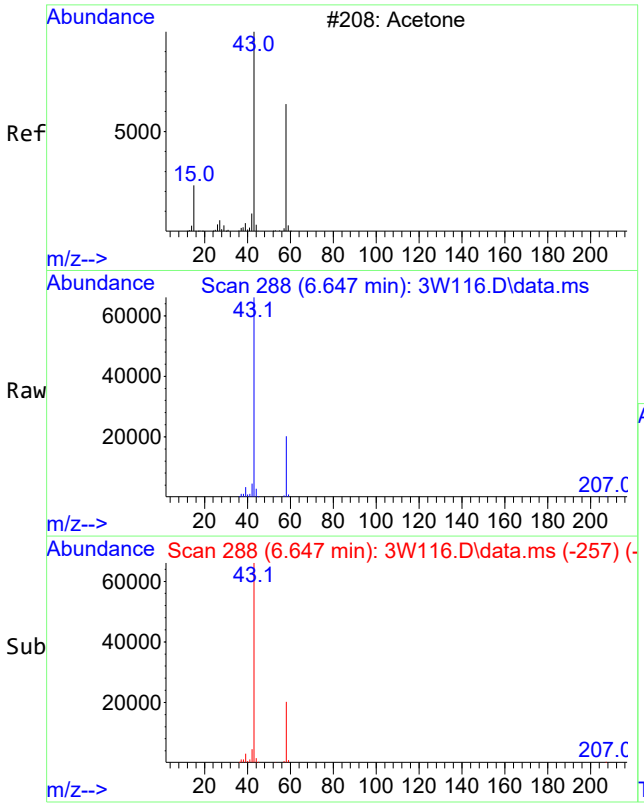
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W116.D
Acq On : 19 Dec 2022 17:26
Operator : KP2
InstName : VOA3
Sample : |604449010|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 20 08:11:29 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

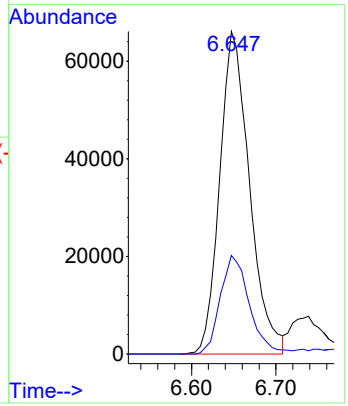


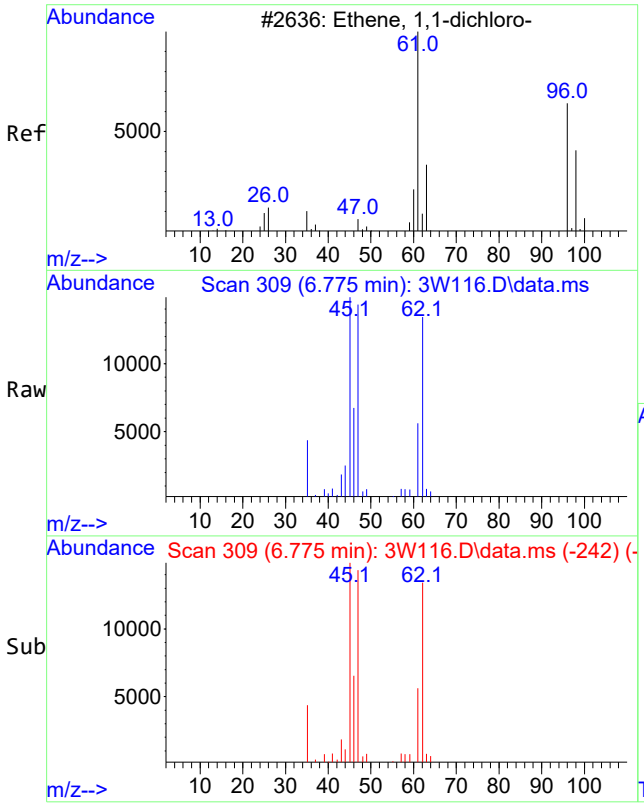


#9
Acetone
Concen: 214.81 ug/L
RT: 6.647 min Scan# 288
Delta R.T. -0.000 min
Lab File: 3W116.D
Acq: 19 Dec 2022 17:26

Tgt Ion: 43 Resp: 161672

Ion	Ratio	Lower	Upper
43	100		
58	32.4	0.0	60.0

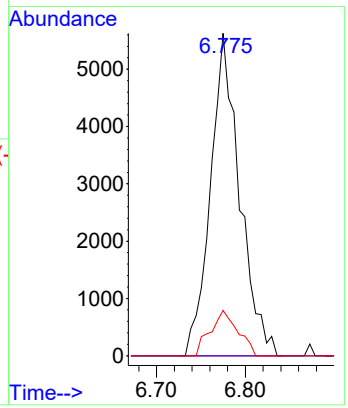


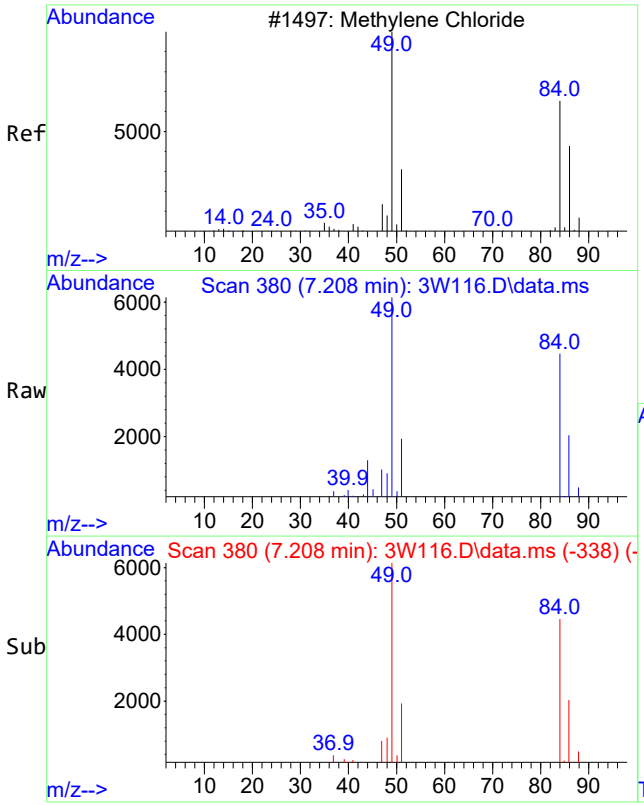


#10 BEFORE analyst DELETION
1,1-Dichloroethylene
Concen: 2.03 ug/L
RT: 6.775 min Scan# 309
Delta R.T. 0.159 min
Lab File: 3W116.D
Acq: 19 Dec 2022 17:26

Tgt Ion: 61 Resp: 12780

Ion	Ratio	Lower	Upper
61	100		
96	0.0	26.9	86.9#
63	13.3	1.7	61.7

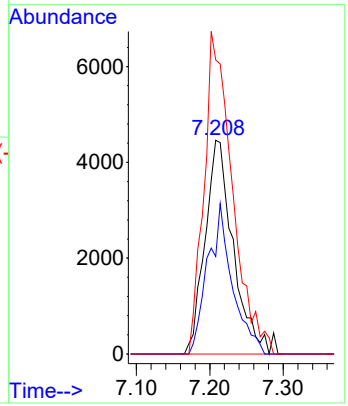


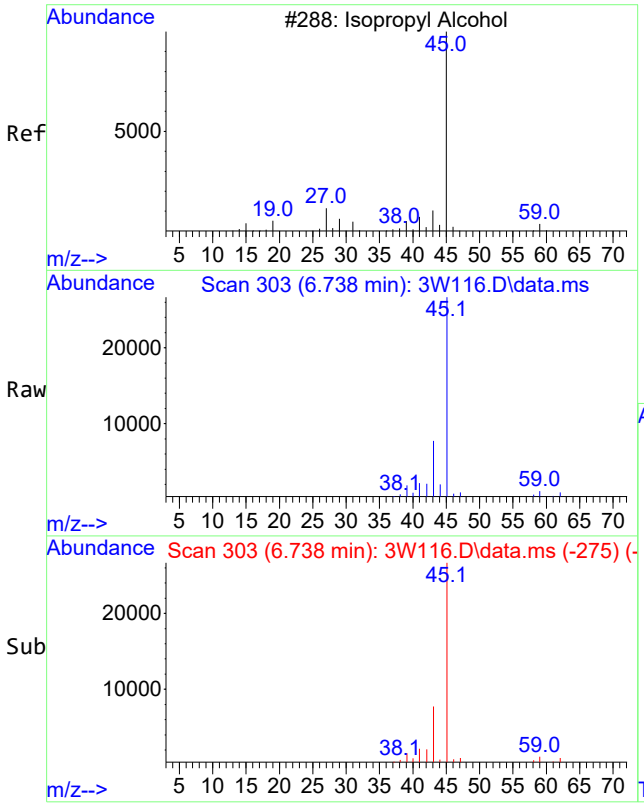


#15
Methylene chloride
Concen: 3.05 ug/L
RT: 7.208 min Scan# 380
Delta R.T. 0.006 min
Lab File: 3W116.D
Acq: 19 Dec 2022 17:26

Tgt Ion: 84 Resp: 12056

Ion	Ratio	Lower	Upper
84	100		
86	61.1	34.2	94.2
49	150.5	110.5	170.5

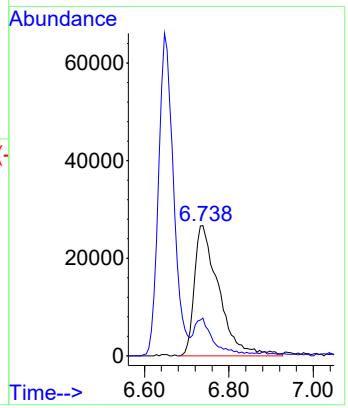




#87
Isopropyl Alcohol
Concen: 531.21 ug/L
RT: 6.738 min Scan# 303
Delta R.T. 0.006 min
Lab File: 3W116.D
Acq: 19 Dec 2022 17:26

Tgt Ion: 45 Resp: 107479

Ion	Ratio	Lower	Upper
45	100		
43	0.0	0.0	50.0



Library Search Compound Report
GEL Laboratories, LLC

12/21/2022

12/22/2022

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W116.D
Acq On : 19 Dec 2022 17:26
Operator : KP2
Sample : |604449010|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 16 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

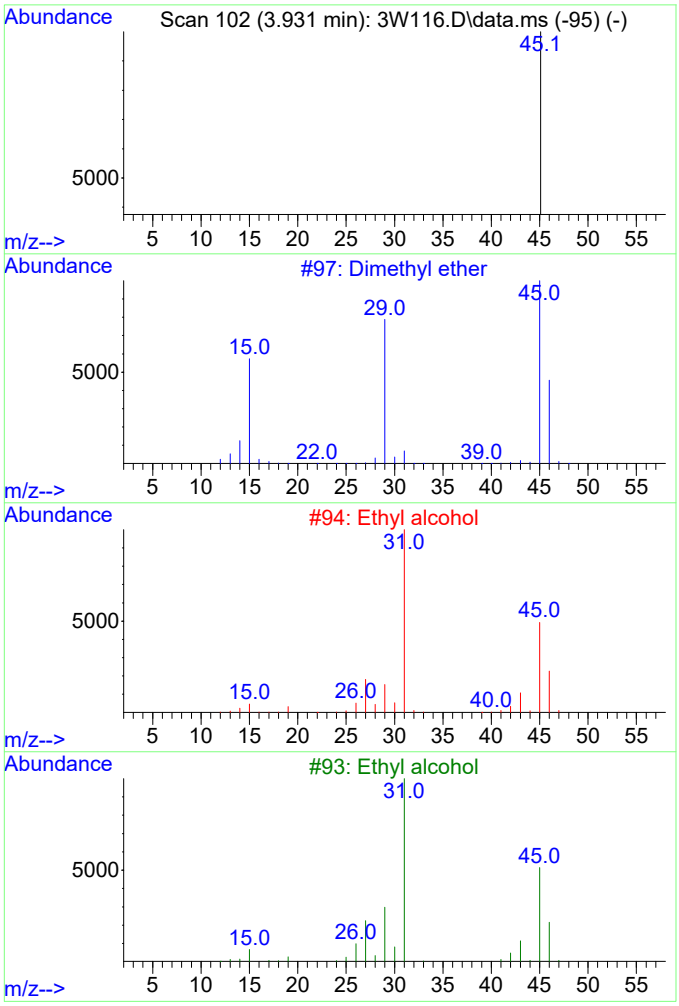
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

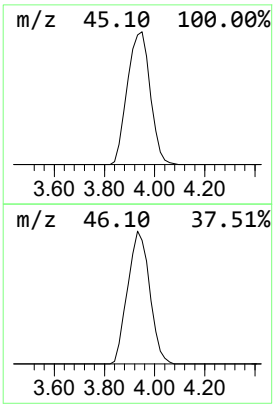
****

Peak Number 1 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.931	14.26 ug/L	420194	Fluorobenzene	9.890

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dimethyl ether	46	C2H6O	000115-10-6	5
2	Ethyl alcohol	46	C2H6O	000064-17-5	4
3	Ethyl alcohol	46	C2H6O	000064-17-5	4
4	Ethyl alcohol	46	C2H6O	000064-17-5	4
5	Dimethyl ether	46	C2H6O	000115-10-6	2





Library Search Compound Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W116.D
Acq On : 19 Dec 2022 17:26
Operator : KP2
Sample : |604449010|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 16 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

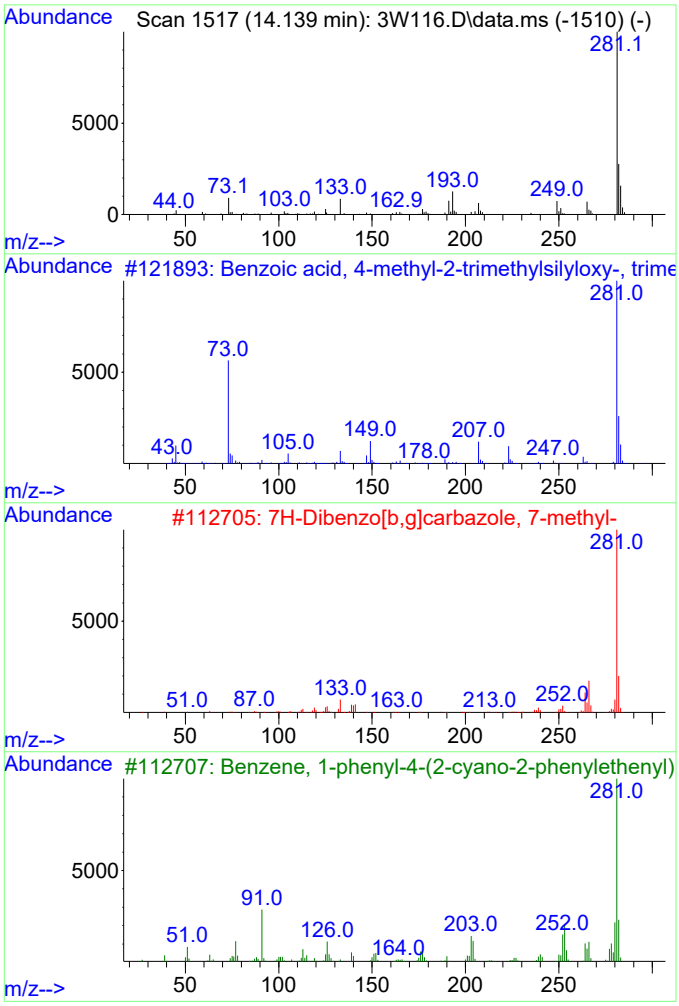
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

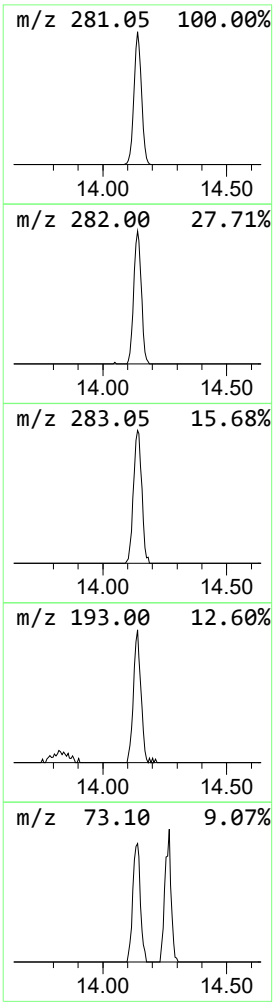
****

Peak Number 2 unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.139	12.08 ug/L	385443	B Chlorobenzene-d5	13.067

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzoic acid, 4-methyl-2-trimeth...	296	C14H24O3Si2	1000153-59-3	64
2	7H-Dibenzo[b,g]carbazole, 7-methyl-	281	C21H15N	003557-49-1	53
3	Benzene, 1-phenyl-4-(2-cyano-2-p...	281	C21H15N	027869-56-3	53
4	5-(p-Aminophenyl)-4-(p-tolyl)-2-...	281	C16H15N3S	094460-46-5	53
5	5H-Naphtho[2,3-c]carbazole, 5-me...	281	C21H15N	100025-44-3	53





Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W116.D
Acq On : 19 Dec 2022 17:26
Operator : KP2
Sample : |604449010|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 16 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

			(ug/L)		Internal Standard		
TIC Top Hit name	CAS #	RT	EstConc	Response	#	RT	Resp	Conc
unknown		3.931	14.3	420194	1	9.890	1473660	50.0
unknown		14.139	12.1	385443	4	13.067	1596020	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:35**	**Matrix:**	**W**
Lab Sample ID:	**604449011**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB03-23-265378**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 17:52**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 17:52**				
Data File:	**121922V3\3W117.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
542-75-6	1,3-Dichloropropylene	U	0.500	ug/L	0.500	2.00
75-71-8	Dichlorodifluoromethane	U	0.355	ug/L	0.355	1.00
74-87-3	Chloromethane	U	0.333	ug/L	0.333	1.00
75-01-4	Vinyl chloride	U	0.333	ug/L	0.333	1.00
74-83-9	Bromomethane	U	0.337	ug/L	0.337	1.00
75-69-4	Trichlorofluoromethane	U	0.333	ug/L	0.333	1.00
75-35-4	1,1-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-09-2	Methylene chloride	BJ	2.39	ug/L	0.500	5.00
1634-04-4	tert-Butyl methyl ether	U	0.333	ug/L	0.333	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-34-3	1,1-Dichloroethane	U	0.333	ug/L	0.333	1.00
156-59-2	cis-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
67-66-3	Chloroform	U	0.333	ug/L	0.333	1.00
71-55-6	1,1,1-Trichloroethane	U	0.333	ug/L	0.333	1.00
56-23-5	Carbon tetrachloride	U	0.333	ug/L	0.333	1.00
107-06-2	1,2-Dichloroethane	U	0.333	ug/L	0.333	1.00
71-43-2	Benzene	U	0.333	ug/L	0.333	1.00
79-01-6	Trichloroethylene	U	0.333	ug/L	0.333	1.00
78-87-5	1,2-Dichloropropane	U	0.333	ug/L	0.333	1.00
74-95-3	Dibromomethane	U	0.333	ug/L	0.333	1.00
75-27-4	Bromodichloromethane	U	0.333	ug/L	0.333	1.00
108-88-3	Toluene	U	0.333	ug/L	0.333	1.00
79-00-5	1,1,2-Trichloroethane	U	0.333	ug/L	0.333	1.00
127-18-4	Tetrachloroethylene	U	0.333	ug/L	0.333	1.00
106-93-4	1,2-Dibromoethane	U	0.333	ug/L	0.333	1.00
108-90-7	Chlorobenzene	U	0.333	ug/L	0.333	1.00
100-41-4	Ethylbenzene	U	0.333	ug/L	0.333	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.333	ug/L	0.333	1.00
100-42-5	Styrene	U	0.333	ug/L	0.333	1.00
75-25-2	Bromoform	U	0.333	ug/L	0.333	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.333	ug/L	0.333	1.00
106-46-7	1,4-Dichlorobenzene	U	0.333	ug/L	0.333	1.00
107-02-8	Acrolein	U	1.67	ug/L	1.67	5.00
107-13-1	Acrylonitrile	U	1.67	ug/L	1.67	5.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	1.00	3.00
120-82-1	1,2,4-Trichlorobenzene	U	0.333	ug/L	0.333	1.00
95-50-1	1,2-Dichlorobenzene	U	0.333	ug/L	0.333	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:35**	**Matrix:**	**W**
Lab Sample ID:	**604449011**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB03-23-265378**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 17:52**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 17:52**				
Data File:	**121922V3\3W117.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	48.4	50.0	ug/L	97	(73%-129%)
Bromofluorobenzene	46.4	50.0	ug/L	93	(72%-125%)
Toluene-d8	50.3	50.0	ug/L	101	(75%-123%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.95	9.8	ug/L	0	J

12/21/2022

12/22/2022

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W117.D
Acq On : 19 Dec 2022 17:52
Operator : KP2
InstName : VOA3
Sample : |604449011|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 20 08:11:41 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	96	9.884	9.884	1.000	1017590	50.00	ug/L	0.00
43) Chlorobenzene-d5	117	13.060	13.066	1.000	754630	50.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	152	15.481	15.480	1.000	449353	50.00	ug/L	0.00
84) B Fluorobenzene	96	9.884	9.884	1.000	1017775	50.00	ug/L	0.00
103) B Chlorobenzene-d5	117	13.060	13.060	1.000	754630	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	15.481	15.481	1.000	449353	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
30) 1,2-Dichloroethane-d4	67	9.549	9.549	0.966	150163	48.36	ug/L	0.00
45) Toluene-d8	98	11.530	11.530	0.883	1017674	50.27	ug/L	0.00
63) Bromofluorobenzene	95	14.261	14.261	0.921	390607	46.35	ug/L	0.00

Compound	Amount	Range	Recovery
30) 1,2-Dichloroethane-d4	50.000	73 - 129	97%
45) Toluene-d8	50.000	75 - 123	101%
63) Bromofluorobenzene	50.000	72 - 125	93%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		0.000	4.260	0.000	0	N.D.		
3) Chloromethane	50	4.662	4.644	0.472	1234	N.D.		
4) Vinyl chloride		0.000	4.826	0.000	0	N.D.		
5) Bromomethane		0.000	5.411	0.000	0	N.D.		
6) Chloroethane		0.000	5.557	0.000	0	N.D.		
7) Trichlorofluoromethane		0.000	5.904	0.000	0	N.D.		
8) Ethyl ether		0.000	6.232	0.000	0	N.D.		
9) Acetone		0.000	6.647	0.000	0m	N.D.	d	
10) 1,1-Dichloroethylene		0.000	6.616	0.000	0	N.D.		
11) Iodomethane	142	6.866	6.866	0.695	105	N.D.		
12) Acetonitrile	41	7.031	7.013	0.711	103	N.D.		
13) Methyl acetate		0.000	7.025	0.000	0	N.D.		
14) Carbon disulfide		0.000	6.982	0.000	0	N.D.		
15) Methylene chloride	84	7.202	7.202	0.729	14325	2.39	ug/L	90
16) tert-Butyl methyl ether		0.000	7.482	0.000	0	N.D.		
17) trans-1,2-Dichloroethy...		0.000	7.531	0.000	0	N.D.		
18) Hexane	57	7.787	7.799	0.788	320	N.D.		
19) Vinyl acetate	43	7.793	7.988	0.788	206	N.D.		
20) 1,1-Dichloroethane		0.000	8.018	0.000	0	N.D.		
21) 2-Butanone	43	8.634	8.622	0.874	132	N.D.		
22) cis-1,2-Dichloroethylene		0.000	8.659	0.000	0	N.D.		
23) 2,2-Dichloropropane		0.000	8.671	0.000	0	N.D.		
24) Bromochloromethane		0.000	8.933	0.000	0	N.D.		
25) Chloroform		0.000	8.970	0.000	0	N.D.		
26) 1,1,1-Trichloroethane		0.000	9.226	0.000	0	N.D.		
27) Cyclohexane		0.000	9.305	0.000	0	N.D.		
28) 1,1-Dichloropropene		0.000	9.384	0.000	0	N.D.		
29) Carbon tetrachloride		0.000	9.415	0.000	0	N.D.		
31) 1,2-Dichloroethane		0.000	9.628	0.000	0	N.D.		
32) Benzene	78	9.628	9.628	0.974	131	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W117.D
Acq On : 19 Dec 2022 17:52
Operator : KP2
InstName : VOA3
Sample : |604449011|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 20 08:11:41 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
33) Cyclohexene	67	9.878	9.732	0.999	312	N.D.	
34) n-Butyl alcohol	56	10.024	10.012	1.014	118	N.D.	
35) Trichloroethylene		0.000	10.268	0.000	0	N.D.	
36) 2-Pentanone		0.000	10.378	0.000	0	N.D.	
37) 1,2-Dichloropropane		0.000	10.530	0.000	0	N.D.	
38) Methylcyclohexane		0.000	10.494	0.000	0	N.D.	
39) Dibromomethane		0.000	10.664	0.000	0	N.D.	
40) Bromodichloromethane		0.000	10.780	0.000	0	N.D.	
41) 2-Chloroethylvinyl ether		0.000	11.006	0.000	0	N.D.	
42) cis-1,3-Dichloropropylene		0.000	11.231	0.000	0	N.D.	
44) 4-Methyl-2-pentanone		0.000	11.329	0.000	0	N.D.	
46) Toluene	91	11.615	11.603	0.889	103	N.D.	
47) trans-1,3-Dichloroprop...		0.000	11.780	0.000	0	N.D.	
48) 1,1,2-Trichloroethane		0.000	11.999	0.000	0	N.D.	
49) 2-Hexanone	43	12.140	12.182	0.930	294	N.D.	
50) 1,3-Dichloropropane		0.000	12.188	0.000	0	N.D.	
51) Tetrachloroethylene		0.000	12.188	0.000	0	N.D.	
52) Dibromochloromethane		0.000	12.457	0.000	0	N.D.	
53) 1,2-Dibromoethane		0.000	12.621	0.000	0	N.D.	
54) Chlorobenzene		0.000	13.097	0.000	0	N.D.	
55) 1,1,1,2-Tetrachloroethane		0.000	13.152	0.000	0	N.D.	
56) Ethylbenzene	91	13.060	13.158	1.000	1684	N.D.	
57) m,p-Xylenes		0.000	13.267	0.000	0	N.D.	
58) o-Xylene		0.000	13.700	0.000	0	N.D.	
59) Styrene		0.000	13.706	0.000	0	N.D.	
61) Bromoform		0.000	13.975	0.000	0	N.D.	
62) Isopropylbenzene		0.000	14.060	0.000	0	N.D.	
64) 1,1,2,2-Tetrachloroethane		0.000	14.359	0.000	0	N.D.	
65) 1,2,3-Trichloropropane		0.000	14.444	0.000	0	N.D.	
66) Bromobenzene		0.000	14.468	0.000	0	N.D.	
67) n-Propylbenzene		0.000	14.487	0.000	0	N.D.	
68) 1,3,5-Trimethylbenzene		0.000	14.639	0.000	0	N.D.	
69) 2-Chlorotoluene		0.000	14.633	0.000	0	N.D.	
70) 4-Chlorotoluene		0.000	14.743	0.000	0	N.D.	
71) tert-Butylbenzene		0.000	15.011	0.000	0	N.D.	
72) 1,2,4-Trimethylbenzene		0.000	15.054	0.000	0	N.D.	
73) sec-Butylbenzene		0.000	15.237	0.000	0	N.D.	
74) 4-Isopropyltoluene		0.000	15.359	0.000	0	N.D.	
75) 1,3-Dichlorobenzene		0.000	15.419	0.000	0	N.D.	
76) 1,4-Dichlorobenzene		0.000	15.505	0.000	0	N.D.	
77) n-Butylbenzene	91	15.798	15.791	1.020	165	N.D.	
78) 1,2-Dichlorobenzene		0.000	15.919	0.000	0	N.D.	
79) 1,2-Dibromo-3-chloropr...		0.000	16.785	0.000	0	N.D.	
80) 1,2,4-Trichlorobenzene	180	17.797	17.791	1.150	386	N.D.	
81) Hexachlorobutadiene		0.000	17.949	0.000	0	N.D.	
82) Naphthalene	128	18.163	18.163	1.173	1259	N.D.	
83) 1,2,3-Trichlorobenzene		0.000	18.492	0.000	0	N.D.	
85) Acrolein		0.000	6.470	0.000	0	N.D.	
86) Trichlorotrifluoroethane		0.000	6.586	0.000	0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W117.D
Acq On : 19 Dec 2022 17:52
Operator : KP2
InstName : VOA3
Sample : |604449011|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 20 08:11:41 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

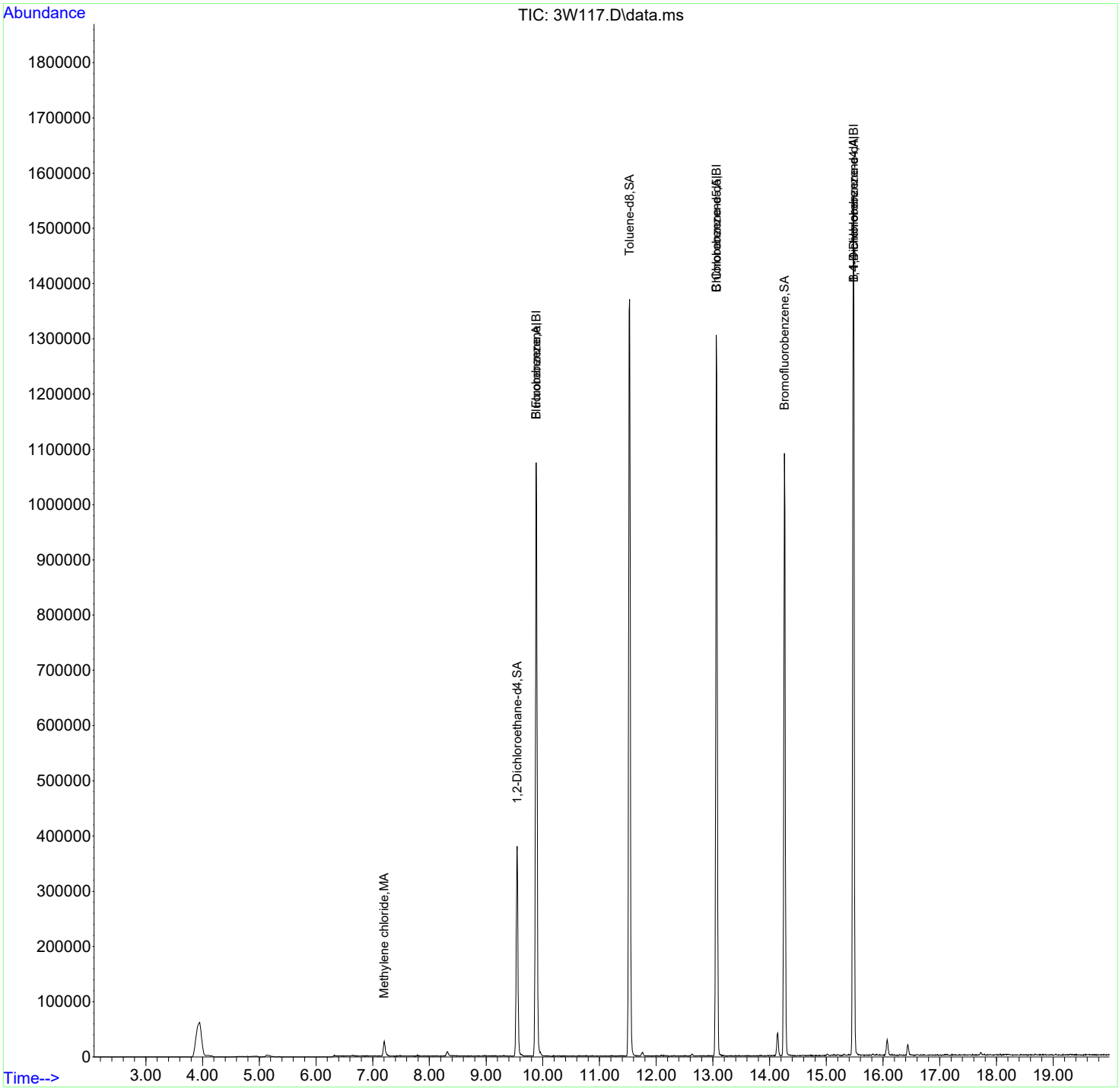
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
87) Isopropyl Alcohol		0.000	6.732	0.000	0	N.D.	
88) Allyl chloride		0.000	7.062	0.000	0	N.D.	
89) tert-Butyl Alcohol		0.000	7.220	0.000	0	N.D.	
90) Acrylonitrile		0.000	7.482	0.000	0	N.D.	
91) Isopropyl ether		0.000	7.988	0.000	0	N.D.	
92) 2-Chloro-1,3-butadiene		0.000	8.122	0.000	0	N.D.	
93) Ethyl tert-butyl ether	59	8.323	8.391	0.842	151	N.D.	
94) Ethyl acetate	43	8.634	8.628	0.874	132	N.D.	
95) Propionitrile		0.000	8.720	0.000	0	N.D.	
96) Methacrylonitrile		0.000	8.884	0.000	0	N.D.	
97) Tetrahydrofuran		0.000	8.976	0.000	0	N.D.	
98) Isobutyl alcohol		0.000	9.323	0.000	0	N.D.	
99) Methyl tert-amyl ether		0.000	9.640	0.000	0	N.D.	
100) Methyl methacrylate		0.000	10.506	0.000	0	N.D.	
101) 1,4-Dioxane		0.000	10.616	0.000	0	N.D.	
102) 2-Nitropropane		0.000	11.006	0.000	0	N.D.	
104) Ethyl methacrylate		0.000	11.774	0.000	0	N.D.	
106) 1-Chlorohexane		0.000	12.963	0.000	0	N.D.	
107) cis-1,4-Dichloro-2-butene		0.000	14.121	0.000	0	N.D.	
108) Cyclohexanone		0.000	14.237	0.000	0	N.D.	
109) trans-1,4-Dichloro-2-b...		0.000	14.408	0.000	0	N.D.	
110) Pentachloroethane		0.000	15.084	0.000	0	N.D.	
111) Benzyl chloride	91	15.487	15.627	1.000	1522	N.D.	
112) bis(2-Chloroisopropyl)...		0.000	16.023	0.000	0	N.D.	

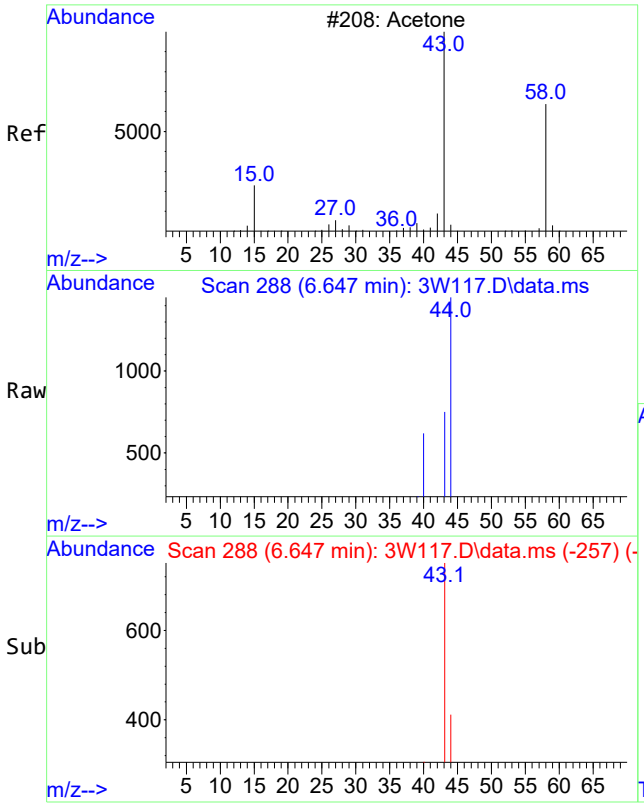
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W117.D
Acq On : 19 Dec 2022 17:52
Operator : KP2
InstName : VOA3
Sample : |604449011|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 20 08:11:41 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

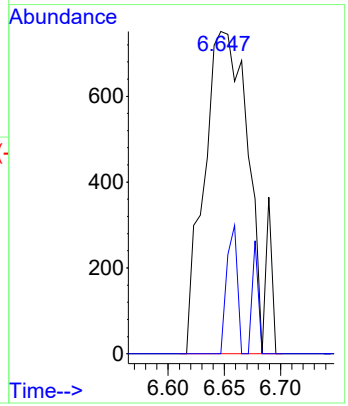


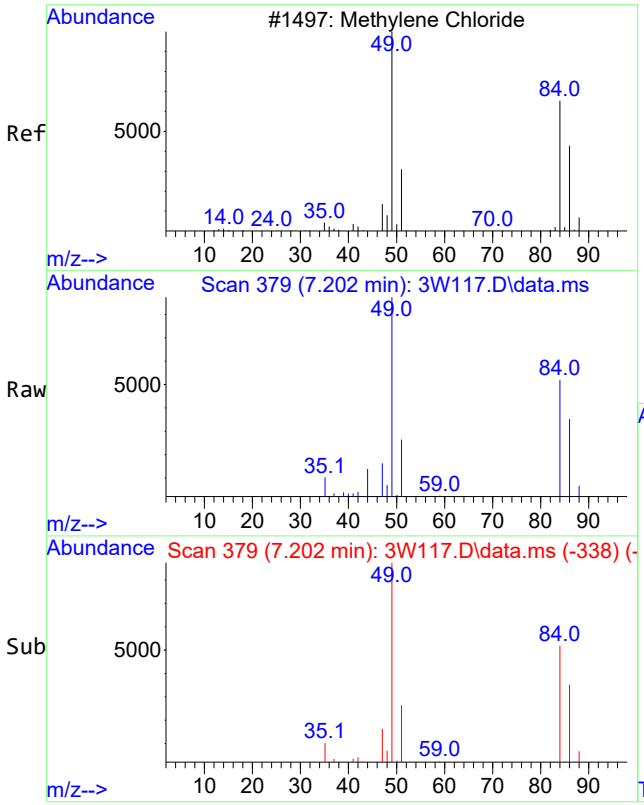


#9 BEFORE analyst DELETION
Acetone
Concen: 1.86 ug/L
RT: 6.647 min Scan# 288
Delta R.T. -0.000 min
Lab File: 3W117.D
Acq: 19 Dec 2022 17:52

Tgt Ion: 43 Resp: 2121

Ion	Ratio	Lower	Upper
43	100		
58	9.1	0.0	60.0

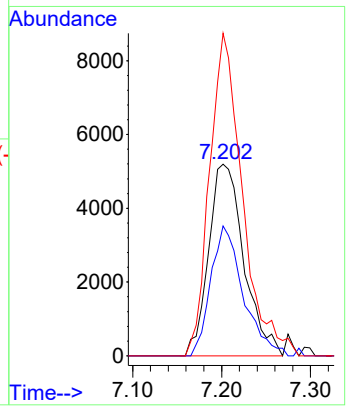




#15
Methylene chloride
Concen: 2.39 ug/L
RT: 7.202 min Scan# 379
Delta R.T. -0.000 min
Lab File: 3W117.D
Acq: 19 Dec 2022 17:52

Tgt Ion: 84 Resp: 14325

Ion	Ratio	Lower	Upper
84	100		
86	62.4	34.2	94.2
49	156.8	110.5	170.5



Library Search Compound Report
GEL Laboratories, LLC

12/21/2022

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W117.D
Acq On : 19 Dec 2022 17:52
Operator : KP2
Sample : |604449011|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 17 Sample Multiplier: 1

12/22/2022

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

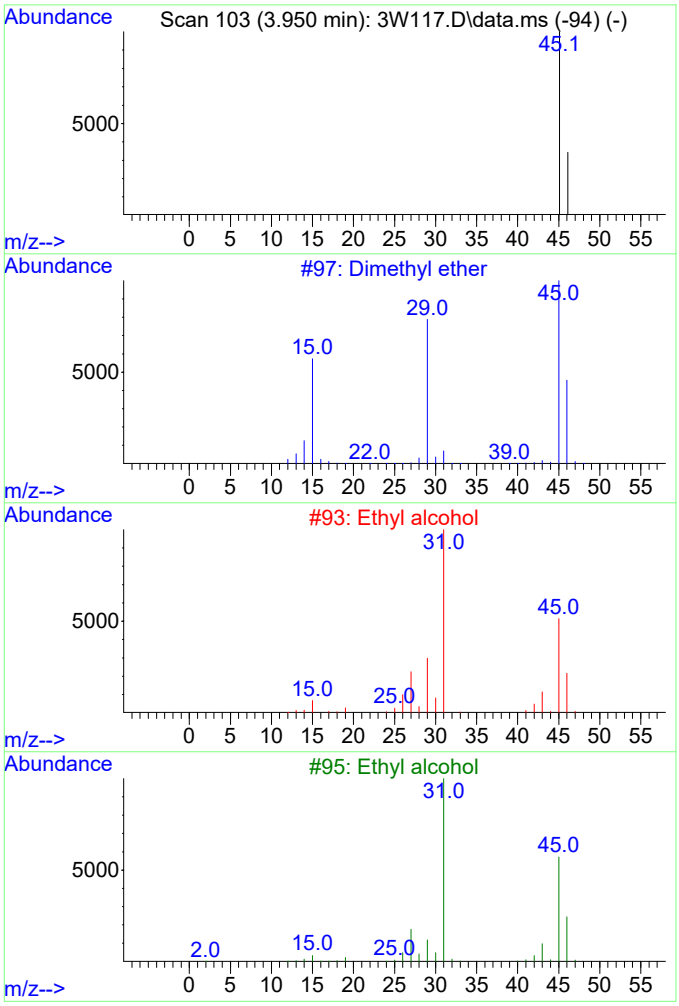
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

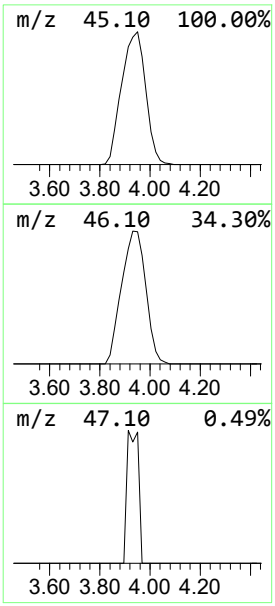
****

Peak Number 1 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.950	9.80 ug/L	439154	Fluorobenzene	9.884

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dimethyl ether	46	C2H6O	000115-10-6	5
2	Ethyl alcohol	46	C2H6O	000064-17-5	4
3	Ethyl alcohol	46	C2H6O	000064-17-5	4
4	Ethyl alcohol	46	C2H6O	000064-17-5	4
5	Formic acid	46	CH2O2	000064-18-6	3





Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W117.D
Acq On : 19 Dec 2022 17:52
Operator : KP2
Sample : |604449011|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 17 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

			(ug/L)		Internal Standard		
TIC Top Hit name	CAS #	RT	EstConc	Response	#	RT	Resp	Conc
unknown		3.950	9.8	439154	1	9.884	2241080	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:01**	**Matrix:**	**W**
Lab Sample ID:	**604449014**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB04-23-265374**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 18:19**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 18:19**				
Data File:	**121922V3\3W118.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
542-75-6	1,3-Dichloropropylene	U	0.500	ug/L	0.500	2.00
75-71-8	Dichlorodifluoromethane	U	0.355	ug/L	0.355	1.00
74-87-3	Chloromethane	U	0.333	ug/L	0.333	1.00
75-01-4	Vinyl chloride	U	0.333	ug/L	0.333	1.00
74-83-9	Bromomethane	U	0.337	ug/L	0.337	1.00
75-69-4	Trichlorofluoromethane	U	0.333	ug/L	0.333	1.00
75-35-4	1,1-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-09-2	Methylene chloride	BJ	2.67	ug/L	0.500	5.00
1634-04-4	tert-Butyl methyl ether	U	0.333	ug/L	0.333	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-34-3	1,1-Dichloroethane	U	0.333	ug/L	0.333	1.00
156-59-2	cis-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
67-66-3	Chloroform	U	0.333	ug/L	0.333	1.00
71-55-6	1,1,1-Trichloroethane	U	0.333	ug/L	0.333	1.00
56-23-5	Carbon tetrachloride	U	0.333	ug/L	0.333	1.00
107-06-2	1,2-Dichloroethane	U	0.333	ug/L	0.333	1.00
71-43-2	Benzene	U	0.333	ug/L	0.333	1.00
79-01-6	Trichloroethylene	U	0.333	ug/L	0.333	1.00
78-87-5	1,2-Dichloropropane	U	0.333	ug/L	0.333	1.00
74-95-3	Dibromomethane	U	0.333	ug/L	0.333	1.00
75-27-4	Bromodichloromethane	U	0.333	ug/L	0.333	1.00
108-88-3	Toluene	U	0.333	ug/L	0.333	1.00
79-00-5	1,1,2-Trichloroethane	U	0.333	ug/L	0.333	1.00
127-18-4	Tetrachloroethylene	U	0.333	ug/L	0.333	1.00
106-93-4	1,2-Dibromoethane	U	0.333	ug/L	0.333	1.00
108-90-7	Chlorobenzene	U	0.333	ug/L	0.333	1.00
100-41-4	Ethylbenzene	U	0.333	ug/L	0.333	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.333	ug/L	0.333	1.00
100-42-5	Styrene	U	0.333	ug/L	0.333	1.00
75-25-2	Bromoform	U	0.333	ug/L	0.333	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.333	ug/L	0.333	1.00
106-46-7	1,4-Dichlorobenzene	U	0.333	ug/L	0.333	1.00
107-02-8	Acrolein	U	1.67	ug/L	1.67	5.00
107-13-1	Acrylonitrile	U	1.67	ug/L	1.67	5.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	1.00	3.00
120-82-1	1,2,4-Trichlorobenzene	U	0.333	ug/L	0.333	1.00
95-50-1	1,2-Dichlorobenzene	U	0.333	ug/L	0.333	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:01**	**Matrix:**	**W**
Lab Sample ID:	**604449014**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB04-23-265374**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 18:19**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 18:19**				
Data File:	**121922V3\3W118.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	54.5	50.0	ug/L	109	(73%-129%)
Bromofluorobenzene	45.1	50.0	ug/L	90	(72%-125%)
Toluene-d8	50.4	50.0	ug/L	101	(75%-123%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.931	21.1	ug/L	0	J
	unknown	14.139	8.65	ug/L	0	J

Quantitation Report
GEL Laboratories, LLC

12/21/2022

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W118.D
Acq On : 19 Dec 2022 18:19
Operator : KP2
InstName : VOA3
Sample : |604449014|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 18 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 20 08:11:51 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	96	9.884	9.884	1.000	729383	50.00	ug/L	0.00
43) Chlorobenzene-d5	117	13.060	13.066	1.000	549795	50.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	152	15.481	15.480	1.000	335087	50.00	ug/L	0.00
84) B Fluorobenzene	96	9.884	9.884	1.000	729585	50.00	ug/L	0.00
103) B Chlorobenzene-d5	117	13.060	13.060	1.000	549795	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	15.481	15.481	1.000	335087	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
30) 1,2-Dichloroethane-d4	67	9.549	9.549	0.966	121234	54.47	ug/L	0.00
45) Toluene-d8	98	11.530	11.530	0.883	742682	50.36	ug/L	0.00
63) Bromofluorobenzene	95	14.261	14.261	0.921	283189	45.06	ug/L	0.00

Compound	Amount	Range	Recovery
30) 1,2-Dichloroethane-d4	50.000	73 - 129	109%
45) Toluene-d8	50.000	75 - 123	101%
63) Bromofluorobenzene	50.000	72 - 125	90%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		0.000	4.260	0.000	0	N.D.		
3) Chloromethane	50	4.644	4.644	0.470	1842	N.D.		
4) Vinyl chloride		0.000	4.826	0.000	0	N.D.		
5) Bromomethane		0.000	5.411	0.000	0	N.D.		
6) Chloroethane		0.000	5.557	0.000	0	N.D.		
7) Trichlorofluoromethane		0.000	5.904	0.000	0	N.D.		
8) Ethyl ether		0.000	6.232	0.000	0	N.D.		
9) Acetone	43	6.647	6.647	0.672	75973	93.14	ug/L	97
10) 1,1-Dichloroethylene		0.000	6.616	0.000	0m	N.D.	d	
11) Iodomethane	142	6.860	6.866	0.694	202	N.D.		
12) Acetonitrile	41	7.037	7.013	0.712	1314	N.D.		
13) Methyl acetate		0.000	7.025	0.000	0	N.D.		
14) Carbon disulfide		0.000	6.982	0.000	0	N.D.		
15) Methylene chloride	84	7.196	7.202	0.728	11471	2.67	ug/L	89
16) tert-Butyl methyl ether		0.000	7.482	0.000	0	N.D.		
17) trans-1,2-Dichloroethy...		0.000	7.531	0.000	0	N.D.		
18) Hexane	57	7.787	7.799	0.788	333	N.D.		
19) Vinyl acetate	43	7.952	7.988	0.804	151	N.D.		
20) 1,1-Dichloroethane		0.000	8.018	0.000	0	N.D.		
21) 2-Butanone	43	8.634	8.622	0.874	1303	N.D.		
22) cis-1,2-Dichloroethylene		0.000	8.659	0.000	0	N.D.		
23) 2,2-Dichloropropane		0.000	8.671	0.000	0	N.D.		
24) Bromochloromethane		0.000	8.933	0.000	0	N.D.		
25) Chloroform		0.000	8.970	0.000	0	N.D.		
26) 1,1,1-Trichloroethane		0.000	9.226	0.000	0	N.D.		
27) Cyclohexane		0.000	9.305	0.000	0	N.D.		
28) 1,1-Dichloropropene	75	9.372	9.384	0.948	102	N.D.		
29) Carbon tetrachloride		0.000	9.415	0.000	0	N.D.		
31) 1,2-Dichloroethane		0.000	9.628	0.000	0	N.D.		
32) Benzene		0.000	9.628	0.000	0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W118.D
Acq On : 19 Dec 2022 18:19
Operator : KP2
InstName : VOA3
Sample : |604449014|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 20 08:11:51 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
33) Cyclohexene		0.000	9.732	0.000	0		N.D.
34) n-Butyl alcohol		0.000	10.012	0.000	0		N.D.
35) Trichloroethylene		0.000	10.268	0.000	0		N.D.
36) 2-Pentanone		0.000	10.378	0.000	0		N.D.
37) 1,2-Dichloropropane		0.000	10.530	0.000	0		N.D.
38) Methylcyclohexane		0.000	10.494	0.000	0		N.D.
39) Dibromomethane		0.000	10.664	0.000	0		N.D.
40) Bromodichloromethane		0.000	10.780	0.000	0		N.D.
41) 2-Chloroethylvinyl ether		0.000	11.006	0.000	0		N.D.
42) cis-1,3-Dichloropropylene		0.000	11.231	0.000	0		N.D.
44) 4-Methyl-2-pentanone		0.000	11.329	0.000	0		N.D.
46) Toluene	91	11.597	11.603	0.888	194		N.D.
47) trans-1,3-Dichloroprop...		0.000	11.780	0.000	0		N.D.
48) 1,1,2-Trichloroethane		0.000	11.999	0.000	0		N.D.
49) 2-Hexanone		0.000	12.182	0.000	0		N.D.
50) 1,3-Dichloropropane		0.000	12.188	0.000	0		N.D.
51) Tetrachloroethylene		0.000	12.188	0.000	0		N.D.
52) Dibromochloromethane		0.000	12.457	0.000	0		N.D.
53) 1,2-Dibromoethane		0.000	12.621	0.000	0		N.D.
54) Chlorobenzene		0.000	13.097	0.000	0		N.D.
55) 1,1,1,2-Tetrachloroethane		0.000	13.152	0.000	0		N.D.
56) Ethylbenzene	91	13.060	13.158	1.000	942		N.D.
57) m,p-Xylenes		0.000	13.267	0.000	0		N.D.
58) o-Xylene		0.000	13.700	0.000	0		N.D.
59) Styrene		0.000	13.706	0.000	0		N.D.
61) Bromoform		0.000	13.975	0.000	0		N.D.
62) Isopropylbenzene	105	14.139	14.060	0.913	156		N.D.
64) 1,1,2,2-Tetrachloroethane		0.000	14.359	0.000	0		N.D.
65) 1,2,3-Trichloropropane		0.000	14.444	0.000	0		N.D.
66) Bromobenzene		0.000	14.468	0.000	0		N.D.
67) n-Propylbenzene		0.000	14.487	0.000	0		N.D.
68) 1,3,5-Trimethylbenzene		0.000	14.639	0.000	0		N.D.
69) 2-Chlorotoluene		0.000	14.633	0.000	0		N.D.
70) 4-Chlorotoluene		0.000	14.743	0.000	0		N.D.
71) tert-Butylbenzene		0.000	15.011	0.000	0		N.D.
72) 1,2,4-Trimethylbenzene		0.000	15.054	0.000	0		N.D.
73) sec-Butylbenzene		0.000	15.237	0.000	0		N.D.
74) 4-Isopropyltoluene		0.000	15.359	0.000	0		N.D.
75) 1,3-Dichlorobenzene	146	15.420	15.419	0.996	1520		N.D.
76) 1,4-Dichlorobenzene	146	15.505	15.505	1.002	179		N.D.
77) n-Butylbenzene		0.000	15.791	0.000	0		N.D.
78) 1,2-Dichlorobenzene		0.000	15.919	0.000	0		N.D.
79) 1,2-Dibromo-3-chloropr...		0.000	16.785	0.000	0		N.D.
80) 1,2,4-Trichlorobenzene	180	17.779	17.791	1.148	107		N.D.
81) Hexachlorobutadiene		0.000	17.949	0.000	0		N.D.
82) Naphthalene	128	18.157	18.163	1.173	501		N.D.
83) 1,2,3-Trichlorobenzene	180	18.492	18.492	1.195	116		N.D.
85) Acrolein		0.000	6.470	0.000	0		N.D.
86) Trichlorotrifluoroethane		0.000	6.586	0.000	0		N.D.

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W118.D
Acq On : 19 Dec 2022 18:19
Operator : KP2
InstName : VOA3
Sample : |604449014|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 20 08:11:51 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

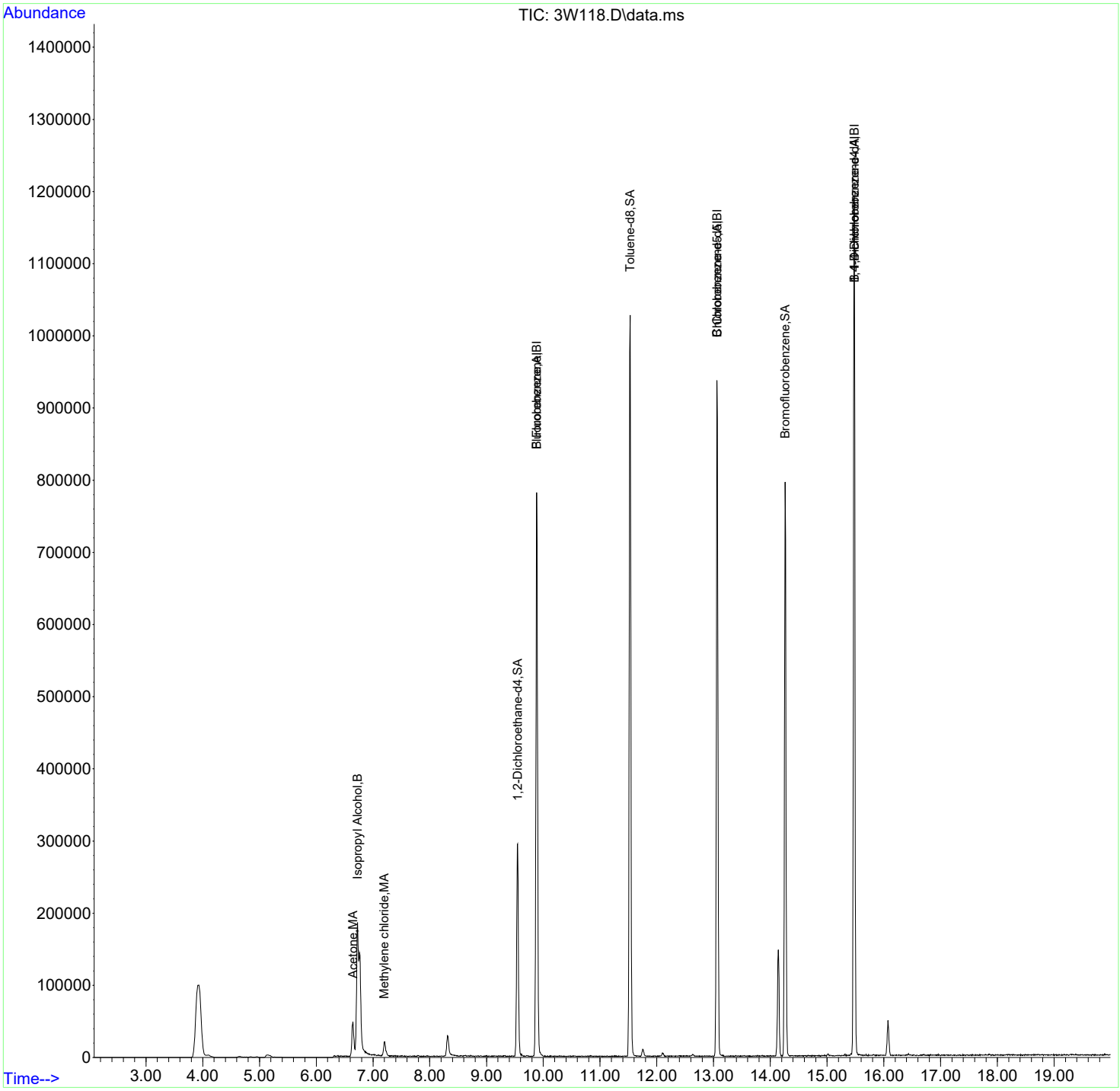
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
87) Isopropyl Alcohol	45	6.726	6.732	0.681	359788	1640.14	ug/L	96
88) Allyl chloride		0.000	7.062	0.000	0	N.D.		
89) tert-Butyl Alcohol		0.000	7.220	0.000	0	N.D.		
90) Acrylonitrile		0.000	7.482	0.000	0	N.D.		
91) Isopropyl ether	45	7.976	7.988	0.807	153	N.D.		
92) 2-Chloro-1,3-butadiene		0.000	8.122	0.000	0	N.D.		
93) Ethyl tert-butyl ether	59	8.305	8.391	0.840	1370	N.D.		
94) Ethyl acetate	43	8.634	8.628	0.874	1303	N.D.		
95) Propionitrile		0.000	8.720	0.000	0	N.D.		
96) Methacrylonitrile		0.000	8.884	0.000	0	N.D.		
97) Tetrahydrofuran		0.000	8.976	0.000	0	N.D.		
98) Isobutyl alcohol		0.000	9.323	0.000	0	N.D.		
99) Methyl tert-amyl ether		0.000	9.640	0.000	0	N.D.		
100) Methyl methacrylate		0.000	10.506	0.000	0	N.D.		
101) 1,4-Dioxane		0.000	10.616	0.000	0	N.D.		
102) 2-Nitropropane		0.000	11.006	0.000	0	N.D.		
104) Ethyl methacrylate		0.000	11.774	0.000	0	N.D.		
106) 1-Chlorohexane		0.000	12.963	0.000	0	N.D.		
107) cis-1,4-Dichloro-2-butene		0.000	14.121	0.000	0	N.D.		
108) Cyclohexanone		0.000	14.237	0.000	0	N.D.		
109) trans-1,4-Dichloro-2-b...		0.000	14.408	0.000	0	N.D.		
110) Pentachloroethane		0.000	15.084	0.000	0	N.D.		
111) Benzyl chloride	91	15.481	15.627	1.000	1108	N.D.		
112) bis(2-Chloroisopropyl)...		0.000	16.023	0.000	0	N.D.		

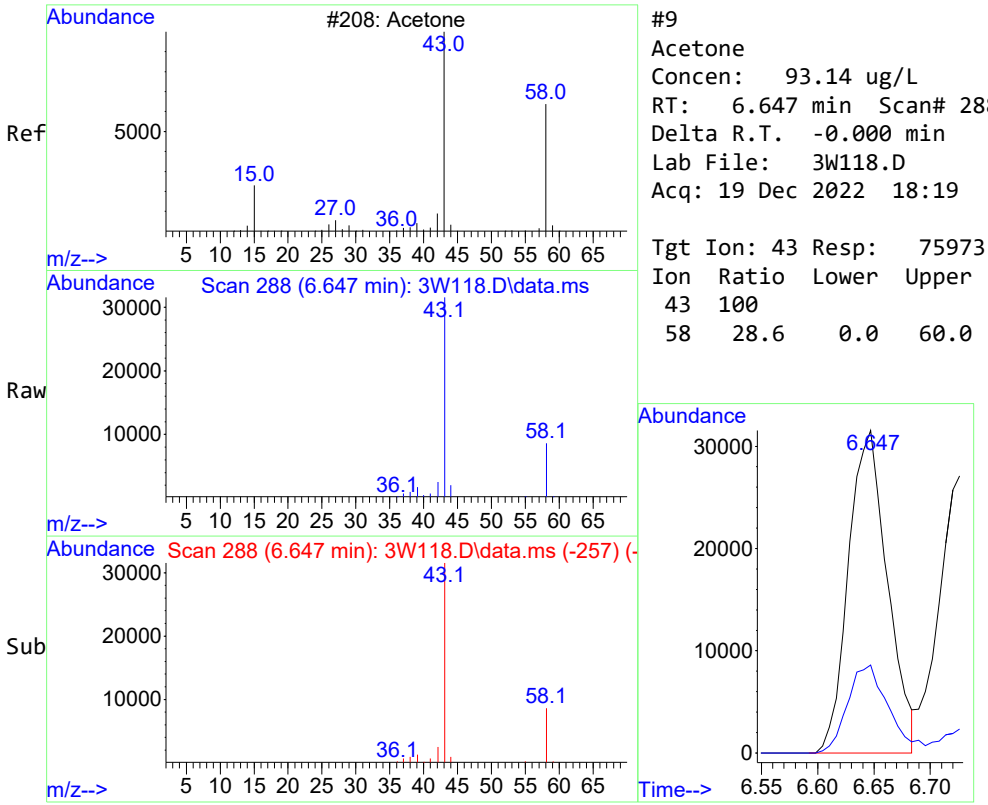
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W118.D
Acq On : 19 Dec 2022 18:19
Operator : KP2
InstName : VOA3
Sample : |604449014|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 20 08:11:51 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

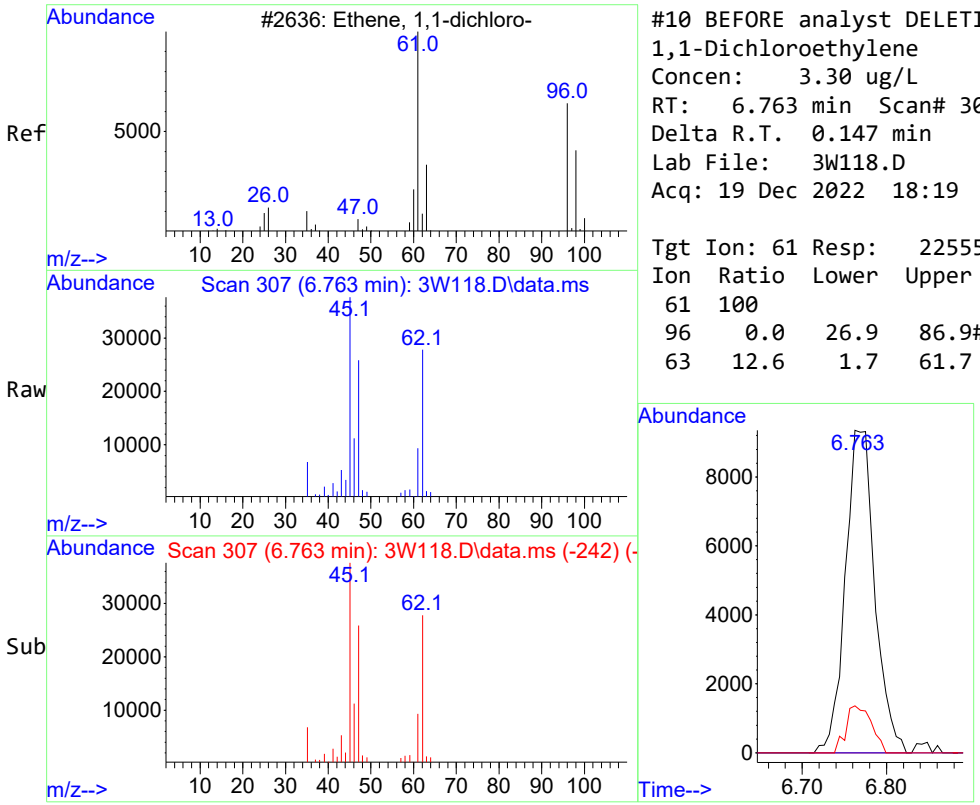




#9
Acetone
Concen: 93.14 ug/L
RT: 6.647 min Scan# 288
Delta R.T. -0.000 min
Lab File: 3W118.D
Acq: 19 Dec 2022 18:19

Tgt Ion: 43 Resp: 75973

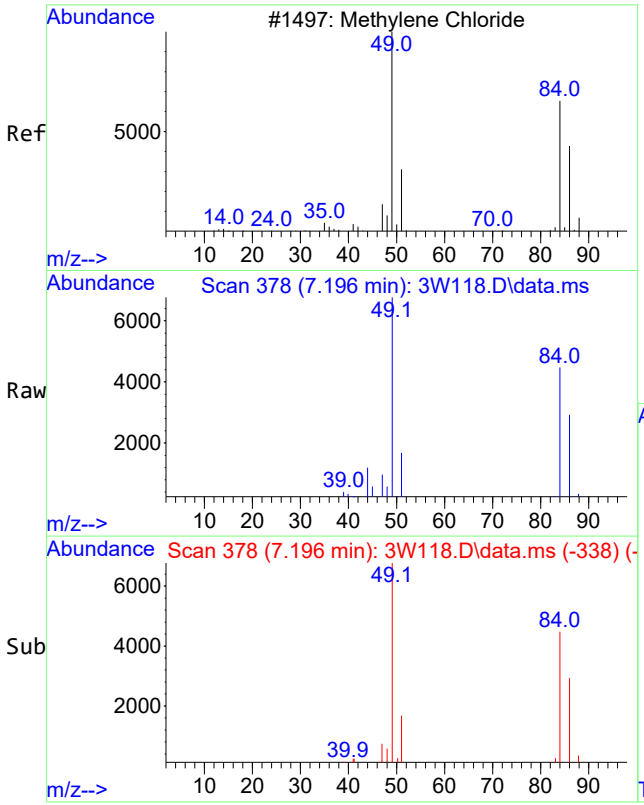
Ion	Ratio	Lower	Upper
43	100		
58	28.6	0.0	60.0



#10 BEFORE analyst DELETION
1,1-Dichloroethylene
Concen: 3.30 ug/L
RT: 6.763 min Scan# 307
Delta R.T. 0.147 min
Lab File: 3W118.D
Acq: 19 Dec 2022 18:19

Tgt Ion: 61 Resp: 22555

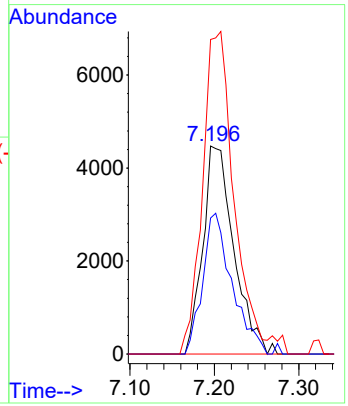
Ion	Ratio	Lower	Upper
61	100		
96	0.0	26.9	86.9#
63	12.6	1.7	61.7

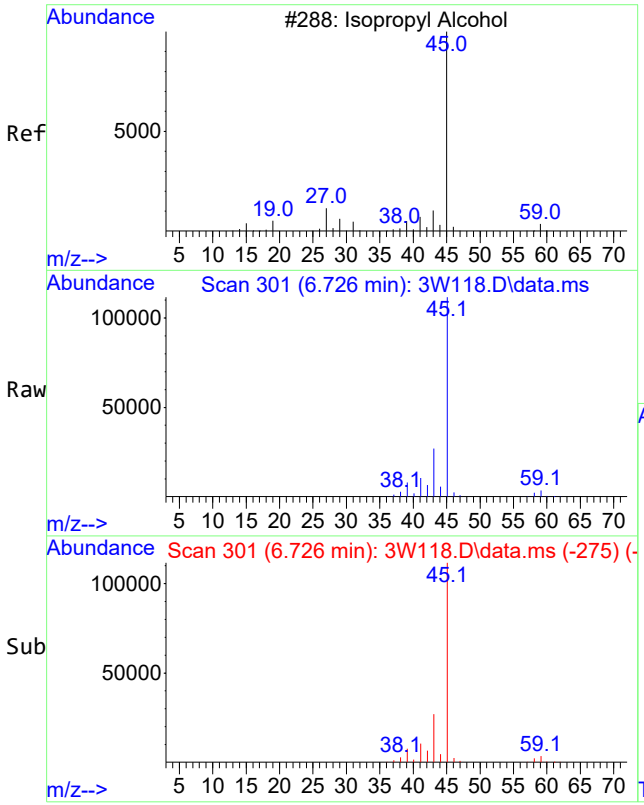


#15
Methylene chloride
Concen: 2.67 ug/L
RT: 7.196 min Scan# 378
Delta R.T. -0.006 min
Lab File: 3W118.D
Acq: 19 Dec 2022 18:19

Tgt Ion: 84 Resp: 11471

Ion	Ratio	Lower	Upper
84	100		
86	63.9	34.2	94.2
49	159.0	110.5	170.5

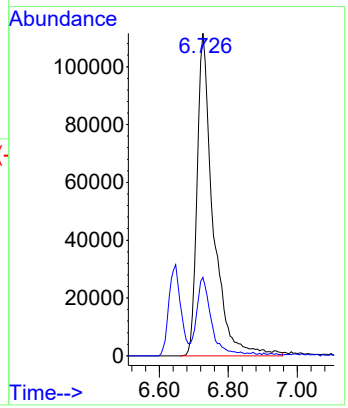




#87
Isopropyl Alcohol
Concen: 1640.14 ug/L
RT: 6.726 min Scan# 301
Delta R.T. -0.006 min
Lab File: 3W118.D
Acq: 19 Dec 2022 18:19

Tgt Ion: 45 Resp: 359788

Ion	Ratio	Lower	Upper
45	100		
43	21.9	0.0	50.0



Library Search Compound Report
GEL Laboratories, LLC

12/21/2022

12/22/2022

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W118.D
Acq On : 19 Dec 2022 18:19
Operator : KP2
Sample : |604449014|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 18 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

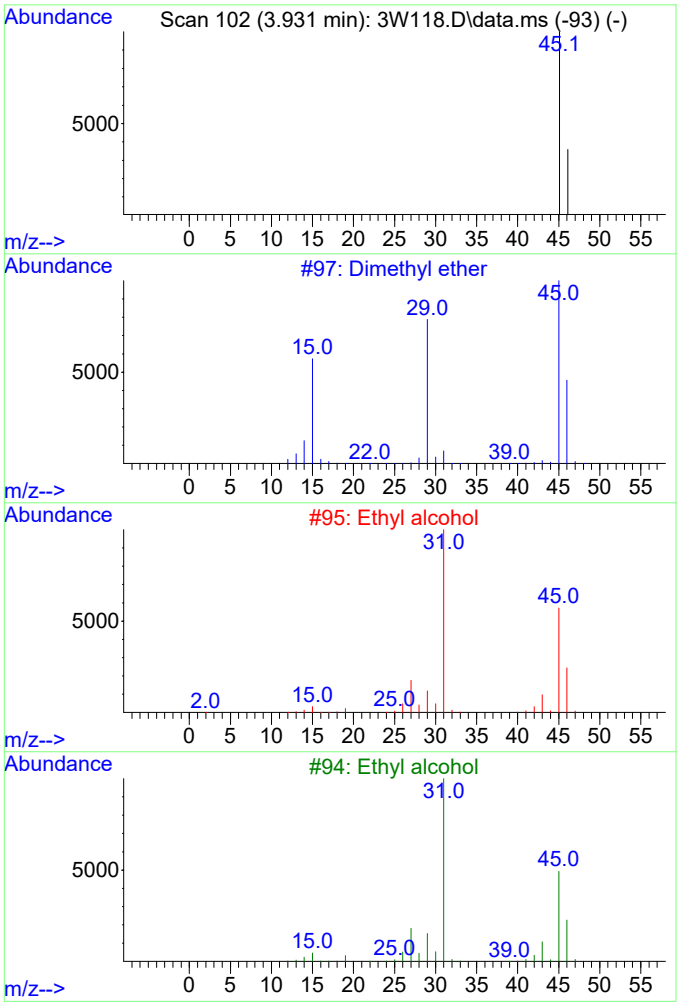
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

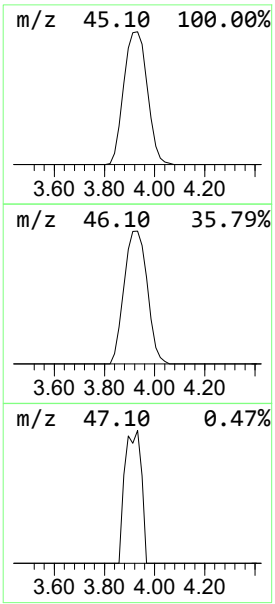
****

Peak Number 1 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.931	21.06 ug/L	674272	Fluorobenzene	9.884

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dimethyl ether	46	C2H6O	000115-10-6	5
2	Ethyl alcohol	46	C2H6O	000064-17-5	4
3	Ethyl alcohol	46	C2H6O	000064-17-5	4
4	Ethyl alcohol	46	C2H6O	000064-17-5	4
5	Formic acid	46	CH2O2	000064-18-6	3





Library Search Compound Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W118.D
Acq On : 19 Dec 2022 18:19
Operator : KP2
Sample : |604449014|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 18 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

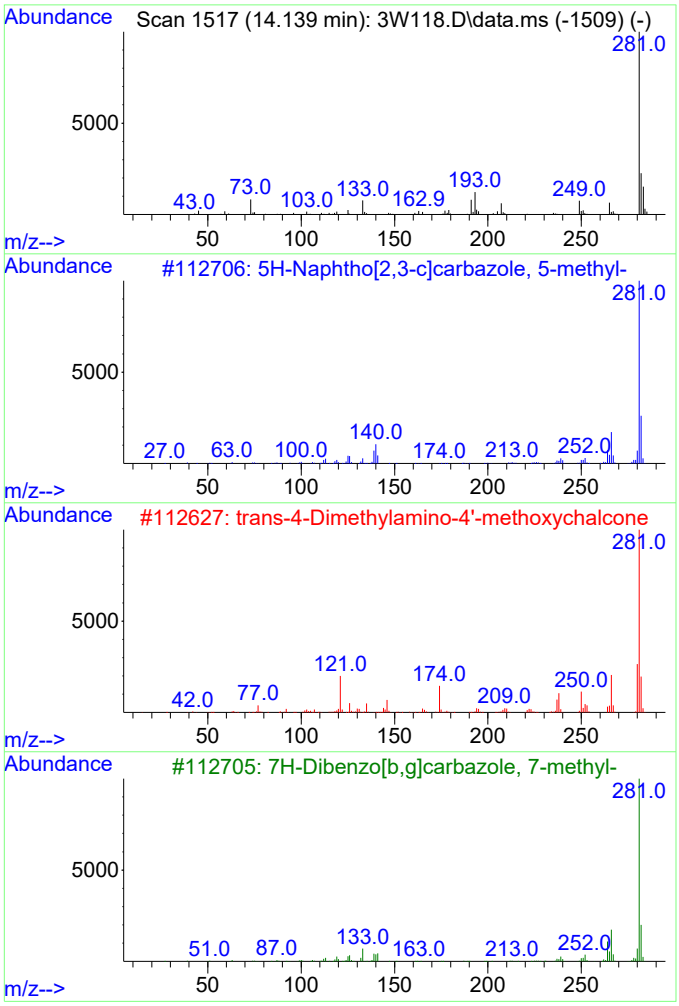
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

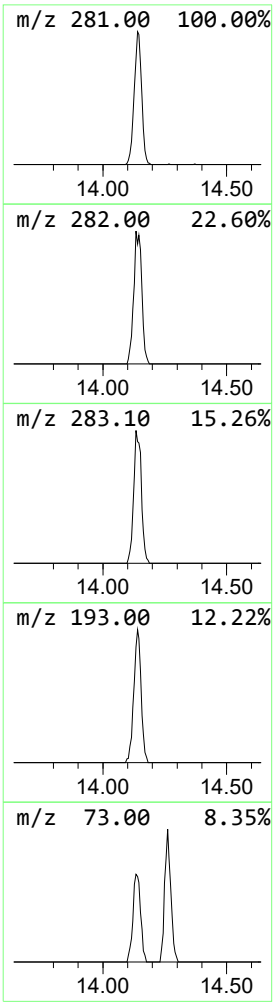
****

Peak Number 2 unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.139	8.65 ug/L	308886	B Chlorobenzene-d5	13.060

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	5H-Naphtho[2,3-c]carbazole, 5-me...	281	C21H15N	100025-44-3	64
2	trans-4-Dimethylamino-4'-methoxy...	281	C18H19NO2	052119-37-6	64
3	7H-Dibenzo[b,g]carbazole, 7-methyl-	281	C21H15N	003557-49-1	64
4	Benzoic acid, 3-methyl-2-trimeth...	296	C14H24O3Si2	1000153-57-1	59
5	trans-4-(2-(5-Nitro-2-furyl)viny...	281	C15H11N3O3	000847-10-9	59





Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W118.D
Acq On : 19 Dec 2022 18:19
Operator : KP2
Sample : |604449014|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 18 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

			(ug/L)		Internal Standard		
TIC Top Hit name	CAS #	RT	EstConc	Response	#	RT	Resp	Conc
unknown		3.931	21.1	674272	1	9.884	1601180	50.0
unknown		14.139	8.7	308886	4	13.060	1785340	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:01**	**Matrix:**	**W**
Lab Sample ID:	**604449015**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB04-23-265379**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 18:45**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 18:45**				
Data File:	**121922V3\3W119.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
542-75-6	1,3-Dichloropropylene	U	0.500	ug/L	0.500	2.00
75-71-8	Dichlorodifluoromethane	U	0.355	ug/L	0.355	1.00
74-87-3	Chloromethane	U	0.333	ug/L	0.333	1.00
75-01-4	Vinyl chloride	U	0.333	ug/L	0.333	1.00
74-83-9	Bromomethane	U	0.337	ug/L	0.337	1.00
75-69-4	Trichlorofluoromethane	U	0.333	ug/L	0.333	1.00
75-35-4	1,1-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-09-2	Methylene chloride	BJ	2.30	ug/L	0.500	5.00
1634-04-4	tert-Butyl methyl ether	U	0.333	ug/L	0.333	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-34-3	1,1-Dichloroethane	U	0.333	ug/L	0.333	1.00
156-59-2	cis-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
67-66-3	Chloroform	U	0.333	ug/L	0.333	1.00
71-55-6	1,1,1-Trichloroethane	U	0.333	ug/L	0.333	1.00
56-23-5	Carbon tetrachloride	U	0.333	ug/L	0.333	1.00
107-06-2	1,2-Dichloroethane	U	0.333	ug/L	0.333	1.00
71-43-2	Benzene	U	0.333	ug/L	0.333	1.00
79-01-6	Trichloroethylene	U	0.333	ug/L	0.333	1.00
78-87-5	1,2-Dichloropropane	U	0.333	ug/L	0.333	1.00
74-95-3	Dibromomethane	U	0.333	ug/L	0.333	1.00
75-27-4	Bromodichloromethane	U	0.333	ug/L	0.333	1.00
108-88-3	Toluene	U	0.333	ug/L	0.333	1.00
79-00-5	1,1,2-Trichloroethane	U	0.333	ug/L	0.333	1.00
127-18-4	Tetrachloroethylene	U	0.333	ug/L	0.333	1.00
106-93-4	1,2-Dibromoethane	U	0.333	ug/L	0.333	1.00
108-90-7	Chlorobenzene	U	0.333	ug/L	0.333	1.00
100-41-4	Ethylbenzene	U	0.333	ug/L	0.333	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.333	ug/L	0.333	1.00
100-42-5	Styrene	U	0.333	ug/L	0.333	1.00
75-25-2	Bromoform	U	0.333	ug/L	0.333	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.333	ug/L	0.333	1.00
106-46-7	1,4-Dichlorobenzene	U	0.333	ug/L	0.333	1.00
107-02-8	Acrolein	U	1.67	ug/L	1.67	5.00
107-13-1	Acrylonitrile	U	1.67	ug/L	1.67	5.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	1.00	3.00
120-82-1	1,2,4-Trichlorobenzene	U	0.333	ug/L	0.333	1.00
95-50-1	1,2-Dichlorobenzene	U	0.333	ug/L	0.333	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:01**	**Matrix:**	**W**
Lab Sample ID:	**604449015**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB04-23-265379**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 18:45**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 18:45**				
Data File:	**121922V3\3W119.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	48.7	50.0	ug/L	97	(73%-129%)
Bromofluorobenzene	46.9	50.0	ug/L	94	(72%-125%)
Toluene-d8	50.2	50.0	ug/L	100	(75%-123%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.95	8.11	ug/L	0	J

Quantitation Report
GEL Laboratories, LLC

12/21/2022

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W119.D
Acq On : 19 Dec 2022 18:45
Operator : KP2
InstName : VOA3
Sample : |604449015|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 19 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 20 08:12:04 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	96	9.884	9.884	1.000	1140697	50.00	ug/L	0.00
43) Chlorobenzene-d5	117	13.060	13.066	1.000	848193	50.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	152	15.480	15.480	1.000	489218	50.00	ug/L	0.00
84) B Fluorobenzene	96	9.884	9.884	1.000	1141349	50.00	ug/L	0.00
103) B Chlorobenzene-d5	117	13.060	13.060	1.000	848193	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	15.480	15.481	1.000	489218	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
30) 1,2-Dichloroethane-d4	67	9.543	9.549	0.965	169418	48.67	ug/L	0.00
45) Toluene-d8	98	11.530	11.530	0.883	1141884	50.19	ug/L	0.00
63) Bromofluorobenzene	95	14.261	14.261	0.921	430123	46.88	ug/L	0.00

Compound	Amount	Range	Recovery
30) 1,2-Dichloroethane-d4	50.000	73 - 129	97%
45) Toluene-d8	50.000	75 - 123	100%
63) Bromofluorobenzene	50.000	72 - 125	94%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		0.000	4.260	0.000	0	N.D.		
3) Chloromethane	50	4.644	4.644	0.470	594	N.D.		
4) Vinyl chloride		0.000	4.826	0.000	0	N.D.		
5) Bromomethane	94	5.246	5.411	0.531	539	N.D.		
6) Chloroethane		0.000	5.557	0.000	0	N.D.		
7) Trichlorofluoromethane		0.000	5.904	0.000	0	N.D.		
8) Ethyl ether		0.000	6.232	0.000	0	N.D.		
9) Acetone		0.000	6.647	0.000	0m	N.D.	d	
10) 1,1-Dichloroethylene		0.000	6.616	0.000	0	N.D.		
11) Iodomethane		0.000	6.866	0.000	0	N.D.		
12) Acetonitrile	41	7.061	7.013	0.714	113	N.D.		
13) Methyl acetate		0.000	7.025	0.000	0	N.D.		
14) Carbon disulfide		0.000	6.982	0.000	0	N.D.		
15) Methylene chloride	84	7.196	7.202	0.728	15438	2.30	ug/L	93
16) tert-Butyl methyl ether		0.000	7.482	0.000	0	N.D.		
17) trans-1,2-Dichloroethy...		0.000	7.531	0.000	0	N.D.		
18) Hexane	57	7.775	7.799	0.787	158	N.D.		
19) Vinyl acetate		0.000	7.988	0.000	0	N.D.		
20) 1,1-Dichloroethane		0.000	8.018	0.000	0	N.D.		
21) 2-Butanone	43	8.628	8.622	0.873	193	N.D.		
22) cis-1,2-Dichloroethylene		0.000	8.659	0.000	0	N.D.		
23) 2,2-Dichloropropane		0.000	8.671	0.000	0	N.D.		
24) Bromochloromethane		0.000	8.933	0.000	0	N.D.		
25) Chloroform		0.000	8.970	0.000	0	N.D.		
26) 1,1,1-Trichloroethane		0.000	9.226	0.000	0	N.D.		
27) Cyclohexane		0.000	9.305	0.000	0	N.D.		
28) 1,1-Dichloropropene		0.000	9.384	0.000	0	N.D.		
29) Carbon tetrachloride		0.000	9.415	0.000	0	N.D.		
31) 1,2-Dichloroethane	62	9.640	9.628	0.975	101	N.D.		
32) Benzene		0.000	9.628	0.000	0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W119.D
Acq On : 19 Dec 2022 18:45
Operator : KP2
InstName : VOA3
Sample : |604449015|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 20 08:12:04 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
33) Cyclohexene		0.000	9.732	0.000	0		N.D.
34) n-Butyl alcohol		0.000	10.012	0.000	0		N.D.
35) Trichloroethylene		0.000	10.268	0.000	0		N.D.
36) 2-Pentanone		0.000	10.378	0.000	0		N.D.
37) 1,2-Dichloropropane		0.000	10.530	0.000	0		N.D.
38) Methylcyclohexane		0.000	10.494	0.000	0		N.D.
39) Dibromomethane		0.000	10.664	0.000	0		N.D.
40) Bromodichloromethane		0.000	10.780	0.000	0		N.D.
41) 2-Chloroethylvinyl ether		0.000	11.006	0.000	0		N.D.
42) cis-1,3-Dichloropropylene		0.000	11.231	0.000	0		N.D.
44) 4-Methyl-2-pentanone		0.000	11.329	0.000	0		N.D.
46) Toluene		0.000	11.603	0.000	0		N.D.
47) trans-1,3-Dichloroprop...		0.000	11.780	0.000	0		N.D.
48) 1,1,2-Trichloroethane		0.000	11.999	0.000	0		N.D.
49) 2-Hexanone		0.000	12.182	0.000	0		N.D.
50) 1,3-Dichloropropane		0.000	12.188	0.000	0		N.D.
51) Tetrachloroethylene		0.000	12.188	0.000	0		N.D.
52) Dibromochloromethane		0.000	12.457	0.000	0		N.D.
53) 1,2-Dibromoethane		0.000	12.621	0.000	0		N.D.
54) Chlorobenzene		0.000	13.097	0.000	0		N.D.
55) 1,1,1,2-Tetrachloroethane		0.000	13.152	0.000	0		N.D.
56) Ethylbenzene	91	13.066	13.158	1.000	1702		N.D.
57) m,p-Xylenes		0.000	13.267	0.000	0		N.D.
58) o-Xylene		0.000	13.700	0.000	0		N.D.
59) Styrene		0.000	13.706	0.000	0		N.D.
61) Bromoform		0.000	13.975	0.000	0		N.D.
62) Isopropylbenzene		0.000	14.060	0.000	0		N.D.
64) 1,1,2,2-Tetrachloroethane	83	14.267	14.359	0.922	147		N.D.
65) 1,2,3-Trichloropropane		0.000	14.444	0.000	0		N.D.
66) Bromobenzene		0.000	14.468	0.000	0		N.D.
67) n-Propylbenzene		0.000	14.487	0.000	0		N.D.
68) 1,3,5-Trimethylbenzene		0.000	14.639	0.000	0		N.D.
69) 2-Chlorotoluene		0.000	14.633	0.000	0		N.D.
70) 4-Chlorotoluene		0.000	14.743	0.000	0		N.D.
71) tert-Butylbenzene		0.000	15.011	0.000	0		N.D.
72) 1,2,4-Trimethylbenzene		0.000	15.054	0.000	0		N.D.
73) sec-Butylbenzene		0.000	15.237	0.000	0		N.D.
74) 4-Isopropyltoluene		0.000	15.359	0.000	0		N.D.
75) 1,3-Dichlorobenzene		0.000	15.419	0.000	0		N.D.
76) 1,4-Dichlorobenzene	146	15.493	15.505	1.001	250		N.D.
77) n-Butylbenzene		0.000	15.791	0.000	0		N.D.
78) 1,2-Dichlorobenzene		0.000	15.919	0.000	0		N.D.
79) 1,2-Dibromo-3-chloropr...		0.000	16.785	0.000	0		N.D.
80) 1,2,4-Trichlorobenzene		0.000	17.791	0.000	0		N.D.
81) Hexachlorobutadiene		0.000	17.949	0.000	0		N.D.
82) Naphthalene	128	18.175	18.163	1.174	170		N.D.
83) 1,2,3-Trichlorobenzene		0.000	18.492	0.000	0		N.D.
85) Acrolein		0.000	6.470	0.000	0		N.D.
86) Trichlorotrifluoroethane		0.000	6.586	0.000	0		N.D.

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W119.D
Acq On : 19 Dec 2022 18:45
Operator : KP2
InstName : VOA3
Sample : |604449015|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 20 08:12:04 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

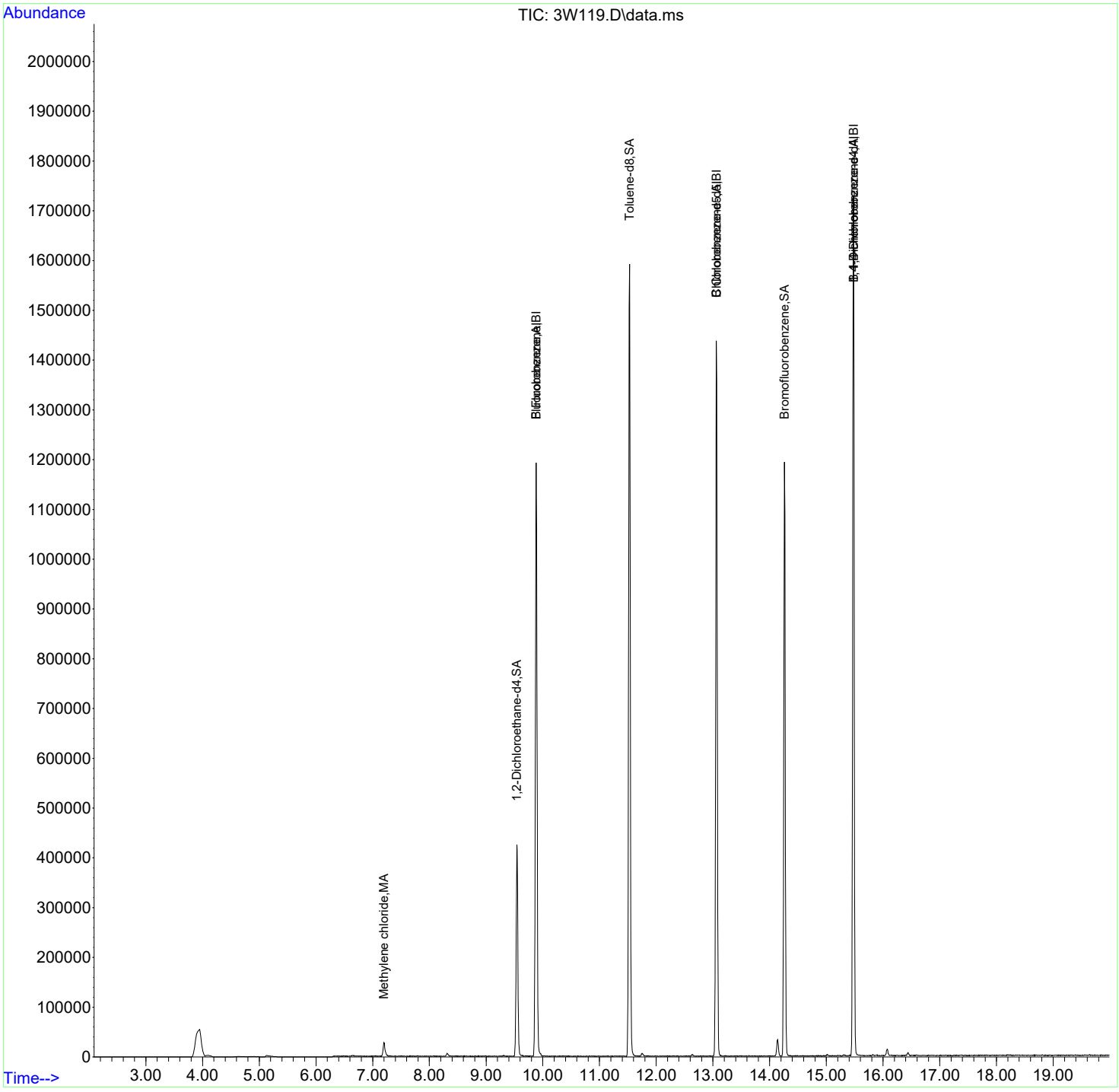
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
87) Isopropyl Alcohol	45	6.757	6.732	0.684	398	N.D.	
88) Allyl chloride		0.000	7.062	0.000	0	N.D.	
89) tert-Butyl Alcohol		0.000	7.220	0.000	0	N.D.	
90) Acrylonitrile		0.000	7.482	0.000	0	N.D.	
91) Isopropyl ether		0.000	7.988	0.000	0	N.D.	
92) 2-Chloro-1,3-butadiene		0.000	8.122	0.000	0	N.D.	
93) Ethyl tert-butyl ether		0.000	8.391	0.000	0	N.D.	
94) Ethyl acetate	43	8.628	8.628	0.873	193	N.D.	
95) Propionitrile		0.000	8.720	0.000	0	N.D.	
96) Methacrylonitrile		0.000	8.884	0.000	0	N.D.	
97) Tetrahydrofuran		0.000	8.976	0.000	0	N.D.	
98) Isobutyl alcohol		0.000	9.323	0.000	0	N.D.	
99) Methyl tert-amyl ether		0.000	9.640	0.000	0	N.D.	
100) Methyl methacrylate		0.000	10.506	0.000	0	N.D.	
101) 1,4-Dioxane		0.000	10.616	0.000	0	N.D.	
102) 2-Nitropropane		0.000	11.006	0.000	0	N.D.	
104) Ethyl methacrylate		0.000	11.774	0.000	0	N.D.	
106) 1-Chlorohexane		0.000	12.963	0.000	0	N.D.	
107) cis-1,4-Dichloro-2-butene		0.000	14.121	0.000	0	N.D.	
108) Cyclohexanone		0.000	14.237	0.000	0	N.D.	
109) trans-1,4-Dichloro-2-b...		0.000	14.408	0.000	0	N.D.	
110) Pentachloroethane		0.000	15.084	0.000	0	N.D.	
111) Benzyl chloride	91	15.474	15.627	1.000	1536	N.D.	
112) bis(2-Chloroisopropyl)...		0.000	16.023	0.000	0	N.D.	

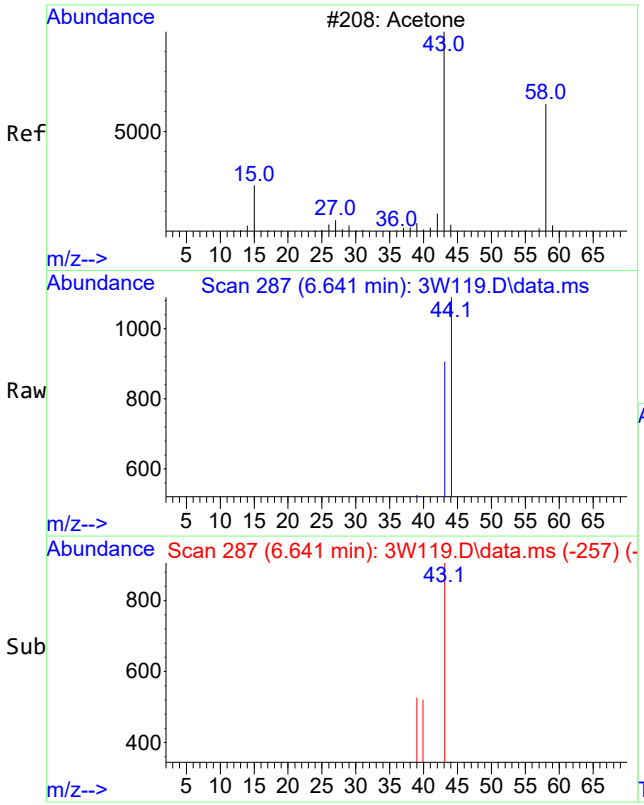
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W119.D
Acq On : 19 Dec 2022 18:45
Operator : KP2
InstName : VOA3
Sample : |604449015|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 20 08:12:04 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

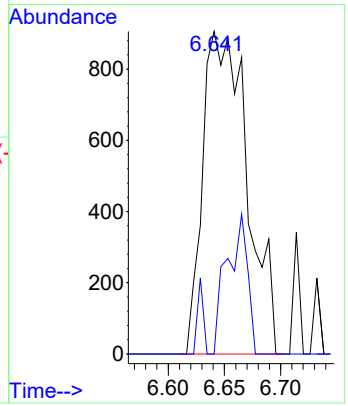


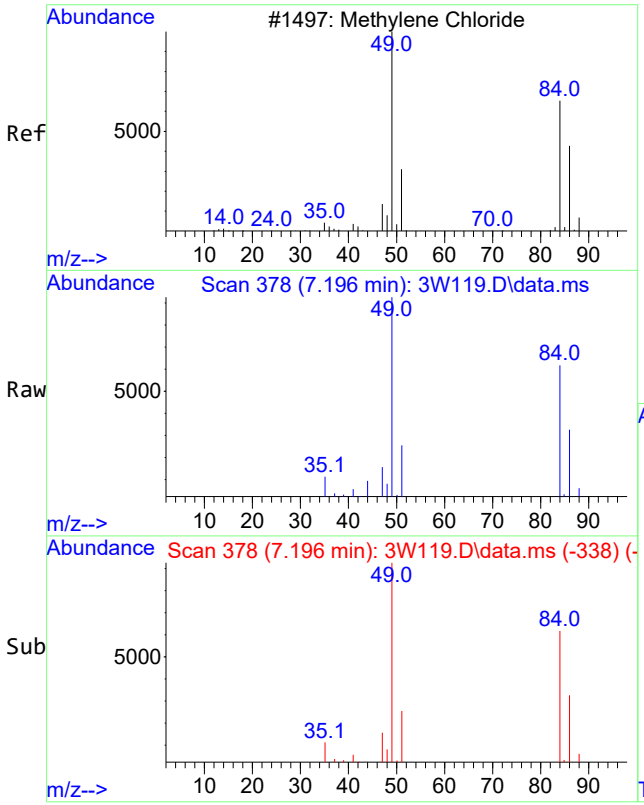


#9 BEFORE analyst DELETION
Acetone
Concen: 1.94 ug/L
RT: 6.641 min Scan# 287
Delta R.T. -0.006 min
Lab File: 3W119.D
Acq: 19 Dec 2022 18:45

Tgt Ion: 43 Resp: 2478

Ion	Ratio	Lower	Upper
43	100		
58	20.1	0.0	60.0

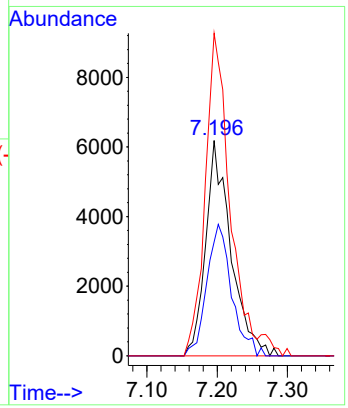




#15
Methylene chloride
Concen: 2.30 ug/L
RT: 7.196 min Scan# 378
Delta R.T. -0.006 min
Lab File: 3W119.D
Acq: 19 Dec 2022 18:45

Tgt Ion: 84 Resp: 15438

Ion	Ratio	Lower	Upper
84	100		
86	60.1	34.2	94.2
49	149.6	110.5	170.5



Library Search Compound Report
GEL Laboratories, LLC

12/21/2022

12/22/2022

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W119.D
Acq On : 19 Dec 2022 18:45
Operator : KP2
Sample : |604449015|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 19 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

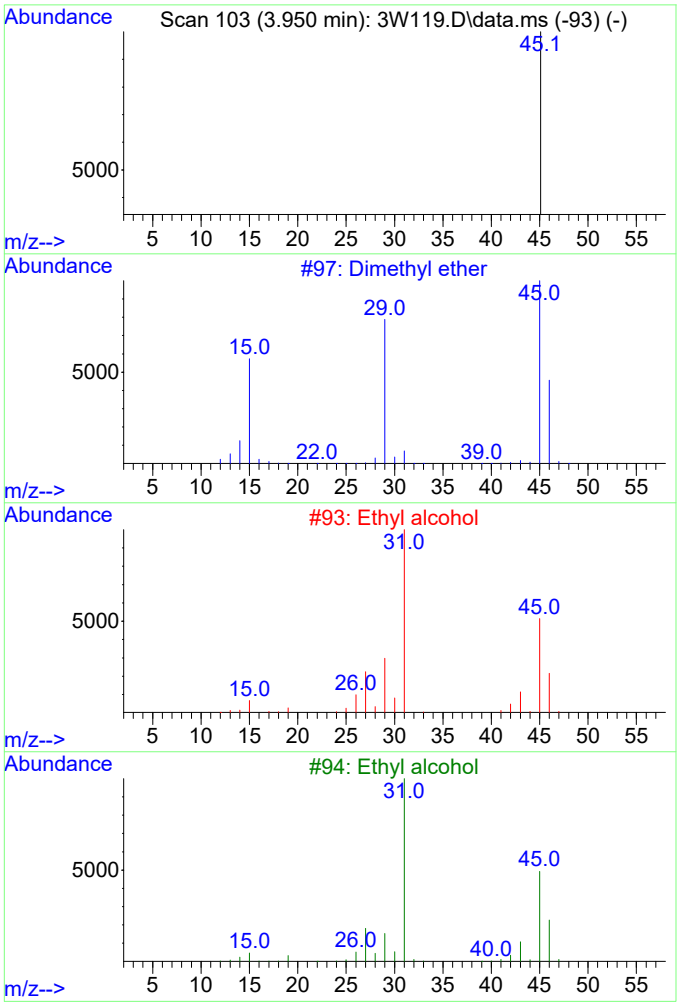
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

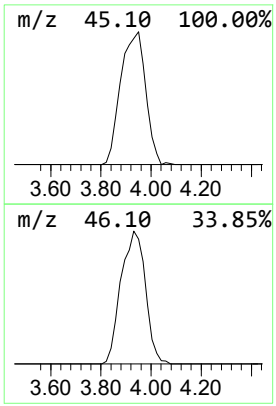
****

Peak Number 1 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.950	8.11 ug/L	408064	Fluorobenzene	9.884

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dimethyl ether	46	C2H6O	000115-10-6	5
2	Ethyl alcohol	46	C2H6O	000064-17-5	4
3	Ethyl alcohol	46	C2H6O	000064-17-5	4
4	Ethyl alcohol	46	C2H6O	000064-17-5	4
5	Formic acid	46	CH2O2	000064-18-6	2





Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W119.D
Acq On : 19 Dec 2022 18:45
Operator : KP2
Sample : |604449015|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 19 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

			(ug/L)		Internal Standard		
TIC Top Hit name	CAS #	RT	EstConc	Response	#	RT	Resp	Conc
unknown		3.950	8.1	408064	1	9.884	2516120	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:12**	**Matrix:**	**W**
Lab Sample ID:	**604449018**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB05-23-265375**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 19:12**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 19:12**				
Data File:	**121922V3\3W120.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
542-75-6	1,3-Dichloropropylene	U	0.500	ug/L	0.500	2.00
75-71-8	Dichlorodifluoromethane	U	0.355	ug/L	0.355	1.00
74-87-3	Chloromethane	U	0.333	ug/L	0.333	1.00
75-01-4	Vinyl chloride	U	0.333	ug/L	0.333	1.00
74-83-9	Bromomethane	U	0.337	ug/L	0.337	1.00
75-69-4	Trichlorofluoromethane	U	0.333	ug/L	0.333	1.00
75-35-4	1,1-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-09-2	Methylene chloride	BJ	2.04	ug/L	0.500	5.00
1634-04-4	tert-Butyl methyl ether	U	0.333	ug/L	0.333	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-34-3	1,1-Dichloroethane	U	0.333	ug/L	0.333	1.00
156-59-2	cis-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
67-66-3	Chloroform	U	0.333	ug/L	0.333	1.00
71-55-6	1,1,1-Trichloroethane	U	0.333	ug/L	0.333	1.00
56-23-5	Carbon tetrachloride	U	0.333	ug/L	0.333	1.00
107-06-2	1,2-Dichloroethane	U	0.333	ug/L	0.333	1.00
71-43-2	Benzene	U	0.333	ug/L	0.333	1.00
79-01-6	Trichloroethylene	U	0.333	ug/L	0.333	1.00
78-87-5	1,2-Dichloropropane	U	0.333	ug/L	0.333	1.00
74-95-3	Dibromomethane	U	0.333	ug/L	0.333	1.00
75-27-4	Bromodichloromethane	U	0.333	ug/L	0.333	1.00
108-88-3	Toluene	U	0.333	ug/L	0.333	1.00
79-00-5	1,1,2-Trichloroethane	U	0.333	ug/L	0.333	1.00
127-18-4	Tetrachloroethylene	U	0.333	ug/L	0.333	1.00
106-93-4	1,2-Dibromoethane	U	0.333	ug/L	0.333	1.00
108-90-7	Chlorobenzene	U	0.333	ug/L	0.333	1.00
100-41-4	Ethylbenzene	U	0.333	ug/L	0.333	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.333	ug/L	0.333	1.00
100-42-5	Styrene	U	0.333	ug/L	0.333	1.00
75-25-2	Bromoform	U	0.333	ug/L	0.333	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.333	ug/L	0.333	1.00
106-46-7	1,4-Dichlorobenzene	U	0.333	ug/L	0.333	1.00
107-02-8	Acrolein	U	1.67	ug/L	1.67	5.00
107-13-1	Acrylonitrile	U	1.67	ug/L	1.67	5.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	1.00	3.00
120-82-1	1,2,4-Trichlorobenzene	U	0.333	ug/L	0.333	1.00
95-50-1	1,2-Dichlorobenzene	U	0.333	ug/L	0.333	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:12**	**Matrix:**	**W**
Lab Sample ID:	**604449018**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB05-23-265375**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 19:12**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 19:12**				
Data File:	**121922V3\3W120.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	54.8	50.0	ug/L	110	(73%-129%)
Bromofluorobenzene	46.4	50.0	ug/L	93	(72%-125%)
Toluene-d8	49.6	50.0	ug/L	99	(75%-123%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.95	26.9	ug/L	0	J
	unknown	14.139	9.73	ug/L	0	J

Quantitation Report
GEL Laboratories, LLC

12/22/2022

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W120.D
Acq On : 19 Dec 2022 19:12
Operator : KP2
InstName : VOA3
Sample : |604449018|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 20 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 20 08:12:14 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	96	9.884	9.884	1.000	876951	50.00	ug/L	0.00
43) Chlorobenzene-d5	117	13.060	13.066	1.000	666334	50.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	152	15.475	15.480	1.000	398616	50.00	ug/L	0.00
84) B Fluorobenzene	96	9.884	9.884	1.000	876906	50.00	ug/L	0.00
103) B Chlorobenzene-d5	117	13.060	13.060	1.000	666334	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	15.475	15.481	1.000	398616	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
30) 1,2-Dichloroethane-d4	67	9.543	9.549	0.965	146739	54.83	ug/L	0.00
45) Toluene-d8	98	11.530	11.530	0.883	886316	49.59	ug/L	0.00
63) Bromofluorobenzene	95	14.261	14.261	0.922	346572	46.36	ug/L	0.00

Compound	Amount	Range	Recovery
30) 1,2-Dichloroethane-d4	50.000	73 - 129	110%
45) Toluene-d8	50.000	75 - 123	99%
63) Bromofluorobenzene	50.000	72 - 125	93%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		0.000	4.260	0.000	0	N.D.		
3) Chloromethane	50	4.680	4.644	0.474	1774	N.D.		
4) Vinyl chloride		0.000	4.826	0.000	0	N.D.		
5) Bromomethane		0.000	5.411	0.000	0	N.D.		
6) Chloroethane		0.000	5.557	0.000	0	N.D.		
7) Trichlorofluoromethane		0.000	5.904	0.000	0	N.D.		
8) Ethyl ether		0.000	6.232	0.000	0	N.D.		
9) Acetone	43	6.647	6.647	0.672	388326	395.96	ug/L	94
10) 1,1-Dichloroethylene		0.000	6.616	0.000	0m	N.D.	d	
11) Iodomethane	142	6.854	6.866	0.693	404	N.D.		
12) Acetonitrile	41	7.019	7.013	0.710	720	N.D.		
13) Methyl acetate		0.000	7.025	0.000	0	N.D.		
14) Carbon disulfide		0.000	6.982	0.000	0	N.D.		
15) Methylene chloride	84	7.208	7.202	0.729	10509	2.04	ug/L	98
16) tert-Butyl methyl ether		0.000	7.482	0.000	0	N.D.		
17) trans-1,2-Dichloroethy...		0.000	7.531	0.000	0	N.D.		
18) Hexane	57	7.793	7.799	0.788	185	N.D.		
19) Vinyl acetate	43	7.799	7.988	0.789	302	N.D.		
20) 1,1-Dichloroethane		0.000	8.018	0.000	0	N.D.		
21) 2-Butanone	43	8.628	8.622	0.873	1014	N.D.		
22) cis-1,2-Dichloroethylene		0.000	8.659	0.000	0	N.D.		
23) 2,2-Dichloropropane		0.000	8.671	0.000	0	N.D.		
24) Bromochloromethane		0.000	8.933	0.000	0	N.D.		
25) Chloroform		0.000	8.970	0.000	0	N.D.		
26) 1,1,1-Trichloroethane		0.000	9.226	0.000	0	N.D.		
27) Cyclohexane		0.000	9.305	0.000	0	N.D.		
28) 1,1-Dichloropropene		0.000	9.384	0.000	0	N.D.		
29) Carbon tetrachloride		0.000	9.415	0.000	0	N.D.		
31) 1,2-Dichloroethane		0.000	9.628	0.000	0	N.D.		
32) Benzene	78	9.634	9.628	0.975	166	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W120.D
Acq On : 19 Dec 2022 19:12
Operator : KP2
InstName : VOA3
Sample : |604449018|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 20 08:12:14 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
33) Cyclohexene	67	9.890	9.732	1.001	288	N.D.	
34) n-Butyl alcohol		0.000	10.012	0.000	0	N.D.	
35) Trichloroethylene		0.000	10.268	0.000	0	N.D.	
36) 2-Pentanone		0.000	10.378	0.000	0	N.D.	
37) 1,2-Dichloropropane		0.000	10.530	0.000	0	N.D.	
38) Methylcyclohexane		0.000	10.494	0.000	0	N.D.	
39) Dibromomethane		0.000	10.664	0.000	0	N.D.	
40) Bromodichloromethane		0.000	10.780	0.000	0	N.D.	
41) 2-Chloroethylvinyl ether		0.000	11.006	0.000	0	N.D.	
42) cis-1,3-Dichloropropylene		0.000	11.231	0.000	0	N.D.	
44) 4-Methyl-2-pentanone	43	11.335	11.329	0.868	102	N.D.	
46) Toluene	91	11.597	11.603	0.888	165	N.D.	
47) trans-1,3-Dichloroprop...		0.000	11.780	0.000	0	N.D.	
48) 1,1,2-Trichloroethane		0.000	11.999	0.000	0	N.D.	
49) 2-Hexanone	43	12.097	12.182	0.926	120	N.D.	
50) 1,3-Dichloropropane		0.000	12.188	0.000	0	N.D.	
51) Tetrachloroethylene		0.000	12.188	0.000	0	N.D.	
52) Dibromochloromethane		0.000	12.457	0.000	0	N.D.	
53) 1,2-Dibromoethane		0.000	12.621	0.000	0	N.D.	
54) Chlorobenzene		0.000	13.097	0.000	0	N.D.	
55) 1,1,1,2-Tetrachloroethane		0.000	13.152	0.000	0	N.D.	
56) Ethylbenzene	91	13.066	13.158	1.000	1352	N.D.	
57) m,p-Xylenes		0.000	13.267	0.000	0	N.D.	
58) o-Xylene		0.000	13.700	0.000	0	N.D.	
59) Styrene		0.000	13.706	0.000	0	N.D.	
61) Bromoform		0.000	13.975	0.000	0	N.D.	
62) Isopropylbenzene	105	14.127	14.060	0.913	387	N.D.	
64) 1,1,2,2-Tetrachloroethane		0.000	14.359	0.000	0	N.D.	
65) 1,2,3-Trichloropropane		0.000	14.444	0.000	0	N.D.	
66) Bromobenzene		0.000	14.468	0.000	0	N.D.	
67) n-Propylbenzene		0.000	14.487	0.000	0	N.D.	
68) 1,3,5-Trimethylbenzene		0.000	14.639	0.000	0	N.D.	
69) 2-Chlorotoluene		0.000	14.633	0.000	0	N.D.	
70) 4-Chlorotoluene		0.000	14.743	0.000	0	N.D.	
71) tert-Butylbenzene		0.000	15.011	0.000	0	N.D.	
72) 1,2,4-Trimethylbenzene	105	15.054	15.054	0.973	188	N.D.	
73) sec-Butylbenzene		0.000	15.237	0.000	0	N.D.	
74) 4-Isopropyltoluene		0.000	15.359	0.000	0	N.D.	
75) 1,3-Dichlorobenzene	146	15.426	15.419	0.997	2062	N.D.	
76) 1,4-Dichlorobenzene		0.000	15.505	0.000	0	N.D.	
77) n-Butylbenzene	91	15.785	15.791	1.020	259	N.D.	
78) 1,2-Dichlorobenzene		0.000	15.919	0.000	0	N.D.	
79) 1,2-Dibromo-3-chloropr...		0.000	16.785	0.000	0	N.D.	
80) 1,2,4-Trichlorobenzene	180	17.785	17.791	1.149	211	N.D.	
81) Hexachlorobutadiene		0.000	17.949	0.000	0	N.D.	
82) Naphthalene	128	18.157	18.163	1.173	106	N.D.	
83) 1,2,3-Trichlorobenzene		0.000	18.492	0.000	0	N.D.	
85) Acrolein		0.000	6.470	0.000	0	N.D.	
86) Trichlorotrifluoroethane		0.000	6.586	0.000	0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W120.D
Acq On : 19 Dec 2022 19:12
Operator : KP2
InstName : VOA3
Sample : |604449018|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 20 08:12:14 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

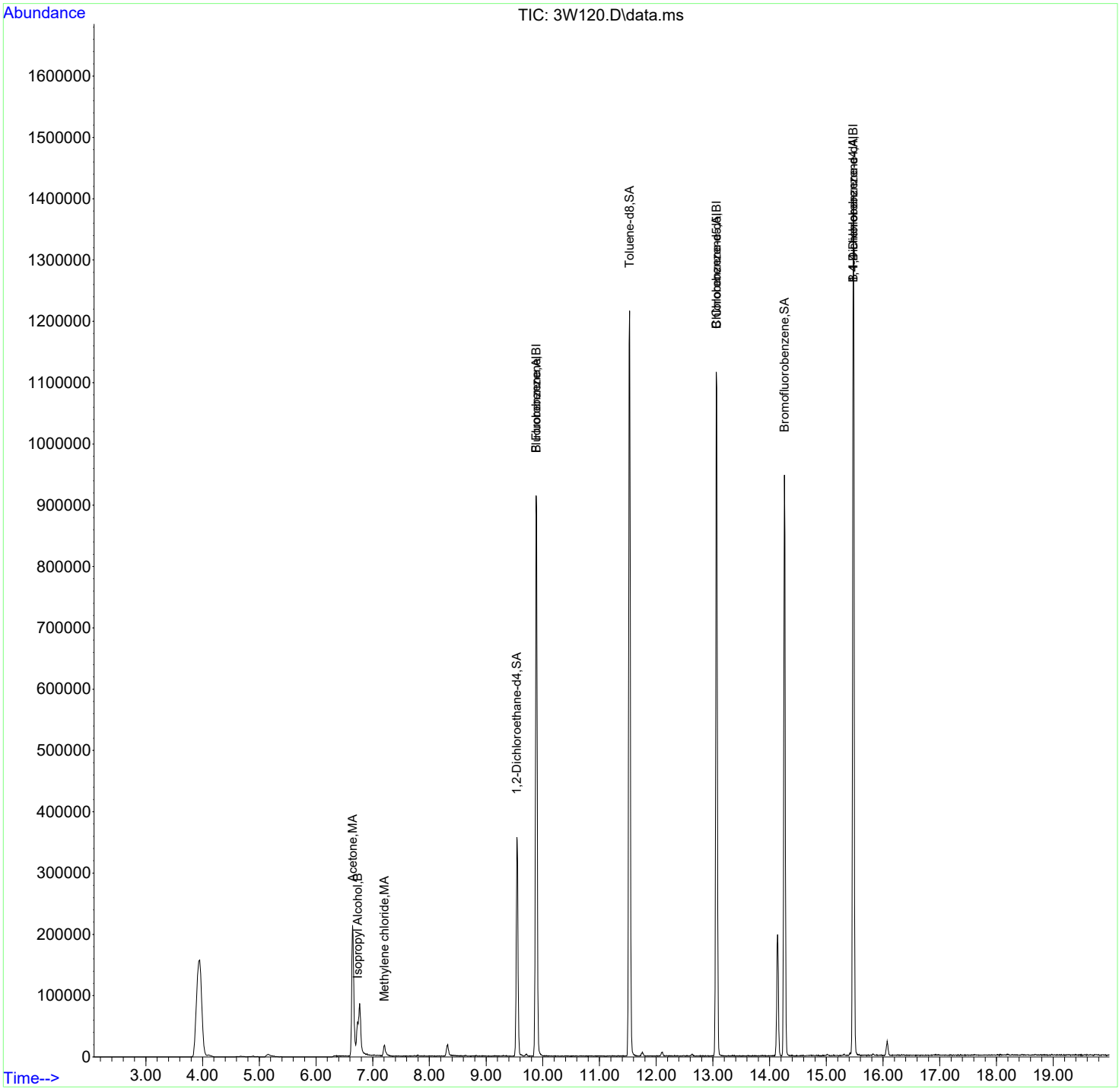
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
87) Isopropyl Alcohol	45	6.732	6.732	0.681	123931	470.04	ug/L #	56
88) Allyl chloride		0.000	7.062	0.000	0	N.D.		
89) tert-Butyl Alcohol	59	7.226	7.220	0.731	162	N.D.		
90) Acrylonitrile		0.000	7.482	0.000	0	N.D.		
91) Isopropyl ether		0.000	7.988	0.000	0	N.D.		
92) 2-Chloro-1,3-butadiene		0.000	8.122	0.000	0	N.D.		
93) Ethyl tert-butyl ether	59	8.317	8.391	0.841	622	N.D.		
94) Ethyl acetate	43	8.628	8.628	0.873	1014	N.D.		
95) Propionitrile		0.000	8.720	0.000	0	N.D.		
96) Methacrylonitrile		0.000	8.884	0.000	0	N.D.		
97) Tetrahydrofuran		0.000	8.976	0.000	0	N.D.		
98) Isobutyl alcohol		0.000	9.323	0.000	0	N.D.		
99) Methyl tert-amyl ether		0.000	9.640	0.000	0	N.D.		
100) Methyl methacrylate		0.000	10.506	0.000	0	N.D.		
101) 1,4-Dioxane		0.000	10.616	0.000	0	N.D.		
102) 2-Nitropropane		0.000	11.006	0.000	0	N.D.		
104) Ethyl methacrylate		0.000	11.774	0.000	0	N.D.		
106) 1-Chlorohexane		0.000	12.963	0.000	0	N.D.		
107) cis-1,4-Dichloro-2-butene		0.000	14.121	0.000	0	N.D.		
108) Cyclohexanone		0.000	14.237	0.000	0	N.D.		
109) trans-1,4-Dichloro-2-b...		0.000	14.408	0.000	0	N.D.		
110) Pentachloroethane		0.000	15.084	0.000	0	N.D.		
111) Benzyl chloride	91	15.481	15.627	1.000	1146	N.D.		
112) bis(2-Chloroisopropyl)...		0.000	16.023	0.000	0	N.D.		

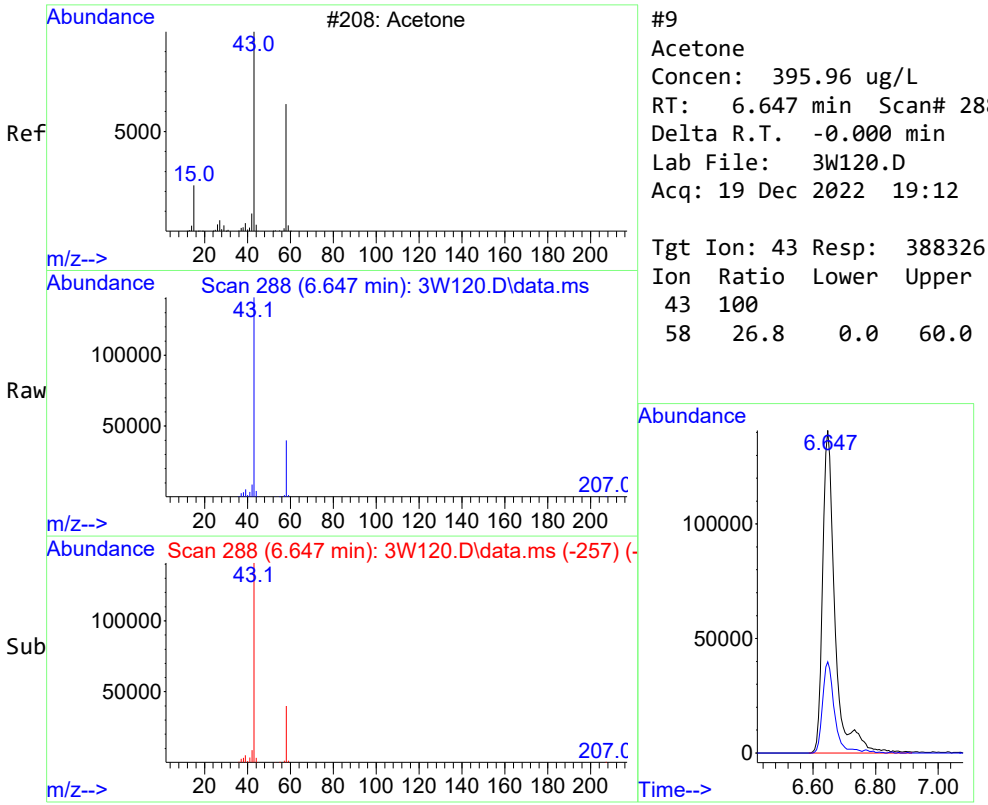
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W120.D
Acq On : 19 Dec 2022 19:12
Operator : KP2
InstName : VOA3
Sample : |604449018|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 20 08:12:14 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

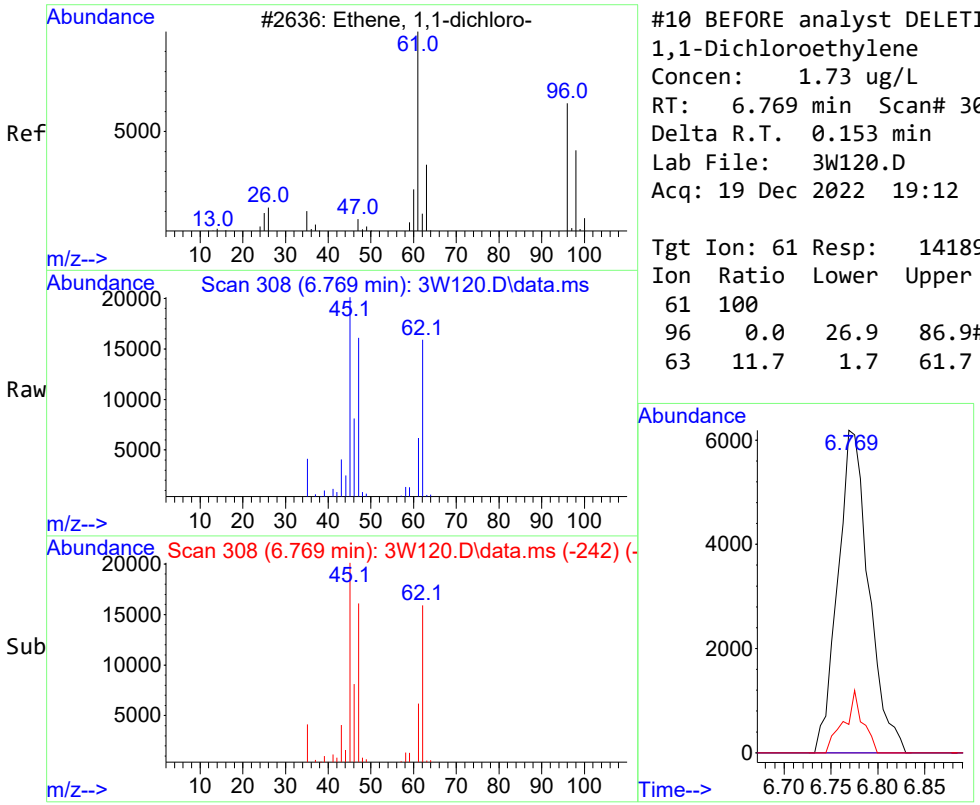




#9
Acetone
Concen: 395.96 ug/L
RT: 6.647 min Scan# 288
Delta R.T. -0.000 min
Lab File: 3W120.D
Acq: 19 Dec 2022 19:12

Tgt Ion: 43 Resp: 388326

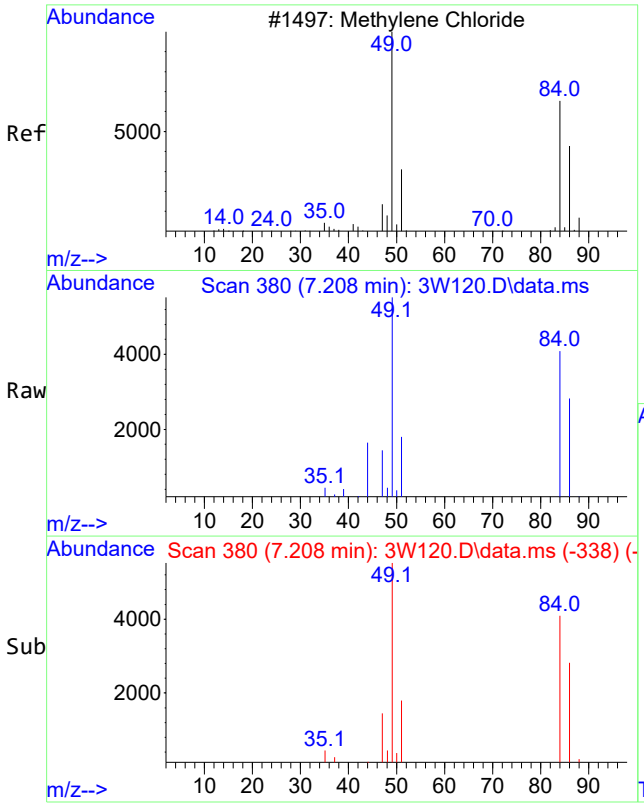
Ion	Ratio	Lower	Upper
43	100		
58	26.8	0.0	60.0



#10 BEFORE analyst DELETION
1,1-Dichloroethylene
Concen: 1.73 ug/L
RT: 6.769 min Scan# 308
Delta R.T. 0.153 min
Lab File: 3W120.D
Acq: 19 Dec 2022 19:12

Tgt Ion: 61 Resp: 14189

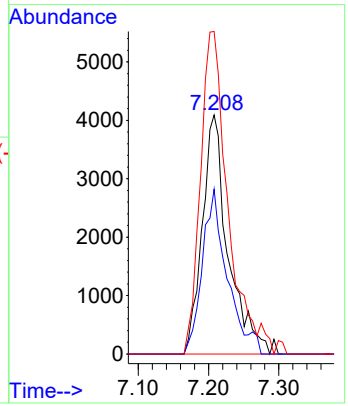
Ion	Ratio	Lower	Upper
61	100		
96	0.0	26.9	86.9#
63	11.7	1.7	61.7

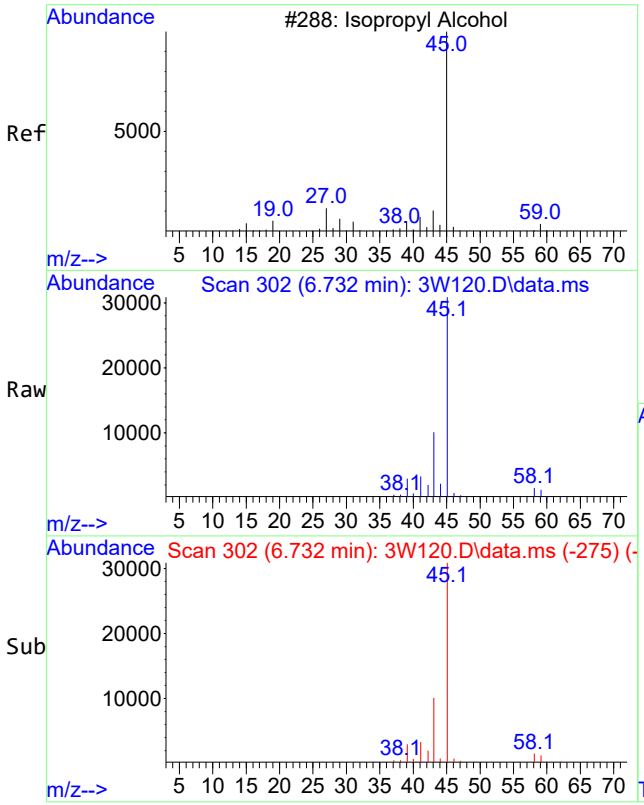


#15
Methylene chloride
Concen: 2.04 ug/L
RT: 7.208 min Scan# 380
Delta R.T. 0.006 min
Lab File: 3W120.D
Acq: 19 Dec 2022 19:12

Tgt Ion: 84 Resp: 10509

Ion	Ratio	Lower	Upper
84	100		
86	66.1	34.2	94.2
49	143.0	110.5	170.5

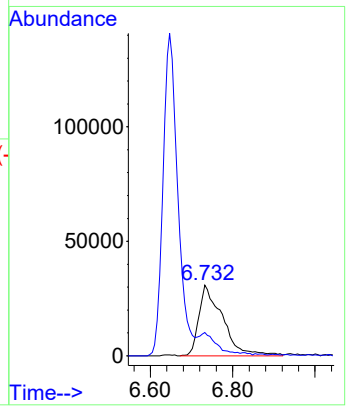




#87
Isopropyl Alcohol
Concen: 470.04 ug/L
RT: 6.732 min Scan# 302
Delta R.T. 0.000 min
Lab File: 3W120.D
Acq: 19 Dec 2022 19:12

Tgt Ion: 45 Resp: 123931

Ion	Ratio	Lower	Upper
45	100		
43	0.0	0.0	50.0



Library Search Compound Report
GEL Laboratories, LLC

12/22/2022

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W120.D
Acq On : 19 Dec 2022 19:12
Operator : KP2
Sample : |604449018|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 20 Sample Multiplier: 1

12/22/2022

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

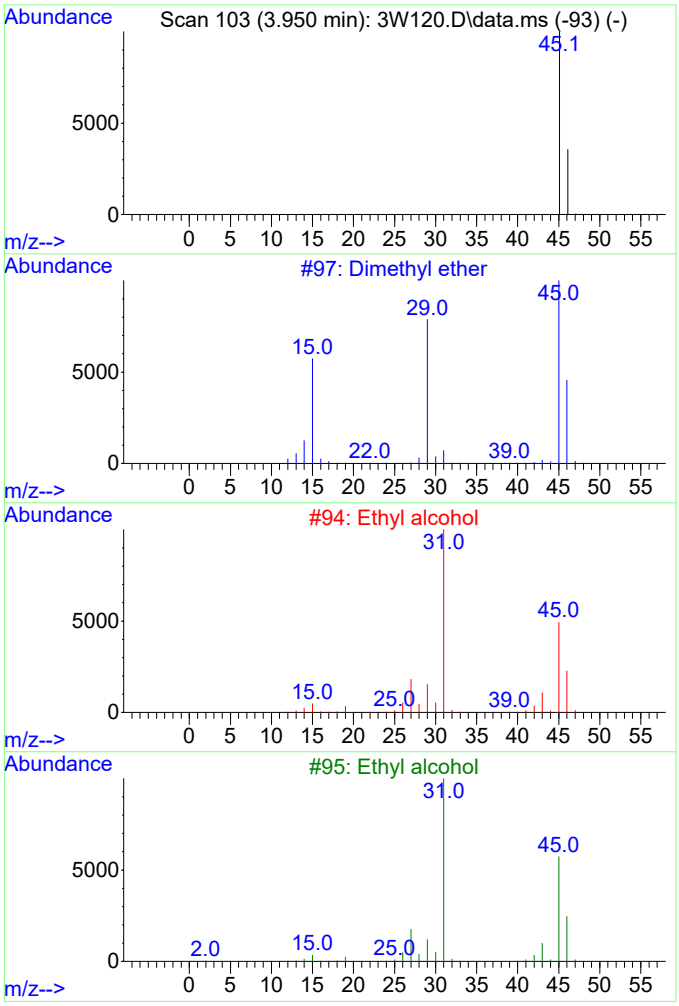
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

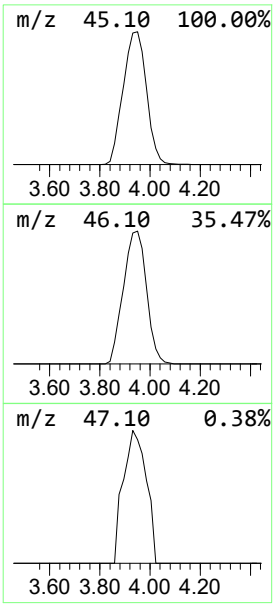
****

Peak Number 1 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.950	26.85 ug/L	1038630	Fluorobenzene	9.884

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dimethyl ether	46	C2H6O	000115-10-6	5
2	Ethyl alcohol	46	C2H6O	000064-17-5	4
3	Ethyl alcohol	46	C2H6O	000064-17-5	4
4	Ethyl alcohol	46	C2H6O	000064-17-5	4
5	Dimethyl ether	46	C2H6O	000115-10-6	2





Library Search Compound Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W120.D
Acq On : 19 Dec 2022 19:12
Operator : KP2
Sample : |604449018|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 20 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

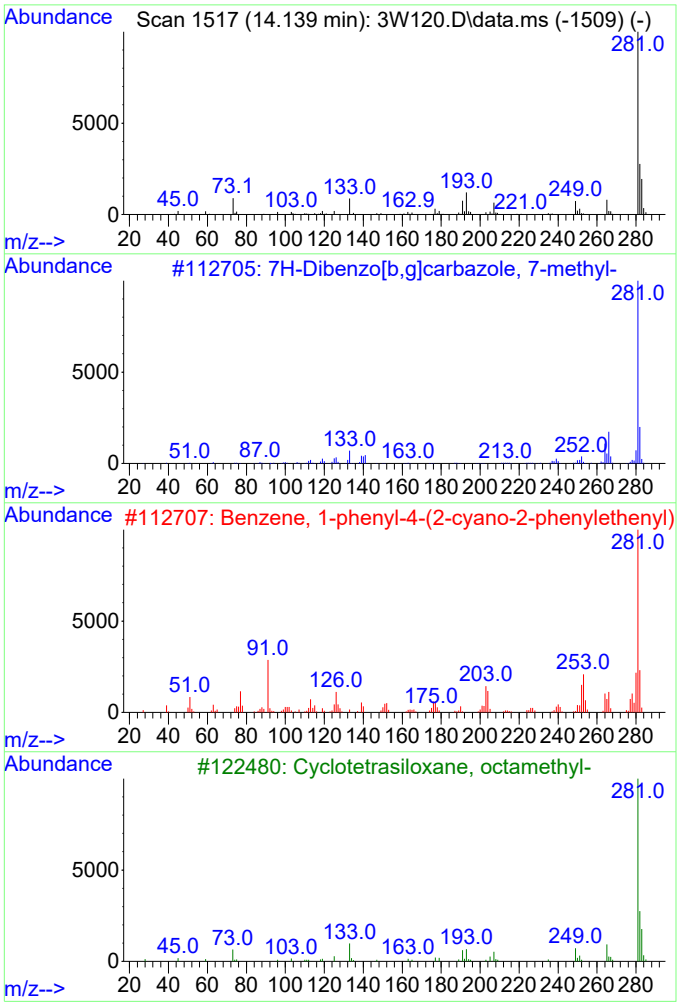
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

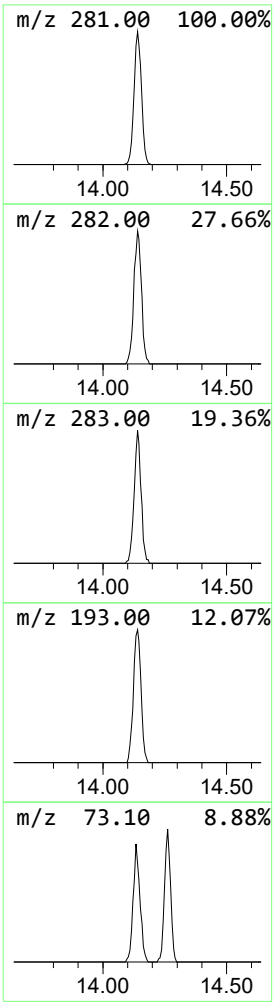
****

Peak Number 2 unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.139	9.73 ug/L	414832	B Chlorobenzene-d5	13.060

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	7H-Dibenzo[b,g]carbazole, 7-methyl-	281	C21H15N	003557-49-1	53
2	Benzene, 1-phenyl-4-(2-cyano-2-p...	281	C21H15N	027869-56-3	53
3	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	46
4	5H-Naphtho[2,3-c]carbazole, 5-me...	281	C21H15N	100025-44-3	42
5	4-Nitro-4'-chlorodiphenylsulfoxide	281	C12H8ClNO3S	024535-53-3	40





Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W120.D
Acq On : 19 Dec 2022 19:12
Operator : KP2
Sample : |604449018|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 20 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

			(ug/L)		Internal Standard		
TIC Top Hit name	CAS #	RT	EstConc	Response	#	RT	Resp	Conc
unknown		3.950	26.9	1038630	1	9.884	1934400	50.0
unknown		14.139	9.7	414832	4	13.060	2132620	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:12**	**Matrix:**	**W**
Lab Sample ID:	**604449019**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB05-23-265380**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 19:38**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 19:38**				
Data File:	**121922V3\3W121.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
542-75-6	1,3-Dichloropropylene	U	0.500	ug/L	0.500	2.00
75-71-8	Dichlorodifluoromethane	U	0.355	ug/L	0.355	1.00
74-87-3	Chloromethane	U	0.333	ug/L	0.333	1.00
75-01-4	Vinyl chloride	U	0.333	ug/L	0.333	1.00
74-83-9	Bromomethane	U	0.337	ug/L	0.337	1.00
75-69-4	Trichlorofluoromethane	U	0.333	ug/L	0.333	1.00
75-35-4	1,1-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-09-2	Methylene chloride	BJ	2.30	ug/L	0.500	5.00
1634-04-4	tert-Butyl methyl ether	U	0.333	ug/L	0.333	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-34-3	1,1-Dichloroethane	U	0.333	ug/L	0.333	1.00
156-59-2	cis-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
67-66-3	Chloroform	U	0.333	ug/L	0.333	1.00
71-55-6	1,1,1-Trichloroethane	U	0.333	ug/L	0.333	1.00
56-23-5	Carbon tetrachloride	U	0.333	ug/L	0.333	1.00
107-06-2	1,2-Dichloroethane	U	0.333	ug/L	0.333	1.00
71-43-2	Benzene	U	0.333	ug/L	0.333	1.00
79-01-6	Trichloroethylene	U	0.333	ug/L	0.333	1.00
78-87-5	1,2-Dichloropropane	U	0.333	ug/L	0.333	1.00
74-95-3	Dibromomethane	U	0.333	ug/L	0.333	1.00
75-27-4	Bromodichloromethane	U	0.333	ug/L	0.333	1.00
108-88-3	Toluene	U	0.333	ug/L	0.333	1.00
79-00-5	1,1,2-Trichloroethane	U	0.333	ug/L	0.333	1.00
127-18-4	Tetrachloroethylene	U	0.333	ug/L	0.333	1.00
106-93-4	1,2-Dibromoethane	U	0.333	ug/L	0.333	1.00
108-90-7	Chlorobenzene	U	0.333	ug/L	0.333	1.00
100-41-4	Ethylbenzene	U	0.333	ug/L	0.333	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.333	ug/L	0.333	1.00
100-42-5	Styrene	U	0.333	ug/L	0.333	1.00
75-25-2	Bromoform	U	0.333	ug/L	0.333	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.333	ug/L	0.333	1.00
106-46-7	1,4-Dichlorobenzene	U	0.333	ug/L	0.333	1.00
107-02-8	Acrolein	U	1.67	ug/L	1.67	5.00
107-13-1	Acrylonitrile	U	1.67	ug/L	1.67	5.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	1.00	3.00
120-82-1	1,2,4-Trichlorobenzene	U	0.333	ug/L	0.333	1.00
95-50-1	1,2-Dichlorobenzene	U	0.333	ug/L	0.333	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:12**	**Matrix:**	**W**
Lab Sample ID:	**604449019**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB05-23-265380**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 19:38**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 19:38**				
Data File:	**121922V3\3W121.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	48.0	50.0	ug/L	96	(73%-129%)
Bromofluorobenzene	45.5	50.0	ug/L	91	(72%-125%)
Toluene-d8	49.9	50.0	ug/L	100	(75%-123%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.931	8.52	ug/L	0	J

Quantitation Report
GEL Laboratories, LLC

12/21/2022

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W121.D
Acq On : 19 Dec 2022 19:38
Operator : KP2
InstName : VOA3
Sample : |604449019|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 21 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 20 08:12:25 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	96	9.884	9.884	1.000	986570	50.00	ug/L	0.00
43) Chlorobenzene-d5	117	13.060	13.066	1.000	729577	50.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	152	15.481	15.480	1.000	436675	50.00	ug/L	0.00
84) B Fluorobenzene	96	9.884	9.884	1.000	987062	50.00	ug/L	0.00
103) B Chlorobenzene-d5	117	13.060	13.060	1.000	729577	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	15.481	15.481	1.000	436675	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
30) 1,2-Dichloroethane-d4	67	9.543	9.549	0.965	144434	47.97	ug/L	0.00
45) Toluene-d8	98	11.530	11.530	0.883	975837	49.86	ug/L	0.00
63) Bromofluorobenzene	95	14.261	14.261	0.921	372957	45.54	ug/L	0.00

Compound	Amount	Range	Recovery
30) 1,2-Dichloroethane-d4	50.000	73 - 129	96%
45) Toluene-d8	50.000	75 - 123	100%
63) Bromofluorobenzene	50.000	72 - 125	91%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		0.000	4.260	0.000	0	N.D.		
3) Chloromethane	50	4.625	4.644	0.468	250	N.D.		
4) Vinyl chloride		0.000	4.826	0.000	0	N.D.		
5) Bromomethane		0.000	5.411	0.000	0	N.D.		
6) Chloroethane		0.000	5.557	0.000	0	N.D.		
7) Trichlorofluoromethane		0.000	5.904	0.000	0	N.D.		
8) Ethyl ether		0.000	6.232	0.000	0	N.D.		
9) Acetone		0.000	6.647	0.000	0m	N.D.	d	
10) 1,1-Dichloroethylene		0.000	6.616	0.000	0	N.D.		
11) Iodomethane		0.000	6.866	0.000	0	N.D.		
12) Acetonitrile	41	7.013	7.013	0.709	185	N.D.		
13) Methyl acetate		0.000	7.025	0.000	0	N.D.		
14) Carbon disulfide		0.000	6.982	0.000	0	N.D.		
15) Methylene chloride	84	7.202	7.202	0.729	13322	2.30	ug/L	93
16) tert-Butyl methyl ether		0.000	7.482	0.000	0	N.D.		
17) trans-1,2-Dichloroethy...		0.000	7.531	0.000	0	N.D.		
18) Hexane	57	7.793	7.799	0.788	121	N.D.		
19) Vinyl acetate	43	7.799	7.988	0.789	117	N.D.		
20) 1,1-Dichloroethane		0.000	8.018	0.000	0	N.D.		
21) 2-Butanone	43	8.458	8.622	0.856	157	N.D.		
22) cis-1,2-Dichloroethylene		0.000	8.659	0.000	0	N.D.		
23) 2,2-Dichloropropane		0.000	8.671	0.000	0	N.D.		
24) Bromochloromethane		0.000	8.933	0.000	0	N.D.		
25) Chloroform		0.000	8.970	0.000	0	N.D.		
26) 1,1,1-Trichloroethane		0.000	9.226	0.000	0	N.D.		
27) Cyclohexane		0.000	9.305	0.000	0	N.D.		
28) 1,1-Dichloropropene		0.000	9.384	0.000	0	N.D.		
29) Carbon tetrachloride		0.000	9.415	0.000	0	N.D.		
31) 1,2-Dichloroethane		0.000	9.628	0.000	0	N.D.		
32) Benzene		0.000	9.628	0.000	0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W121.D
Acq On : 19 Dec 2022 19:38
Operator : KP2
InstName : VOA3
Sample : |604449019|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 20 08:12:25 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
33) Cyclohexene		0.000	9.732	0.000	0		N.D.
34) n-Butyl alcohol		0.000	10.012	0.000	0		N.D.
35) Trichloroethylene		0.000	10.268	0.000	0		N.D.
36) 2-Pentanone		0.000	10.378	0.000	0		N.D.
37) 1,2-Dichloropropane		0.000	10.530	0.000	0		N.D.
38) Methylcyclohexane		0.000	10.494	0.000	0		N.D.
39) Dibromomethane		0.000	10.664	0.000	0		N.D.
40) Bromodichloromethane		0.000	10.780	0.000	0		N.D.
41) 2-Chloroethylvinyl ether		0.000	11.006	0.000	0		N.D.
42) cis-1,3-Dichloropropylene		0.000	11.231	0.000	0		N.D.
44) 4-Methyl-2-pentanone		0.000	11.329	0.000	0		N.D.
46) Toluene	91	11.609	11.603	0.889	589		N.D.
47) trans-1,3-Dichloroprop...		0.000	11.780	0.000	0		N.D.
48) 1,1,2-Trichloroethane		0.000	11.999	0.000	0		N.D.
49) 2-Hexanone		0.000	12.182	0.000	0		N.D.
50) 1,3-Dichloropropane		0.000	12.188	0.000	0		N.D.
51) Tetrachloroethylene	164	12.182	12.188	0.933	103		N.D.
52) Dibromochloromethane		0.000	12.457	0.000	0		N.D.
53) 1,2-Dibromoethane		0.000	12.621	0.000	0		N.D.
54) Chlorobenzene		0.000	13.097	0.000	0		N.D.
55) 1,1,1,2-Tetrachloroethane		0.000	13.152	0.000	0		N.D.
56) Ethylbenzene		0.000	13.158	0.000	0		N.D.
57) m,p-Xylenes		0.000	13.267	0.000	0		N.D.
58) o-Xylene		0.000	13.700	0.000	0		N.D.
59) Styrene		0.000	13.706	0.000	0		N.D.
61) Bromoform		0.000	13.975	0.000	0		N.D.
62) Isopropylbenzene		0.000	14.060	0.000	0		N.D.
64) 1,1,2,2-Tetrachloroethane		0.000	14.359	0.000	0		N.D.
65) 1,2,3-Trichloropropane		0.000	14.444	0.000	0		N.D.
66) Bromobenzene		0.000	14.468	0.000	0		N.D.
67) n-Propylbenzene		0.000	14.487	0.000	0		N.D.
68) 1,3,5-Trimethylbenzene		0.000	14.639	0.000	0		N.D.
69) 2-Chlorotoluene		0.000	14.633	0.000	0		N.D.
70) 4-Chlorotoluene		0.000	14.743	0.000	0		N.D.
71) tert-Butylbenzene		0.000	15.011	0.000	0		N.D.
72) 1,2,4-Trimethylbenzene		0.000	15.054	0.000	0		N.D.
73) sec-Butylbenzene		0.000	15.237	0.000	0		N.D.
74) 4-Isopropyltoluene		0.000	15.359	0.000	0		N.D.
75) 1,3-Dichlorobenzene		0.000	15.419	0.000	0		N.D.
76) 1,4-Dichlorobenzene	146	15.511	15.505	1.002	282		N.D.
77) n-Butylbenzene		0.000	15.791	0.000	0		N.D.
78) 1,2-Dichlorobenzene		0.000	15.919	0.000	0		N.D.
79) 1,2-Dibromo-3-chloropr...		0.000	16.785	0.000	0		N.D.
80) 1,2,4-Trichlorobenzene		0.000	17.791	0.000	0		N.D.
81) Hexachlorobutadiene		0.000	17.949	0.000	0		N.D.
82) Naphthalene	128	18.175	18.163	1.174	353		N.D.
83) 1,2,3-Trichlorobenzene		0.000	18.492	0.000	0		N.D.
85) Acrolein		0.000	6.470	0.000	0		N.D.
86) Trichlorotrifluoroethane		0.000	6.586	0.000	0		N.D.

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W121.D
Acq On : 19 Dec 2022 19:38
Operator : KP2
InstName : VOA3
Sample : |604449019|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 20 08:12:25 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

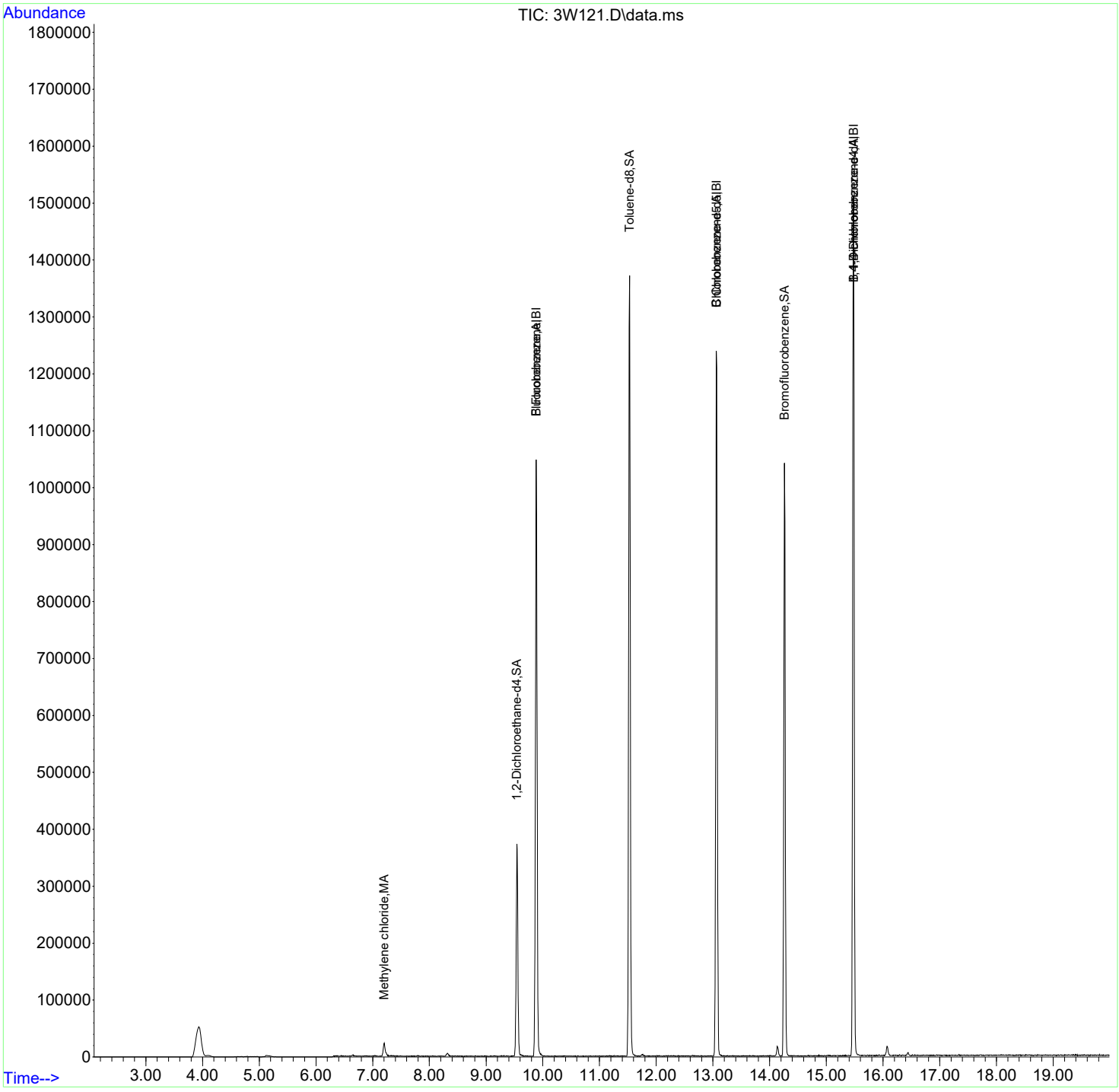
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
87) Isopropyl Alcohol		0.000	6.732	0.000	0	N.D.	
88) Allyl chloride		0.000	7.062	0.000	0	N.D.	
89) tert-Butyl Alcohol		0.000	7.220	0.000	0	N.D.	
90) Acrylonitrile		0.000	7.482	0.000	0	N.D.	
91) Isopropyl ether		0.000	7.988	0.000	0	N.D.	
92) 2-Chloro-1,3-butadiene		0.000	8.122	0.000	0	N.D.	
93) Ethyl tert-butyl ether		0.000	8.391	0.000	0	N.D.	
94) Ethyl acetate		0.000	8.628	0.000	0	N.D.	
95) Propionitrile		0.000	8.720	0.000	0	N.D.	
96) Methacrylonitrile		0.000	8.884	0.000	0	N.D.	
97) Tetrahydrofuran		0.000	8.976	0.000	0	N.D.	
98) Isobutyl alcohol		0.000	9.323	0.000	0	N.D.	
99) Methyl tert-amyl ether		0.000	9.640	0.000	0	N.D.	
100) Methyl methacrylate		0.000	10.506	0.000	0	N.D.	
101) 1,4-Dioxane		0.000	10.616	0.000	0	N.D.	
102) 2-Nitropropane		0.000	11.006	0.000	0	N.D.	
104) Ethyl methacrylate		0.000	11.774	0.000	0	N.D.	
106) 1-Chlorohexane		0.000	12.963	0.000	0	N.D.	
107) cis-1,4-Dichloro-2-butene		0.000	14.121	0.000	0	N.D.	
108) Cyclohexanone		0.000	14.237	0.000	0	N.D.	
109) trans-1,4-Dichloro-2-b...		0.000	14.408	0.000	0	N.D.	
110) Pentachloroethane		0.000	15.084	0.000	0	N.D.	
111) Benzyl chloride	91	15.481	15.627	1.000	1232	N.D.	
112) bis(2-Chloroisopropyl)...		0.000	16.023	0.000	0	N.D.	

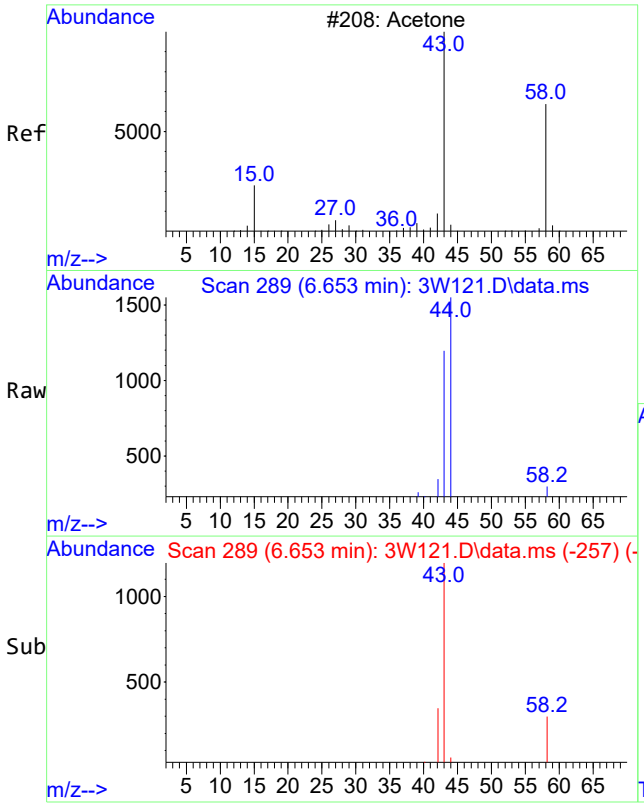
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W121.D
Acq On : 19 Dec 2022 19:38
Operator : KP2
InstName : VOA3
Sample : |604449019|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 20 08:12:25 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

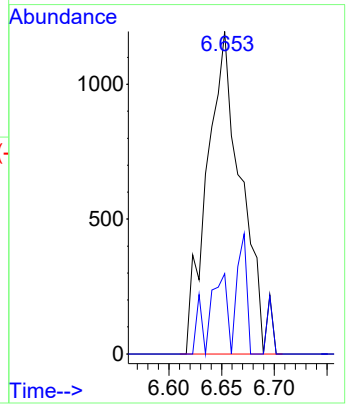


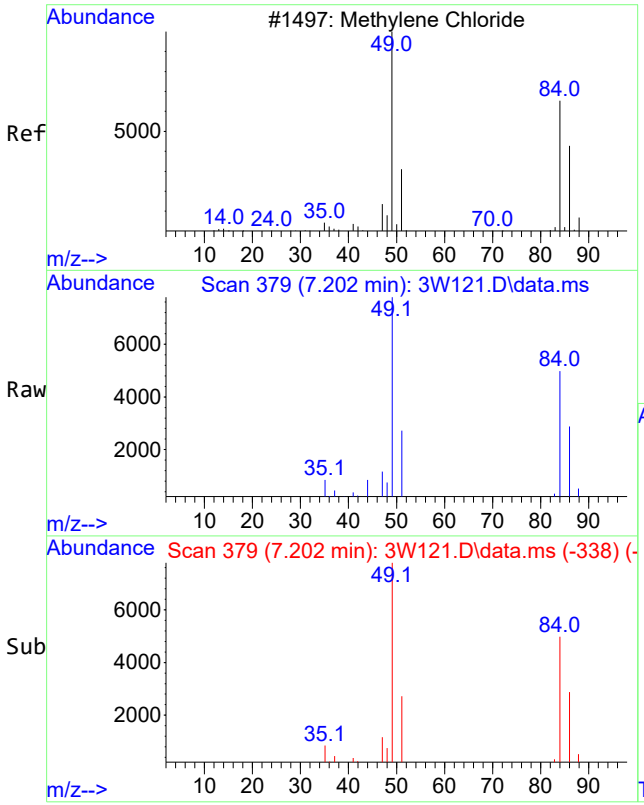


#9 BEFORE analyst DELETION
Acetone
Concen: 2.46 ug/L
RT: 6.653 min Scan# 289
Delta R.T. 0.006 min
Lab File: 3W121.D
Acq: 19 Dec 2022 19:38

Tgt Ion: 43 Resp: 2711

Ion	Ratio	Lower	Upper
43	100		
58	13.5	0.0	60.0

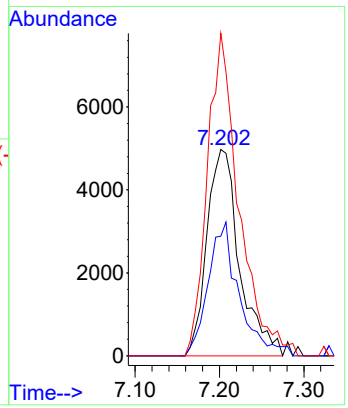




#15
Methylene chloride
Concen: 2.30 ug/L
RT: 7.202 min Scan# 379
Delta R.T. -0.000 min
Lab File: 3W121.D
Acq: 19 Dec 2022 19:38

Tgt Ion: 84 Resp: 13322

Ion	Ratio	Lower	Upper
84	100		
86	61.5	34.2	94.2
49	151.9	110.5	170.5



Library Search Compound Report
GEL Laboratories, LLC

12/21/2022

12/22/2022

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W121.D
Acq On : 19 Dec 2022 19:38
Operator : KP2
Sample : |604449019|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 21 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

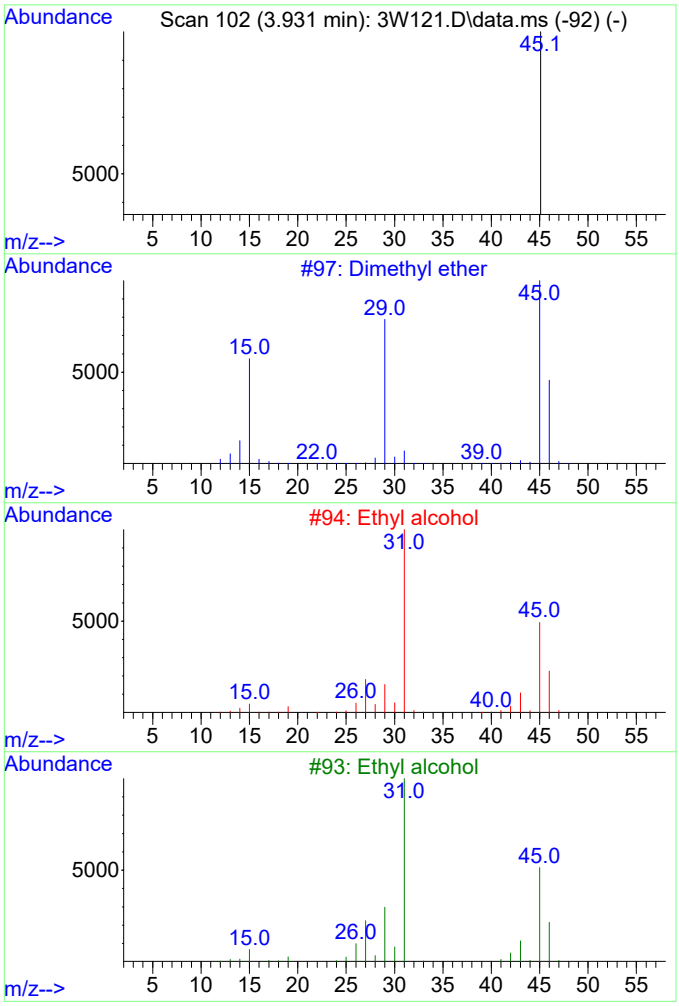
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

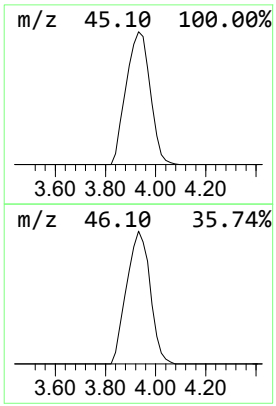
****

Peak Number 1 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.931	8.52 ug/L	369029	Fluorobenzene	9.884

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dimethyl ether	46	C2H6O	000115-10-6	5
2	Ethyl alcohol	46	C2H6O	000064-17-5	4
3	Ethyl alcohol	46	C2H6O	000064-17-5	4
4	Ethyl alcohol	46	C2H6O	000064-17-5	4
5	Dimethyl ether	46	C2H6O	000115-10-6	2





Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W121.D
Acq On : 19 Dec 2022 19:38
Operator : KP2
Sample : |604449019|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2
ALS Vial : 21 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

			(ug/L)		Internal Standard		
TIC Top Hit name	CAS #	RT	EstConc	Response	#	RT	Resp	Conc
unknown		3.931	8.5	369029	1	9.884	2166330	50.0

Standards

Low level SW846 8260B and Regular level 8260B and EPA 624

Calibration Standard Concentration Levels

	Level 1	Level 1a	Level 2	Level 3	Level 4	Level 5	Level 6 #	Level 7 !	Level 7a
Fluorobenzene (IS)	20	20/50	20/50	20/50	20/50	20/50	20/50	20/50	20/50
1,2-Dichloroethane-d4(surr)		20/50	20/50	20/50	20/50	20/50	20/50	20/50	20/50
Dichlorodifluoromethane		0.5	1	2	5	10	20	50	100
Chloromethane		0.5	1	2	5	10	20	50	100
Vinyl chloride		0.5	1	2	5	10	20	50	100
Bromomethane		0.5	1	2	5	10	20	50	100
Chloroethane		0.5	1	2	5	10	20	50	100
Trichlorofluoromethane		0.5	1	2	5	10	20	50	100
1,1-Dichloroethene		0.5	1	2	5	10	20	50	100
Acetone	1	2.5	5	10	25	50	100	250	500
Iodomethane	1	2.5	5	10	25	50	100	250	500
Carbon disulfide	1	2.5	5	10	25	50	100	250	500
Methylene chloride		0.5	1	2	5	10	20	50	100
trans-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,1-Dichloroethane		0.5	1	2	5	10	20	50	100
Ethyl ether		0.5	1	2	5	10	20	50	100
Vinyl acetate	1	2.5	5	10	25	50	100	250	500
cis-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethene (total)		1	2	4	10	20	40	100	200
Cyclohexene		0.5	1	2	5	10	20	50	100
2-Chloroethylvinyl ether			5	10	25	50	100	250	500
2,2-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Butanone	1	2.5	5	10	25	50	100	250	500
Bromochloromethane		0.5	1	2	5	10	20	50	100
Chloroform		0.5	1	2	5	10	20	50	100
1,1,1-Trichloroethane		0.5	1	2	5	10	20	50	100
1,1-Dichloropropene		0.5	1	2	5	10	20	50	100
Carbon tetrachloride		0.5	1	2	5	10	20	50	100
Benzene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethane		0.5	1	2	5	10	20	50	100
Trichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloropropane		0.5	1	2	5	10	20	50	100
Dibromomethane		0.5	1	2	5	10	20	50	100
Bromodichloromethane		0.5	1	2	5	10	20	50	100
cis-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
tert-Butylmethylether		0.5	1	2	5	10	20	50	100
Ethyl Ether			1	2	5	10	20	50	100
Acetonitrile			25	50	125	250	500	1250	2500
Methyl acetate			5	10	25	50	100	250	500
Cyclohexane			1	2	5	10	20	50	100
Methylcyclohexane			1	2	5	10	20	50	100
n-Butyl alcohol		50	100	200	500	1000	2000	5000	10000
2-Nitropropane			5	10	25	50	100	250	500
Ethyl acetate			5	10	25	50	100	250	500
Acrolein			5	10	25	50	100	250	500
Trichlorotrifluoroethane		2	5	10	25	50	100	250	500
Allyl chloride			5	10	25	50	100	250	500
Acrylonitrile			5	10	25	50	100	250	500
1,4-Dioxane			50	100	250	500	1000	2500	5000
Isobutyl alcohol			50	100	250	500	1000	2500	5000
Methacrylonitrile			5	10	25	50	100	250	500
Propionitrile			5	10	25	50	100	250	500
Methyl methacrylate			5	10	25	50	100	250	500
Chlorotrifluoroethylene			5	10	25	50	100	150	200
2-Chloro-1,1,1-trifluoroethane			5	10	25	50	100	150	200
Tetrahydrofuran			5	10	25	50	100	250	500
tert-Butyl alcohol			50	100	250	500	1000	2500	5000
Isopropyl ether			1	2	5	10	20	50	100
Ethyl tert-butyl ether			1	2	5	10	20	50	100
Isopropyl alcohol			50	100	250	500	1000	2500	5000
Methyl tert-amyl ether			1	2	5	10	20	50	100
1-Chlorohexane			1	2	5	10	20	50	100
2-Chloro-1,3-butadiene(chloroprene)			1	2	5	10	20	50	100
Chlorobenzene-d5 (IS)	20	20	20/50	20/50	20/50	20/50	20/50	20/50	20/50
Toluene-d8 (surr)		20	20/50	20/50	20/50	20/50	20/50	20/50	20/50
4-Methyl-2-pentanone	1	2.5	5	10	25	50	100	250	500
Toluene		0.5	1	2	5	10	20	50	100
trans-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
1,1,2-Trichloroethane		0.5	1	2	5	10	20	50	100
Tetrachloroethene		0.5	1	2	5	10	20	50	100
1,3-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Hexanone	1	2.5	5	10	25	50	20	250	500
Dibromochloromethane		0.5	1	2	5	10	20	50	100
1,2-Dibromoethane		0.5	1	2	5	10	20	50	100
Chlorobenzene		0.5	1	2	5	10	20	50	100
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Ethylbenzene		0.5	1	2	5	10	20	50	100
m,p-Xylene		1	2	4	10	20	20	100	200
o-Xylene		0.5	1	2	5	10	20	50	100
Xylenes (total)		1.5	3	6	15	30	60	150	300
Stryene		0.5	1	2	5	10	20	50	100
Ethyl methacrylate			5	10	25	50	100	250	500
1,4-Dichlorobenzene-d4 (IS)	20	20	20/50	20/50	20/50	20/50	20/50	20/50	20/50
Bromofluorobenzene (surr)		20	20/50	20/50	20/50	20/50	20/50	20/50	20/50
Bromoform		0.5	1	2	5	10	20	50	100
Isopropylbenzene		0.5	1	2	5	10	20	50	100
1,1,2,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Bromobenzene		0.5	1	2	5	10	20	50	100
1,2,3-Trichloropropane		0.5	1	2	5	10	20	50	100
n-Propylbenzene		0.5	1	2	5	10	20	50	100
2-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,3,5-Trimethylbenzene		0.5	1	2	5	10	20	50	100
4-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,2,4-Trimethylbenzene		0.5	1	2	5	10	20	50	100
sec-Butylbenzene		0.5	1	2	5	10	20	50	100
1,3-Dichlorobenzene		0.5	1	2	5	10	20	50	100
tert-Butylbenzene		0.5	1	2	5	10	20	50	100
Isopropyltoluene		0.5	1	2	5	10	20	50	100
1,4-Dichlorobenzene		0.5	1	2	5	10	20	50	100
n-Butylbenzene		0.5	1	2	5	10	20	50	100
1,2-Dichlorobenzene		0.5	1	2	5	10	20	50	100
1,2-Dibromo-3-chloropropa		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
Cyclohexanone			25	50	125	250	500	1250	2500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

Method	PQL	Concentration range		
SW 846 8260B low level	Level 1 &1a	Levels 1-> 7a	IS/SS @ 20 ppb	
EPA 524.2	Level 1a	Levels 1a-> 7a	IS/SS @ 20 ppb	
SW846 8260B/624	Level 2	Levels 1a-> 7a	IS/SS @ 50 ppb	n-butyl alchol only in 1a

#: Indicates calibration verification concentration level used for low level analysis

!: Indicates calibration verification concentration level used for regular level analysis

12/01/2022

12/01/2022

Calibration History Report VOA3
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Last Update : Thu Dec 01 08:04:56 2022
Integrator : (RTE Integrator) Response via : Initial Calibration

Cal Lvl:8 Amt:0.00 Last Updated with: D:\MSDCHEM\1\Data\113022V3_ICAL\3T302.D

Injection Date	Mix	Calibration File
30 Nov 2022 12:04	A	D:\MSDCHEM\1\Data\113022V3_ICAL\3T302.D

Cal Lvl:1 Amt:1.00 Last Updated with: D:\MSDCHEM\1\Data\113022V3_ICAL\3T313.D

Injection Date	Mix	Calibration File
30 Nov 2022 12:32	A	D:\MSDCHEM\1\Data\113022V3_ICAL\3T303.D
30 Nov 2022 17:05	B	D:\MSDCHEM\1\Data\113022V3_ICAL\3T313.D

Cal Lvl:2 Amt:2.00 Last Updated with: D:\MSDCHEM\1\Data\113022V3_ICAL\3T314.D

Injection Date	Mix	Calibration File
30 Nov 2022 12:59	A	D:\MSDCHEM\1\Data\113022V3_ICAL\3T304.D
30 Nov 2022 17:32	B	D:\MSDCHEM\1\Data\113022V3_ICAL\3T314.D

Cal Lvl:3 Amt:5.00 Last Updated with: D:\MSDCHEM\1\Data\113022V3_ICAL\3T315.D

Injection Date	Mix	Calibration File
30 Nov 2022 13:26	A	D:\MSDCHEM\1\Data\113022V3_ICAL\3T305.D
30 Nov 2022 17:59	B	D:\MSDCHEM\1\Data\113022V3_ICAL\3T315.D

Cal Lvl:4 Amt:10.00 Last Updated with: D:\MSDCHEM\1\Data\113022V3_ICAL\3T316.D

Injection Date	Mix	Calibration File
30 Nov 2022 13:53	A	D:\MSDCHEM\1\Data\113022V3_ICAL\3T306.D
30 Nov 2022 18:26	B	D:\MSDCHEM\1\Data\113022V3_ICAL\3T316.D

Cal Lvl:5 Amt:20.00 Last Updated with: D:\MSDCHEM\1\Data\113022V3_ICAL\3T317.D

Injection Date	Mix	Calibration File
30 Nov 2022 14:21	A	D:\MSDCHEM\1\Data\113022V3_ICAL\3T307.D
30 Nov 2022 18:53	B	D:\MSDCHEM\1\Data\113022V3_ICAL\3T317.D

Cal Lvl:6 Amt:50.00 Last Updated with: D:\MSDCHEM\1\Data\113022V3_ICAL\3T318.D

Injection Date	Mix	Calibration File
30 Nov 2022 14:48	A	D:\MSDCHEM\1\Data\113022V3_ICAL\3T308.D
30 Nov 2022 19:20	B	D:\MSDCHEM\1\Data\113022V3_ICAL\3T318.D

Cal Lvl:7 Amt:100.00 Last Updated with: D:\MSDCHEM\1\Data\113022V3_ICAL\3T320.D

Injection Date	Mix	Calibration File
30 Nov 2022 15:43	A	D:\MSDCHEM\1\Data\113022V3_ICAL\3T310.D
30 Nov 2022 20:13	B	D:\MSDCHEM\1\Data\113022V3_ICAL\3T320.D

Calibration History Report VOA3
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Last Update : Thu Dec 01 08:04:56 2022
Integrator : (RTE Integrator) Response via : Initial Calibration

Cal Lvl:9 Amt:80.00 Last Updated with: D:\MSDCHEM\1\Data\113022V3_ICAL\3T319.D

Injection Date	Mix	Calibration File
30 Nov 2022 15:16	A	D:\MSDCHEM\1\Data\113022V3_ICAL\3T309.D
30 Nov 2022 19:47	B	D:\MSDCHEM\1\Data\113022V3_ICAL\3T319.D

VOA3-8260D-113022.M Thu Dec 01 08:32:05 2022

Response Factor Report VOA3
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Last Update : Thu Dec 01 08:04:56 2022
Integrator : (RTE Integrator) Response via : Initial Calibration

12/01/2022

12/01/2022

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	8 6	1 7	2 9	3	4	5	Avg	Curve	Exp	%RSD/r2
2)MA Dichlorodifluoromethane		0.3836381	0.4332597	0.3011888	0.3714008	0.3745902				
	0.4083105	0.3790802	0.3897700				0.3802	AVRG		9.9731
3)MA Chloromethane		0.5542816	0.5615469	0.4329185	0.4574773	0.4590579				
	0.4452547	0.4351451	0.4421088				0.4735	AVRG		11.1886
4)MA Vinyl chloride		0.3886935	0.4253363	0.3433106	0.3927478	0.3826506				
	0.3817399	0.3615034	0.3683175				0.3805	AVRG		6.3799
5)MA Bromomethane		0.3304769	0.3088416	0.2598190	0.2602813	0.2573333				
	0.2586428	0.2531243	0.2601315				0.2736	AVRG		10.6417
6)MA Chloroethane		0.2411966	0.3107593	0.2443253	0.2758257	0.2728657				
	0.2771943	0.2621841	0.2679044				0.2690	AVRG		8.0731
7)MA Trichlorofluoromethane		0.5227092	0.5613619	0.4915390	0.5299892	0.5152500				
	0.5057371	0.4880152	0.4968659				0.5139	AVRG		4.7193
8)MA Ethyl ether		0.1984006	0.1823038	0.1643344	0.1469798	0.1519894				
	0.1175764	0.1278731	0.1396891				0.1536	AVRG	#	17.6466
9)MA Acetone		0.0639206	0.0598068	0.0532922	0.0537217	0.0578419				
	0.0549049	0.0504358	0.0534117				0.0559	AVRG		7.7644
10)MA 1,1-Dichloroethylene		0.4499624	0.4895304	0.4700688	0.4596524	0.5311691				
	0.4552896	0.4350209	0.4541727				0.4681	AVRG		6.4055
11)MA Iodomethane		0.4468782	0.4446484	0.4417342	0.4388233	0.4546103				
	0.4160438	0.3870403	0.4046438				0.4293	AVRG		5.5682
12)MA Acetonitrile		0.0305740	0.0301598	0.0268632	0.0275854	0.0301755				
	0.0269674	0.0253786	0.0264196				0.0280	AVRG		7.1288
13)MA Methyl acetate		0.0284501	0.0271445	0.0270754	0.0250334	0.0277074				
	0.0253174	0.0242509	0.0254827				0.0263	AVRG		5.6297
14)MA Carbon disulfide		0.9301236	0.9665955	0.9481879	0.9531120	0.9719850				
	0.8970300	0.7946081	0.8477176				0.9137	AVRG		6.9249
15)MA Methylene chloride		0.3725098	0.3172023	0.2955716	0.2847488	0.2849306				

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Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	8 6	1 7	2 9	3	4	5	Avg	Curve	Exp	%RSD/r2
	0.2696974	0.2586805	0.2694285				0.2941	AVRG		12.4032
16)MA tert-Butyl methyl ether		0.6437527	0.6028290	0.5912032	0.6092972	0.6819624				
	0.6247675	0.5883551	0.6039876				0.6183	AVRG		5.0776
17)MA trans-1,2-Dichloroethyle		0.4099643	0.4432522	0.3956085	0.4016298	0.4615192				
	0.3816076	0.3711431	0.3820309				0.4058	AVRG		7.7903
18)MA Hexane			0.3403095	0.4403992	0.4194589	0.4065042				
	0.4197305	0.3987465	0.4315519				0.4081	AVRG		8.0919
19)MA Vinyl acetate		0.4541784	0.4462634	0.4641908	0.4762614	0.4746093				
	0.4453098	0.4076108	0.4296630				0.4498	AVRG		5.1531
20)MA 1,1-Dichloroethane		0.5033461	0.4743230	0.4795993	0.4677055	0.4936921				
	0.4525490	0.4381440	0.4465482				0.4695	AVRG		4.8682
21)MA 2-Butanone		0.1110725	0.1031513	0.0907380	0.0868958	0.0976997				
	0.0888365	0.0837233	0.0873575				0.0937	AVRG		10.0911
22)MA cis-1,2-Dichloroethylene		0.2853916	0.3089593	0.2727970	0.2699169	0.3246358				
	0.2698324	0.2591396	0.2669032				0.2822	AVRG		8.1306
23)MA 2,2-Dichloropropane		0.3300635	0.3504096	0.3197839	0.3438538	0.3532117				
	0.3084742	0.3039986	0.3027657				0.3266	AVRG		6.3799
24)MA Bromochloromethane		0.2593833	0.2579371	0.2515930	0.2531017	0.2792951				
	0.2573324	0.2457580	0.2521956				0.2571	AVRG		3.8832
25)MA Chloroform		0.4400105	0.4500988	0.4425755	0.4457385	0.4686476				
	0.4338281	0.4154239	0.4281778				0.4406	AVRG		3.5802
26)MA 1,1,1-Trichloroethane		0.3961335	0.4019028	0.3854591	0.4127931	0.4326740				
	0.4037156	0.3904089	0.3981266				0.4027	AVRG		3.6528
27)MA Cyclohexane		0.4758117	0.4807828	0.4397935	0.4561619	0.4741691				
	0.4269652	0.4093065	0.4130280				0.4470	AVRG		6.4516
28)MA 1,1-Dichloropropene		0.3763570	0.3815982	0.3582985	0.3608643	0.3811249				
	0.3474634	0.3329088	0.3388381				0.3597	AVRG		5.2773

Response Factor Report VOA3
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Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	8	1	2	3	4	5	Avg	Curve	Exp	%RSD/r2
b m1 m2	6	7	9							
29)MA Carbon tetrachloride		0.3361046	0.3123743	0.3099606	0.3273195	0.3491004				
	0.3316610	0.3213620	0.3263483				0.3268	AVRG		3.8868
30)SA 1,2-Dichloroethane-d4	0.1550746	0.1540899	0.1524193	0.1533890	0.1530798	0.1525535				
	0.1495559	0.1502121	0.1528594				0.1526	AVRG		1.1414
31)MA 1,2-Dichloroethane		0.3183312	0.3307274	0.3177407	0.3207462	0.3433234				
	0.3079970	0.2882546	0.2991730				0.3158	AVRG		5.4993
32)MA Benzene		0.9995383	0.9513545	0.9182215	0.9163453	0.9599561				
	0.8709685	0.8403440	0.8529780				0.9137	AVRG		6.1142
33)MA Cyclohexene		0.5686530	0.5736758	0.5420400	0.5493529	0.5887489				
	0.5327901	0.5032921	0.5174627				0.5470	AVRG		5.3247
34)MA n-Butyl alcohol	0.0070809	0.0071246	0.0050872	0.0060602	0.0063783	0.0073481				
	0.0068939	0.0062606	0.0064431				0.0065	AVRG	#	10.6586
35)MA Trichloroethylene		0.2716880	0.2595184	0.2547143	0.2598805	0.2788550				
	0.2540380	0.2469607	0.2520626				0.2597	AVRG		4.0858
36)MA 2-Pentanone			0.1548060	0.1575752	0.1531818	0.1545136				
	0.1519082	0.1423229	0.1509377				0.1522	AVRG		3.1882
37)MA 1,2-Dichloropropane		0.2872357	0.2613857	0.2589538	0.2559859	0.2748765				
	0.2543900	0.2419991	0.2439048				0.2598	AVRG		5.8122
38)MA Methylcyclohexane		0.4694209	0.4709586	0.4289186	0.4575526	0.4745627				
	0.4385414	0.4023532	0.4072492				0.4437	AVRG		6.5056
39)MA Dibromomethane		0.1313450	0.1327788	0.1246551	0.1245127	0.1393878				
	0.1269521	0.1229292	0.1247159				0.1284	AVRG		4.3986
40)MA Bromodichloromethane		0.2921639	0.2859800	0.2803242	0.2950935	0.3243631				
	0.3131094	0.3073061	0.3075724				0.3007	AVRG		4.9335
41)MA 2-Chloroethylvinyl ether		0.1205729	0.1208484	0.1484048	0.1239249	0.1159340				
	0.1008981						0.1218	AVRG		12.6487
42)MA cis-1,3-Dichloropropylen		0.3767385	0.3674506	0.3485817	0.3616521	0.4094453				
	0.3862190	0.3689182	0.3749054				0.3742	AVRG		4.8233

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For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	8 6	1 7	2 9	3	4	5	Avg	Curve	Exp	%RSD/r2
44)MA 4-Methyl-2-pentanone		0.2779506	0.2781403	0.2731205	0.2727193	0.2972002				
	0.2586111	0.2453374	0.2524031				0.2694	AVRG		6.1652
45)SA Toluene-d8	1.3318525	1.3250982	1.3387689	1.3801808	1.3354490	1.3449293				
	1.3192375	1.3513286	1.3443460				1.3412	AVRG		1.3217
46)MA Toluene		1.4731736	1.4506308	1.4645272	1.3964280	1.4873806				
	1.3298930	1.2973122	1.3121383				1.4014	AVRG		5.5856
47)MA trans-1,3-Dichloropropyl		0.4008533	0.3902030	0.3938096	0.4061568	0.4553958				
	0.4270273	0.4345138	0.4343345				0.4178	AVRG		5.5851
48)MA 1,1,2-Trichloroethane		0.2477066	0.2490107	0.2484234	0.2392552	0.2693102				
	0.2461643	0.2433332	0.2472033				0.2488	AVRG		3.5709
49)MA 2-Hexanone		0.2045725	0.1870832	0.1904646	0.1924411	0.2120904				
	0.1813084	0.1670751	0.1723621				0.1884	AVRG		8.0421
50)MA 1,3-Dichloropropane		0.4353186	0.4481293	0.4468811	0.4238711	0.4702770				
	0.4003390	0.3891937	0.3965629				0.4263	AVRG		6.7847
51)MA Tetrachloroethylene		0.3034877	0.2858728	0.2849979	0.2827189	0.2906956				
	0.2626281	0.2570458	0.2625886				0.2788	AVRG		5.8357
52)MA Dibromochloromethane		0.2263489	0.2222755	0.2288968	0.2395867	0.2743462				
	0.2713261	0.2788422	0.2734994				0.2519	AVRG		9.8222
53)MA 1,2-Dibromoethane		0.2442307	0.2233782	0.2352790	0.2336467	0.2567530				
	0.2385521	0.2380044	0.2371983				0.2384	AVRG		3.9811
54)MA Chlorobenzene		0.8718936	0.8836336	0.8599799	0.8574719	0.9192224				
	0.8306404	0.8056008	0.8127581				0.8552	AVRG		4.4372
55)MA 1,1,1,2-Tetrachloroethan		0.2704462	0.2710875	0.2633723	0.2750567	0.3030704				
	0.2857490	0.2803713	0.2825163				0.2790	AVRG		4.3583
56)MA Ethylbenzene		1.7808909	1.7177801	1.6890552	1.6853448	1.7793059				
	1.5930249	1.4907902	1.5270254				1.6579	AVRG		6.6246
57)MA m,p-Xylenes		0.6342377	0.6357931	0.6177297	0.6258145	0.6518644				

Response Factor Report VOA3
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For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	8 6	1 7	2 9	3	4	5	Avg	Curve	Exp	%RSD/r2
	0.5864577	0.5523227	0.5670792				0.6089	AVRG		5.8981
58)MA o-Xylene		0.6060121	0.6460551	0.6004730	0.6266663	0.6388934				
	0.5802303	0.5555381	0.5654263				0.6024	AVRG		5.5758
59)MA Styrene		1.0601339	0.9789620	0.9786973	1.0120376	1.0654270				
	0.9767825	0.9271604	0.9420319				0.9927	AVRG		5.0673
61)MA Bromoform		0.1800891	0.2045854	0.2024287	0.2190741	0.2548236				
	0.2589547	0.2658550	0.2653951				0.2314	AVRG		14.6037
62)MA Isopropylbenzene		2.8261272	2.8845981	2.7296542	2.7744563	2.9239097				
	2.5980971	2.4131636	2.5060284				2.7070	AVRG		6.7892
63)SA Bromofluorobenzene	0.9434583	0.9584397	0.9511080	0.9467829	0.9433070	0.9380940				
	0.9262131	0.9124001	0.9199937				0.9378	AVRG		1.6184
64)MA 1,1,2,2-Tetrachloroethan		0.5272019	0.5155702	0.5229973	0.5388027	0.5887407				
	0.5441827	0.5249486	0.5360757				0.5373	AVRG		4.2373
65)MA 1,2,3-Trichloropropane		0.1516279	0.1469790	0.1482765	0.1565721	0.1634952				
	0.1462601	0.1421921	0.1474627				0.1504	AVRG		4.4997
66)MA Bromobenzene		0.6825729	0.6976906	0.6635701	0.6638371	0.7154728				
	0.6491598	0.6126999	0.6288928				0.6642	AVRG		5.1570
67)MA n-Propylbenzene		3.8110378	3.7689471	3.5748836	3.5768637	3.7274812				
	3.3060138	3.0085131	3.1625140				3.4920	AVRG		8.5563
68)MA 1,3,5-Trimethylbenzene		2.6913076	2.5323211	2.4522070	2.5077468	2.6165561				
	2.3347791	2.1927994	2.2540935				2.4477	AVRG		7.1408
69)MA 2-Chlorotoluene		0.6827848	0.6736880	0.6614867	0.6457588	0.6880959				
	0.6092807	0.5781408	0.5916728				0.6414	AVRG		6.6841
70)MA 4-Chlorotoluene		0.7474050	0.6987408	0.6717422	0.6768377	0.7124436				
	0.6443959	0.6140020	0.6285037				0.6743	AVRG		6.6414
71)MA tert-Butylbenzene		0.5112411	0.5162453	0.4747885	0.5104692	0.5380770				
	0.4893668	0.4755500	0.4778529				0.4992	AVRG		4.6560

Response Factor Report VOA3
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Last Update : Thu Dec 01 08:04:56 2022
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	8	1	2	3	4	5	Avg	Curve	Exp	%RSD/r2
b m1 m2	6	7	9							
72)MA 1,2,4-Trimethylbenzene		2.7345996	2.7215298	2.5406626	2.6124469	2.7355953				
	2.4560183	2.3292014	2.3977830				2.5660	AVRG		6.2605
73)MA sec-Butylbenzene		3.3190769	3.5193942	3.2837086	3.3929216	3.5127172				
	3.1529887	3.0094049	3.0946630				3.2856	AVRG		5.7427
74)MA 4-Isopropyltoluene		2.9637717	2.9894598	2.7949501	2.8604050	3.0371930				
	2.7155089	2.5902583	2.6821786				2.8292	AVRG		5.6810
75)MA 1,3-Dichlorobenzene		1.4453031	1.4051699	1.3008797	1.3564743	1.4314957				
	1.2787311	1.2503780	1.2710998				1.3424	AVRG		5.7697
76)MA 1,4-Dichlorobenzene		1.4448087	1.4040072	1.3303541	1.3130984	1.4107430				
	1.2575216	1.2375594	1.2755562				1.3342	AVRG		5.8115
77)MA n-Butylbenzene		3.1725338	3.1551909	3.0610435	3.1074302	3.2535679				
	2.9006140	2.7543571	2.8736738				3.0348	AVRG		5.7060
78)MA 1,2-Dichlorobenzene		1.3711487	1.3458007	1.2797550	1.2818130	1.3898646				
	1.2391491	1.2301556	1.2527324				1.2988	AVRG		4.7623
79)MA 1,2-Dibromo-3-chloroprop		0.0910333	0.0865597	0.0980650	0.0997905	0.1261270				
	0.1249370	0.1356749	0.1367143				0.1124	AVRG	#	18.3234
80)MA 1,2,4-Trichlorobenzene		1.1413410	1.1775194	1.2213553	1.2262396	1.3334606				
	1.1477864	1.1188714	1.1918478				1.1948	AVRG		5.6643
81)MA Hexachlorobutadiene		0.7474050	0.7692862	0.7664641	0.7626029	0.8355964				
	0.7196465	0.7071049	0.7359837				0.7555	AVRG		5.2111
82)MA Naphthalene		2.1081721	2.1748311	2.3405272	2.2482258	2.4939573				
	2.1831608	2.1354056	2.2681683				2.2441	AVRG		5.6147
83)MA 1,2,3-Trichlorobenzene		1.0438104	1.0778707	1.1019879	1.1114527	1.2184682				
	1.0403757	1.0070455	1.0701441				1.0839	AVRG		5.9207
85)B Acrolein		0.0374032	0.0316418	0.0278734	0.0294568	0.0305050				
	0.0328645	0.0319096	0.0315458				0.0317	AVRG		8.8594
86)B Trichlorotrifluoroethane		0.1042619	0.1161987	0.1383915	0.1336760	0.1351968				
	0.1254560	0.1261348	0.1338562				0.1266	AVRG		9.0735

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	8	1	2	3	4	5	Avg	Curve	Exp	%RSD/r2
b | m1 | m2	6	7	9							
87)B Isopropyl Alcohol		0.0154276	0.0145123	0.0155075	0.0152795	0.0147579				
	0.0154390	0.0147280	0.0146160				0.0150	AVRG		2.7771
88)B Allyl chloride		0.1491417	0.1348211	0.1373084	0.1436858	0.1416144				
	0.1411555	0.1353360	0.1408130				0.1405	AVRG		3.3571
89)B tert-Butyl Alcohol		0.0242704	0.0224825	0.0239001	0.0239539	0.0231477				
	0.0238255	0.0225227	0.0225386				0.0233	AVRG		3.1885
90)B Acrylonitrile		0.0659570	0.0671094	0.0682713	0.0699233	0.0702802				
	0.0708589	0.0687691	0.0685284				0.0687	AVRG		2.3930
91)B Isopropyl ether		0.8282138	0.7697491	0.8372577	0.8159746	0.8171384				
	0.8139290	0.7730219	0.7926390				0.8060	AVRG		3.0883
92)B 2-Chloro-1,3-butadiene		0.4224853	0.3705280	0.3887389	0.4001981	0.4041720				
	0.4086021	0.4004509	0.4111421				0.4008	AVRG		3.9018
93)B Ethyl tert-butyl ether		0.7831254	0.6934659	0.7487640	0.7548858	0.7495775				
	0.7519058	0.7215647	0.7419250				0.7432	AVRG		3.5314
94)B Ethyl acetate		0.1972719	0.1911019	0.1964909	0.1929923	0.1831364				
	0.1744387	0.1547532	0.1545171				0.1806	AVRG		9.7881
95)B Propionitrile		0.0234191	0.0268299	0.0273063	0.0269997	0.0267388				
	0.0278082	0.0264945	0.0261253				0.0265	AVRG		5.0291
96)B Methacrylonitrile		0.0330559	0.0318040	0.0326406	0.0343279	0.0322746				
	0.0335966	0.0323556	0.0317387				0.0327	AVRG		2.7347
97)B Tetrahydrofuran		0.0245362	0.0229809	0.0233711	0.0241414	0.0232518				
	0.0235294	0.0228823	0.0221740				0.0234	AVRG		3.1597
98)B Isobutyl alcohol		0.0118138	0.0104096	0.0104505	0.0107389	0.0103957				
	0.0107819	0.0102323	0.0102221				0.0106	AVRG		4.8965
99)B Methyl tert-amyl ether		0.1368804	0.1300621	0.1365315	0.1367391	0.1368216				
	0.1389907	0.1373292	0.1409098				0.1368	AVRG		2.2694
100)B Methyl methacrylate		0.1248411	0.1196770	0.1337636	0.1330488	0.1276303				

Response Factor Report VOA3
GEL Laboratories, LLC

Method File : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Last Update : Thu Dec 01 08:04:56 2022
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	8 6	1 7	2 9	3	4	5	Avg	Curve	Exp	%RSD/r2
	0.1297960	0.1215235	0.1250496				0.1269	AVRG		4.0240
101)B 1,4-Dioxane		0.0024368	0.0022772	0.0023644	0.0023096	0.0022529				
	0.0023374	0.0022543	0.0022767				0.0023	AVRG	#	2.7443
102)B 2-Nitropropane		0.0430157	0.0361758	0.0381571	0.0401771	0.0448074				
	0.0526163	0.0538734	0.0521659				0.0451	AVRG	#	15.4427
104)B Ethyl methacrylate		0.3404701	0.3347908	0.3620606	0.3795342	0.3680237				
	0.3551459	0.3340586	0.3506365				0.3531	AVRG		4.6282
106)B 1-Chlorohexane		0.6997143	0.6235287	0.6593542	0.6616583	0.6504683				
	0.6476189	0.6248777	0.6476599				0.6519	AVRG		3.6719
107)B cis-1,4-Dichloro-2-buten		0.1737812	0.1634994	0.1789442	0.1861631	0.1856255				
	0.1908317	0.1843169	0.1862022				0.1812	AVRG		4.8711
108)B Cyclohexanone		0.0159649	0.0144277	0.0142850	0.0148696	0.0148919				
	0.0168202	0.0160656	0.0157052				0.0154	AVRG		5.8142
109)B trans-1,4-Dichloro-2-but		0.1625119	0.1575498	0.1813865	0.1854984	0.1870109				
	0.1902764	0.1820313	0.1864493				0.1791	AVRG		6.7925
110)B Pentachloroethane		0.3167989	0.3098482	0.3541648	0.3663450	0.3679748				
	0.3742913	0.3564012	0.3743725				0.3525	AVRG		7.1892
111)B Benzyl chloride		0.9158768	0.8744504	1.0310164	1.0878192	1.0983409				
	1.0837580	1.0105229	1.0737557				1.0219	AVRG		8.2617
112)B bis(2-Chloroisopropyl)et		0.0607394	0.0537131	0.0608255	0.0625537	0.0632071				
	0.0631951	0.0666358	0.0638658				0.0618	AVRG		6.0997

(#) = Out of Range ($) = Individual RF Out of Range
AVRG = Average, LINR = Linear Regression, 1/x = the inverse of concentration, 1/x^2 = the inverse square of concentration

Continuing Calibration Summary

Client SDG: 2023-289

Instrument ID: VOA3.I **Injection Date:** 30-NOV-22 16:38

Data File: 113022V3_ICAL\3T312.D **Init. Cal. Date(s)** 30-NOV-22 12:04 - 30-NOV-22 20:1

Lab Sample ID W3VM221130-10 **Method:** 113022V3_ICAL\VOA3-8260D-113022.M

Quant Type ISTD **Method Update:** 01-DEC-22 08:04

	Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S	1,2-Dichloroethane-d4	0.1526	0.15067		.01		-1.26474	30		Averaged
S	Toluene-d8	1.3412	1.32984		.01		-0.847	30		Averaged
S	Bromofluorobenzene	0.9378	0.93812		.01		0.03412	30		Averaged
	Dichlorodifluoromethane	0.3802	0.36959		.01		-2.79064	30		Averaged
	Chloromethane	0.4735	0.41627		.1		-12.08659	30		Averaged
	Vinyl chloride	0.3805	0.35581		.01		-6.48883	30		Averaged
	Bromomethane	0.2736	0.24863		.01		-9.12646	30		Averaged
	Trichlorofluoromethane	0.5139	0.46175		.01		-10.14789	30		Averaged
	1,4-Dichlorobenzene	1.3342	1.25039		.01		-6.28167	30		Averaged
	1,2-Dichlorobenzene	1.2988	1.23661		.01		-4.78827	30		Averaged
	1,1-Dichloroethylene	0.4681	0.4291		.01		-8.33155	30		Averaged
	Methylene chloride	0.2941	0.2552		.01		-13.22679	30		Averaged
	tert-Butyl methyl ether	0.6183	0.54599		.01		-11.69497	30		Averaged
	trans-1,2-Dichloroethylene	0.4058	0.36519		.01		-10.00739	30		Averaged
	1,1-Dichloroethane	0.4695	0.42861		.1		-8.70927	30		Averaged
	cis-1,2-Dichloroethylene	0.2822	0.25481		.01		-9.70588	30		Averaged
	Chloroform	0.4406	0.41021		.01		-6.89741	30		Averaged
	1,1,1-Trichloroethane	0.4027	0.38996		.01		-3.16365	30		Averaged
	Carbon tetrachloride	0.3268	0.31914		.01		-2.34394	30		Averaged
	1,2-Dichloroethane	0.3158	0.28609		.01		-9.40785	30		Averaged
	1,2,4-Trichlorobenzene	1.1948	1.14159		.01		-4.45347	30		Averaged
	Benzene	0.9137	0.89975		.01		-1.52676	30		Averaged
	Trichloroethylene	0.2597	0.24502		.01		-5.65268	30		Averaged
	1,2-Dichloropropane	0.2598	0.23501		.01		-9.54196	30		Averaged
	Dibromomethane	0.1284	0.12117		.01		-5.63084	30		Averaged
	Bromodichloromethane	0.3007	0.29721		.01		-1.16063	30		Averaged
	cis-1,3-Dichloropropylene	0.3742	0.3407		.01		-8.95243	30		Averaged
	Toluene	1.4014	1.28103		.01		-8.58927	30		Averaged
	trans-1,3-Dichloropropylene	0.4178	0.39982		.01		-4.30349	30		Averaged
	1,1,2-Trichloroethane	0.2488	0.22705		.01		-8.74196	30		Averaged
	Tetrachloroethylene	0.2788	0.25963		.01		-6.8759	30		Averaged
	1,2-Dibromoethane	0.2384	0.22479		.01		-5.70889	30		Averaged
	Chlorobenzene	0.8552	0.79447		.3		-7.10126	30		Averaged
	Ethylbenzene	1.6579	1.46826		.01		-11.43857	30		Averaged
	m,p-Xylenes	0.6089	0.55138		.01		-9.44654	30		Averaged
	o-Xylene	0.6024	0.5559		.01		-7.71912	30		Averaged
	Styrene	0.9927	0.89621		.01		-9.71996	30		Averaged

Continuing Calibration Summary

Instrument ID: VOA3.I **Injection Date:** 30-NOV-22 16:38

Data File: 113022V3_ICAL\3T312.D **Init. Cal. Date(s)** 30-NOV-22 12:04 30-NOV-22 20:1

Lab Sample ID W3VM221130-10 **Method:** 113022V3_ICAL\VOA3-8260D-113022.M

Quant Type ISTD

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
Bromoform	0.2314	0.24829		.1		7.29905	30		Averaged
1,1,2,2-Tetrachloroethane	0.5373	0.51568		.3		-4.02382	30		Averaged

Quantitation Report
GEL Laboratories, LLC

12/01/2022

Data Path : D:\MSDCHEM\1\Data\113022V3_ICAL\
Data File : 3T312.D
Acq On : 30 Nov 2022 16:38
Operator : JM6
InstName : VOA3
Sample : |W3VM221130-10|ICV|1|VOA|1|VOA8260L|
Misc : VSTD050 5UL/5ML N/A MIX[A]
ALS Vial : 12 Sample Multiplier: 1

12/01/2022

Quant Time: Dec 01 08:07:49 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
Internal Standards								Dev(Min)
1) Fluorobenzene	96	9.890	9.884	1.000	1466790	50.00	ug/L	0.00
43) Chlorobenzene-d5	117	13.067	13.066	1.000	1090566	50.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	152	15.481	15.480	1.000	646859	50.00	ug/L	0.00
84) B Fluorobenzene	96	9.890	9.884	1.000	1467872	50.00	ug/L	0.00
103) B Chlorobenzene-d5	117	13.067	13.060	1.000	1090566	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	15.481	15.481	1.000	646859	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
30) 1,2-Dichloroethane-d4	67	9.549	9.549	0.965	220994	49.37	ug/L	0.00
45) Toluene-d8	98	11.530	11.530	0.882	1450276	49.57	ug/L	0.00
63) Bromofluorobenzene	95	14.261	14.261	0.921	606834	50.02	ug/L	0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	85	4.260	4.260	0.431	542116	48.61	ug/L	99
3) Chloromethane	50	4.662	4.644	0.471	610584	43.96	ug/L	100
4) Vinyl chloride	62	4.826	4.826	0.488	521899	46.75	ug/L	99
5) Bromomethane	94	5.411	5.411	0.547	364681	45.44	ug/L	98
6) Chloroethane	64	5.557	5.557	0.562	383940	48.65	ug/L	100
7) Trichlorofluoromethane	101	5.904	5.904	0.597	677295	44.92	ug/L	100
8) Ethyl ether	59	6.251	6.232	0.632	149835	33.24	ug/L	93
9) Acetone	43	6.653	6.647	0.673	383627	233.87	ug/L	100
10) 1,1-Dichloroethylene	61	6.623	6.616	0.670	629402	45.83	ug/L	99
11) Iodomethane	142	6.873	6.866	0.695	2693927	213.91	ug/L	100
12) Acetonitrile	41	7.019	7.013	0.710	893132	1086.73	ug/L	99
13) Methyl acetate	74	7.031	7.025	0.711	181336	234.96	ug/L	100
14) Carbon disulfide	76	6.988	6.982	0.707	5575132	208.00	ug/L	100
15) Methylene chloride	84	7.208	7.202	0.729	374326	43.39	ug/L	99
16) tert-Butyl methyl ether	73	7.488	7.482	0.757	800857	44.15	ug/L	99
17) trans-1,2-Dichloroethy...	61	7.537	7.531	0.762	535664	44.99	ug/L	99
18) Hexane	57	7.799	7.799	0.789	594965	49.70	ug/L	99
19) Vinyl acetate	43	7.988	7.988	0.808	2941753	222.96	ug/L	100
20) 1,1-Dichloroethane	63	8.025	8.018	0.811	628685	45.65	ug/L	99
21) 2-Butanone	43	8.628	8.622	0.872	602009	219.05	ug/L	100
22) cis-1,2-Dichloroethylene	96	8.659	8.659	0.875	373754	45.15	ug/L	99
23) 2,2-Dichloropropane	77	8.677	8.671	0.877	463394	48.37	ug/L	99
24) Bromochloromethane	49	8.939	8.933	0.904	347594	46.09	ug/L	98
25) Chloroform	83	8.970	8.970	0.907	601699	46.56	ug/L	100
26) 1,1,1-Trichloroethane	97	9.232	9.226	0.933	571990	48.42	ug/L	100
27) Cyclohexane	56	9.305	9.305	0.941	666261	50.81	ug/L	98
28) 1,1-Dichloropropene	75	9.390	9.384	0.949	452412	42.88	ug/L	100
29) Carbon tetrachloride	117	9.415	9.415	0.952	468116	48.83	ug/L	100
31) 1,2-Dichloroethane	62	9.628	9.628	0.973	419641	45.30	ug/L	100
32) Benzene	78	9.634	9.628	0.974	1319744	49.24	ug/L	99
33) Cyclohexene	67	9.732	9.732	0.984	743672	46.34	ug/L	100
34) n-Butyl alcohol	56	10.012	10.012	1.012	943588	4933.55	ug/L	100
35) Trichloroethylene	95	10.268	10.268	1.038	359386	47.17	ug/L	99
36) 2-Pentanone	43	10.378	10.378	1.049	1075984	241.02	ug/L	100

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\113022V3_ICAL\
Data File : 3T312.D
Acq On : 30 Nov 2022 16:38
Operator : JM6
InstName : VOA3
Sample : |W3VM221130-10|ICV|1|VOA|1|VOA8260L|
Misc : VSTD050 5UL/5ML N/A MIX[A]
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 01 08:07:49 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
37)	1,2-Dichloropropane	63	10.530	10.530	1.065	344713	45.22	ug/L	99
38)	Methylcyclohexane	83	10.500	10.494	1.062	625376	48.05	ug/L	99
39)	Dibromomethane	93	10.671	10.664	1.079	177737	47.18	ug/L	98
40)	Bromodichloromethane	83	10.780	10.780	1.090	435942	49.41	ug/L	100
41)	2-Chloroethylvinyl ether	63	11.006	11.006	1.113	498959	139.68	ug/L	100
42)	cis-1,3-Dichloropropylene	75	11.232	11.231	1.136	499737	45.52	ug/L	100
44)	4-Methyl-2-pentanone	43	11.329	11.329	0.867	1317914	224.26	ug/L	100
46)	Toluene	91	11.603	11.603	0.888	1397051	45.70	ug/L	99
47)	trans-1,3-Dichloroprop...	75	11.780	11.780	0.902	436029	47.85	ug/L	99
48)	1,1,2-Trichloroethane	97	12.000	11.999	0.918	247610	45.63	ug/L	99
49)	2-Hexanone	43	12.183	12.182	0.932	914476	222.51	ug/L	99
50)	1,3-Dichloropropane	76	12.189	12.188	0.933	417662	44.92	ug/L	98
51)	Tetrachloroethylene	164	12.189	12.188	0.933	283141	46.57	ug/L	98
52)	Dibromochloromethane	129	12.451	12.457	0.953	274557	49.97	ug/L	100
53)	1,2-Dibromoethane	107	12.621	12.621	0.966	245143	47.15	ug/L	99
54)	Chlorobenzene	112	13.097	13.097	1.002	866420	46.45	ug/L	100
55)	1,1,1,2-Tetrachloroethane	131	13.152	13.152	1.007	293732	48.28	ug/L	99
56)	Ethylbenzene	91	13.158	13.158	1.007	1601238	44.28	ug/L	100
57)	m,p-Xylenes	106	13.268	13.267	1.015	1202638	90.55	ug/L	99
58)	o-Xylene	106	13.701	13.700	1.049	606248	46.14	ug/L	98
59)	Styrene	104	13.707	13.706	1.049	977381	45.14	ug/L	99
61)	Bromoform	173	13.975	13.975	0.903	160611	53.65	ug/L	100
62)	Isopropylbenzene	105	14.060	14.060	0.908	1577858	45.05	ug/L	99
64)	1,1,2,2-Tetrachloroethane	83	14.359	14.359	0.928	333573	47.99	ug/L	99
65)	1,2,3-Trichloropropane	110	14.444	14.444	0.933	93890	48.27	ug/L	96
66)	Bromobenzene	156	14.469	14.468	0.935	405100	47.14	ug/L	100
67)	n-Propylbenzene	91	14.487	14.487	0.936	2074156	45.91	ug/L	100
68)	1,3,5-Trimethylbenzene	105	14.639	14.639	0.946	1451768	45.85	ug/L	99
69)	2-Chlorotoluene	126	14.633	14.633	0.945	386597	46.59	ug/L	100
70)	4-Chlorotoluene	126	14.737	14.743	0.952	410339	47.04	ug/L	99
71)	tert-Butylbenzene	134	15.011	15.011	0.970	307423	47.60	ug/L	99
72)	1,2,4-Trimethylbenzene	105	15.054	15.054	0.972	1502840	45.27	ug/L	100
73)	sec-Butylbenzene	105	15.237	15.237	0.984	1993539	46.90	ug/L	100
74)	4-Isopropyltoluene	119	15.359	15.359	0.992	1699981	46.44	ug/L	100
75)	1,3-Dichlorobenzene	146	15.420	15.419	0.996	811899	46.75	ug/L	99
76)	1,4-Dichlorobenzene	146	15.505	15.505	1.002	808829	46.86	ug/L	99
77)	n-Butylbenzene	91	15.792	15.791	1.020	1840564	46.88	ug/L	99
78)	1,2-Dichlorobenzene	146	15.920	15.919	1.028	799914	47.61	ug/L	99
79)	1,2-Dibromo-3-chloropr...	157	16.785	16.785	1.084	78682	54.13	ug/L	99
80)	1,2,4-Trichlorobenzene	180	17.791	17.791	1.149	738449	47.77	ug/L	100
81)	Hexachlorobutadiene	225	17.950	17.949	1.159	472495	48.34	ug/L	99
82)	Naphthalene	128	18.163	18.163	1.173	1408801	48.53	ug/L	100
83)	1,2,3-Trichlorobenzene	180	18.492	18.492	1.195	677707	48.33	ug/L	99
85)	Acrolein		6.464	6.470	0.654	0m	N.D.	d	
86)	Trichlorotrifluoroethane		6.580	6.586	0.665	0m	N.D.	d	
87)	Isopropyl Alcohol		6.653	6.732	0.673	0m	N.D.	d	
88)	Allyl chloride		6.988	7.062	0.707	0m	N.D.	d	
89)	tert-Butyl Alcohol		7.238	7.220	0.732	0m	N.D.	d	
90)	Acrylonitrile		7.488	7.482	0.757	0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\113022V3_ICAL\
Data File : 3T312.D
Acq On : 30 Nov 2022 16:38
Operator : JM6
InstName : VOA3
Sample : |W3VM221130-10|ICV|1|VOA|1|VOA8260L|
Misc : VSTD050 5UL/5ML N/A MIX[A]
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 01 08:07:49 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

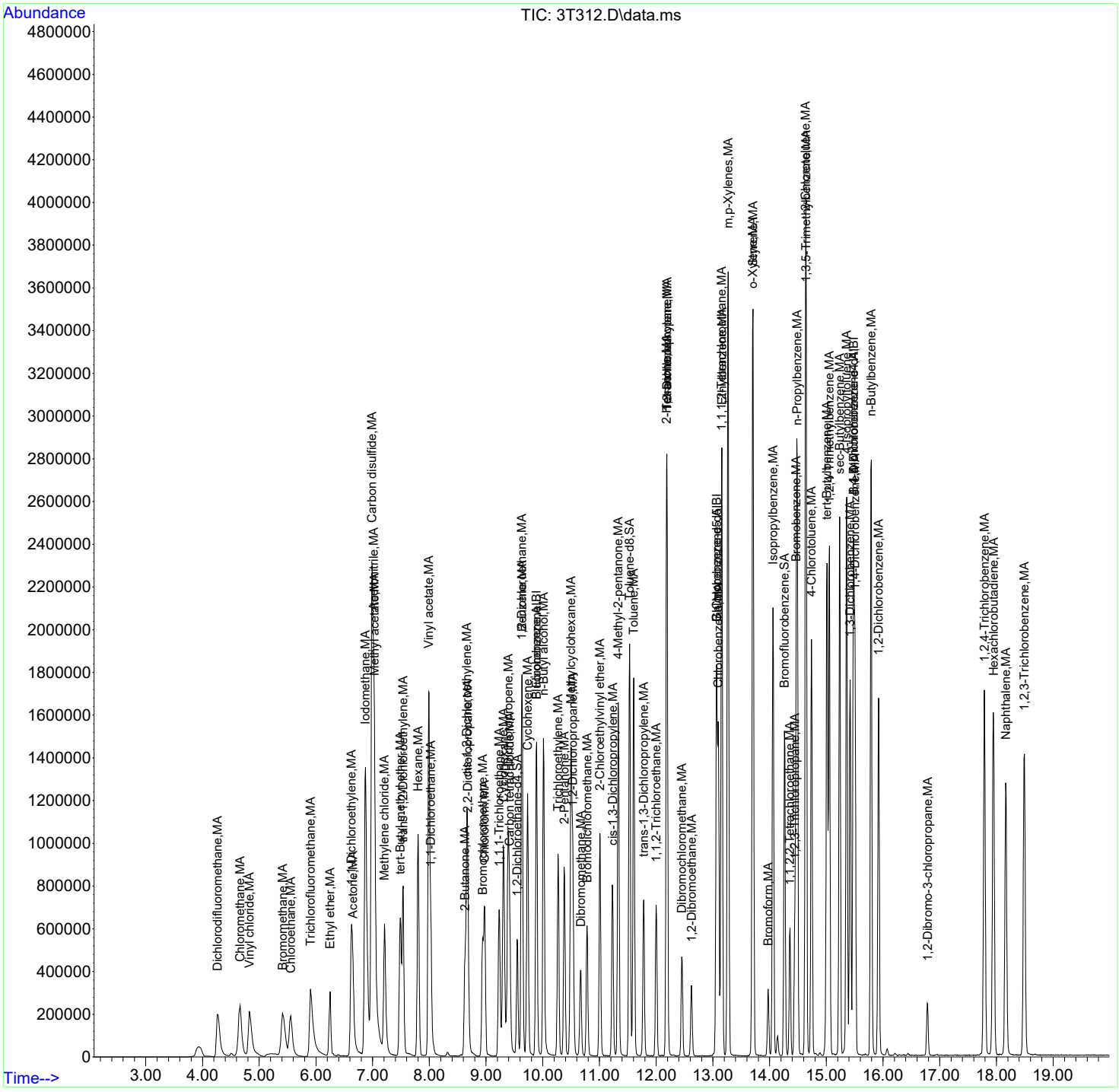
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
91) Isopropyl ether		7.988	7.988	0.808	0m	N.D.	d
92) 2-Chloro-1,3-butadiene		7.988	8.122	0.808	0m	N.D.	d
93) Ethyl tert-butyl ether		8.317	8.391	0.841	0m	N.D.	d
94) Ethyl acetate		8.628	8.628	0.872	0m	N.D.	d
95) Propionitrile		8.616	8.720	0.871	0m	N.D.	d
96) Methacrylonitrile		8.945	8.884	0.904	0m	N.D.	d
97) Tetrahydrofuran		8.976	8.976	0.908	0m	N.D.	d
98) Isobutyl alcohol		9.305	9.323	0.941	0m	N.D.	d
99) Methyl tert-amyl ether		0.000	9.640	0.000	0	N.D.	
100) Methyl methacrylate		10.500	10.506	1.062	0m	N.D.	d
101) 1,4-Dioxane		10.671	10.616	1.079	0m	N.D.	d
102) 2-Nitropropane		11.006	11.006	1.113	0m	N.D.	d
104) Ethyl methacrylate		11.774	11.774	0.901	0m	N.D.	d
106) 1-Chlorohexane		12.969	12.963	0.838	0m	N.D.	d
107) cis-1,4-Dichloro-2-butene		14.054	14.121	0.908	0m	N.D.	d
108) Cyclohexanone		14.249	14.237	0.920	0m	N.D.	d
109) trans-1,4-Dichloro-2-b...		14.420	14.408	0.931	0m	N.D.	d
110) Pentachloroethane		15.084	15.084	0.974	0m	N.D.	d
111) Benzyl chloride		15.792	15.627	1.020	0m	N.D.	d
112) bis(2-Chloroisopropyl)...		15.926	16.023	1.029	0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\113022V3_ICAL\
Data File : 3T312.D
Acq On : 30 Nov 2022 16:38
Operator : JM6
InstName : VOA3
Sample : |W3VM221130-10|ICV|1|VOA|1|VOA8260L|
Misc : VSTD050 5UL/5ML N/A MIX[A]
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 01 08:07:49 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 2023-289

Instrument ID: VOA3.I

Injection Date: 01-DEC-22 08:12

Data File: 113022V3_ICAL\3T325.D

Init. Cal. Date(s) 30-NOV-22 12:04 - 30-NOV-22 20:1

Lab Sample ID W3VM221201-01

Method: 113022V3_ICAL\VOA3-8260D-113022.M

Quant Type ISTD

Method Update: 01-DEC-22 08:04

	Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S	1,2-Dichloroethane-d4	0.1526	0.145		.01		-4.98034	30		Averaged
S	Toluene-d8	1.3412	1.3463		.01		0.38026	30		Averaged
S	Bromofluorobenzene	0.9378	0.94347		.01		0.60461	30		Averaged
	Acrolein	0.0317	0.02224		.01		-29.84227	30		Averaged
	Acrylonitrile	0.0687	0.05859		.01		-14.71616	30		Averaged

Quantitation Report
GEL Laboratories, LLC

12/01/2022

Data Path : D:\MSDCHEM\1\Data\113022V3_ICAL\
Data File : 3T325.D
Acq On : 01 Dec 2022 08:12
Operator : JM6
InstName : VOA3
Sample : |W3VM221201-01|ICV|1|VOA|1|VOA8260L|
Misc : VSTD250 5UL/5ML N/A MIX[B]
ALS Vial : 25 Sample Multiplier: 1

12/01/2022

Quant Time: Dec 01 08:32:59 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
Internal Standards								Dev(Min)
1) Fluorobenzene	96	9.878	9.884	1.000	1703951	50.00	ug/L	0.00
43) Chlorobenzene-d5	117	13.060	13.066	1.000	1232518	50.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	152	15.481	15.480	1.000	708404	50.00	ug/L	0.00
84) B Fluorobenzene	96	9.878	9.884	1.000	1703987	50.00	ug/L	0.00
103) B Chlorobenzene-d5	117	13.060	13.060	1.000	1232518	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	15.481	15.481	1.000	708404	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
30) 1,2-Dichloroethane-d4	67	9.543	9.549	0.966	247077	47.52	ug/L	0.00
45) Toluene-d8	98	11.524	11.530	0.882	1659334	50.19	ug/L	0.00
63) Bromofluorobenzene	95	14.261	14.261	0.921	668360	50.30	ug/L	0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		4.242	4.260	0.429	0m	N.D.	d	
3) Chloromethane		4.662	4.644	0.472	0m	N.D.	d	
4) Vinyl chloride		0.000	4.826	0.000	0	N.D.		
5) Bromomethane		0.000	5.411	0.000	0	N.D.		
6) Chloroethane		0.000	5.557	0.000	0	N.D.		
7) Trichlorofluoromethane		0.000	5.904	0.000	0	N.D.		
8) Ethyl ether		6.233	6.232	0.631	0m	N.D.	d	
9) Acetone		6.726	6.647	0.681	0m	N.D.	d	
10) 1,1-Dichloroethylene		6.543	6.616	0.662	0m	N.D.	d	
11) Iodomethane		6.848	6.866	0.693	0m	N.D.	d	
12) Acetonitrile		7.049	7.013	0.714	0m	N.D.	d	
13) Methyl acetate		7.019	7.025	0.711	0m	N.D.	d	
14) Carbon disulfide		7.049	6.982	0.714	0m	N.D.	d	
15) Methylene chloride		7.208	7.202	0.730	0m	N.D.	d	
16) tert-Butyl methyl ether		7.470	7.482	0.756	0m	N.D.	d	
17) trans-1,2-Dichloroethy...		7.519	7.531	0.761	0m	N.D.	d	
18) Hexane		7.793	7.799	0.789	0m	N.D.	d	
19) Vinyl acetate		7.982	7.988	0.808	0m	N.D.	d	
20) 1,1-Dichloroethane		8.110	8.018	0.821	0m	N.D.	d	
21) 2-Butanone		8.622	8.622	0.873	0m	N.D.	d	
22) cis-1,2-Dichloroethylene		0.000	8.659	0.000	0	N.D.		
23) 2,2-Dichloropropane		0.000	8.671	0.000	0	N.D.		
24) Bromochloromethane		8.958	8.933	0.907	0m	N.D.	d	
25) Chloroform		8.970	8.970	0.908	0m	N.D.	d	
26) 1,1,1-Trichloroethane		0.000	9.226	0.000	0	N.D.		
27) Cyclohexane		9.317	9.305	0.943	0m	N.D.	d	
28) 1,1-Dichloropropene		9.323	9.384	0.944	0m	N.D.	d	
29) Carbon tetrachloride		0.000	9.415	0.000	0	N.D.		
31) 1,2-Dichloroethane		9.640	9.628	0.976	0m	N.D.	d	
32) Benzene		9.640	9.628	0.976	0m	N.D.	d	
33) Cyclohexene		9.762	9.732	0.988	0m	N.D.	d	
34) n-Butyl alcohol		10.018	10.012	1.014	0m	N.D.	d	
35) Trichloroethylene		10.262	10.268	1.039	0m	N.D.	d	
36) 2-Pentanone		10.500	10.378	1.063	0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\113022V3_ICAL\
Data File : 3T325.D
Acq On : 01 Dec 2022 08:12
Operator : JM6
InstName : VOA3
Sample : |W3VM221201-01|ICV|1|VOA|1|VOA8260L|
Misc : VSTD250 5UL/5ML N/A MIX[B]
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Dec 01 08:32:59 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
37) 1,2-Dichloropropane		0.000	10.530	0.000	0	N.D.		
38) Methylcyclohexane		10.500	10.494	1.063	0m	N.D.	d	
39) Dibromomethane		0.000	10.664	0.000	0	N.D.		
40) Bromodichloromethane		0.000	10.780	0.000	0	N.D.		
41) 2-Chloroethylvinyl ether		0.000	11.006	0.000	0	N.D.		
42) cis-1,3-Dichloropropylene		0.000	11.231	0.000	0	N.D.		
44) 4-Methyl-2-pentanone		0.000	11.329	0.000	0	N.D.		
46) Toluene		11.603	11.603	0.888	0m	N.D.	d	
47) trans-1,3-Dichloroprop...		0.000	11.780	0.000	0	N.D.		
48) 1,1,2-Trichloroethane		0.000	11.999	0.000	0	N.D.		
49) 2-Hexanone		12.048	12.182	0.923	0m	N.D.	d	
50) 1,3-Dichloropropane		12.182	12.188	0.933	0m	N.D.	d	
51) Tetrachloroethylene		12.189	12.188	0.933	0m	N.D.	d	
52) Dibromochloromethane		0.000	12.457	0.000	0	N.D.		
53) 1,2-Dibromoethane		0.000	12.621	0.000	0	N.D.		
54) Chlorobenzene		13.091	13.097	1.002	0m	N.D.	d	
55) 1,1,1,2-Tetrachloroethane		13.152	13.152	1.007	0m	N.D.	d	
56) Ethylbenzene		13.158	13.158	1.007	0m	N.D.	d	
57) m,p-Xylenes		13.262	13.267	1.015	0m	N.D.	d	
58) o-Xylene		13.707	13.700	1.049	0m	N.D.	d	
59) Styrene		13.707	13.706	1.049	0m	N.D.	d	
61) Bromoform		0.000	13.975	0.000	0	N.D.		
62) Isopropylbenzene		14.054	14.060	0.908	0m	N.D.	d	
64) 1,1,2,2-Tetrachloroethane		14.408	14.359	0.931	0m	N.D.	d	
65) 1,2,3-Trichloropropane		0.000	14.444	0.000	0	N.D.		
66) Bromobenzene		14.475	14.468	0.935	0m	N.D.	d	
67) n-Propylbenzene		14.408	14.487	0.931	0m	N.D.	d	
68) 1,3,5-Trimethylbenzene		14.645	14.639	0.946	0m	N.D.	d	
69) 2-Chlorotoluene		14.633	14.633	0.945	0m	N.D.	d	
70) 4-Chlorotoluene		14.743	14.743	0.952	0m	N.D.	d	
71) tert-Butylbenzene		15.084	15.011	0.974	0m	N.D.	d	
72) 1,2,4-Trimethylbenzene		15.054	15.054	0.972	0m	N.D.	d	
73) sec-Butylbenzene		15.237	15.237	0.984	0m	N.D.	d	
74) 4-Isopropyltoluene		15.359	15.359	0.992	0m	N.D.	d	
75) 1,3-Dichlorobenzene		15.420	15.419	0.996	0m	N.D.	d	
76) 1,4-Dichlorobenzene		15.499	15.505	1.001	0m	N.D.	d	
77) n-Butylbenzene		15.944	15.791	1.030	0m	N.D.	d	
78) 1,2-Dichlorobenzene		15.926	15.919	1.029	0m	N.D.	d	
79) 1,2-Dibromo-3-chloropr...		0.000	16.785	0.000	0	N.D.		
80) 1,2,4-Trichlorobenzene		17.791	17.791	1.149	0m	N.D.	d	
81) Hexachlorobutadiene		0.000	17.949	0.000	0	N.D.		
82) Naphthalene		18.169	18.163	1.174	0m	N.D.	d	
83) 1,2,3-Trichlorobenzene		18.486	18.492	1.194	0m	N.D.	d	
85) Acrolein	56	6.464	6.470	0.654	189459	175.65	ug/L	96
86) Trichlorotrifluoroethane	85	6.586	6.586	0.667	890815	206.39	ug/L	100
87) Isopropyl Alcohol	45	6.726	6.732	0.681	1131439	2208.39	ug/L	100
88) Allyl chloride	76	7.049	7.062	0.714	1027980	214.71	ug/L	100
89) tert-Butyl Alcohol	59	7.214	7.220	0.730	1744633	2194.27	ug/L	98
90) Acrylonitrile	53	7.476	7.482	0.757	499214	213.18	ug/L	100

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\113022V3_ICAL\
Data File : 3T325.D
Acq On : 01 Dec 2022 08:12
Operator : JM6
InstName : VOA3
Sample : |W3VM221201-01|ICV|1|VOA|1|VOA8260L|
Misc : VSTD250 5UL/5ML N/A MIX[B]
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Dec 01 08:32:59 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

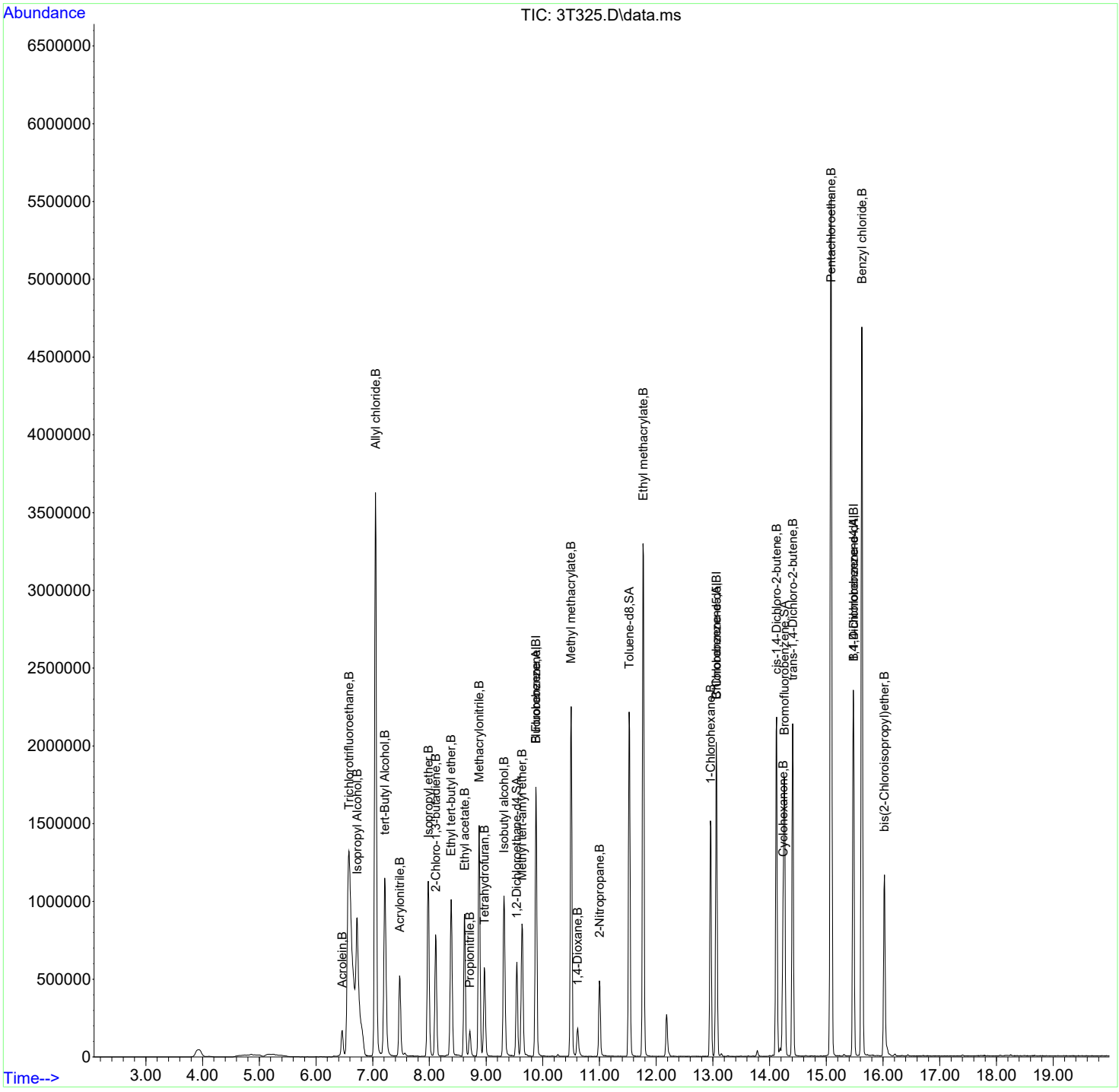
	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
91)	Isopropyl ether	45	7.982	7.988	0.808	1235094	44.96	ug/L	100
92)	2-Chloro-1,3-butadiene	53	8.110	8.122	0.821	572337	41.90	ug/L	99
93)	Ethyl tert-butyl ether	59	8.384	8.391	0.849	1088523	42.98	ug/L	99
94)	Ethyl acetate	43	8.622	8.628	0.873	1223731	198.84	ug/L	100
95)	Propionitrile	54	8.714	8.720	0.882	194117	215.22	ug/L	100
96)	Methacrylonitrile	52	8.878	8.884	0.899	230169	206.39	ug/L	97
97)	Tetrahydrofuran	72	8.970	8.976	0.908	165456	207.85	ug/L	95
98)	Isobutyl alcohol	43	9.317	9.323	0.943	770878	2127.80	ug/L	99
99)	Methyl tert-amyl ether	87	9.634	9.640	0.975	183681	39.40	ug/L	97
100)	Methyl methacrylate	69	10.500	10.506	1.063	918978	212.47	ug/L	99
101)	1,4-Dioxane	88	10.616	10.616	1.075	163826	2077.70	ug/L	100
102)	2-Nitropropane	43	11.000	11.006	1.114	383093	249.12	ug/L	99
104)	Ethyl methacrylate	69	11.768	11.774	0.901	1870523	214.91	ug/L	99
106)	1-Chlorohexane	55	12.963	12.963	0.837	418357	45.30	ug/L	99
107)	cis-1,4-Dichloro-2-butene	53	14.121	14.121	0.912	558802	217.70	ug/L	99
108)	Cyclohexanone	42	14.237	14.237	0.920	262554	1205.00	ug/L	98
109)	trans-1,4-Dichloro-2-b...	53	14.408	14.408	0.931	522772	206.03	ug/L	98
110)	Pentachloroethane	167	15.084	15.084	0.974	1274788	255.23	ug/L	99
111)	Benzyl chloride	91	15.627	15.627	1.009	3865448	266.97	ug/L	100
112)	bis(2-Chloroisopropyl)...	121	16.023	16.023	1.035	192192	219.35	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\113022V3_ICAL\
Data File : 3T325.D
Acq On : 01 Dec 2022 08:12
Operator : JM6
InstName : VOA3
Sample : |W3VM221201-01|ICV|1|VOA|1|VOA8260L|
Misc : VSTD250 5UL/5ML N/A MIX[B]
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Dec 01 08:32:59 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 2023-289

Instrument ID: VOA3.I **Injection Date:** 19-DEC-22 10:52

Data File: 121922V3\3W102.D **Init. Cal. Date(s)** 30-NOV-22 12:04 - 30-NOV-22 20:1

Lab Sample ID W3VM221219-01 **Method:** 113022V3_ICAL\VOA3-8260D-113022.M

Quant Type ISTD **Method Update:** 01-DEC-22 08:04

	Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S	1,2-Dichloroethane-d4	0.1526	0.14733		.01		-3.45347	20		Averaged
S	Toluene-d8	1.3412	1.34433		.01		0.23337	20		Averaged
S	Bromofluorobenzene	0.9378	0.87058		.01		-7.16784	20		Averaged
	Dichlorodifluoromethane	0.3802	0.41216		.01		8.4061	20		Averaged
	Chloromethane	0.4735	0.59371		.1		25.38754	20	*	Averaged
	Vinyl chloride	0.3805	0.51168		.01		34.47569	20	*	Averaged
	Bromomethane	0.2736	0.3686		.01		34.72222	20	*	Averaged
	Trichlorofluoromethane	0.5139	0.57764		.01		12.40319	20		Averaged
	1,4-Dichlorobenzene	1.3342	1.47037		.01		10.20612	20		Averaged
	1,2-Dichlorobenzene	1.2988	1.40488		.01		8.16754	20		Averaged
	1,1-Dichloroethylene	0.4681	0.51748		.01		10.54903	20		Averaged
	Methylene chloride	0.2941	0.29577		.01		0.56783	20		Averaged
	tert-Butyl methyl ether	0.6183	0.58759		.01		-4.96684	20		Averaged
	trans-1,2-Dichloroethylene	0.4058	0.43544		.01		7.30409	20		Averaged
	1,1-Dichloroethane	0.4695	0.52694		.1		12.23429	20		Averaged
	cis-1,2-Dichloroethylene	0.2822	0.29946		.01		6.11623	20		Averaged
	Chloroform	0.4406	0.48725		.01		10.58783	20		Averaged
	1,1,1-Trichloroethane	0.4027	0.45985		.01		14.19171	20		Averaged
	Carbon tetrachloride	0.3268	0.38526		.01		17.88862	20		Averaged
	1,2-Dichloroethane	0.3158	0.33913		.01		7.38759	20		Averaged
	1,2,4-Trichlorobenzene	1.1948	1.21916		.01		2.03883	20		Averaged
	Benzene	0.9137	1.08614		.01		18.87272	20		Averaged
	Trichloroethylene	0.2597	0.29045		.01		11.84059	20		Averaged
	1,2-Dichloropropane	0.2598	0.28311		.01		8.97229	20		Averaged
	Dibromomethane	0.1284	0.14159		.01		10.27259	20		Averaged
	Bromodichloromethane	0.3007	0.36078		.01		19.98005	20		Averaged
	cis-1,3-Dichloropropylene	0.3742	0.40344		.01		7.814	20		Averaged
	Toluene	1.4014	1.53656		.01		9.64464	20		Averaged
	trans-1,3-Dichloropropylene	0.4178	0.46813		.01		12.04643	20		Averaged
	1,1,2-Trichloroethane	0.2488	0.26093		.01		4.8754	20		Averaged
	Tetrachloroethylene	0.2788	0.31657		.01		13.54735	20		Averaged
	1,2-Dibromoethane	0.2384	0.25911		.01		8.68708	20		Averaged
	Chlorobenzene	0.8552	0.94674		.3		10.70393	20		Averaged
	Ethylbenzene	1.6579	1.77624		.01		7.13795	20		Averaged
	m,p-Xylenes	0.6089	0.67292		.01		10.51404	20		Averaged
	o-Xylene	0.6024	0.66536		.01		10.45153	20		Averaged
	Styrene	0.9927	1.05893		.01		6.6717	20		Averaged

Continuing Calibration Summary

Instrument ID: VOA3.I **Injection Date:** 19-DEC-22 10:52

Data File: 121922V3\3W102.D **Init. Cal. Date(s)** 30-NOV-22 12:04 30-NOV-22 20:1

Lab Sample ID W3VM221219-01 **Method:** 113022V3_ICAL\VOA3-8260D-113022.M

Quant Type ISTD

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
Bromoform	0.2314	0.31884		.1		37.78738	20	*	Averaged
1,1,2,2-Tetrachloroethane	0.5373	0.59135		.3		10.05956	20		Averaged

Quantitation Report
GEL Laboratories, LLC

12/20/2022

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W102.D
Acq On : 19 Dec 2022 10:52
Operator : KP2
InstName : VOA3
Sample : |W3VM221219-01|CCV|1|VOA|1|VOA8260D_L|
Misc : CCV/LCS 5ML N/A MIX[A]
ALS Vial : 2 Sample Multiplier: 1

12/20/2022

Quant Time: Dec 19 11:24:49 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		QValue
Internal Standards									Dev(Min)
1) Fluorobenzene	96	9.878	9.884	1.000	1213829	50.00	ug/L		0.00
43) Chlorobenzene-d5	117	13.060	13.066	1.000	903394	50.00	ug/L		0.00
60) 1,4-Dichlorobenzene-d4	152	15.480	15.480	1.000	529603	50.00	ug/L		0.00
84) B Fluorobenzene	96	9.878	9.884	1.000	1214537	50.00	ug/L		0.00
103) B Chlorobenzene-d5	117	13.060	13.060	1.000	903394	50.00	ug/L		0.00
105) B 1,4-Dichlorobenzene-d4	152	15.480	15.481	1.000	529603	50.00	ug/L		0.00
System Monitoring Compounds									Dev(Min)
30) 1,2-Dichloroethane-d4	67	9.543	9.549	0.966	178831	48.28	ug/L		0.00
45) Toluene-d8	98	11.524	11.530	0.882	1214457	50.11	ug/L		0.00
63) Bromofluorobenzene	95	14.261	14.261	0.921	461061	46.42	ug/L		0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		QValue
2) Dichlorodifluoromethane	85	4.260	4.260	0.431	500292	54.21	ug/L		100
3) Chloromethane	50	4.644	4.644	0.470	720663	62.70	ug/L		99
4) Vinyl chloride	62	4.826	4.826	0.489	621097	67.23	ug/L		100
5) Bromomethane	94	5.392	5.411	0.546	447421	67.37	ug/L		98
6) Chloroethane	64	5.538	5.557	0.561	414496	63.46	ug/L		99
7) Trichlorofluoromethane	101	5.885	5.904	0.596	701160	56.20	ug/L		100
8) Ethyl ether	59	6.232	6.232	0.631	191533	51.35	ug/L		82
9) Acetone	43	6.641	6.647	0.672	385323	283.85	ug/L		97
10) 1,1-Dichloroethylene	61	6.610	6.616	0.669	628132	55.27	ug/L		98
11) Iodomethane	142	6.854	6.866	0.694	2665696	255.78	ug/L		100
12) Acetonitrile	41	7.007	7.013	0.709	918947	1351.16	ug/L		99
13) Methyl acetate	74	7.019	7.025	0.711	170092	266.33	ug/L	#	89
14) Carbon disulfide	76	6.976	6.982	0.706	5725760	258.14	ug/L		100
15) Methylene chloride	84	7.196	7.202	0.728	359014	50.28	ug/L		96
16) tert-Butyl methyl ether	73	7.476	7.482	0.757	713234	47.52	ug/L		97
17) trans-1,2-Dichloroethy...	61	7.525	7.531	0.762	528547	53.65	ug/L		98
18) Hexane	57	7.793	7.799	0.789	534142	53.91	ug/L		94
19) Vinyl acetate	43	7.976	7.988	0.807	2910117	266.53	ug/L		98
20) 1,1-Dichloroethane	63	8.012	8.018	0.811	639609	56.12	ug/L		99
21) 2-Butanone	43	8.616	8.622	0.872	587287	258.22	ug/L		97
22) cis-1,2-Dichloroethylene	96	8.646	8.659	0.875	363493	53.06	ug/L		97
23) 2,2-Dichloropropane	77	8.665	8.671	0.877	447127	56.40	ug/L		93
24) Bromochloromethane	49	8.927	8.933	0.904	358895	57.51	ug/L		98
25) Chloroform	83	8.963	8.970	0.907	591436	55.30	ug/L		100
26) 1,1,1-Trichloroethane	97	9.220	9.226	0.933	558181	57.10	ug/L		97
27) Cyclohexane	56	9.299	9.305	0.941	649974	59.90	ug/L		98
28) 1,1-Dichloropropene	75	9.378	9.384	0.949	448643	51.38	ug/L		96
29) Carbon tetrachloride	117	9.402	9.415	0.952	467637	58.95	ug/L		99
31) 1,2-Dichloroethane	62	9.622	9.628	0.974	411643	53.70	ug/L		100
32) Benzene	78	9.622	9.628	0.974	1318388	59.44	ug/L		100
33) Cyclohexene	67	9.726	9.732	0.985	733091	55.21	ug/L		98
34) n-Butyl alcohol	56	10.006	10.012	1.013	780463	4931.06	ug/L		95
35) Trichloroethylene	95	10.262	10.268	1.039	352556	55.92	ug/L		100
36) 2-Pentanone	43	10.372	10.378	1.050	957850	259.27	ug/L		97

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W102.D
Acq On : 19 Dec 2022 10:52
Operator : KP2
InstName : VOA3
Sample : |W3VM221219-01|CCV|1|VOA|1|VOA8260D_L|
Misc : CCV/LCS 5ML N/A MIX[A]
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 19 11:24:49 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
37)	1,2-Dichloropropane	63	10.524	10.530	1.065	343653	54.48	ug/L		98
38)	Methylcyclohexane	83	10.488	10.494	1.062	631124	58.59	ug/L		98
39)	Dibromomethane	93	10.658	10.664	1.079	171865	55.13	ug/L		97
40)	Bromodichloromethane	83	10.774	10.780	1.091	437929	59.98	ug/L		99
41)	2-Chloroethylvinyl ether	63	11.000	11.006	1.114	422611	142.97	ug/L		98
42)	cis-1,3-Dichloropropylene	75	11.225	11.231	1.136	489703	53.90	ug/L		97
44)	4-Methyl-2-pentanone	43	11.329	11.329	0.867	1313342	269.78	ug/L		96
46)	Toluene	91	11.597	11.603	0.888	1388116	54.82	ug/L		98
47)	trans-1,3-Dichloroprop...	75	11.774	11.780	0.902	422904	56.02	ug/L		97
48)	1,1,2-Trichloroethane	97	11.993	11.999	0.918	235723	52.44	ug/L		97
49)	2-Hexanone	43	12.182	12.182	0.933	934515	274.50	ug/L		96
50)	1,3-Dichloropropane	76	12.182	12.188	0.933	421612	54.74	ug/L		100
51)	Tetrachloroethylene	164	12.182	12.188	0.933	285986	56.78	ug/L		98
52)	Dibromochloromethane	129	12.451	12.457	0.953	282903	62.16	ug/L		100
53)	1,2-Dibromoethane	107	12.615	12.621	0.966	234078	54.35	ug/L		99
54)	Chlorobenzene	112	13.091	13.097	1.002	855281	55.36	ug/L		98
55)	1,1,1,2-Tetrachloroethane	131	13.152	13.152	1.007	302938	60.10	ug/L		100
56)	Ethylbenzene	91	13.152	13.158	1.007	1604642	53.57	ug/L		99
57)	m,p-Xylenes	106	13.261	13.267	1.015	1215831	110.51	ug/L		98
58)	o-Xylene	106	13.700	13.700	1.049	601079	55.22	ug/L		99
59)	Styrene	104	13.706	13.706	1.049	956629	53.34	ug/L		98
61)	Bromoform	173	13.969	13.975	0.902	168857	68.89	ug/L		99
62)	Isopropylbenzene	105	14.060	14.060	0.908	1548669	54.01	ug/L		100
64)	1,1,2,2-Tetrachloroethane	83	14.359	14.359	0.928	313183	55.03	ug/L		99
65)	1,2,3-Trichloropropane	110	14.444	14.444	0.933	83970	52.72	ug/L	#	90
66)	Bromobenzene	156	14.469	14.468	0.935	385585	54.80	ug/L		98
67)	n-Propylbenzene	91	14.487	14.487	0.936	2091868	56.56	ug/L		99
68)	1,3,5-Trimethylbenzene	105	14.639	14.639	0.946	1460330	56.33	ug/L		97
69)	2-Chlorotoluene	126	14.633	14.633	0.945	391744	57.67	ug/L		100
70)	4-Chlorotoluene	126	14.737	14.743	0.952	396861	55.57	ug/L		98
71)	tert-Butylbenzene	134	15.011	15.011	0.970	295568	55.90	ug/L		99
72)	1,2,4-Trimethylbenzene	105	15.054	15.054	0.972	1453436	53.48	ug/L		99
73)	sec-Butylbenzene	105	15.237	15.237	0.984	1971259	56.64	ug/L		99
74)	4-Isopropyltoluene	119	15.359	15.359	0.992	1629870	54.39	ug/L		100
75)	1,3-Dichlorobenzene	146	15.420	15.419	0.996	783147	55.08	ug/L		99
76)	1,4-Dichlorobenzene	146	15.505	15.505	1.002	778713	55.10	ug/L		99
77)	n-Butylbenzene	91	15.791	15.791	1.020	1803264	56.10	ug/L		98
78)	1,2-Dichlorobenzene	146	15.919	15.919	1.028	744029	54.08	ug/L		99
79)	1,2-Dibromo-3-chloropr...	157	16.785	16.785	1.084	72956	61.30	ug/L		100
80)	1,2,4-Trichlorobenzene	180	17.785	17.791	1.149	645673	51.02	ug/L		99
81)	Hexachlorobutadiene	225	17.950	17.949	1.159	406021	50.74	ug/L		99
82)	Naphthalene	128	18.163	18.163	1.173	1164837	49.01	ug/L		100
83)	1,2,3-Trichlorobenzene	180	18.492	18.492	1.195	584936	50.95	ug/L		100
85)	Acrolein		0.000	6.470	0.000	0	N.D.			
86)	Trichlorotrifluoroethane		0.000	6.586	0.000	0	N.D.			
87)	Isopropyl Alcohol		6.726	6.732	0.681	0m	N.D.	d		
88)	Allyl chloride		6.976	7.062	0.706	0m	N.D.	d		
89)	tert-Butyl Alcohol		7.214	7.220	0.730	0m	N.D.	d		
90)	Acrylonitrile		7.476	7.482	0.757	0m	N.D.	d		

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W102.D
Acq On : 19 Dec 2022 10:52
Operator : KP2
InstName : VOA3
Sample : |W3VM221219-01|CCV|1|VOA|1|VOA8260D_L|
Misc : CCV/LCS 5ML N/A MIX[A]
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 19 11:24:49 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

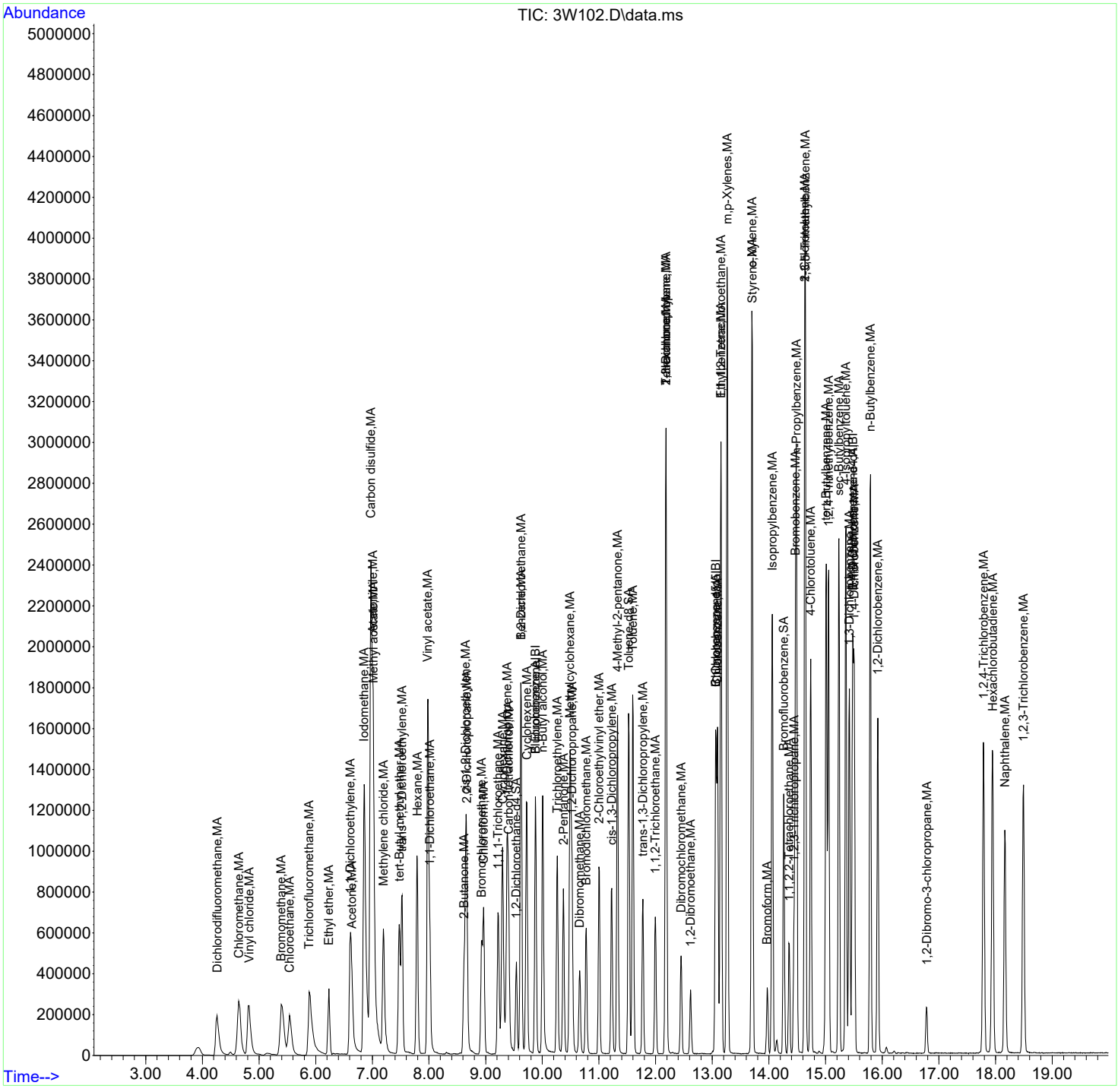
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
91) Isopropyl ether		7.976	7.988	0.807	0m	N.D.	d
92) 2-Chloro-1,3-butadiene		7.982	8.122	0.808	0m	N.D.	d
93) Ethyl tert-butyl ether		8.305	8.391	0.841	0m	N.D.	d
94) Ethyl acetate		8.616	8.628	0.872	0m	N.D.	d
95) Propionitrile		8.616	8.720	0.872	0m	N.D.	d
96) Methacrylonitrile		8.921	8.884	0.903	0m	N.D.	d
97) Tetrahydrofuran		8.963	8.976	0.907	0m	N.D.	d
98) Isobutyl alcohol		9.299	9.323	0.941	0m	N.D.	d
99) Methyl tert-amyl ether		0.000	9.640	0.000	0	N.D.	
100) Methyl methacrylate		10.494	10.506	1.062	0m	N.D.	d
101) 1,4-Dioxane		10.664	10.616	1.080	0m	N.D.	d
102) 2-Nitropropane		11.128	11.006	1.127	0m	N.D.	d
104) Ethyl methacrylate		0.000	11.774	0.000	0	N.D.	
106) 1-Chlorohexane		13.005	12.963	0.840	0m	N.D.	d
107) cis-1,4-Dichloro-2-butene		14.060	14.121	0.908	0m	N.D.	d
108) Cyclohexanone		14.231	14.237	0.919	0m	N.D.	d
109) trans-1,4-Dichloro-2-b...		14.487	14.408	0.936	0m	N.D.	d
110) Pentachloroethane		15.096	15.084	0.975	0m	N.D.	d
111) Benzyl chloride		15.791	15.627	1.020	0m	N.D.	d
112) bis(2-Chloroisopropyl)...		15.926	16.023	1.029	0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W102.D
Acq On : 19 Dec 2022 10:52
Operator : KP2
InstName : VOA3
Sample : |W3VM221219-01|CCV|1|VOA|1|VOA8260D_L|
Misc : CCV/LCS 5ML N/A MIX[A]
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 19 11:24:49 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 2023-289

Instrument ID: VOA3.I

Injection Date: 19-DEC-22 11:45

Data File: 121922V3\3W104.D

Init. Cal. Date(s) 30-NOV-22 12:04 - 30-NOV-22 20:1

Lab Sample ID W3VM221219-03

Method: 113022V3_ICAL\VOA3-8260D-113022.M

Quant Type ISTD

Method Update: 01-DEC-22 08:04

	Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S	1,2-Dichloroethane-d4	0.1526	0.14901		.01		-2.35256	20		Averaged
S	Toluene-d8	1.3412	1.3785		.01		2.78109	20		Averaged
S	Bromofluorobenzene	0.9378	0.88134		.01		-6.02047	20		Averaged
	Acrolein	0.0317	0.0228		.01		-28.07571	20	*	Averaged
	Acrylonitrile	0.0687	0.07685		.01		11.86317	20		Averaged

Quantitation Report
GEL Laboratories, LLC

12/20/2022

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W104.D
Acq On : 19 Dec 2022 11:45
Operator : KP2
InstName : VOA3
Sample : |W3VM221219-03|CCV|1|VOA|1|VOA8260D_L|
Misc : CCV/LCS 5ML N/A MIX[B]
ALS Vial : 4 Sample Multiplier: 1

12/20/2022

Quant Time: Dec 19 13:12:25 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
Internal Standards								Dev(Min)
1) Fluorobenzene	96	9.884	9.884	1.000	1133304	50.00	ug/L	0.00
43) Chlorobenzene-d5	117	13.060	13.066	1.000	809035	50.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	152	15.480	15.480	1.000	481293	50.00	ug/L	0.00
84) B Fluorobenzene	96	9.884	9.884	1.000	1133152	50.00	ug/L	0.00
103) B Chlorobenzene-d5	117	13.060	13.060	1.000	809035	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	15.480	15.481	1.000	481293	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
30) 1,2-Dichloroethane-d4	67	9.543	9.549	0.965	168875	48.83	ug/L	0.00
45) Toluene-d8	98	11.530	11.530	0.883	1115253	51.39	ug/L	0.00
63) Bromofluorobenzene	95	14.261	14.261	0.921	424183	46.99	ug/L	0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		4.260	4.260	0.431	0m	N.D.		d
3) Chloromethane		4.643	4.644	0.470	0m	N.D.		d
4) Vinyl chloride		4.826	4.826	0.488	0m	N.D.		d
5) Bromomethane		5.411	5.411	0.547	0m	N.D.		d
6) Chloroethane		5.538	5.557	0.560	0m	N.D.		d
7) Trichlorofluoromethane		5.885	5.904	0.595	0m	N.D.		d
8) Ethyl ether		6.232	6.232	0.631	0m	N.D.		d
9) Acetone		6.574	6.647	0.665	0m	N.D.		d
10) 1,1-Dichloroethylene		6.568	6.616	0.664	0m	N.D.		d
11) Iodomethane		6.860	6.866	0.694	0m	N.D.		d
12) Acetonitrile		7.055	7.013	0.714	0m	N.D.		d
13) Methyl acetate		7.031	7.025	0.711	0m	N.D.		d
14) Carbon disulfide		6.982	6.982	0.706	0m	N.D.		d
15) Methylene chloride		7.202	7.202	0.729	0m	N.D.		d
16) tert-Butyl methyl ether		7.482	7.482	0.757	0m	N.D.		d
17) trans-1,2-Dichloroethy...		7.525	7.531	0.761	0m	N.D.		d
18) Hexane		7.793	7.799	0.788	0m	N.D.		d
19) Vinyl acetate		7.982	7.988	0.808	0m	N.D.		d
20) 1,1-Dichloroethane		8.110	8.018	0.821	0m	N.D.		d
21) 2-Butanone		8.622	8.622	0.872	0m	N.D.		d
22) cis-1,2-Dichloroethylene		0.000	8.659	0.000	0	N.D.		
23) 2,2-Dichloropropane		0.000	8.671	0.000	0	N.D.		
24) Bromochloromethane		8.976	8.933	0.908	0m	N.D.		d
25) Chloroform		8.970	8.970	0.907	0m	N.D.		d
26) 1,1,1-Trichloroethane		0.000	9.226	0.000	0	N.D.		
27) Cyclohexane		9.323	9.305	0.943	0m	N.D.		d
28) 1,1-Dichloropropene		9.390	9.384	0.950	0m	N.D.		d
29) Carbon tetrachloride		0.000	9.415	0.000	0	N.D.		
31) 1,2-Dichloroethane		9.628	9.628	0.974	0m	N.D.		d
32) Benzene		9.634	9.628	0.975	0m	N.D.		d
33) Cyclohexene		9.878	9.732	0.999	0m	N.D.		d
34) n-Butyl alcohol		10.030	10.012	1.015	0m	N.D.		d
35) Trichloroethylene		10.268	10.268	1.039	0m	N.D.		d
36) 2-Pentanone		10.506	10.378	1.063	0m	N.D.		d

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W104.D
Acq On : 19 Dec 2022 11:45
Operator : KP2
InstName : VOA3
Sample : |W3VM221219-03|CCV|1|VOA|1|VOA8260D_L|
Misc : CCV/LCS 5ML N/A MIX[B]
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 19 13:12:25 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
37)	1,2-Dichloropropane		0.000	10.530	0.000	0	N.D.		
38)	Methylcyclohexane		10.500	10.494	1.062	0m	N.D.	d	
39)	Dibromomethane		0.000	10.664	0.000	0	N.D.		
40)	Bromodichloromethane		10.774	10.780	1.090	0m	N.D.	d	
41)	2-Chloroethylvinyl ether		11.030	11.006	1.116	0m	N.D.	d	
42)	cis-1,3-Dichloropropylene		11.225	11.231	1.136	0m	N.D.	d	
44)	4-Methyl-2-pentanone		11.329	11.329	0.867	0m	N.D.	d	
46)	Toluene		11.597	11.603	0.888	0m	N.D.	d	
47)	trans-1,3-Dichloroprop...		11.774	11.780	0.902	0m	N.D.	d	
48)	1,1,2-Trichloroethane		0.000	11.999	0.000	0	N.D.		
49)	2-Hexanone		12.188	12.182	0.933	0m	N.D.	d	
50)	1,3-Dichloropropane		12.194	12.188	0.934	0m	N.D.	d	
51)	Tetrachloroethylene		12.188	12.188	0.933	0m	N.D.	d	
52)	Dibromochloromethane		0.000	12.457	0.000	0	N.D.		
53)	1,2-Dibromoethane		12.627	12.621	0.967	0m	N.D.	d	
54)	Chlorobenzene		13.097	13.097	1.003	0m	N.D.	d	
55)	1,1,1,2-Tetrachloroethane		13.158	13.152	1.007	0m	N.D.	d	
56)	Ethylbenzene		13.152	13.158	1.007	0m	N.D.	d	
57)	m,p-Xylenes		13.267	13.267	1.016	0m	N.D.	d	
58)	o-Xylene		13.694	13.700	1.049	0m	N.D.	d	
59)	Styrene		13.712	13.706	1.050	0m	N.D.	d	
61)	Bromoform		0.000	13.975	0.000	0	N.D.		
62)	Isopropylbenzene		14.060	14.060	0.908	0m	N.D.	d	
64)	1,1,2,2-Tetrachloroethane		14.359	14.359	0.928	0m	N.D.	d	
65)	1,2,3-Trichloropropane		0.000	14.444	0.000	0	N.D.		
66)	Bromobenzene		14.475	14.468	0.935	0m	N.D.	d	
67)	n-Propylbenzene		14.487	14.487	0.936	0m	N.D.	d	
68)	1,3,5-Trimethylbenzene		14.645	14.639	0.946	0m	N.D.	d	
69)	2-Chlorotoluene		14.639	14.633	0.946	0m	N.D.	d	
70)	4-Chlorotoluene		14.743	14.743	0.952	0m	N.D.	d	
71)	tert-Butylbenzene		15.017	15.011	0.970	0m	N.D.	d	
72)	1,2,4-Trimethylbenzene		15.054	15.054	0.972	0m	N.D.	d	
73)	sec-Butylbenzene		15.230	15.237	0.984	0m	N.D.	d	
74)	4-Isopropyltoluene		15.358	15.359	0.992	0m	N.D.	d	
75)	1,3-Dichlorobenzene		15.426	15.419	0.996	0m	N.D.	d	
76)	1,4-Dichlorobenzene		15.505	15.505	1.002	0m	N.D.	d	
77)	n-Butylbenzene		15.785	15.791	1.020	0m	N.D.	d	
78)	1,2-Dichlorobenzene		15.919	15.919	1.028	0m	N.D.	d	
79)	1,2-Dibromo-3-chloropr...		16.779	16.785	1.084	0m	N.D.	d	
80)	1,2,4-Trichlorobenzene		17.791	17.791	1.149	0m	N.D.	d	
81)	Hexachlorobutadiene		17.943	17.949	1.159	0m	N.D.	d	
82)	Naphthalene		18.169	18.163	1.174	0m	N.D.	d	
83)	1,2,3-Trichlorobenzene		18.498	18.492	1.195	0m	N.D.	d	
85)	Acrolein	56	6.470	6.470	0.655	129173	180.09	ug/L	99
86)	Trichlorotrifluoroethane	85	6.580	6.586	0.666	825458	287.60	ug/L	97
87)	Isopropyl Alcohol	45	6.726	6.732	0.681	969663	2846.05	ug/L	98
88)	Allyl chloride	76	7.055	7.062	0.714	926708	291.07	ug/L	99
89)	tert-Butyl Alcohol	59	7.220	7.220	0.730	1448097	2738.81	ug/L	98
90)	Acrylonitrile	53	7.482	7.482	0.757	435439	279.62	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W104.D
Acq On : 19 Dec 2022 11:45
Operator : KP2
InstName : VOA3
Sample : |W3VM221219-03|CCV|1|VOA|1|VOA8260D_L|
Misc : CCV/LCS 5ML N/A MIX[B]
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 19 13:12:25 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

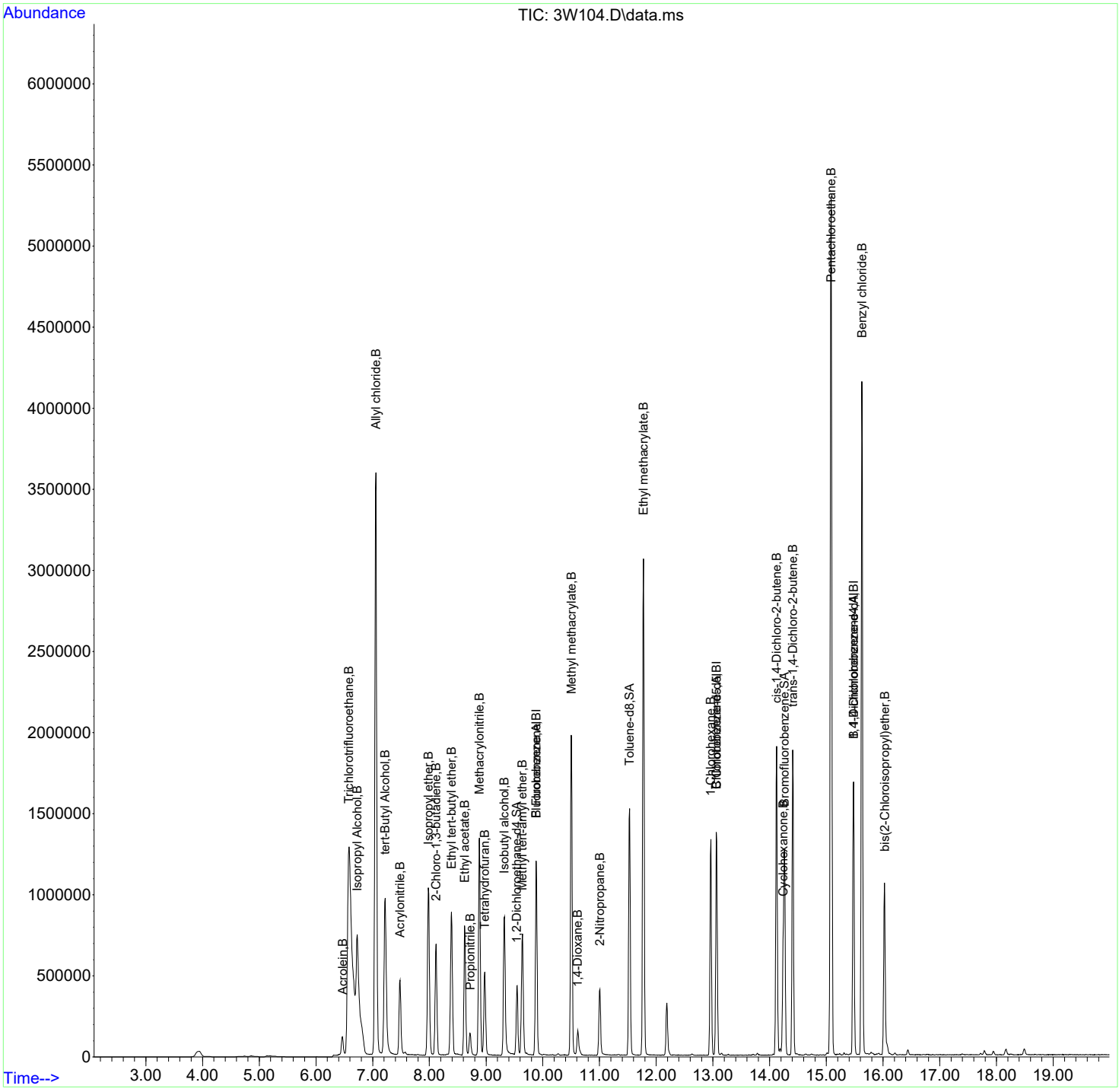
	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
91)	Isopropyl ether	45	7.982	7.988	0.808	1115255	61.06	ug/L		98
92)	2-Chloro-1,3-butadiene	53	8.116	8.122	0.821	505753	55.68	ug/L		96
93)	Ethyl tert-butyl ether	59	8.390	8.391	0.849	913398	54.23	ug/L		98
94)	Ethyl acetate	43	8.622	8.628	0.872	1057564	258.40	ug/L		97
95)	Propionitrile	54	8.720	8.720	0.882	165567	276.05	ug/L		98
96)	Methacrylonitrile	52	8.884	8.884	0.899	207844	280.25	ug/L		95
97)	Tetrahydrofuran	72	8.976	8.976	0.908	138227	261.12	ug/L		95
98)	Isobutyl alcohol	43	9.323	9.323	0.943	649910	2697.60	ug/L		99
99)	Methyl tert-amyl ether	87	9.640	9.640	0.975	143313	46.23	ug/L		93
100)	Methyl methacrylate	69	10.506	10.506	1.063	773122	268.79	ug/L		93
101)	1,4-Dioxane	88	10.616	10.616	1.074	133076	2537.92	ug/L		96
102)	2-Nitropropane	43	11.006	11.006	1.113	307993	301.18	ug/L		96
104)	Ethyl methacrylate	69	11.774	11.774	0.902	1608554	281.55	ug/L		95
106)	1-Chlorohexane	55	12.963	12.963	0.837	349085	55.63	ug/L		96
107)	cis-1,4-Dichloro-2-butene	53	14.121	14.121	0.912	476778	273.39	ug/L		96
108)	Cyclohexanone	42	14.237	14.237	0.920	206832	1397.19	ug/L		96
109)	trans-1,4-Dichloro-2-b...	53	14.407	14.408	0.931	452588	262.54	ug/L		98
110)	Pentachloroethane	167	15.084	15.084	0.974	1092900	322.07	ug/L		98
111)	Benzyl chloride	91	15.627	15.627	1.009	3159817	321.22	ug/L		100
112)	bis(2-Chloroisopropyl)...	121	16.029	16.023	1.035	155510	261.24	ug/L	#	85

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W104.D
Acq On : 19 Dec 2022 11:45
Operator : KP2
InstName : VOA3
Sample : |W3VM221219-03|CCV|1|VOA|1|VOA8260D_L|
Misc : CCV/LCS 5ML N/A MIX[B]
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 19 13:12:25 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 2023-289

Instrument ID: VOA3.I **Injection Date:** 20-DEC-22 20:17

Data File: 122022V3\3W230.D **Init. Cal. Date(s)** 30-NOV-22 12:04 - 30-NOV-22 20:1

Lab Sample ID W3VM221220-07 **Method:** 113022V3_ICAL\VOA3-8260D-113022.M

Quant Type ISTD **Method Update:** 01-DEC-22 08:04

	Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S	1,2-Dichloroethane-d4	0.1526	0.13988		.01		-8.33552	20		Averaged
S	Toluene-d8	1.3412	1.3522		.01		0.82016	20		Averaged
S	Bromofluorobenzene	0.9378	0.88053		.01		-6.10685	20		Averaged
	Dichlorodifluoromethane	0.3802	0.32385		.01		-14.82115	20		Averaged
	Chloromethane	0.4735	0.50082		.1		5.7698	20		Averaged
	Vinyl chloride	0.3805	0.42789		.01		12.45466	20		Averaged
	Bromomethane	0.2736	0.31686		.01		15.8114	20		Averaged
	Trichlorofluoromethane	0.5139	0.48856		.01		-4.93092	20		Averaged
	1,4-Dichlorobenzene	1.3342	1.29579		.01		-2.87888	20		Averaged
	1,2-Dichlorobenzene	1.2988	1.25546		.01		-3.33693	20		Averaged
	1,1-Dichloroethylene	0.4681	0.46126		.01		-1.46123	20		Averaged
	Methylene chloride	0.2941	0.26174		.01		-11.00306	20		Averaged
	tert-Butyl methyl ether	0.6183	0.51871		.01		-16.10707	20		Averaged
	trans-1,2-Dichloroethylene	0.4058	0.41148		.01		1.3997	20		Averaged
	1,1-Dichloroethane	0.4695	0.49467		.1		5.36102	20		Averaged
	cis-1,2-Dichloroethylene	0.2822	0.27248		.01		-3.44437	20		Averaged
	Chloroform	0.4406	0.44627		.01		1.28688	20		Averaged
	1,1,1-Trichloroethane	0.4027	0.41601		.01		3.30519	20		Averaged
	Carbon tetrachloride	0.3268	0.32776		.01		0.29376	20		Averaged
	1,2-Dichloroethane	0.3158	0.29809		.01		-5.60798	20		Averaged
	1,2,4-Trichlorobenzene	1.1948	1.01895		.01		-14.71794	20		Averaged
	Benzene	0.9137	0.98406		.01		7.70056	20		Averaged
	Trichloroethylene	0.2597	0.27262		.01		4.97497	20		Averaged
	1,2-Dichloropropane	0.2598	0.26002		.01		0.08468	20		Averaged
	Dibromomethane	0.1284	0.12144		.01		-5.42056	20		Averaged
	Bromodichloromethane	0.3007	0.30099		.01		0.09644	20		Averaged
	cis-1,3-Dichloropropylene	0.3742	0.34833		.01		-6.91342	20		Averaged
	Toluene	1.4014	1.43813		.01		2.62095	20		Averaged
	trans-1,3-Dichloropropylene	0.4178	0.39908		.01		-4.48061	20		Averaged
	1,1,2-Trichloroethane	0.2488	0.2363		.01		-5.02412	20		Averaged
	Tetrachloroethylene	0.2788	0.28131		.01		0.90029	20		Averaged
	1,2-Dibromoethane	0.2384	0.22189		.01		-6.92534	20		Averaged
	Chlorobenzene	0.8552	0.86619		.3		1.28508	20		Averaged
	Ethylbenzene	1.6579	1.64648		.01		-0.68882	20		Averaged
	m,p-Xylenes	0.6089	0.60855		.01		-0.05748	20		Averaged
	o-Xylene	0.6024	0.61522		.01		2.12815	20		Averaged
	Styrene	0.9927	0.95247		.01		-4.05258	20		Averaged

Continuing Calibration Summary

Instrument ID: VOA3.I **Injection Date:** 20-DEC-22 20:17

Data File: 122022V3\3W230.D **Init. Cal. Date(s)** 30-NOV-22 12:04 30-NOV-22 20:1

Lab Sample ID W3VM221220-07 **Method:** 113022V3_ICAL\VOA3-8260D-113022.M

Quant Type ISTD

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
Bromoform	0.2314	0.2104		.1		-9.07519	20		Averaged
1,1,2,2-Tetrachloroethane	0.5373	0.51813		.3		-3.56784	20		Averaged

Quantitation Report
GEL Laboratories, LLC

12/21/2022

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W230.D
Acq On : 20 Dec 2022 20:17
Operator : JM6
InstName : VOA3
Sample : |W3VM221220-07|CCV|1|VOA|1|VOA8260D_L|
Misc : CCV/LCS 5ML N/A MIX[A]
ALS Vial : 30 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 20 20:43:26 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		QValue
Internal Standards									Dev(Min)
1) Fluorobenzene	96	9.884	9.884	1.000	1379286	50.00	ug/L		0.00
43) Chlorobenzene-d5	117	13.060	13.066	1.000	1003262	50.00	ug/L		0.00
60) 1,4-Dichlorobenzene-d4	152	15.474	15.480	1.000	594458	50.00	ug/L		0.00
84) B Fluorobenzene	96	9.884	9.884	1.000	1379312	50.00	ug/L		0.00
103) B Chlorobenzene-d5	117	13.060	13.060	1.000	1003262	50.00	ug/L		0.00
105) B 1,4-Dichlorobenzene-d4	152	15.474	15.481	1.000	594458	50.00	ug/L		0.00
System Monitoring Compounds									Dev(Min)
30) 1,2-Dichloroethane-d4	67	9.543	9.549	0.965	192935	45.84	ug/L		0.00
45) Toluene-d8	98	11.530	11.530	0.883	1356614	50.41	ug/L		0.00
63) Bromofluorobenzene	95	14.261	14.261	0.922	523441	46.95	ug/L		0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		QValue
2) Dichlorodifluoromethane	85	4.260	4.260	0.431	446675	42.59	ug/L		99
3) Chloromethane	50	4.644	4.644	0.470	690774	52.89	ug/L		99
4) Vinyl chloride	62	4.826	4.826	0.488	590176	56.22	ug/L		100
5) Bromomethane	94	5.411	5.411	0.547	437044	57.91	ug/L		96
6) Chloroethane	64	5.538	5.557	0.560	398771	53.73	ug/L		99
7) Trichlorofluoromethane	101	5.904	5.904	0.597	673866	47.53	ug/L		99
8) Ethyl ether	59	6.232	6.232	0.631	155476	36.68	ug/L		86
9) Acetone	43	6.641	6.647	0.672	339745	220.25	ug/L		97
10) 1,1-Dichloroethylene	61	6.616	6.616	0.669	636215	49.27	ug/L		96
11) Iodomethane	142	6.866	6.866	0.695	2618818	221.13	ug/L		100
12) Acetonitrile	41	7.013	7.013	0.709	840974	1088.18	ug/L		99
13) Methyl acetate	74	7.025	7.025	0.711	162551	223.99	ug/L	#	85
14) Carbon disulfide	76	6.982	6.982	0.706	5722002	227.03	ug/L		100
15) Methylene chloride	84	7.202	7.202	0.729	361008	44.50	ug/L		95
16) tert-Butyl methyl ether	73	7.482	7.482	0.757	715453	41.95	ug/L		98
17) trans-1,2-Dichloroethy...	61	7.531	7.531	0.762	567553	50.69	ug/L		96
18) Hexane	57	7.793	7.799	0.788	569605	50.60	ug/L		94
19) Vinyl acetate	43	7.982	7.988	0.808	2870709	231.38	ug/L		97
20) 1,1-Dichloroethane	63	8.019	8.018	0.811	682298	52.68	ug/L		100
21) 2-Butanone	43	8.622	8.622	0.872	552792	213.90	ug/L		96
22) cis-1,2-Dichloroethylene	96	8.653	8.659	0.875	375834	48.28	ug/L		94
23) 2,2-Dichloropropane	77	8.671	8.671	0.877	484704	53.80	ug/L		93
24) Bromochloromethane	49	8.933	8.933	0.904	368421	51.95	ug/L		94
25) Chloroform	83	8.970	8.970	0.907	615532	50.65	ug/L		99
26) 1,1,1-Trichloroethane	97	9.226	9.226	0.933	573801	51.66	ug/L		98
27) Cyclohexane	56	9.305	9.305	0.941	704025	57.09	ug/L		98
28) 1,1-Dichloropropene	75	9.384	9.384	0.949	472002	47.57	ug/L		96
29) Carbon tetrachloride	117	9.409	9.415	0.952	452071	50.15	ug/L		100
31) 1,2-Dichloroethane	62	9.628	9.628	0.974	411152	47.20	ug/L		99
32) Benzene	78	9.628	9.628	0.974	1357302	53.85	ug/L		99
33) Cyclohexene	67	9.726	9.732	0.984	782382	51.85	ug/L		97
34) n-Butyl alcohol	56	10.006	10.012	1.012	768686	4274.05	ug/L		94
35) Trichloroethylene	95	10.268	10.268	1.039	376020	52.48	ug/L		98
36) 2-Pentanone	43	10.378	10.378	1.050	898409	214.01	ug/L		97

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W230.D
Acq On : 20 Dec 2022 20:17
Operator : JM6
InstName : VOA3
Sample : |W3VM221220-07|CCV|1|VOA|1|VOA8260D_L|
Misc : CCV/LCS 5ML N/A MIX[A]
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Dec 20 20:43:26 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
37)	1,2-Dichloropropane	63	10.524	10.530	1.065	358636	50.03	ug/L		98
38)	Methylcyclohexane	83	10.494	10.494	1.062	667819	54.56	ug/L		97
39)	Dibromomethane	93	10.664	10.664	1.079	167507	47.29	ug/L		96
40)	Bromodichloromethane	83	10.774	10.780	1.090	415158	50.04	ug/L		100
41)	2-Chloroethylvinyl ether	63	11.006	11.006	1.113	421073	125.36	ug/L		98
42)	cis-1,3-Dichloropropylene	75	11.225	11.231	1.136	480447	46.54	ug/L		99
44)	4-Methyl-2-pentanone	43	11.329	11.329	0.867	1277119	236.23	ug/L		96
46)	Toluene	91	11.603	11.603	0.888	1442817	51.31	ug/L		98
47)	trans-1,3-Dichloroprop...	75	11.774	11.780	0.902	400385	47.76	ug/L		98
48)	1,1,2-Trichloroethane	97	12.000	11.999	0.919	237070	47.49	ug/L		99
49)	2-Hexanone	43	12.182	12.182	0.933	898302	237.60	ug/L		95
50)	1,3-Dichloropropane	76	12.189	12.188	0.933	408673	47.77	ug/L		98
51)	Tetrachloroethylene	164	12.182	12.188	0.933	282227	50.46	ug/L		97
52)	Dibromochloromethane	129	12.451	12.457	0.953	239872	47.46	ug/L		100
53)	1,2-Dibromoethane	107	12.621	12.621	0.966	222614	46.54	ug/L		97
54)	Chlorobenzene	112	13.097	13.097	1.003	869018	50.65	ug/L		99
55)	1,1,1,2-Tetrachloroethane	131	13.152	13.152	1.007	293636	52.46	ug/L		99
56)	Ethylbenzene	91	13.158	13.158	1.007	1651849	49.66	ug/L		98
57)	m,p-Xylenes	106	13.268	13.267	1.016	1221069	99.94	ug/L		97
58)	o-Xylene	106	13.700	13.700	1.049	617229	51.06	ug/L		99
59)	Styrene	104	13.707	13.706	1.049	955578	47.98	ug/L		98
61)	Bromoform	173	13.975	13.975	0.903	125072	45.46	ug/L		99
62)	Isopropylbenzene	105	14.060	14.060	0.909	1620901	50.36	ug/L		99
64)	1,1,2,2-Tetrachloroethane	83	14.359	14.359	0.928	308005	48.21	ug/L		99
65)	1,2,3-Trichloropropane	110	14.444	14.444	0.933	83253	46.57	ug/L	#	86
66)	Bromobenzene	156	14.469	14.468	0.935	389444	49.31	ug/L		98
67)	n-Propylbenzene	91	14.487	14.487	0.936	2154346	51.89	ug/L		99
68)	1,3,5-Trimethylbenzene	105	14.639	14.639	0.946	1487812	51.13	ug/L		98
69)	2-Chlorotoluene	126	14.633	14.633	0.946	398441	52.25	ug/L		99
70)	4-Chlorotoluene	126	14.737	14.743	0.952	406184	50.67	ug/L		99
71)	tert-Butylbenzene	134	15.011	15.011	0.970	307824	51.87	ug/L		98
72)	1,2,4-Trimethylbenzene	105	15.054	15.054	0.973	1487772	48.77	ug/L		99
73)	sec-Butylbenzene	105	15.231	15.237	0.984	2049568	52.47	ug/L		98
74)	4-Isopropyltoluene	119	15.359	15.359	0.993	1668199	49.59	ug/L		99
75)	1,3-Dichlorobenzene	146	15.420	15.419	0.996	775877	48.61	ug/L		99
76)	1,4-Dichlorobenzene	146	15.505	15.505	1.002	770294	48.56	ug/L		99
77)	n-Butylbenzene	91	15.791	15.791	1.020	1817314	50.37	ug/L		98
78)	1,2-Dichlorobenzene	146	15.919	15.919	1.029	746320	48.33	ug/L		100
79)	1,2-Dibromo-3-chloropr...	157	16.779	16.785	1.084	58791	44.01	ug/L		97
80)	1,2,4-Trichlorobenzene	180	17.785	17.791	1.149	605725	42.64	ug/L		99
81)	Hexachlorobutadiene	225	17.950	17.949	1.160	415891	46.30	ug/L		99
82)	Naphthalene	128	18.163	18.163	1.174	1121821	42.05	ug/L		100
83)	1,2,3-Trichlorobenzene	180	18.492	18.492	1.195	561941	43.61	ug/L		100
85)	Acrolein		0.000	6.470	0.000	0	N.D.			
86)	Trichlorotrifluoroethane		0.000	6.586	0.000	0	N.D.			
87)	Isopropyl Alcohol		6.757	6.732	0.684	0m	N.D.	d		
88)	Allyl chloride		6.982	7.062	0.706	0m	N.D.	d		
89)	tert-Butyl Alcohol		7.220	7.220	0.730	0m	N.D.	d		
90)	Acrylonitrile		7.476	7.482	0.756	0m	N.D.	d		

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W230.D
Acq On : 20 Dec 2022 20:17
Operator : JM6
InstName : VOA3
Sample : |W3VM221220-07|CCV|1|VOA|1|VOA8260D_L|
Misc : CCV/LCS 5ML N/A MIX[A]
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Dec 20 20:43:26 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

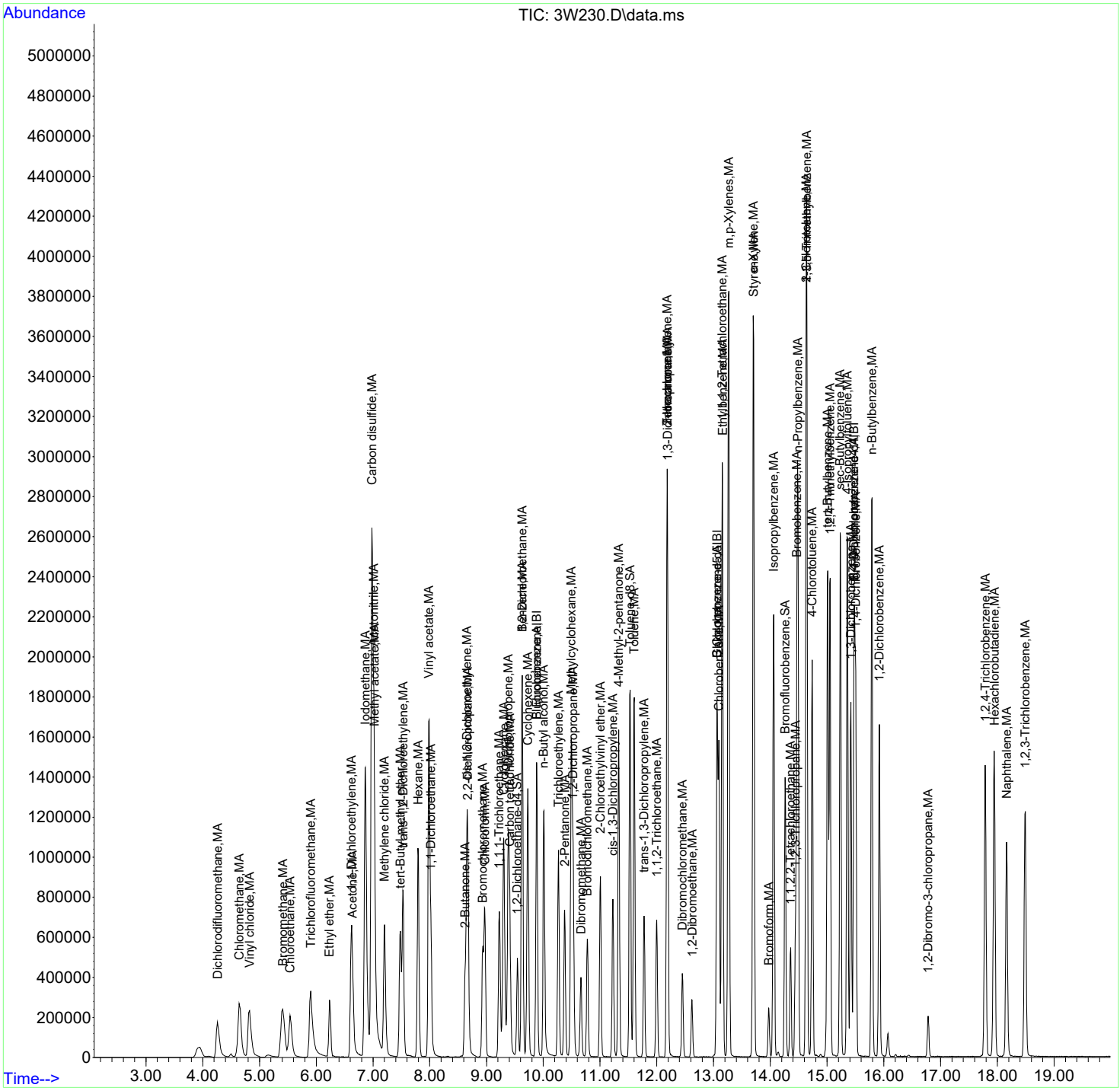
	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
91)	Isopropyl ether		7.988	7.988	0.808	0m	N.D.	d
92)	2-Chloro-1,3-butadiene		7.982	8.122	0.808	0m	N.D.	d
93)	Ethyl tert-butyl ether		0.000	8.391	0.000	0	N.D.	
94)	Ethyl acetate		8.622	8.628	0.872	0m	N.D.	d
95)	Propionitrile		8.622	8.720	0.872	0m	N.D.	d
96)	Methacrylonitrile		8.921	8.884	0.903	0m	N.D.	d
97)	Tetrahydrofuran		8.970	8.976	0.907	0m	N.D.	d
98)	Isobutyl alcohol		9.305	9.323	0.941	0m	N.D.	d
99)	Methyl tert-amyl ether		0.000	9.640	0.000	0	N.D.	
100)	Methyl methacrylate		10.494	10.506	1.062	0m	N.D.	d
101)	1,4-Dioxane		10.671	10.616	1.080	0m	N.D.	d
102)	2-Nitropropane		11.006	11.006	1.113	0m	N.D.	d
104)	Ethyl methacrylate		0.000	11.774	0.000	0	N.D.	
106)	1-Chlorohexane		13.005	12.963	0.840	0m	N.D.	d
107)	cis-1,4-Dichloro-2-butene		14.054	14.121	0.908	0m	N.D.	d
108)	Cyclohexanone		14.231	14.237	0.920	0m	N.D.	d
109)	trans-1,4-Dichloro-2-b...		14.487	14.408	0.936	0m	N.D.	d
110)	Pentachloroethane		15.078	15.084	0.974	0m	N.D.	d
111)	Benzyl chloride		15.791	15.627	1.020	0m	N.D.	d
112)	bis(2-Chloroisopropyl)...		15.926	16.023	1.029	0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W230.D
Acq On : 20 Dec 2022 20:17
Operator : JM6
InstName : VOA3
Sample : |W3VM221220-07|CCV|1|VOA|1|VOA8260D_L|
Misc : CCV/LCS 5ML N/A MIX[A]
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Dec 20 20:43:26 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE



Quality Control Data

Tune Report
GEL Laboratories, LLC

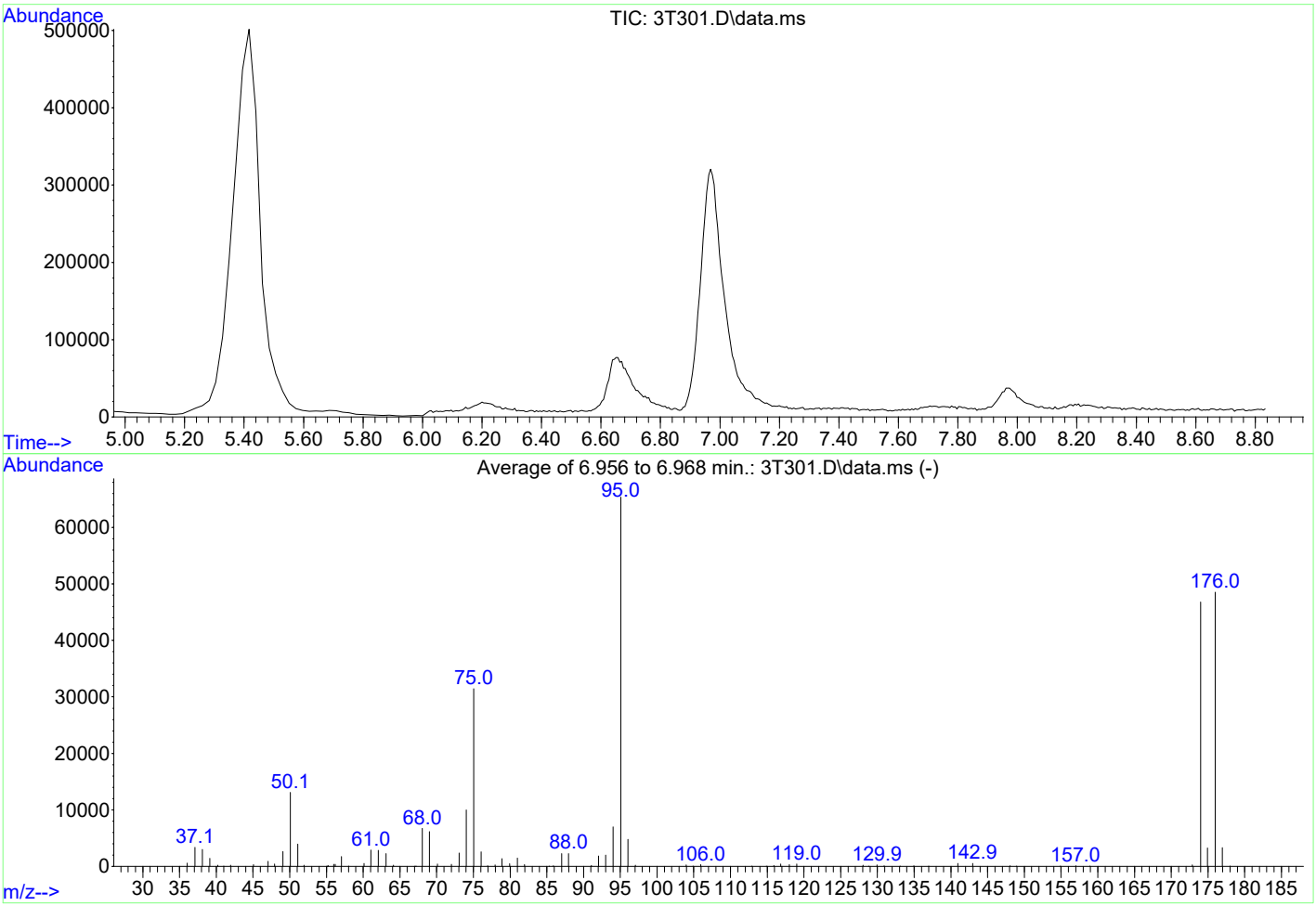
12/01/2022

Data Path : D:\MSDCHEM\1\Data\113022V3_ICAL\
Data File : 3T301.D
Acq On : 30 Nov 2022 11:39
Operator : JM6
Sample : |IVM221104-01|BFB1|1|VOA|1|VOA8260L|
Misc : BFB 1UL/10ML N/A
ALS Vial : 1 Sample Multiplier: 1

12/01/2022

Integration File:

Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Title : Volatile Organics SubList :
Last Update : Thu Dec 01 08:04:56 2022



AutoFind: Scans 218, 219, 220; Background Corrected with Scan 201

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
95	174	50	200	139.6	65355	PASS
96	95	5	9	7.3	4783	PASS
173	174	0.00	2	0.5	252	PASS
174	95	50	200	71.6	46824	PASS
175	174	5	9	6.9	3252	PASS
176	174	95	105	103.6	48533	PASS
177	176	5	10	6.9	3327	PASS

This report evaluates the Rel Abn% as passing only if it is greater
than the Lower Limit and lower than the Upper Limit.

Tune Report
GEL Laboratories, LLC

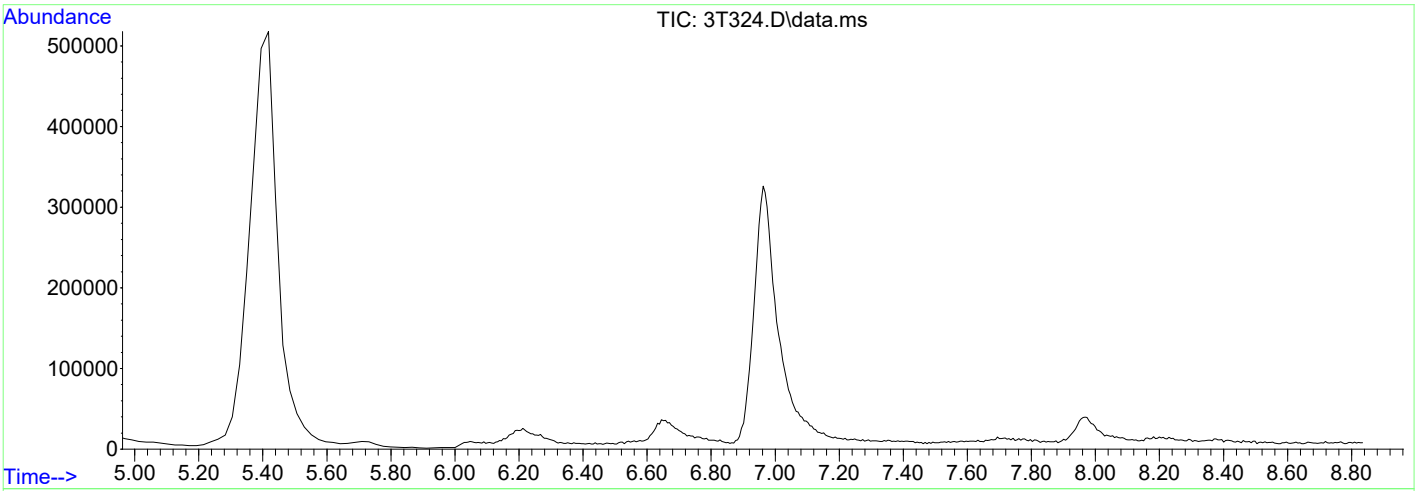
12/01/2022

Data Path : D:\MSDCHEM\1\Data\113022V3_ICAL\
Data File : 3T324.D
Acq On : 01 Dec 2022 07:47
Operator : JM6
Sample : |IVM221104-01|BFB1|1|VOA|1|VOA8260L|
Misc : BFB 1UL/10ML N/A
ALS Vial : 24 Sample Multiplier: 1

12/01/2022

Integration File:

Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Title : Volatile Organics SubList :
Last Update : Thu Dec 01 08:04:56 2022



AutoFind: Scans 218, 219, 220; Background Corrected with Scan 201

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
95	174	50	200	133.5	66491	PASS
96	95	5	9	7.1	4747	PASS
173	174	0.00	2	0.5	246	PASS
174	95	50	200	74.9	49800	PASS
175	174	5	9	8.0	4001	PASS
176	174	95	105	102.5	51043	PASS
177	176	5	10	6.3	3216	PASS

This report evaluates the Rel Abn% as passing only if it is greater than the Lower Limit and lower than the Upper Limit.

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**			**Matrix:**	**WATER**
Lab Sample ID:	**1205275617**				
Client Sample:	**QC for batch 2358452**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**MB for batch 2358452**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 12:39**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 12:39**				
Data File:	**121922V3\3W106BR.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
542-75-6	1,3-Dichloropropylene	U	0.500	ug/L	0.500	2.00
75-71-8	Dichlorodifluoromethane	U	0.355	ug/L	0.355	1.00
74-87-3	Chloromethane	U	0.333	ug/L	0.333	1.00
75-01-4	Vinyl chloride	U	0.333	ug/L	0.333	1.00
74-83-9	Bromomethane	U	0.337	ug/L	0.337	1.00
75-69-4	Trichlorofluoromethane	U	0.333	ug/L	0.333	1.00
75-35-4	1,1-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-09-2	Methylene chloride	J	0.840	ug/L	0.500	5.00
1634-04-4	tert-Butyl methyl ether	U	0.333	ug/L	0.333	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-34-3	1,1-Dichloroethane	U	0.333	ug/L	0.333	1.00
156-59-2	cis-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
67-66-3	Chloroform	U	0.333	ug/L	0.333	1.00
71-55-6	1,1,1-Trichloroethane	U	0.333	ug/L	0.333	1.00
56-23-5	Carbon tetrachloride	U	0.333	ug/L	0.333	1.00
107-06-2	1,2-Dichloroethane	U	0.333	ug/L	0.333	1.00
71-43-2	Benzene	U	0.333	ug/L	0.333	1.00
79-01-6	Trichloroethylene	U	0.333	ug/L	0.333	1.00
78-87-5	1,2-Dichloropropane	U	0.333	ug/L	0.333	1.00
74-95-3	Dibromomethane	U	0.333	ug/L	0.333	1.00
75-27-4	Bromodichloromethane	U	0.333	ug/L	0.333	1.00
108-88-3	Toluene	U	0.333	ug/L	0.333	1.00
79-00-5	1,1,2-Trichloroethane	U	0.333	ug/L	0.333	1.00
127-18-4	Tetrachloroethylene	U	0.333	ug/L	0.333	1.00
106-93-4	1,2-Dibromoethane	U	0.333	ug/L	0.333	1.00
108-90-7	Chlorobenzene	U	0.333	ug/L	0.333	1.00
100-41-4	Ethylbenzene	U	0.333	ug/L	0.333	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.333	ug/L	0.333	1.00
100-42-5	Styrene	U	0.333	ug/L	0.333	1.00
75-25-2	Bromoform	U	0.333	ug/L	0.333	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.333	ug/L	0.333	1.00
106-46-7	1,4-Dichlorobenzene	U	0.333	ug/L	0.333	1.00
107-02-8	Acrolein	U	1.67	ug/L	1.67	5.00
107-13-1	Acrylonitrile	U	1.67	ug/L	1.67	5.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	1.00	3.00
120-82-1	1,2,4-Trichlorobenzene	U	0.333	ug/L	0.333	1.00
95-50-1	1,2-Dichlorobenzene	U	0.333	ug/L	0.333	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**			**Matrix:**	**WATER**
Lab Sample ID:	**1205275617**				
Client Sample:	**QC for batch 2358452**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**MB for batch 2358452**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 12:39**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 12:39**				
Data File:	**121922V3\3W106BR.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	48.2	50.0	ug/L	96	(73%-129%)
Bromofluorobenzene	45.8	50.0	ug/L	92	(72%-125%)
Toluene-d8	49.8	50.0	ug/L	100	(75%-123%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	7.013	8.65	ug/L	0	J

Quantitation Report
GEL Laboratories, LLC

12/21/2022

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W106BR.D
Acq On : 19 Dec 2022 12:39
Operator : KP2
InstName : VOA3
Sample : |1205275617|2358452|1|VOA|1|VOA8260D_L|
Misc : BLANK 5ML N/A
ALS Vial : 6 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 19 13:12:09 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	96	9.884	9.884	1.000	1036794	50.00	ug/L	0.00
43) Chlorobenzene-d5	117	13.066	13.066	1.000	758949	50.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	152	15.480	15.480	1.000	455201	50.00	ug/L	0.00
84) B Fluorobenzene	96	9.884	9.884	1.000	1036747	50.00	ug/L	0.00
103) B Chlorobenzene-d5	117	13.066	13.060	1.000	758949	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	15.480	15.481	1.000	455201	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
30) 1,2-Dichloroethane-d4	67	9.549	9.549	0.966	152619	48.24	ug/L	0.00
45) Toluene-d8	98	11.530	11.530	0.882	1014523	49.83	ug/L	0.00
63) Bromofluorobenzene	95	14.261	14.261	0.921	391035	45.80	ug/L	0.00

Compound	Amount	Range	Recovery
30) 1,2-Dichloroethane-d4	50.000	73 - 129	96%
45) Toluene-d8	50.000	75 - 123	100%
63) Bromofluorobenzene	50.000	72 - 125	92%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		0.000	4.260	0.000	0	N.D.		
3) Chloromethane	50	4.662	4.644	0.472	237	N.D.		
4) Vinyl chloride		0.000	4.826	0.000	0	N.D.		
5) Bromomethane		0.000	5.411	0.000	0	N.D.		
6) Chloroethane		0.000	5.557	0.000	0	N.D.		
7) Trichlorofluoromethane		0.000	5.904	0.000	0	N.D.		
8) Ethyl ether		0.000	6.232	0.000	0	N.D.		
9) Acetone	43	6.659	6.647	0.674	1528	N.D.		
10) 1,1-Dichloroethylene		0.000	6.616	0.000	0	N.D.		
11) Iodomethane	142	6.872	6.866	0.695	180	N.D.		
12) Acetonitrile	41	7.013	7.013	0.709	130	N.D.		
13) Methyl acetate		0.000	7.025	0.000	0	N.D.		
14) Carbon disulfide	76	6.976	6.982	0.706	677	N.D.		
15) Methylene chloride	84	7.208	7.202	0.729	5127	0.84	ug/L	93
16) tert-Butyl methyl ether		0.000	7.482	0.000	0	N.D.		
17) trans-1,2-Dichloroethy...		0.000	7.531	0.000	0	N.D.		
18) Hexane	57	7.793	7.799	0.788	1048	N.D.		
19) Vinyl acetate	43	7.811	7.988	0.790	765	N.D.		
20) 1,1-Dichloroethane		0.000	8.018	0.000	0	N.D.		
21) 2-Butanone	43	8.628	8.622	0.873	327	N.D.		
22) cis-1,2-Dichloroethylene		0.000	8.659	0.000	0	N.D.		
23) 2,2-Dichloropropane		0.000	8.671	0.000	0	N.D.		
24) Bromochloromethane		0.000	8.933	0.000	0	N.D.		
25) Chloroform		0.000	8.970	0.000	0	N.D.		
26) 1,1,1-Trichloroethane		0.000	9.226	0.000	0	N.D.		
27) Cyclohexane		0.000	9.305	0.000	0	N.D.		
28) 1,1-Dichloropropene		0.000	9.384	0.000	0	N.D.		
29) Carbon tetrachloride		0.000	9.415	0.000	0	N.D.		
31) 1,2-Dichloroethane		0.000	9.628	0.000	0	N.D.		
32) Benzene	78	9.628	9.628	0.974	114	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W106BR.D
Acq On : 19 Dec 2022 12:39
Operator : KP2
InstName : VOA3
Sample : |1205275617|2358452|1|VOA|1|VOA8260D_L|
Misc : BLANK 5ML N/A
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 19 13:12:09 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
33) Cyclohexene		0.000	9.732	0.000	0	N.D.	
34) n-Butyl alcohol		0.000	10.012	0.000	0	N.D.	
35) Trichloroethylene		0.000	10.268	0.000	0	N.D.	
36) 2-Pentanone		0.000	10.378	0.000	0	N.D.	
37) 1,2-Dichloropropane		0.000	10.530	0.000	0	N.D.	
38) Methylcyclohexane		0.000	10.494	0.000	0	N.D.	
39) Dibromomethane		0.000	10.664	0.000	0	N.D.	
40) Bromodichloromethane		0.000	10.780	0.000	0	N.D.	
41) 2-Chloroethylvinyl ether		0.000	11.006	0.000	0	N.D.	
42) cis-1,3-Dichloropropylene		0.000	11.231	0.000	0	N.D.	
44) 4-Methyl-2-pentanone	43	11.329	11.329	0.867	111	N.D.	
46) Toluene	91	11.603	11.603	0.888	496	N.D.	
47) trans-1,3-Dichloroprop...		0.000	11.780	0.000	0	N.D.	
48) 1,1,2-Trichloroethane		0.000	11.999	0.000	0	N.D.	
49) 2-Hexanone	43	12.170	12.182	0.931	108	N.D.	
50) 1,3-Dichloropropane		0.000	12.188	0.000	0	N.D.	
51) Tetrachloroethylene		0.000	12.188	0.000	0	N.D.	
52) Dibromochloromethane		0.000	12.457	0.000	0	N.D.	
53) 1,2-Dibromoethane		0.000	12.621	0.000	0	N.D.	
54) Chlorobenzene	112	13.085	13.097	1.001	137	N.D.	
55) 1,1,1,2-Tetrachloroethane		0.000	13.152	0.000	0	N.D.	
56) Ethylbenzene	91	13.164	13.158	1.007	328	N.D.	
57) m,p-Xylenes		0.000	13.267	0.000	0	N.D.	
58) o-Xylene		0.000	13.700	0.000	0	N.D.	
59) Styrene	104	13.706	13.706	1.049	328	N.D.	
61) Bromoform		0.000	13.975	0.000	0	N.D.	
62) Isopropylbenzene	105	14.042	14.060	0.907	160	N.D.	
64) 1,1,2,2-Tetrachloroethane	83	14.261	14.359	0.921	165	N.D.	
65) 1,2,3-Trichloropropane		0.000	14.444	0.000	0	N.D.	
66) Bromobenzene		0.000	14.468	0.000	0	N.D.	
67) n-Propylbenzene	91	14.481	14.487	0.935	670	N.D.	
68) 1,3,5-Trimethylbenzene		0.000	14.639	0.000	0	N.D.	
69) 2-Chlorotoluene		0.000	14.633	0.000	0	N.D.	
70) 4-Chlorotoluene		0.000	14.743	0.000	0	N.D.	
71) tert-Butylbenzene		0.000	15.011	0.000	0	N.D.	
72) 1,2,4-Trimethylbenzene	105	15.048	15.054	0.972	323	N.D.	
73) sec-Butylbenzene	105	15.243	15.237	0.985	620	N.D.	
74) 4-Isopropyltoluene		0.000	15.359	0.000	0	N.D.	
75) 1,3-Dichlorobenzene	146	15.426	15.419	0.996	468	N.D.	
76) 1,4-Dichlorobenzene	146	15.499	15.505	1.001	1253	N.D.	
77) n-Butylbenzene	91	15.791	15.791	1.020	1069	N.D.	
78) 1,2-Dichlorobenzene	146	15.919	15.919	1.028	554	N.D.	
79) 1,2-Dibromo-3-chloropr...		0.000	16.785	0.000	0	N.D.	
80) 1,2,4-Trichlorobenzene	180	17.785	17.791	1.149	936	N.D.	
81) Hexachlorobutadiene		0.000	17.949	0.000	0	N.D.	
82) Naphthalene	128	18.157	18.163	1.173	2828	N.D.	
83) 1,2,3-Trichlorobenzene	180	18.510	18.492	1.196	917	N.D.	
85) Acrolein		0.000	6.470	0.000	0	N.D.	
86) Trichlorotrifluoroethane		0.000	6.586	0.000	0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W106BR.D
Acq On : 19 Dec 2022 12:39
Operator : KP2
InstName : VOA3
Sample : |1205275617|2358452|1|VOA|1|VOA8260D_L|
Misc : BLANK 5ML N/A
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 19 13:12:09 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

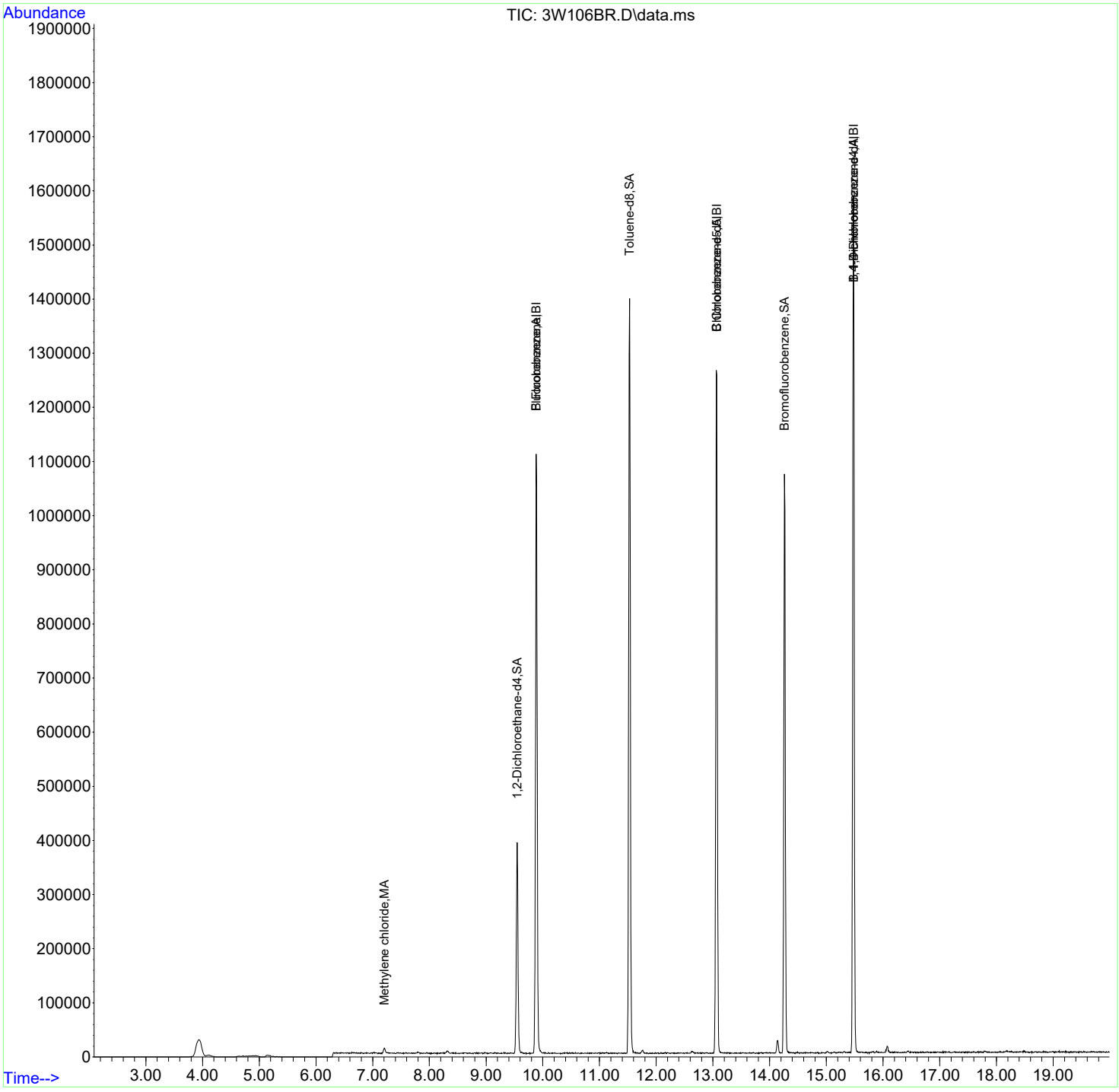
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
87) Isopropyl Alcohol	45	6.738	6.732	0.682	169	N.D.	
88) Allyl chloride		0.000	7.062	0.000	0	N.D.	
89) tert-Butyl Alcohol		0.000	7.220	0.000	0	N.D.	
90) Acrylonitrile		0.000	7.482	0.000	0	N.D.	
91) Isopropyl ether		0.000	7.988	0.000	0	N.D.	
92) 2-Chloro-1,3-butadiene		0.000	8.122	0.000	0	N.D.	
93) Ethyl tert-butyl ether		0.000	8.391	0.000	0	N.D.	
94) Ethyl acetate	43	8.628	8.628	0.873	327	N.D.	
95) Propionitrile		0.000	8.720	0.000	0	N.D.	
96) Methacrylonitrile		0.000	8.884	0.000	0	N.D.	
97) Tetrahydrofuran		0.000	8.976	0.000	0	N.D.	
98) Isobutyl alcohol		0.000	9.323	0.000	0	N.D.	
99) Methyl tert-amyl ether		0.000	9.640	0.000	0	N.D.	
100) Methyl methacrylate		0.000	10.506	0.000	0	N.D.	
101) 1,4-Dioxane		0.000	10.616	0.000	0	N.D.	
102) 2-Nitropropane		0.000	11.006	0.000	0	N.D.	
104) Ethyl methacrylate		0.000	11.774	0.000	0	N.D.	
106) 1-Chlorohexane		0.000	12.963	0.000	0	N.D.	
107) cis-1,4-Dichloro-2-butene		0.000	14.121	0.000	0	N.D.	
108) Cyclohexanone		0.000	14.237	0.000	0	N.D.	
109) trans-1,4-Dichloro-2-b...		0.000	14.408	0.000	0	N.D.	
110) Pentachloroethane		0.000	15.084	0.000	0	N.D.	
111) Benzyl chloride	91	15.627	15.627	1.009	1531	N.D.	
112) bis(2-Chloroisopropyl)...		0.000	16.023	0.000	0	N.D.	

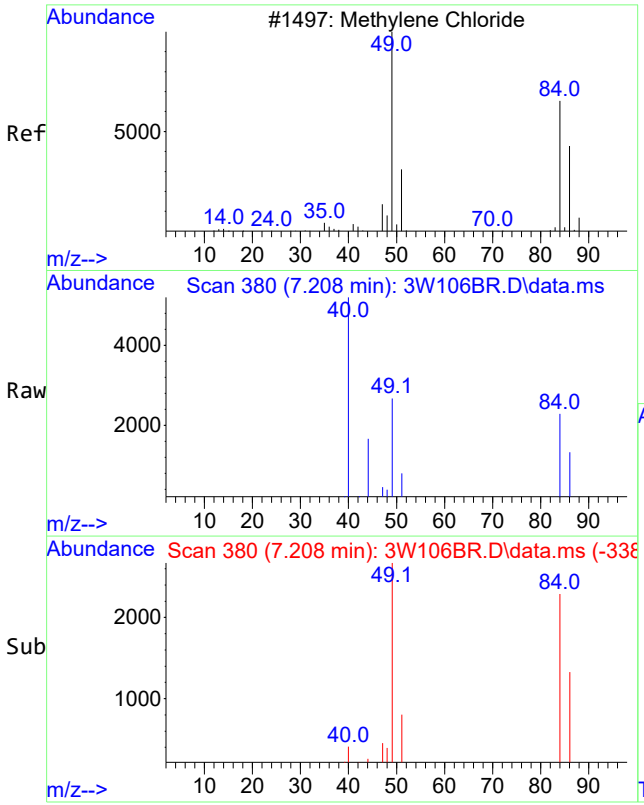
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W106BR.D
Acq On : 19 Dec 2022 12:39
Operator : KP2
InstName : VOA3
Sample : |1205275617|2358452|1|VOA|1|VOA8260D_L|
Misc : BLANK 5ML N/A
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 19 13:12:09 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

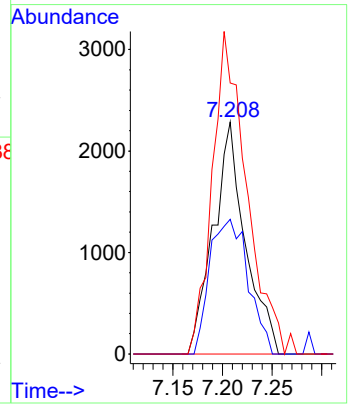




#15
Methylene chloride
Concen: 0.84 ug/L
RT: 7.208 min Scan# 380
Delta R.T. 0.006 min
Lab File: 3W106BR.D
Acq: 19 Dec 2022 12:39

Tgt Ion: 84 Resp: 5127

Ion	Ratio	Lower	Upper
84	100		
86	69.6	34.2	94.2
49	149.3	110.5	170.5



Library Search Compound Report
GEL Laboratories, LLC

12/21/2022

12/22/2022

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W106BR.D
Acq On : 19 Dec 2022 12:39
Operator : KP2
Sample : |1205275617|2358452|1|VOA|1|VOA8260D_L|
Misc : BLANK 5ML N/A
ALS Vial : 6 Sample Multiplier: 1

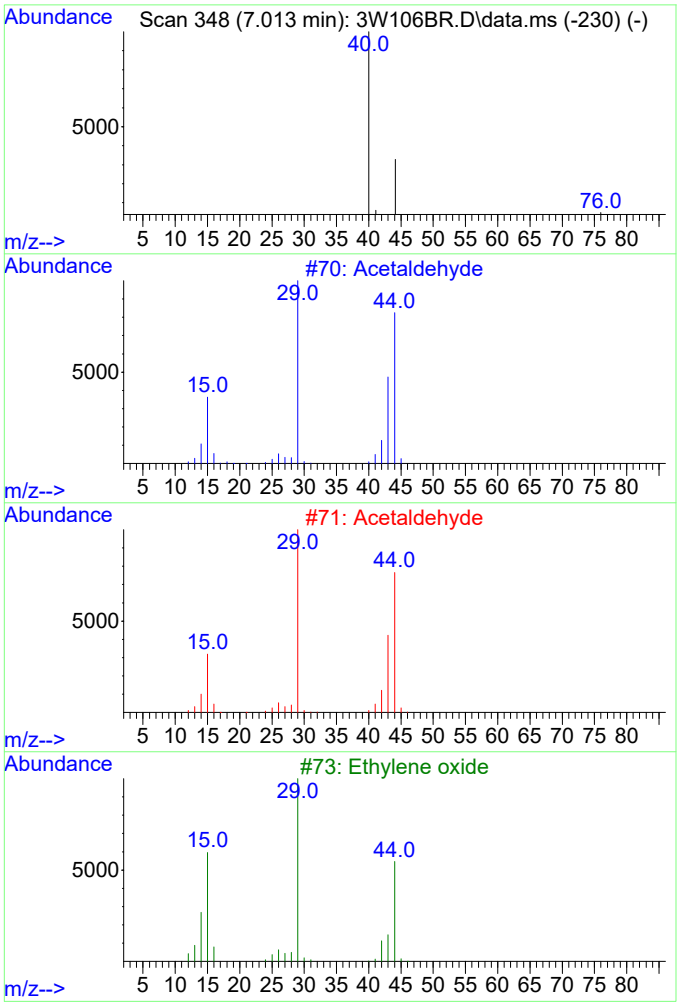
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

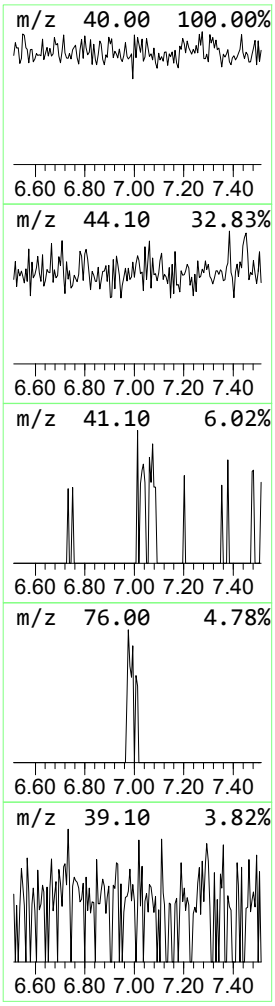
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

****
Peak Number 1 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.013	8.65 ug/L	393391	Fluorobenzene	9.884

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Acetaldehyde	44	C2H4O	000075-07-0	2
2	Acetaldehyde	44	C2H4O	000075-07-0	2
3	Ethylene oxide	44	C2H4O	000075-21-8	2
4	Ethylene oxide	44	C2H4O	000075-21-8	2
5	Ethylene oxide	44	C2H4O	000075-21-8	2





Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W106BR.D
Acq On : 19 Dec 2022 12:39
Operator : KP2
Sample : |1205275617|2358452|1|VOA|1|VOA8260D_L|
Misc : BLANK 5ML N/A
ALS Vial : 6 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

			(ug/L)		Internal Standard		
TIC Top Hit name	CAS #	RT	EstConc	Response	#	RT	Resp	Conc
unknown		7.013	8.7	393391	1	9.884	2273780	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**			**Matrix:**	**WATER**
Lab Sample ID:	**1205276793**				
Client Sample:	**QC for batch 2358452**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**MB for batch 2358452**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 21:36**	**Analyst:**	**JM6**	**Purge Vol:**	**5 mL**
Prep Date:	**12/20/2022 21:36**				
Data File:	**122022V3\3W233T.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
542-75-6	1,3-Dichloropropylene	U	0.500	ug/L	0.500	2.00
75-71-8	Dichlorodifluoromethane	U	0.355	ug/L	0.355	1.00
74-87-3	Chloromethane	U	0.333	ug/L	0.333	1.00
75-01-4	Vinyl chloride	U	0.333	ug/L	0.333	1.00
74-83-9	Bromomethane	U	0.337	ug/L	0.337	1.00
75-69-4	Trichlorofluoromethane	U	0.333	ug/L	0.333	1.00
75-35-4	1,1-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-09-2	Methylene chloride	U	0.500	ug/L	0.500	5.00
1634-04-4	tert-Butyl methyl ether	U	0.333	ug/L	0.333	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-34-3	1,1-Dichloroethane	U	0.333	ug/L	0.333	1.00
156-59-2	cis-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
67-66-3	Chloroform	U	0.333	ug/L	0.333	1.00
71-55-6	1,1,1-Trichloroethane	U	0.333	ug/L	0.333	1.00
56-23-5	Carbon tetrachloride	U	0.333	ug/L	0.333	1.00
107-06-2	1,2-Dichloroethane	U	0.333	ug/L	0.333	1.00
71-43-2	Benzene	U	0.333	ug/L	0.333	1.00
79-01-6	Trichloroethylene	U	0.333	ug/L	0.333	1.00
78-87-5	1,2-Dichloropropane	U	0.333	ug/L	0.333	1.00
74-95-3	Dibromomethane	U	0.333	ug/L	0.333	1.00
75-27-4	Bromodichloromethane	U	0.333	ug/L	0.333	1.00
108-88-3	Toluene	U	0.333	ug/L	0.333	1.00
79-00-5	1,1,2-Trichloroethane	U	0.333	ug/L	0.333	1.00
127-18-4	Tetrachloroethylene	U	0.333	ug/L	0.333	1.00
106-93-4	1,2-Dibromoethane	U	0.333	ug/L	0.333	1.00
108-90-7	Chlorobenzene	U	0.333	ug/L	0.333	1.00
100-41-4	Ethylbenzene	U	0.333	ug/L	0.333	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.333	ug/L	0.333	1.00
100-42-5	Styrene	U	0.333	ug/L	0.333	1.00
75-25-2	Bromoform	U	0.333	ug/L	0.333	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.333	ug/L	0.333	1.00
106-46-7	1,4-Dichlorobenzene	U	0.333	ug/L	0.333	1.00
107-02-8	Acrolein	U	1.67	ug/L	1.67	5.00
107-13-1	Acrylonitrile	U	1.67	ug/L	1.67	5.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	1.00	3.00
120-82-1	1,2,4-Trichlorobenzene	U	0.333	ug/L	0.333	1.00
95-50-1	1,2-Dichlorobenzene	U	0.333	ug/L	0.333	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**			**Matrix:**	**WATER**
Lab Sample ID:	**1205276793**				
Client Sample:	**QC for batch 2358452**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**MB for batch 2358452**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 21:36**	**Analyst:**	**JM6**	**Purge Vol:**	**5 mL**
Prep Date:	**12/20/2022 21:36**				
Data File:	**122022V3\3W233T.D**	**Column:**	**Serial Number: AB001**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	46.5	50.0	ug/L	93	(73%-129%)
Bromofluorobenzene	47.7	50.0	ug/L	95	(72%-125%)
Toluene-d8	51.1	50.0	ug/L	102	(75%-123%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.931	5.63	ug/L	0	J

Quantitation Report
GEL Laboratories, LLC

12/21/2022

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W233T.D
Acq On : 20 Dec 2022 21:36
Operator : JM6
InstName : VOA3
Sample : |1205276793|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL BLANK 5ML N/A
ALS Vial : 33 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 21 06:38:49 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	96	9.884	9.884	1.000	1320329	50.00	ug/L	0.00
43) Chlorobenzene-d5	117	13.060	13.066	1.000	956683	50.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	152	15.481	15.480	1.000	556670	50.00	ug/L	0.00
84) B Fluorobenzene	96	9.884	9.884	1.000	1320912	50.00	ug/L	0.00
103) B Chlorobenzene-d5	117	13.060	13.060	1.000	956683	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	15.481	15.481	1.000	556670	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
30) 1,2-Dichloroethane-d4	67	9.543	9.549	0.965	187280	46.48	ug/L	0.00
45) Toluene-d8	98	11.530	11.530	0.883	1309994	51.05	ug/L	0.00
63) Bromofluorobenzene	95	14.261	14.261	0.921	498392	47.74	ug/L	0.00

Compound	Amount	Range	Recovery
30) 1,2-Dichloroethane-d4	50.000	73 - 129	93%
45) Toluene-d8	50.000	75 - 123	102%
63) Bromofluorobenzene	50.000	72 - 125	95%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		0.000	4.260	0.000	0	N.D.		
3) Chloromethane	50	4.662	4.644	0.472	1673	N.D.		
4) Vinyl chloride		0.000	4.826	0.000	0	N.D.		
5) Bromomethane	94	5.265	5.411	0.533	227	N.D.		
6) Chloroethane		0.000	5.557	0.000	0	N.D.		
7) Trichlorofluoromethane		0.000	5.904	0.000	0	N.D.		
8) Ethyl ether		0.000	6.232	0.000	0	N.D.		
9) Acetone	43	6.653	6.647	0.673	2514	N.D.		
10) 1,1-Dichloroethylene		0.000	6.616	0.000	0	N.D.		
11) Iodomethane	142	6.873	6.866	0.695	100	N.D.		
12) Acetonitrile	41	7.019	7.013	0.710	593	N.D.		
13) Methyl acetate		0.000	7.025	0.000	0	N.D.		
14) Carbon disulfide	76	6.982	6.982	0.706	1020	N.D.		
15) Methylene chloride	84	7.202	7.202	0.729	3879	N.D.		
16) tert-Butyl methyl ether		0.000	7.482	0.000	0	N.D.		
17) trans-1,2-Dichloroethy...		0.000	7.531	0.000	0	N.D.		
18) Hexane	57	7.781	7.799	0.787	357	N.D.		
19) Vinyl acetate	43	7.976	7.988	0.807	130	N.D.		
20) 1,1-Dichloroethane		0.000	8.018	0.000	0	N.D.		
21) 2-Butanone	43	8.634	8.622	0.874	1857	N.D.		
22) cis-1,2-Dichloroethylene		0.000	8.659	0.000	0	N.D.		
23) 2,2-Dichloropropane		0.000	8.671	0.000	0	N.D.		
24) Bromochloromethane		0.000	8.933	0.000	0	N.D.		
25) Chloroform		0.000	8.970	0.000	0	N.D.		
26) 1,1,1-Trichloroethane		0.000	9.226	0.000	0	N.D.		
27) Cyclohexane		0.000	9.305	0.000	0	N.D.		
28) 1,1-Dichloropropene		0.000	9.384	0.000	0	N.D.		
29) Carbon tetrachloride		0.000	9.415	0.000	0	N.D.		
31) 1,2-Dichloroethane	62	9.616	9.628	0.973	155	N.D.		
32) Benzene	78	9.622	9.628	0.973	486	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W233T.D
Acq On : 20 Dec 2022 21:36
Operator : JM6
InstName : VOA3
Sample : |1205276793|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL BLANK 5ML N/A
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Dec 21 06:38:49 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
33) Cyclohexene	67	9.878	9.732	0.999	555	N.D.	
34) n-Butyl alcohol	56	10.030	10.012	1.015	106	N.D.	
35) Trichloroethylene		0.000	10.268	0.000	0	N.D.	
36) 2-Pentanone	43	10.421	10.378	1.054	112	N.D.	
37) 1,2-Dichloropropane		0.000	10.530	0.000	0	N.D.	
38) Methylcyclohexane		0.000	10.494	0.000	0	N.D.	
39) Dibromomethane		0.000	10.664	0.000	0	N.D.	
40) Bromodichloromethane		0.000	10.780	0.000	0	N.D.	
41) 2-Chloroethylvinyl ether		0.000	11.006	0.000	0	N.D.	
42) cis-1,3-Dichloropropylene		0.000	11.231	0.000	0	N.D.	
44) 4-Methyl-2-pentanone	43	11.335	11.329	0.868	229	N.D.	
46) Toluene	91	11.609	11.603	0.889	709	N.D.	
47) trans-1,3-Dichloroprop...		0.000	11.780	0.000	0	N.D.	
48) 1,1,2-Trichloroethane		0.000	11.999	0.000	0	N.D.	
49) 2-Hexanone	43	12.256	12.182	0.938	1301	N.D.	
50) 1,3-Dichloropropane		0.000	12.188	0.000	0	N.D.	
51) Tetrachloroethylene	164	12.189	12.188	0.933	365	N.D.	
52) Dibromochloromethane		0.000	12.457	0.000	0	N.D.	
53) 1,2-Dibromoethane		0.000	12.621	0.000	0	N.D.	
54) Chlorobenzene	112	13.097	13.097	1.003	590	N.D.	
55) 1,1,1,2-Tetrachloroethane		0.000	13.152	0.000	0	N.D.	
56) Ethylbenzene	91	13.152	13.158	1.007	447	N.D.	
57) m,p-Xylenes	106	13.274	13.267	1.016	468	N.D.	
58) o-Xylene		0.000	13.700	0.000	0	N.D.	
59) Styrene	104	13.707	13.706	1.049	205	N.D.	
61) Bromoform		0.000	13.975	0.000	0	N.D.	
62) Isopropylbenzene		0.000	14.060	0.000	0	N.D.	
64) 1,1,2,2-Tetrachloroethane	83	14.255	14.359	0.921	329	N.D.	
65) 1,2,3-Trichloropropane		0.000	14.444	0.000	0	N.D.	
66) Bromobenzene		0.000	14.468	0.000	0	N.D.	
67) n-Propylbenzene	91	14.487	14.487	0.936	580	N.D.	
68) 1,3,5-Trimethylbenzene	105	14.652	14.639	0.946	105	N.D.	
69) 2-Chlorotoluene		0.000	14.633	0.000	0	N.D.	
70) 4-Chlorotoluene	126	14.737	14.743	0.952	195	N.D.	
71) tert-Butylbenzene		0.000	15.011	0.000	0	N.D.	
72) 1,2,4-Trimethylbenzene	105	15.048	15.054	0.972	764	N.D.	
73) sec-Butylbenzene	105	15.231	15.237	0.984	126	N.D.	
74) 4-Isopropyltoluene	119	15.353	15.359	0.992	494	N.D.	
75) 1,3-Dichlorobenzene	146	15.426	15.419	0.996	774	N.D.	
76) 1,4-Dichlorobenzene	146	15.511	15.505	1.002	1169	N.D.	
77) n-Butylbenzene	91	15.804	15.791	1.021	1088	N.D.	
78) 1,2-Dichlorobenzene	146	15.926	15.919	1.029	286	N.D.	
79) 1,2-Dibromo-3-chloropr...		0.000	16.785	0.000	0	N.D.	
80) 1,2,4-Trichlorobenzene	180	17.797	17.791	1.150	1219	N.D.	
81) Hexachlorobutadiene	225	17.950	17.949	1.159	107	N.D.	
82) Naphthalene	128	18.175	18.163	1.174	3076	N.D.	
83) 1,2,3-Trichlorobenzene	180	18.480	18.492	1.194	596	N.D.	
85) Acrolein		0.000	6.470	0.000	0	N.D.	
86) Trichlorotrifluoroethane		0.000	6.586	0.000	0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W233T.D
Acq On : 20 Dec 2022 21:36
Operator : JM6
InstName : VOA3
Sample : |1205276793|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL BLANK 5ML N/A
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Dec 21 06:38:49 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

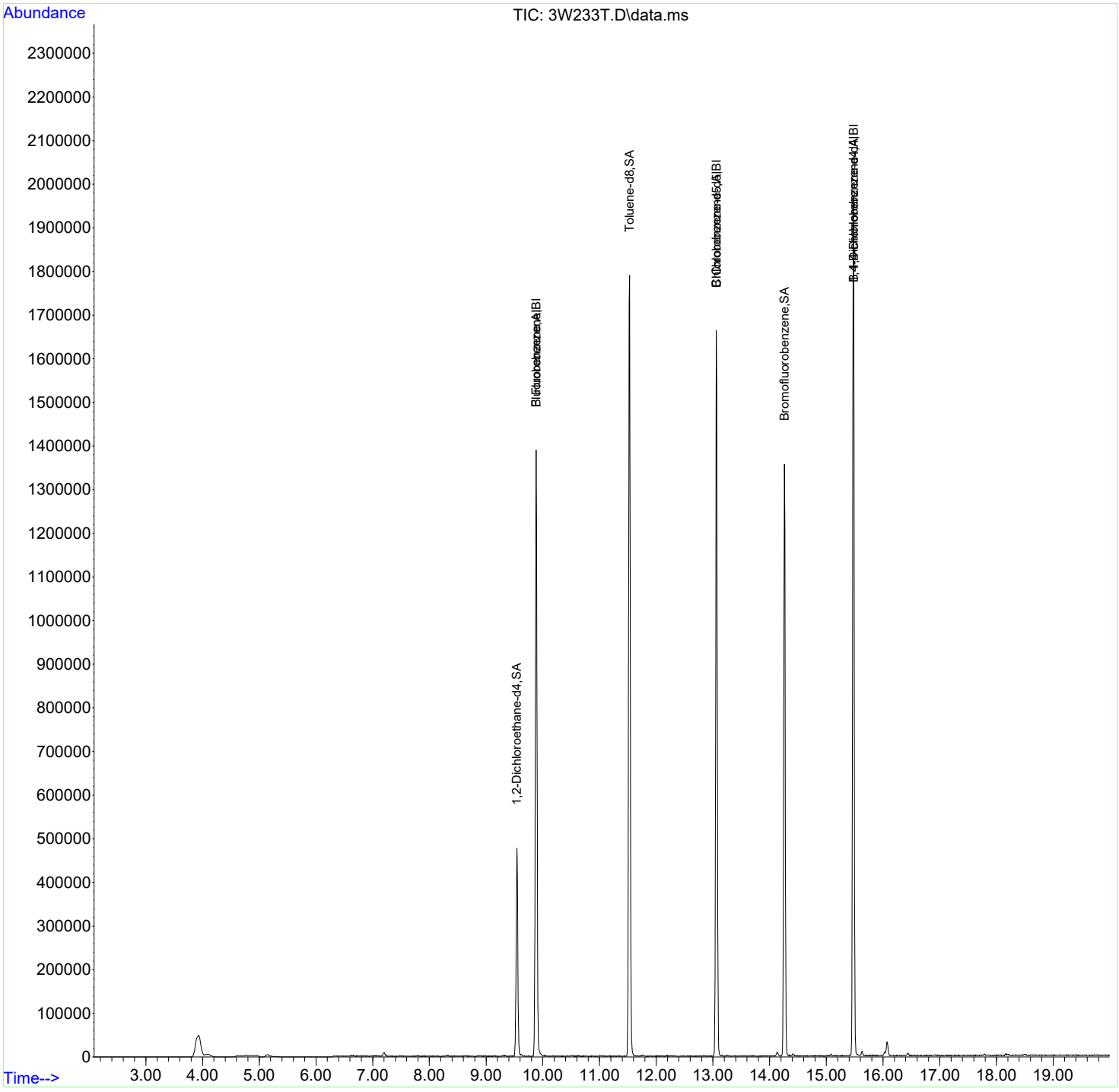
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
87) Isopropyl Alcohol	45	6.720	6.732	0.680	217	N.D.	
88) Allyl chloride		0.000	7.062	0.000	0	N.D.	
89) tert-Butyl Alcohol	59	7.214	7.220	0.730	1164	N.D.	
90) Acrylonitrile	53	7.458	7.482	0.755	100	N.D.	
91) Isopropyl ether		0.000	7.988	0.000	0	N.D.	
92) 2-Chloro-1,3-butadiene		0.000	8.122	0.000	0	N.D.	
93) Ethyl tert-butyl ether		0.000	8.391	0.000	0	N.D.	
94) Ethyl acetate	43	8.634	8.628	0.874	1857	N.D.	
95) Propionitrile	54	8.720	8.720	0.882	181	N.D.	
96) Methacrylonitrile		0.000	8.884	0.000	0	N.D.	
97) Tetrahydrofuran		0.000	8.976	0.000	0	N.D.	
98) Isobutyl alcohol	43	9.317	9.323	0.943	794	N.D.	
99) Methyl tert-amyl ether		0.000	9.640	0.000	0	N.D.	
100) Methyl methacrylate	69	10.506	10.506	1.063	651	N.D.	
101) 1,4-Dioxane	88	10.628	10.616	1.075	205	N.D.	
102) 2-Nitropropane	43	11.000	11.006	1.113	221	N.D.	
104) Ethyl methacrylate	69	11.780	11.774	0.902	1133	N.D.	
106) 1-Chlorohexane		0.000	12.963	0.000	0	N.D.	
107) cis-1,4-Dichloro-2-butene	53	14.121	14.121	0.912	953	N.D.	
108) Cyclohexanone	42	14.243	14.237	0.920	1615	N.D.	
109) trans-1,4-Dichloro-2-b...	53	14.414	14.408	0.931	1235	N.D.	
110) Pentachloroethane	167	15.090	15.084	0.975	329	N.D.	
111) Benzyl chloride	91	15.627	15.627	1.009	7916	N.D.	
112) bis(2-Chloroisopropyl)...	121	16.035	16.023	1.036	949	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W233T.D
Acq On : 20 Dec 2022 21:36
Operator : JM6
InstName : VOA3
Sample : |1205276793|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL BLANK 5ML N/A
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Dec 21 06:38:49 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE



Library Search Compound Report
GEL Laboratories, LLC

12/21/2022

12/22/2022

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W233T.D
Acq On : 20 Dec 2022 21:36
Operator : JM6
Sample : |1205276793|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL BLANK 5ML N/A
ALS Vial : 33 Sample Multiplier: 1

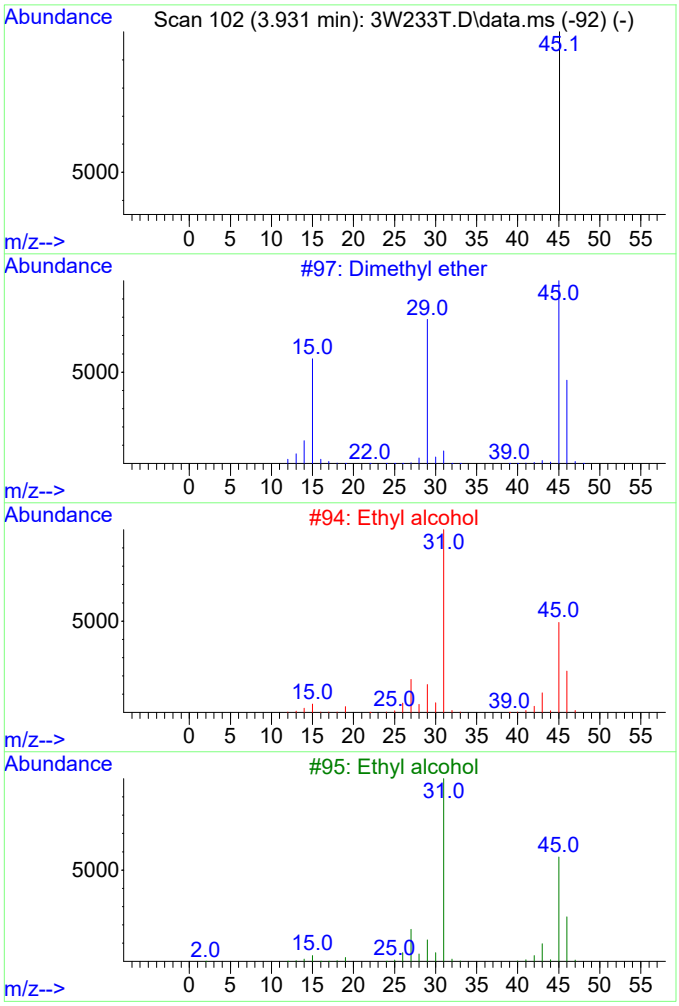
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

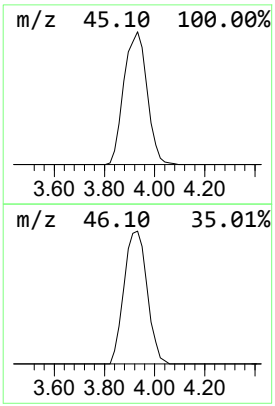
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

****
Peak Number 1 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.931	5.63 ug/L	326720	Fluorobenzene	9.884

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dimethyl ether	46	C2H6O	000115-10-6	5
2	Ethyl alcohol	46	C2H6O	000064-17-5	4
3	Ethyl alcohol	46	C2H6O	000064-17-5	4
4	Ethyl alcohol	46	C2H6O	000064-17-5	4
5	Dimethyl ether	46	C2H6O	000115-10-6	2





Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W233T.D
Acq On : 20 Dec 2022 21:36
Operator : JM6
Sample : |1205276793|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL BLANK 5ML N/A
ALS Vial : 33 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: default.P

			(ug/L)		Internal Standard		
TIC Top Hit name	CAS #	RT	EstConc	Response	#	RT	Resp	Conc
unknown		3.931	5.6	326720	1	9.884	2902700	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**			**Matrix:**	**WATER**
Lab Sample ID:	**1205275615**				
Client Sample:	**QC for batch 2358452**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**LCS for batch 2358452**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 10:52**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 10:52**				
Data File:	**121922V3\3W102BR.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
542-75-6	1,3-Dichloropropylene		110	ug/L	0.500	2.00
75-71-8	Dichlorodifluoromethane		54.2	ug/L	0.355	1.00
74-87-3	Chloromethane		62.7	ug/L	0.333	1.00
75-01-4	Vinyl chloride		67.2	ug/L	0.333	1.00
74-83-9	Bromomethane		67.4	ug/L	0.337	1.00
75-69-4	Trichlorofluoromethane		56.2	ug/L	0.333	1.00
75-35-4	1,1-Dichloroethylene		55.3	ug/L	0.333	1.00
75-09-2	Methylene chloride	B	50.3	ug/L	0.500	5.00
1634-04-4	tert-Butyl methyl ether		47.5	ug/L	0.333	1.00
156-60-5	trans-1,2-Dichloroethylene		53.7	ug/L	0.333	1.00
75-34-3	1,1-Dichloroethane		56.1	ug/L	0.333	1.00
156-59-2	cis-1,2-Dichloroethylene		53.1	ug/L	0.333	1.00
67-66-3	Chloroform		55.3	ug/L	0.333	1.00
71-55-6	1,1,1-Trichloroethane		57.1	ug/L	0.333	1.00
56-23-5	Carbon tetrachloride		59.0	ug/L	0.333	1.00
107-06-2	1,2-Dichloroethane		53.7	ug/L	0.333	1.00
71-43-2	Benzene		59.4	ug/L	0.333	1.00
79-01-6	Trichloroethylene		55.9	ug/L	0.333	1.00
78-87-5	1,2-Dichloropropane		54.5	ug/L	0.333	1.00
74-95-3	Dibromomethane		55.1	ug/L	0.333	1.00
75-27-4	Bromodichloromethane		60.0	ug/L	0.333	1.00
108-88-3	Toluene		54.8	ug/L	0.333	1.00
79-00-5	1,1,2-Trichloroethane		52.4	ug/L	0.333	1.00
127-18-4	Tetrachloroethylene		56.8	ug/L	0.333	1.00
106-93-4	1,2-Dibromoethane		54.4	ug/L	0.333	1.00
108-90-7	Chlorobenzene		55.4	ug/L	0.333	1.00
100-41-4	Ethylbenzene		53.6	ug/L	0.333	1.00
179601-23-1	m,p-Xylenes		111	ug/L	0.500	2.00
95-47-6	o-Xylene		55.2	ug/L	0.333	1.00
100-42-5	Styrene		53.3	ug/L	0.333	1.00
75-25-2	Bromoform		68.9	ug/L	0.333	1.00
79-34-5	1,1,2,2-Tetrachloroethane		55.0	ug/L	0.333	1.00
106-46-7	1,4-Dichlorobenzene		55.1	ug/L	0.333	1.00
107-02-8	Acrolein	U	1.67	ug/L	1.67	5.00
107-13-1	Acrylonitrile	U	1.67	ug/L	1.67	5.00
1330-20-7	Xylenes (total)		166	ug/L	1.00	3.00
120-82-1	1,2,4-Trichlorobenzene		51.0	ug/L	0.333	1.00
95-50-1	1,2-Dichlorobenzene		54.1	ug/L	0.333	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**			**Matrix:**	**WATER**
Lab Sample ID:	**1205275615**				
Client Sample:	**QC for batch 2358452**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**LCS for batch 2358452**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 10:52**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 10:52**				
Data File:	**121922V3\3W102BR.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	48.3	50.0	ug/L	97	(73%-129%)
Bromofluorobenzene	46.4	50.0	ug/L	93	(72%-125%)
Toluene-d8	50.1	50.0	ug/L	100	(75%-123%)

Quantitation Report
GEL Laboratories, LLC

12/21/2022

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W102BR.D
Acq On : 19 Dec 2022 10:52
Operator : KP2
InstName : VOA3
Sample : |1205275615|2358452|1|VOA|1|VOA8260D_L|
Misc : CCV/LCS 5ML N/A MIX[A]
ALS Vial : 2 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 19 11:24:49 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		QValue
Internal Standards									Dev(Min)
1) Fluorobenzene	96	9.878	9.884	1.000	1213829	50.00	ug/L		0.00
43) Chlorobenzene-d5	117	13.060	13.066	1.000	903394	50.00	ug/L		0.00
60) 1,4-Dichlorobenzene-d4	152	15.480	15.480	1.000	529603	50.00	ug/L		0.00
84) B Fluorobenzene	96	9.878	9.884	1.000	1214537	50.00	ug/L		0.00
103) B Chlorobenzene-d5	117	13.060	13.060	1.000	903394	50.00	ug/L		0.00
105) B 1,4-Dichlorobenzene-d4	152	15.480	15.481	1.000	529603	50.00	ug/L		0.00
System Monitoring Compounds									Dev(Min)
30) 1,2-Dichloroethane-d4	67	9.543	9.549	0.966	178831	48.28	ug/L		0.00
45) Toluene-d8	98	11.524	11.530	0.882	1214457	50.11	ug/L		0.00
63) Bromofluorobenzene	95	14.261	14.261	0.921	461061	46.42	ug/L		0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		QValue
2) Dichlorodifluoromethane	85	4.260	4.260	0.431	500292	54.21	ug/L		100
3) Chloromethane	50	4.644	4.644	0.470	720663	62.70	ug/L		99
4) Vinyl chloride	62	4.826	4.826	0.489	621097	67.23	ug/L		100
5) Bromomethane	94	5.392	5.411	0.546	447421	67.37	ug/L		98
6) Chloroethane	64	5.538	5.557	0.561	414496	63.46	ug/L		99
7) Trichlorofluoromethane	101	5.885	5.904	0.596	701160	56.20	ug/L		100
8) Ethyl ether	59	6.232	6.232	0.631	191533	51.35	ug/L		82
9) Acetone	43	6.641	6.647	0.672	385323	283.85	ug/L		97
10) 1,1-Dichloroethylene	61	6.610	6.616	0.669	628132	55.27	ug/L		98
11) Iodomethane	142	6.854	6.866	0.694	2665696	255.78	ug/L		100
12) Acetonitrile	41	7.007	7.013	0.709	918947	1351.16	ug/L		99
13) Methyl acetate	74	7.019	7.025	0.711	170092	266.33	ug/L	#	89
14) Carbon disulfide	76	6.976	6.982	0.706	5725760	258.14	ug/L		100
15) Methylene chloride	84	7.196	7.202	0.728	359014	50.28	ug/L		96
16) tert-Butyl methyl ether	73	7.476	7.482	0.757	713234	47.52	ug/L		97
17) trans-1,2-Dichloroethy...	61	7.525	7.531	0.762	528547	53.65	ug/L		98
18) Hexane	57	7.793	7.799	0.789	534142	53.91	ug/L		94
19) Vinyl acetate	43	7.976	7.988	0.807	2910117	266.53	ug/L		98
20) 1,1-Dichloroethane	63	8.012	8.018	0.811	639609	56.12	ug/L		99
21) 2-Butanone	43	8.616	8.622	0.872	587287	258.22	ug/L		97
22) cis-1,2-Dichloroethylene	96	8.646	8.659	0.875	363493	53.06	ug/L		97
23) 2,2-Dichloropropane	77	8.665	8.671	0.877	447127	56.40	ug/L		93
24) Bromochloromethane	49	8.927	8.933	0.904	358895	57.51	ug/L		98
25) Chloroform	83	8.963	8.970	0.907	591436	55.30	ug/L		100
26) 1,1,1-Trichloroethane	97	9.220	9.226	0.933	558181	57.10	ug/L		97
27) Cyclohexane	56	9.299	9.305	0.941	649974	59.90	ug/L		98
28) 1,1-Dichloropropene	75	9.378	9.384	0.949	448643	51.38	ug/L		96
29) Carbon tetrachloride	117	9.402	9.415	0.952	467637	58.95	ug/L		99
31) 1,2-Dichloroethane	62	9.622	9.628	0.974	411643	53.70	ug/L		100
32) Benzene	78	9.622	9.628	0.974	1318388	59.44	ug/L		100
33) Cyclohexene	67	9.726	9.732	0.985	733091	55.21	ug/L		98
34) n-Butyl alcohol	56	10.006	10.012	1.013	780463	4931.06	ug/L		95
35) Trichloroethylene	95	10.262	10.268	1.039	352556	55.92	ug/L		100
36) 2-Pentanone	43	10.372	10.378	1.050	957850	259.27	ug/L		97

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W102BR.D
Acq On : 19 Dec 2022 10:52
Operator : KP2
InstName : VOA3
Sample : |1205275615|2358452|1|VOA|1|VOA8260D_L|
Misc : CCV/LCS 5ML N/A MIX[A]
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 19 11:24:49 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
37)	1,2-Dichloropropane	63	10.524	10.530	1.065	343653	54.48	ug/L		98
38)	Methylcyclohexane	83	10.488	10.494	1.062	631124	58.59	ug/L		98
39)	Dibromomethane	93	10.658	10.664	1.079	171865	55.13	ug/L		97
40)	Bromodichloromethane	83	10.774	10.780	1.091	437929	59.98	ug/L		99
41)	2-Chloroethylvinyl ether	63	11.000	11.006	1.114	422611	142.97	ug/L		98
42)	cis-1,3-Dichloropropylene	75	11.225	11.231	1.136	489703	53.90	ug/L		97
44)	4-Methyl-2-pentanone	43	11.329	11.329	0.867	1313342	269.78	ug/L		96
46)	Toluene	91	11.597	11.603	0.888	1388116	54.82	ug/L		98
47)	trans-1,3-Dichloroprop...	75	11.774	11.780	0.902	422904	56.02	ug/L		97
48)	1,1,2-Trichloroethane	97	11.993	11.999	0.918	235723	52.44	ug/L		97
49)	2-Hexanone	43	12.182	12.182	0.933	934515	274.50	ug/L		96
50)	1,3-Dichloropropane	76	12.182	12.188	0.933	421612	54.74	ug/L		100
51)	Tetrachloroethylene	164	12.182	12.188	0.933	285986	56.78	ug/L		98
52)	Dibromochloromethane	129	12.451	12.457	0.953	282903	62.16	ug/L		100
53)	1,2-Dibromoethane	107	12.615	12.621	0.966	234078	54.35	ug/L		99
54)	Chlorobenzene	112	13.091	13.097	1.002	855281	55.36	ug/L		98
55)	1,1,1,2-Tetrachloroethane	131	13.152	13.152	1.007	302938	60.10	ug/L		100
56)	Ethylbenzene	91	13.152	13.158	1.007	1604642	53.57	ug/L		99
57)	m,p-Xylenes	106	13.261	13.267	1.015	1215831	110.51	ug/L		98
58)	o-Xylene	106	13.700	13.700	1.049	601079	55.22	ug/L		99
59)	Styrene	104	13.706	13.706	1.049	956629	53.34	ug/L		98
61)	Bromoform	173	13.969	13.975	0.902	168857	68.89	ug/L		99
62)	Isopropylbenzene	105	14.060	14.060	0.908	1548669	54.01	ug/L		100
64)	1,1,2,2-Tetrachloroethane	83	14.359	14.359	0.928	313183	55.03	ug/L		99
65)	1,2,3-Trichloropropane	110	14.444	14.444	0.933	83970	52.72	ug/L	#	90
66)	Bromobenzene	156	14.469	14.468	0.935	385585	54.80	ug/L		98
67)	n-Propylbenzene	91	14.487	14.487	0.936	2091868	56.56	ug/L		99
68)	1,3,5-Trimethylbenzene	105	14.639	14.639	0.946	1460330	56.33	ug/L		97
69)	2-Chlorotoluene	126	14.633	14.633	0.945	391744	57.67	ug/L		100
70)	4-Chlorotoluene	126	14.737	14.743	0.952	396861	55.57	ug/L		98
71)	tert-Butylbenzene	134	15.011	15.011	0.970	295568	55.90	ug/L		99
72)	1,2,4-Trimethylbenzene	105	15.054	15.054	0.972	1453436	53.48	ug/L		99
73)	sec-Butylbenzene	105	15.237	15.237	0.984	1971259	56.64	ug/L		99
74)	4-Isopropyltoluene	119	15.359	15.359	0.992	1629870	54.39	ug/L		100
75)	1,3-Dichlorobenzene	146	15.420	15.419	0.996	783147	55.08	ug/L		99
76)	1,4-Dichlorobenzene	146	15.505	15.505	1.002	778713	55.10	ug/L		99
77)	n-Butylbenzene	91	15.791	15.791	1.020	1803264	56.10	ug/L		98
78)	1,2-Dichlorobenzene	146	15.919	15.919	1.028	744029	54.08	ug/L		99
79)	1,2-Dibromo-3-chloropr...	157	16.785	16.785	1.084	72956	61.30	ug/L		100
80)	1,2,4-Trichlorobenzene	180	17.785	17.791	1.149	645673	51.02	ug/L		99
81)	Hexachlorobutadiene	225	17.950	17.949	1.159	406021	50.74	ug/L		99
82)	Naphthalene	128	18.163	18.163	1.173	1164837	49.01	ug/L		100
83)	1,2,3-Trichlorobenzene	180	18.492	18.492	1.195	584936	50.95	ug/L		100
85)	Acrolein		0.000	6.470	0.000	0	N.D.			
86)	Trichlorotrifluoroethane		0.000	6.586	0.000	0	N.D.			
87)	Isopropyl Alcohol		6.726	6.732	0.681	0m	N.D.	d		
88)	Allyl chloride		6.976	7.062	0.706	0m	N.D.	d		
89)	tert-Butyl Alcohol		7.214	7.220	0.730	0m	N.D.	d		
90)	Acrylonitrile		7.476	7.482	0.757	0m	N.D.	d		

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W102BR.D
Acq On : 19 Dec 2022 10:52
Operator : KP2
InstName : VOA3
Sample : |1205275615|2358452|1|VOA|1|VOA8260D_L|
Misc : CCV/LCS 5ML N/A MIX[A]
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 19 11:24:49 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

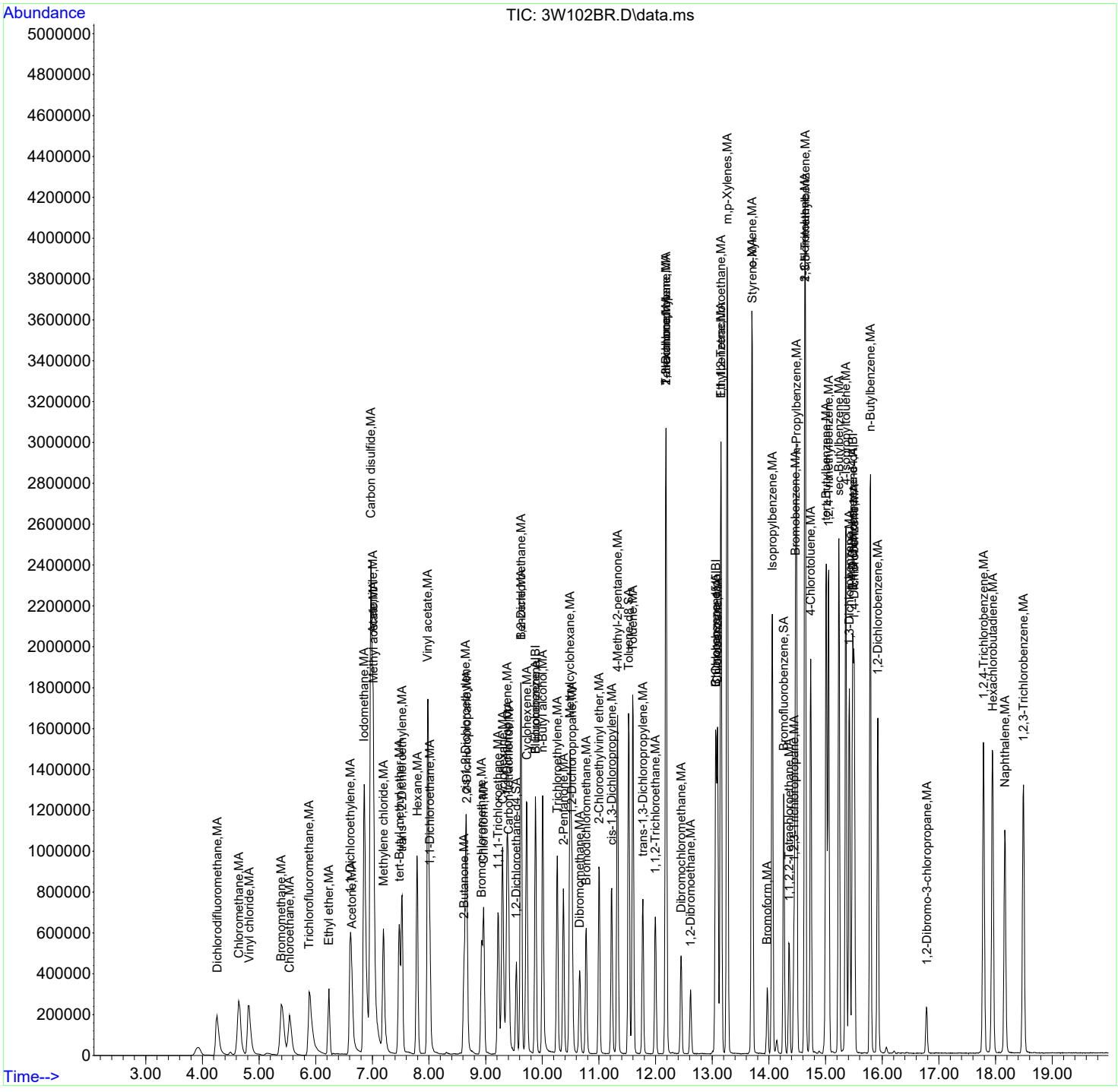
	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
91)	Isopropyl ether		7.976	7.988	0.807	0m	N.D.	d
92)	2-Chloro-1,3-butadiene		7.982	8.122	0.808	0m	N.D.	d
93)	Ethyl tert-butyl ether		8.305	8.391	0.841	0m	N.D.	d
94)	Ethyl acetate		8.616	8.628	0.872	0m	N.D.	d
95)	Propionitrile		8.616	8.720	0.872	0m	N.D.	d
96)	Methacrylonitrile		8.921	8.884	0.903	0m	N.D.	d
97)	Tetrahydrofuran		8.963	8.976	0.907	0m	N.D.	d
98)	Isobutyl alcohol		9.299	9.323	0.941	0m	N.D.	d
99)	Methyl tert-amyl ether		0.000	9.640	0.000	0	N.D.	
100)	Methyl methacrylate		10.494	10.506	1.062	0m	N.D.	d
101)	1,4-Dioxane		10.664	10.616	1.080	0m	N.D.	d
102)	2-Nitropropane		11.128	11.006	1.127	0m	N.D.	d
104)	Ethyl methacrylate		0.000	11.774	0.000	0	N.D.	
106)	1-Chlorohexane		13.005	12.963	0.840	0m	N.D.	d
107)	cis-1,4-Dichloro-2-butene		14.060	14.121	0.908	0m	N.D.	d
108)	Cyclohexanone		14.231	14.237	0.919	0m	N.D.	d
109)	trans-1,4-Dichloro-2-b...		14.487	14.408	0.936	0m	N.D.	d
110)	Pentachloroethane		15.096	15.084	0.975	0m	N.D.	d
111)	Benzyl chloride		15.791	15.627	1.020	0m	N.D.	d
112)	bis(2-Chloroisopropyl)...		15.926	16.023	1.029	0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W102BR.D
Acq On : 19 Dec 2022 10:52
Operator : KP2
InstName : VOA3
Sample : |1205275615|2358452|1|VOA|1|VOA8260D_L|
Misc : CCV/LCS 5ML N/A MIX[A]
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 19 11:24:49 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**			**Matrix:**	**WATER**
Lab Sample ID:	**1205275616**				
Client Sample:	**QC for batch 2358452**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**LCS for batch 2358452**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 11:45**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 11:45**				
Data File:	**121922V3\3W104BR.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
542-75-6	1,3-Dichloropropylene	U	0.500	ug/L	0.500	2.00
75-71-8	Dichlorodifluoromethane	U	0.355	ug/L	0.355	1.00
74-87-3	Chloromethane	U	0.333	ug/L	0.333	1.00
75-01-4	Vinyl chloride	U	0.333	ug/L	0.333	1.00
74-83-9	Bromomethane	U	0.337	ug/L	0.337	1.00
75-69-4	Trichlorofluoromethane	U	0.333	ug/L	0.333	1.00
75-35-4	1,1-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-09-2	Methylene chloride	U	0.500	ug/L	0.500	5.00
1634-04-4	tert-Butyl methyl ether	U	0.333	ug/L	0.333	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-34-3	1,1-Dichloroethane	U	0.333	ug/L	0.333	1.00
156-59-2	cis-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
67-66-3	Chloroform	U	0.333	ug/L	0.333	1.00
71-55-6	1,1,1-Trichloroethane	U	0.333	ug/L	0.333	1.00
56-23-5	Carbon tetrachloride	U	0.333	ug/L	0.333	1.00
107-06-2	1,2-Dichloroethane	U	0.333	ug/L	0.333	1.00
71-43-2	Benzene	U	0.333	ug/L	0.333	1.00
79-01-6	Trichloroethylene	U	0.333	ug/L	0.333	1.00
78-87-5	1,2-Dichloropropane	U	0.333	ug/L	0.333	1.00
74-95-3	Dibromomethane	U	0.333	ug/L	0.333	1.00
75-27-4	Bromodichloromethane	U	0.333	ug/L	0.333	1.00
108-88-3	Toluene	U	0.333	ug/L	0.333	1.00
79-00-5	1,1,2-Trichloroethane	U	0.333	ug/L	0.333	1.00
127-18-4	Tetrachloroethylene	U	0.333	ug/L	0.333	1.00
106-93-4	1,2-Dibromoethane	U	0.333	ug/L	0.333	1.00
108-90-7	Chlorobenzene	U	0.333	ug/L	0.333	1.00
100-41-4	Ethylbenzene	U	0.333	ug/L	0.333	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.333	ug/L	0.333	1.00
100-42-5	Styrene	U	0.333	ug/L	0.333	1.00
75-25-2	Bromoform	U	0.333	ug/L	0.333	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.333	ug/L	0.333	1.00
106-46-7	1,4-Dichlorobenzene	U	0.333	ug/L	0.333	1.00
107-02-8	Acrolein		180	ug/L	1.67	5.00
107-13-1	Acrylonitrile		280	ug/L	1.67	5.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	1.00	3.00
120-82-1	1,2,4-Trichlorobenzene	U	0.333	ug/L	0.333	1.00
95-50-1	1,2-Dichlorobenzene	U	0.333	ug/L	0.333	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**			**Matrix:**	**WATER**
Lab Sample ID:	**1205275616**				
Client Sample:	**QC for batch 2358452**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**LCS for batch 2358452**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 11:45**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 11:45**				
Data File:	**121922V3\3W104BR.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	48.8	50.0	ug/L	98	(73%-129%)
Bromofluorobenzene	47.0	50.0	ug/L	94	(72%-125%)
Toluene-d8	51.4	50.0	ug/L	103	(75%-123%)

Quantitation Report
GEL Laboratories, LLC

12/20/2022

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W104BR.D
Acq On : 19 Dec 2022 11:45
Operator : KP2
InstName : VOA3
Sample : |1205275616|2358452|1|VOA|1|VOA8260D_L|
Misc : CCV/LCS 5ML N/A MIX[B]
ALS Vial : 4 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 19 13:12:25 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
Internal Standards								Dev(Min)
1) Fluorobenzene	96	9.884	9.884	1.000	1133304	50.00	ug/L	0.00
43) Chlorobenzene-d5	117	13.060	13.066	1.000	809035	50.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	152	15.480	15.480	1.000	481293	50.00	ug/L	0.00
84) B Fluorobenzene	96	9.884	9.884	1.000	1133152	50.00	ug/L	0.00
103) B Chlorobenzene-d5	117	13.060	13.060	1.000	809035	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	15.480	15.481	1.000	481293	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
30) 1,2-Dichloroethane-d4	67	9.543	9.549	0.965	168875	48.83	ug/L	0.00
45) Toluene-d8	98	11.530	11.530	0.883	1115253	51.39	ug/L	0.00
63) Bromofluorobenzene	95	14.261	14.261	0.921	424183	46.99	ug/L	0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		4.260	4.260	0.431	0m	N.D.	d	
3) Chloromethane		4.643	4.644	0.470	0m	N.D.	d	
4) Vinyl chloride		4.826	4.826	0.488	0m	N.D.	d	
5) Bromomethane		5.411	5.411	0.547	0m	N.D.	d	
6) Chloroethane		5.538	5.557	0.560	0m	N.D.	d	
7) Trichlorofluoromethane		5.885	5.904	0.595	0m	N.D.	d	
8) Ethyl ether		6.232	6.232	0.631	0m	N.D.	d	
9) Acetone		6.574	6.647	0.665	0m	N.D.	d	
10) 1,1-Dichloroethylene		6.568	6.616	0.664	0m	N.D.	d	
11) Iodomethane		6.860	6.866	0.694	0m	N.D.	d	
12) Acetonitrile		7.055	7.013	0.714	0m	N.D.	d	
13) Methyl acetate		7.031	7.025	0.711	0m	N.D.	d	
14) Carbon disulfide		6.982	6.982	0.706	0m	N.D.	d	
15) Methylene chloride		7.202	7.202	0.729	0m	N.D.	d	
16) tert-Butyl methyl ether		7.482	7.482	0.757	0m	N.D.	d	
17) trans-1,2-Dichloroethy...		7.525	7.531	0.761	0m	N.D.	d	
18) Hexane		7.793	7.799	0.788	0m	N.D.	d	
19) Vinyl acetate		7.982	7.988	0.808	0m	N.D.	d	
20) 1,1-Dichloroethane		8.110	8.018	0.821	0m	N.D.	d	
21) 2-Butanone		8.622	8.622	0.872	0m	N.D.	d	
22) cis-1,2-Dichloroethylene		0.000	8.659	0.000	0	N.D.		
23) 2,2-Dichloropropane		0.000	8.671	0.000	0	N.D.		
24) Bromochloromethane		8.976	8.933	0.908	0m	N.D.	d	
25) Chloroform		8.970	8.970	0.907	0m	N.D.	d	
26) 1,1,1-Trichloroethane		0.000	9.226	0.000	0	N.D.		
27) Cyclohexane		9.323	9.305	0.943	0m	N.D.	d	
28) 1,1-Dichloropropene		9.390	9.384	0.950	0m	N.D.	d	
29) Carbon tetrachloride		0.000	9.415	0.000	0	N.D.		
31) 1,2-Dichloroethane		9.628	9.628	0.974	0m	N.D.	d	
32) Benzene		9.634	9.628	0.975	0m	N.D.	d	
33) Cyclohexene		9.878	9.732	0.999	0m	N.D.	d	
34) n-Butyl alcohol		10.030	10.012	1.015	0m	N.D.	d	
35) Trichloroethylene		10.268	10.268	1.039	0m	N.D.	d	
36) 2-Pentanone		10.506	10.378	1.063	0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W104BR.D
Acq On : 19 Dec 2022 11:45
Operator : KP2
InstName : VOA3
Sample : |1205275616|2358452|1|VOA|1|VOA8260D_L|
Misc : CCV/LCS 5ML N/A MIX[B]
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 19 13:12:25 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
37)	1,2-Dichloropropane		0.000	10.530	0.000	0	N.D.		
38)	Methylcyclohexane		10.500	10.494	1.062	0m	N.D.	d	
39)	Dibromomethane		0.000	10.664	0.000	0	N.D.		
40)	Bromodichloromethane		10.774	10.780	1.090	0m	N.D.	d	
41)	2-Chloroethylvinyl ether		11.030	11.006	1.116	0m	N.D.	d	
42)	cis-1,3-Dichloropropylene		11.225	11.231	1.136	0m	N.D.	d	
44)	4-Methyl-2-pentanone		11.329	11.329	0.867	0m	N.D.	d	
46)	Toluene		11.597	11.603	0.888	0m	N.D.	d	
47)	trans-1,3-Dichloroprop...		11.774	11.780	0.902	0m	N.D.	d	
48)	1,1,2-Trichloroethane		0.000	11.999	0.000	0	N.D.		
49)	2-Hexanone		12.188	12.182	0.933	0m	N.D.	d	
50)	1,3-Dichloropropane		12.194	12.188	0.934	0m	N.D.	d	
51)	Tetrachloroethylene		12.188	12.188	0.933	0m	N.D.	d	
52)	Dibromochloromethane		0.000	12.457	0.000	0	N.D.		
53)	1,2-Dibromoethane		12.627	12.621	0.967	0m	N.D.	d	
54)	Chlorobenzene		13.097	13.097	1.003	0m	N.D.	d	
55)	1,1,1,2-Tetrachloroethane		13.158	13.152	1.007	0m	N.D.	d	
56)	Ethylbenzene		13.152	13.158	1.007	0m	N.D.	d	
57)	m,p-Xylenes		13.267	13.267	1.016	0m	N.D.	d	
58)	o-Xylene		13.694	13.700	1.049	0m	N.D.	d	
59)	Styrene		13.712	13.706	1.050	0m	N.D.	d	
61)	Bromoform		0.000	13.975	0.000	0	N.D.		
62)	Isopropylbenzene		14.060	14.060	0.908	0m	N.D.	d	
64)	1,1,2,2-Tetrachloroethane		14.359	14.359	0.928	0m	N.D.	d	
65)	1,2,3-Trichloropropane		0.000	14.444	0.000	0	N.D.		
66)	Bromobenzene		14.475	14.468	0.935	0m	N.D.	d	
67)	n-Propylbenzene		14.487	14.487	0.936	0m	N.D.	d	
68)	1,3,5-Trimethylbenzene		14.645	14.639	0.946	0m	N.D.	d	
69)	2-Chlorotoluene		14.639	14.633	0.946	0m	N.D.	d	
70)	4-Chlorotoluene		14.743	14.743	0.952	0m	N.D.	d	
71)	tert-Butylbenzene		15.017	15.011	0.970	0m	N.D.	d	
72)	1,2,4-Trimethylbenzene		15.054	15.054	0.972	0m	N.D.	d	
73)	sec-Butylbenzene		15.230	15.237	0.984	0m	N.D.	d	
74)	4-Isopropyltoluene		15.358	15.359	0.992	0m	N.D.	d	
75)	1,3-Dichlorobenzene		15.426	15.419	0.996	0m	N.D.	d	
76)	1,4-Dichlorobenzene		15.505	15.505	1.002	0m	N.D.	d	
77)	n-Butylbenzene		15.785	15.791	1.020	0m	N.D.	d	
78)	1,2-Dichlorobenzene		15.919	15.919	1.028	0m	N.D.	d	
79)	1,2-Dibromo-3-chloropr...		16.779	16.785	1.084	0m	N.D.	d	
80)	1,2,4-Trichlorobenzene		17.791	17.791	1.149	0m	N.D.	d	
81)	Hexachlorobutadiene		17.943	17.949	1.159	0m	N.D.	d	
82)	Naphthalene		18.169	18.163	1.174	0m	N.D.	d	
83)	1,2,3-Trichlorobenzene		18.498	18.492	1.195	0m	N.D.	d	
85)	Acrolein	56	6.470	6.470	0.655	129173	180.09	ug/L	99
86)	Trichlorotrifluoroethane	85	6.580	6.586	0.666	825458	287.60	ug/L	97
87)	Isopropyl Alcohol	45	6.726	6.732	0.681	969663	2846.05	ug/L	98
88)	Allyl chloride	76	7.055	7.062	0.714	926708	291.07	ug/L	99
89)	tert-Butyl Alcohol	59	7.220	7.220	0.730	1448097	2738.81	ug/L	98
90)	Acrylonitrile	53	7.482	7.482	0.757	435439	279.62	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W104BR.D
Acq On : 19 Dec 2022 11:45
Operator : KP2
InstName : VOA3
Sample : |1205275616|2358452|1|VOA|1|VOA8260D_L|
Misc : CCV/LCS 5ML N/A MIX[B]
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 19 13:12:25 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

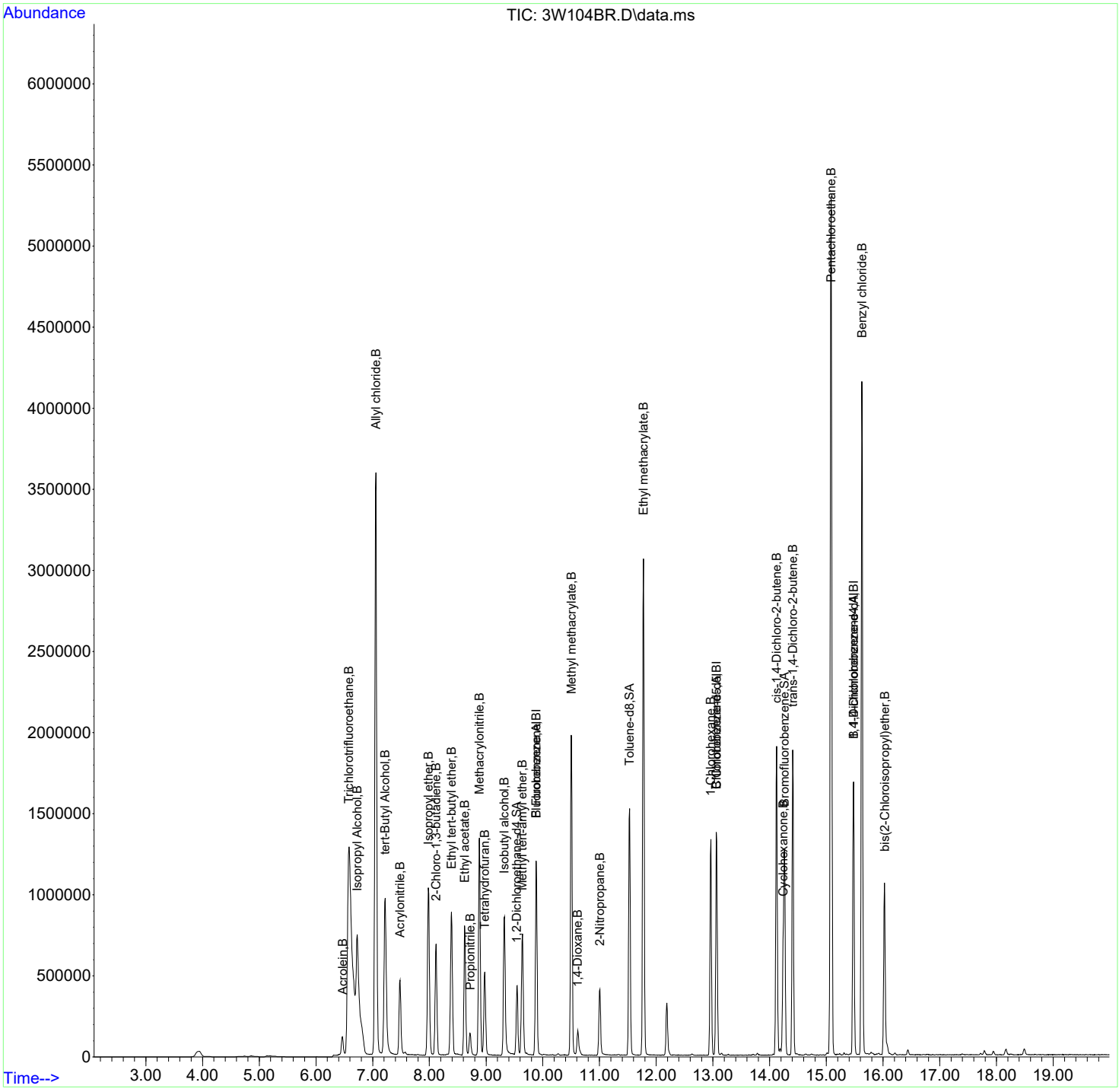
	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
91)	Isopropyl ether	45	7.982	7.988	0.808	1115255	61.06	ug/L		98
92)	2-Chloro-1,3-butadiene	53	8.116	8.122	0.821	505753	55.68	ug/L		96
93)	Ethyl tert-butyl ether	59	8.390	8.391	0.849	913398	54.23	ug/L		98
94)	Ethyl acetate	43	8.622	8.628	0.872	1057564	258.40	ug/L		97
95)	Propionitrile	54	8.720	8.720	0.882	165567	276.05	ug/L		98
96)	Methacrylonitrile	52	8.884	8.884	0.899	207844	280.25	ug/L		95
97)	Tetrahydrofuran	72	8.976	8.976	0.908	138227	261.12	ug/L		95
98)	Isobutyl alcohol	43	9.323	9.323	0.943	649910	2697.60	ug/L		99
99)	Methyl tert-amyl ether	87	9.640	9.640	0.975	143313	46.23	ug/L		93
100)	Methyl methacrylate	69	10.506	10.506	1.063	773122	268.79	ug/L		93
101)	1,4-Dioxane	88	10.616	10.616	1.074	133076	2537.92	ug/L		96
102)	2-Nitropropane	43	11.006	11.006	1.113	307993	301.18	ug/L		96
104)	Ethyl methacrylate	69	11.774	11.774	0.902	1608554	281.55	ug/L		95
106)	1-Chlorohexane	55	12.963	12.963	0.837	349085	55.63	ug/L		96
107)	cis-1,4-Dichloro-2-butene	53	14.121	14.121	0.912	476778	273.39	ug/L		96
108)	Cyclohexanone	42	14.237	14.237	0.920	206832	1397.19	ug/L		96
109)	trans-1,4-Dichloro-2-b...	53	14.407	14.408	0.931	452588	262.54	ug/L		98
110)	Pentachloroethane	167	15.084	15.084	0.974	1092900	322.07	ug/L		98
111)	Benzyl chloride	91	15.627	15.627	1.009	3159817	321.22	ug/L		100
112)	bis(2-Chloroisopropyl)...	121	16.029	16.023	1.035	155510	261.24	ug/L	#	85

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W104BR.D
Acq On : 19 Dec 2022 11:45
Operator : KP2
InstName : VOA3
Sample : |1205275616|2358452|1|VOA|1|VOA8260D_L|
Misc : CCV/LCS 5ML N/A MIX[B]
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 19 13:12:25 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**			**Matrix:**	**WATER**
Lab Sample ID:	**1205276791**				
Client Sample:	**QC for batch 2358452**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**LCS for batch 2358452**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 20:17**	**Analyst:**	**JM6**	**Purge Vol:**	**5 mL**
Prep Date:	**12/20/2022 20:17**				
Data File:	**122022V3\3W230T.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
542-75-6	1,3-Dichloropropylene		94.3	ug/L	0.500	2.00
75-71-8	Dichlorodifluoromethane		42.6	ug/L	0.355	1.00
74-87-3	Chloromethane		52.9	ug/L	0.333	1.00
75-01-4	Vinyl chloride		56.2	ug/L	0.333	1.00
74-83-9	Bromomethane		57.9	ug/L	0.337	1.00
75-69-4	Trichlorofluoromethane		47.5	ug/L	0.333	1.00
75-35-4	1,1-Dichloroethylene		49.3	ug/L	0.333	1.00
75-09-2	Methylene chloride		44.5	ug/L	0.500	5.00
1634-04-4	tert-Butyl methyl ether		42.0	ug/L	0.333	1.00
156-60-5	trans-1,2-Dichloroethylene		50.7	ug/L	0.333	1.00
75-34-3	1,1-Dichloroethane		52.7	ug/L	0.333	1.00
156-59-2	cis-1,2-Dichloroethylene		48.3	ug/L	0.333	1.00
67-66-3	Chloroform		50.7	ug/L	0.333	1.00
71-55-6	1,1,1-Trichloroethane		51.7	ug/L	0.333	1.00
56-23-5	Carbon tetrachloride		50.2	ug/L	0.333	1.00
107-06-2	1,2-Dichloroethane		47.2	ug/L	0.333	1.00
71-43-2	Benzene		53.9	ug/L	0.333	1.00
79-01-6	Trichloroethylene		52.5	ug/L	0.333	1.00
78-87-5	1,2-Dichloropropane		50.0	ug/L	0.333	1.00
74-95-3	Dibromomethane		47.3	ug/L	0.333	1.00
75-27-4	Bromodichloromethane		50.0	ug/L	0.333	1.00
108-88-3	Toluene		51.3	ug/L	0.333	1.00
79-00-5	1,1,2-Trichloroethane		47.5	ug/L	0.333	1.00
127-18-4	Tetrachloroethylene		50.5	ug/L	0.333	1.00
106-93-4	1,2-Dibromoethane		46.5	ug/L	0.333	1.00
108-90-7	Chlorobenzene		50.7	ug/L	0.333	1.00
100-41-4	Ethylbenzene		49.7	ug/L	0.333	1.00
179601-23-1	m,p-Xylenes		99.9	ug/L	0.500	2.00
95-47-6	o-Xylene		51.1	ug/L	0.333	1.00
100-42-5	Styrene		48.0	ug/L	0.333	1.00
75-25-2	Bromoform		45.5	ug/L	0.333	1.00
79-34-5	1,1,2,2-Tetrachloroethane		48.2	ug/L	0.333	1.00
106-46-7	1,4-Dichlorobenzene		48.6	ug/L	0.333	1.00
107-02-8	Acrolein	U	1.67	ug/L	1.67	5.00
107-13-1	Acrylonitrile	U	1.67	ug/L	1.67	5.00
1330-20-7	Xylenes (total)		151	ug/L	1.00	3.00
120-82-1	1,2,4-Trichlorobenzene		42.6	ug/L	0.333	1.00
95-50-1	1,2-Dichlorobenzene		48.3	ug/L	0.333	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**			**Matrix:**	**WATER**
Lab Sample ID:	**1205276791**				
Client Sample:	**QC for batch 2358452**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**LCS for batch 2358452**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 20:17**	**Analyst:**	**JM6**	**Purge Vol:**	**5 mL**
Prep Date:	**12/20/2022 20:17**				
Data File:	**122022V3\3W230T.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	45.8	50.0	ug/L	92	(73%-129%)
Bromofluorobenzene	47.0	50.0	ug/L	94	(72%-125%)
Toluene-d8	50.4	50.0	ug/L	101	(75%-123%)

Quantitation Report
GEL Laboratories, LLC

12/21/2022

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W230T.D
Acq On : 20 Dec 2022 20:17
Operator : JM6
InstName : VOA3
Sample : |1205276791|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL LCS 5ML N/A MIX[A]
ALS Vial : 30 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 20 20:43:26 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		Dev(Min)
Internal Standards									
1) Fluorobenzene	96	9.884	9.884	1.000	1379286	50.00	ug/L		0.00
43) Chlorobenzene-d5	117	13.060	13.066	1.000	1003262	50.00	ug/L		0.00
60) 1,4-Dichlorobenzene-d4	152	15.474	15.480	1.000	594458	50.00	ug/L		0.00
84) B Fluorobenzene	96	9.884	9.884	1.000	1379312	50.00	ug/L		0.00
103) B Chlorobenzene-d5	117	13.060	13.060	1.000	1003262	50.00	ug/L		0.00
105) B 1,4-Dichlorobenzene-d4	152	15.474	15.481	1.000	594458	50.00	ug/L		0.00
System Monitoring Compounds									Dev(Min)
30) 1,2-Dichloroethane-d4	67	9.543	9.549	0.965	192935	45.84	ug/L		0.00
45) Toluene-d8	98	11.530	11.530	0.883	1356614	50.41	ug/L		0.00
63) Bromofluorobenzene	95	14.261	14.261	0.922	523441	46.95	ug/L		0.00

Compound	Amount	Range	Recovery
30) 1,2-Dichloroethane-d4	50.000	73 - 129	92%
45) Toluene-d8	50.000	75 - 123	101%
63) Bromofluorobenzene	50.000	72 - 125	94%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		QValue
2) Dichlorodifluoromethane	85	4.260	4.260	0.431	446675	42.59	ug/L		99
3) Chloromethane	50	4.644	4.644	0.470	690774	52.89	ug/L		99
4) Vinyl chloride	62	4.826	4.826	0.488	590176	56.22	ug/L		100
5) Bromomethane	94	5.411	5.411	0.547	437044	57.91	ug/L		96
6) Chloroethane	64	5.538	5.557	0.560	398771	53.73	ug/L		99
7) Trichlorofluoromethane	101	5.904	5.904	0.597	673866	47.53	ug/L		99
8) Ethyl ether	59	6.232	6.232	0.631	155476	36.68	ug/L		86
9) Acetone	43	6.641	6.647	0.672	339745	220.25	ug/L		97
10) 1,1-Dichloroethylene	61	6.616	6.616	0.669	636215	49.27	ug/L		96
11) Iodomethane	142	6.866	6.866	0.695	2618818	221.13	ug/L		100
12) Acetonitrile	41	7.013	7.013	0.709	840974	1088.18	ug/L		99
13) Methyl acetate	74	7.025	7.025	0.711	162551	223.99	ug/L	#	85
14) Carbon disulfide	76	6.982	6.982	0.706	5722002	227.03	ug/L		100
15) Methylene chloride	84	7.202	7.202	0.729	361008	44.50	ug/L		95
16) tert-Butyl methyl ether	73	7.482	7.482	0.757	715453	41.95	ug/L		98
17) trans-1,2-Dichloroethy...	61	7.531	7.531	0.762	567553	50.69	ug/L		96
18) Hexane	57	7.793	7.799	0.788	569605	50.60	ug/L		94
19) Vinyl acetate	43	7.982	7.988	0.808	2870709	231.38	ug/L		97
20) 1,1-Dichloroethane	63	8.019	8.018	0.811	682298	52.68	ug/L		100
21) 2-Butanone	43	8.622	8.622	0.872	552792	213.90	ug/L		96
22) cis-1,2-Dichloroethylene	96	8.653	8.659	0.875	375834	48.28	ug/L		94
23) 2,2-Dichloropropane	77	8.671	8.671	0.877	484704	53.80	ug/L		93
24) Bromochloromethane	49	8.933	8.933	0.904	368421	51.95	ug/L		94
25) Chloroform	83	8.970	8.970	0.907	615532	50.65	ug/L		99
26) 1,1,1-Trichloroethane	97	9.226	9.226	0.933	573801	51.66	ug/L		98
27) Cyclohexane	56	9.305	9.305	0.941	704025	57.09	ug/L		98
28) 1,1-Dichloropropene	75	9.384	9.384	0.949	472002	47.57	ug/L		96
29) Carbon tetrachloride	117	9.409	9.415	0.952	452071	50.15	ug/L		100
31) 1,2-Dichloroethane	62	9.628	9.628	0.974	411152	47.20	ug/L		99
32) Benzene	78	9.628	9.628	0.974	1357302	53.85	ug/L		99

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W230T.D
Acq On : 20 Dec 2022 20:17
Operator : JM6
InstName : VOA3
Sample : |1205276791|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL LCS 5ML N/A MIX[A]
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Dec 20 20:43:26 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
33)	Cyclohexene	67	9.726	9.732	0.984	782382	51.85	ug/L		97
34)	n-Butyl alcohol	56	10.006	10.012	1.012	768686	4274.05	ug/L		94
35)	Trichloroethylene	95	10.268	10.268	1.039	376020	52.48	ug/L		98
36)	2-Pentanone	43	10.378	10.378	1.050	898409	214.01	ug/L		97
37)	1,2-Dichloropropane	63	10.524	10.530	1.065	358636	50.03	ug/L		98
38)	Methylcyclohexane	83	10.494	10.494	1.062	667819	54.56	ug/L		97
39)	Dibromomethane	93	10.664	10.664	1.079	167507	47.29	ug/L		96
40)	Bromodichloromethane	83	10.774	10.780	1.090	415158	50.04	ug/L		100
41)	2-Chloroethylvinyl ether	63	11.006	11.006	1.113	421073	125.36	ug/L		98
42)	cis-1,3-Dichloropropylene	75	11.225	11.231	1.136	480447	46.54	ug/L		99
44)	4-Methyl-2-pentanone	43	11.329	11.329	0.867	1277119	236.23	ug/L		96
46)	Toluene	91	11.603	11.603	0.888	1442817	51.31	ug/L		98
47)	trans-1,3-Dichloroprop...	75	11.774	11.780	0.902	400385	47.76	ug/L		98
48)	1,1,2-Trichloroethane	97	12.000	11.999	0.919	237070	47.49	ug/L		99
49)	2-Hexanone	43	12.182	12.182	0.933	898302	237.60	ug/L		95
50)	1,3-Dichloropropane	76	12.189	12.188	0.933	408673	47.77	ug/L		98
51)	Tetrachloroethylene	164	12.182	12.188	0.933	282227	50.46	ug/L		97
52)	Dibromochloromethane	129	12.451	12.457	0.953	239872	47.46	ug/L		100
53)	1,2-Dibromoethane	107	12.621	12.621	0.966	222614	46.54	ug/L		97
54)	Chlorobenzene	112	13.097	13.097	1.003	869018	50.65	ug/L		99
55)	1,1,1,2-Tetrachloroethane	131	13.152	13.152	1.007	293636	52.46	ug/L		99
56)	Ethylbenzene	91	13.158	13.158	1.007	1651849	49.66	ug/L		98
57)	m,p-Xylenes	106	13.268	13.267	1.016	1221069	99.94	ug/L		97
58)	o-Xylene	106	13.700	13.700	1.049	617229	51.06	ug/L		99
59)	Styrene	104	13.707	13.706	1.049	955578	47.98	ug/L		98
61)	Bromoform	173	13.975	13.975	0.903	125072	45.46	ug/L		99
62)	Isopropylbenzene	105	14.060	14.060	0.909	1620901	50.36	ug/L		99
64)	1,1,2,2-Tetrachloroethane	83	14.359	14.359	0.928	308005	48.21	ug/L		99
65)	1,2,3-Trichloropropane	110	14.444	14.444	0.933	83253	46.57	ug/L	#	86
66)	Bromobenzene	156	14.469	14.468	0.935	389444	49.31	ug/L		98
67)	n-Propylbenzene	91	14.487	14.487	0.936	2154346	51.89	ug/L		99
68)	1,3,5-Trimethylbenzene	105	14.639	14.639	0.946	1487812	51.13	ug/L		98
69)	2-Chlorotoluene	126	14.633	14.633	0.946	398441	52.25	ug/L		99
70)	4-Chlorotoluene	126	14.737	14.743	0.952	406184	50.67	ug/L		99
71)	tert-Butylbenzene	134	15.011	15.011	0.970	307824	51.87	ug/L		98
72)	1,2,4-Trimethylbenzene	105	15.054	15.054	0.973	1487772	48.77	ug/L		99
73)	sec-Butylbenzene	105	15.231	15.237	0.984	2049568	52.47	ug/L		98
74)	4-Isopropyltoluene	119	15.359	15.359	0.993	1668199	49.59	ug/L		99
75)	1,3-Dichlorobenzene	146	15.420	15.419	0.996	775877	48.61	ug/L		99
76)	1,4-Dichlorobenzene	146	15.505	15.505	1.002	770294	48.56	ug/L		99
77)	n-Butylbenzene	91	15.791	15.791	1.020	1817314	50.37	ug/L		98
78)	1,2-Dichlorobenzene	146	15.919	15.919	1.029	746320	48.33	ug/L		100
79)	1,2-Dibromo-3-chloropr...	157	16.779	16.785	1.084	58791	44.01	ug/L		97
80)	1,2,4-Trichlorobenzene	180	17.785	17.791	1.149	605725	42.64	ug/L		99
81)	Hexachlorobutadiene	225	17.950	17.949	1.160	415891	46.30	ug/L		99
82)	Naphthalene	128	18.163	18.163	1.174	1121821	42.05	ug/L		100
83)	1,2,3-Trichlorobenzene	180	18.492	18.492	1.195	561941	43.61	ug/L		100
85)	Acrolein		0.000	6.470	0.000	0	N.D.			
86)	Trichlorotrifluoroethane		0.000	6.586	0.000	0	N.D.			

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W230T.D
Acq On : 20 Dec 2022 20:17
Operator : JM6
InstName : VOA3
Sample : |1205276791|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL LCS 5ML N/A MIX[A]
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Dec 20 20:43:26 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

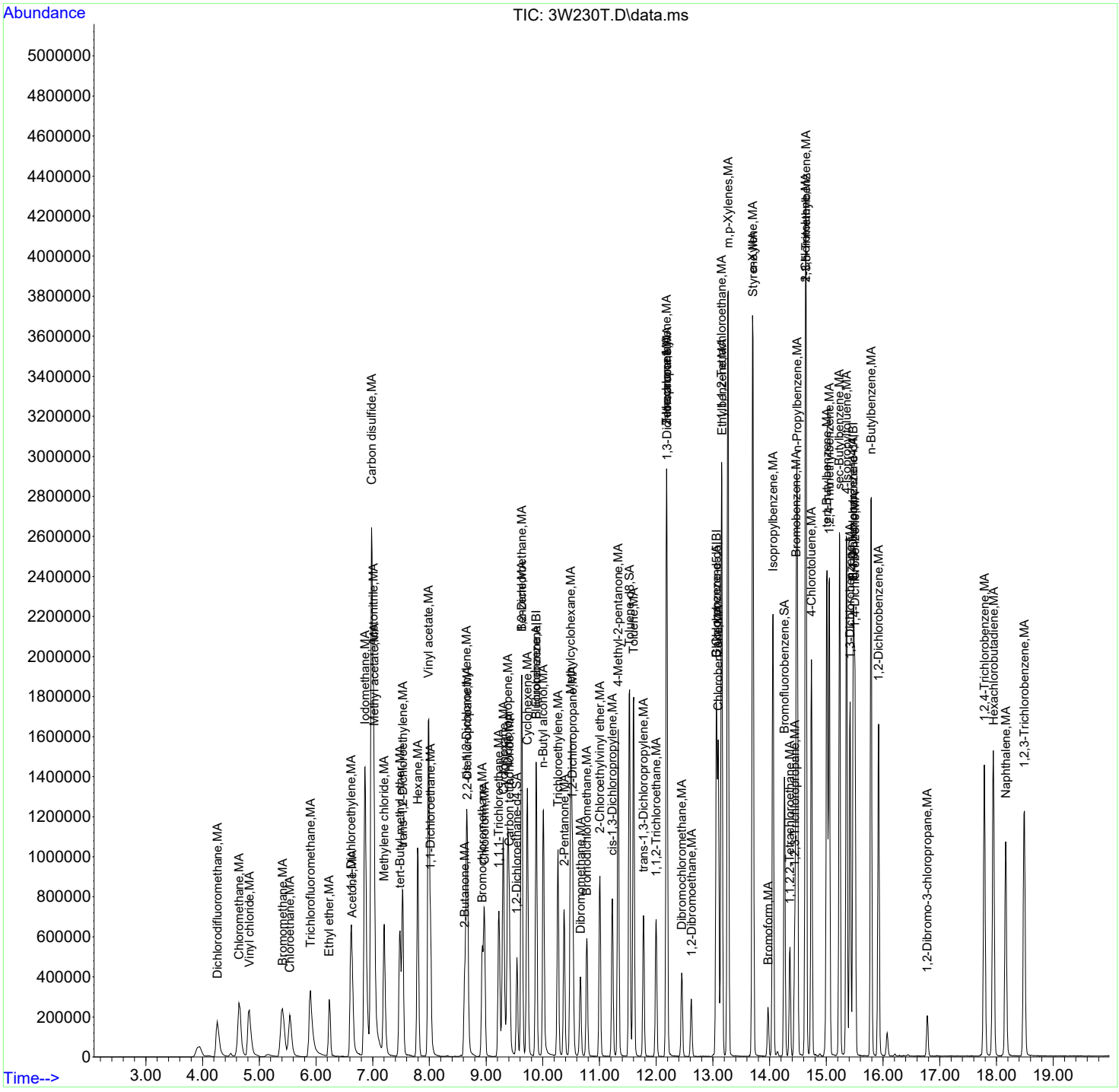
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
87) Isopropyl Alcohol		6.757	6.732	0.684	0m	N.D.	d
88) Allyl chloride		6.982	7.062	0.706	0m	N.D.	d
89) tert-Butyl Alcohol		7.220	7.220	0.730	0m	N.D.	d
90) Acrylonitrile		7.476	7.482	0.756	0m	N.D.	d
91) Isopropyl ether		7.988	7.988	0.808	0m	N.D.	d
92) 2-Chloro-1,3-butadiene		7.982	8.122	0.808	0m	N.D.	d
93) Ethyl tert-butyl ether		0.000	8.391	0.000	0	N.D.	
94) Ethyl acetate		8.622	8.628	0.872	0m	N.D.	d
95) Propionitrile		8.622	8.720	0.872	0m	N.D.	d
96) Methacrylonitrile		8.921	8.884	0.903	0m	N.D.	d
97) Tetrahydrofuran		8.970	8.976	0.907	0m	N.D.	d
98) Isobutyl alcohol		9.305	9.323	0.941	0m	N.D.	d
99) Methyl tert-amyl ether		0.000	9.640	0.000	0	N.D.	
100) Methyl methacrylate		10.494	10.506	1.062	0m	N.D.	d
101) 1,4-Dioxane		10.671	10.616	1.080	0m	N.D.	d
102) 2-Nitropropane		11.006	11.006	1.113	0m	N.D.	d
104) Ethyl methacrylate		0.000	11.774	0.000	0	N.D.	
106) 1-Chlorohexane		13.005	12.963	0.840	0m	N.D.	d
107) cis-1,4-Dichloro-2-butene		14.054	14.121	0.908	0m	N.D.	d
108) Cyclohexanone		14.231	14.237	0.920	0m	N.D.	d
109) trans-1,4-Dichloro-2-b...		14.487	14.408	0.936	0m	N.D.	d
110) Pentachloroethane		15.078	15.084	0.974	0m	N.D.	d
111) Benzyl chloride		15.791	15.627	1.020	0m	N.D.	d
112) bis(2-Chloroisopropyl)...		15.926	16.023	1.029	0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W230T.D
Acq On : 20 Dec 2022 20:17
Operator : JM6
InstName : VOA3
Sample : |1205276791|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL LCS 5ML N/A MIX[A]
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Dec 20 20:43:26 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**1205275619**	**Date Received:**	**12/16/2022 09:15**		
Client Sample:	**QC for batch 2358452**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265371PS**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 20:57**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 20:57**				
Data File:	**121922V3\3W124.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
542-75-6	1,3-Dichloropropylene	U	0.500	ug/L	0.500	2.00
75-71-8	Dichlorodifluoromethane	U	0.355	ug/L	0.355	1.00
74-87-3	Chloromethane	U	0.333	ug/L	0.333	1.00
75-01-4	Vinyl chloride	U	0.333	ug/L	0.333	1.00
74-83-9	Bromomethane	U	0.337	ug/L	0.337	1.00
75-69-4	Trichlorofluoromethane	U	0.333	ug/L	0.333	1.00
75-35-4	1,1-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-09-2	Methylene chloride	U	0.500	ug/L	0.500	5.00
1634-04-4	tert-Butyl methyl ether	U	0.333	ug/L	0.333	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-34-3	1,1-Dichloroethane	U	0.333	ug/L	0.333	1.00
156-59-2	cis-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
67-66-3	Chloroform	U	0.333	ug/L	0.333	1.00
71-55-6	1,1,1-Trichloroethane	U	0.333	ug/L	0.333	1.00
56-23-5	Carbon tetrachloride	U	0.333	ug/L	0.333	1.00
107-06-2	1,2-Dichloroethane	U	0.333	ug/L	0.333	1.00
71-43-2	Benzene	U	0.333	ug/L	0.333	1.00
79-01-6	Trichloroethylene	U	0.333	ug/L	0.333	1.00
78-87-5	1,2-Dichloropropane	U	0.333	ug/L	0.333	1.00
74-95-3	Dibromomethane	U	0.333	ug/L	0.333	1.00
75-27-4	Bromodichloromethane	U	0.333	ug/L	0.333	1.00
108-88-3	Toluene	U	0.333	ug/L	0.333	1.00
79-00-5	1,1,2-Trichloroethane	U	0.333	ug/L	0.333	1.00
127-18-4	Tetrachloroethylene	U	0.333	ug/L	0.333	1.00
106-93-4	1,2-Dibromoethane	U	0.333	ug/L	0.333	1.00
108-90-7	Chlorobenzene	U	0.333	ug/L	0.333	1.00
100-41-4	Ethylbenzene	U	0.333	ug/L	0.333	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.333	ug/L	0.333	1.00
100-42-5	Styrene	U	0.333	ug/L	0.333	1.00
75-25-2	Bromoform	U	0.333	ug/L	0.333	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.333	ug/L	0.333	1.00
106-46-7	1,4-Dichlorobenzene	U	0.333	ug/L	0.333	1.00
107-02-8	Acrolein		8.61	ug/L	1.67	5.00
107-13-1	Acrylonitrile		309	ug/L	1.67	5.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	1.00	3.00
120-82-1	1,2,4-Trichlorobenzene	U	0.333	ug/L	0.333	1.00
95-50-1	1,2-Dichlorobenzene	U	0.333	ug/L	0.333	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**1205275619**	**Date Received:**	**12/16/2022 09:15**		
Client Sample:	**QC for batch 2358452**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265371PS**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 20:57**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 20:57**				
Data File:	**121922V3\3W124.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	52.4	50.0	ug/L	105	(73%-129%)
Bromofluorobenzene	47.9	50.0	ug/L	96	(72%-125%)
Toluene-d8	52.2	50.0	ug/L	104	(75%-123%)

Quantitation Report
GEL Laboratories, LLC

12/21/2022

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W124.D
Acq On : 19 Dec 2022 20:57
Operator : KP2
InstName : VOA3
Sample : |1205275619|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2 MIX[B] 604449002MS
ALS Vial : 24 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 20 08:13:03 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	96	9.884	9.884	1.000	767557	50.00	ug/L	0.00
43) Chlorobenzene-d5	117	13.060	13.066	1.000	550241	50.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	152	15.481	15.480	1.000	333086	50.00	ug/L	0.00
84) B Fluorobenzene	96	9.884	9.884	1.000	767518	50.00	ug/L	0.00
103) B Chlorobenzene-d5	117	13.060	13.060	1.000	550241	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	15.481	15.481	1.000	333086	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
30) 1,2-Dichloroethane-d4	67	9.549	9.549	0.966	122716	52.39	ug/L	0.00
45) Toluene-d8	98	11.530	11.530	0.883	770121	52.18	ug/L	0.00
63) Bromofluorobenzene	95	14.261	14.261	0.921	299456	47.94	ug/L	0.00

Compound	Amount	Range	Recovery
30) 1,2-Dichloroethane-d4	50.000	73 - 129	105%
45) Toluene-d8	50.000	75 - 123	104%
63) Bromofluorobenzene	50.000	72 - 125	96%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		4.260	4.260	0.431	0m	N.D.	d	
3) Chloromethane		4.644	4.644	0.470	0m	N.D.	d	
4) Vinyl chloride		4.808	4.826	0.486	0m	N.D.	d	
5) Bromomethane		0.000	5.411	0.000	0	N.D.		
6) Chloroethane		0.000	5.557	0.000	0	N.D.		
7) Trichlorofluoromethane		5.904	5.904	0.597	0m	N.D.	d	
8) Ethyl ether		6.251	6.232	0.632	0m	N.D.	d	
9) Acetone		6.647	6.647	0.672	0m	N.D.	d	
10) 1,1-Dichloroethylene		6.574	6.616	0.665	0m	N.D.	d	
11) Iodomethane		6.866	6.866	0.695	0m	N.D.	d	
12) Acetonitrile		7.055	7.013	0.714	0m	N.D.	d	
13) Methyl acetate		7.031	7.025	0.711	0m	N.D.	d	
14) Carbon disulfide		6.988	6.982	0.707	0m	N.D.	d	
15) Methylene chloride		7.208	7.202	0.729	0m	N.D.	d	
16) tert-Butyl methyl ether		7.470	7.482	0.756	0m	N.D.	d	
17) trans-1,2-Dichloroethy...		7.525	7.531	0.761	0m	N.D.	d	
18) Hexane		7.793	7.799	0.788	0m	N.D.	d	
19) Vinyl acetate		7.988	7.988	0.808	0m	N.D.	d	
20) 1,1-Dichloroethane		8.116	8.018	0.821	0m	N.D.	d	
21) 2-Butanone		8.628	8.622	0.873	0m	N.D.	d	
22) cis-1,2-Dichloroethylene		0.000	8.659	0.000	0	N.D.		
23) 2,2-Dichloropropane		0.000	8.671	0.000	0	N.D.		
24) Bromochloromethane		8.957	8.933	0.906	0m	N.D.	d	
25) Chloroform		8.970	8.970	0.907	0m	N.D.	d	
26) 1,1,1-Trichloroethane		0.000	9.226	0.000	0	N.D.		
27) Cyclohexane		9.323	9.305	0.943	0m	N.D.	d	
28) 1,1-Dichloropropene		9.439	9.384	0.955	0m	N.D.	d	
29) Carbon tetrachloride		0.000	9.415	0.000	0	N.D.		
31) 1,2-Dichloroethane		9.628	9.628	0.974	0m	N.D.	d	
32) Benzene		9.634	9.628	0.975	0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W124.D
Acq On : 19 Dec 2022 20:57
Operator : KP2
InstName : VOA3
Sample : |1205275619|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2 MIX[B] 604449002MS
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Dec 20 08:13:03 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
33) Cyclohexene		9.884	9.732	1.000	0m	N.D.	d	
34) n-Butyl alcohol		10.012	10.012	1.013	0m	N.D.	d	
35) Trichloroethylene		10.268	10.268	1.039	0m	N.D.	d	
36) 2-Pentanone		10.500	10.378	1.062	0m	N.D.	d	
37) 1,2-Dichloropropane		0.000	10.530	0.000	0	N.D.		
38) Methylcyclohexane		10.506	10.494	1.063	0m	N.D.	d	
39) Dibromomethane		10.658	10.664	1.078	0m	N.D.	d	
40) Bromodichloromethane		10.780	10.780	1.091	0m	N.D.	d	
41) 2-Chloroethylvinyl ether		0.000	11.006	0.000	0	N.D.		
42) cis-1,3-Dichloropropylene		11.231	11.231	1.136	0m	N.D.	d	
44) 4-Methyl-2-pentanone		11.329	11.329	0.867	0m	N.D.	d	
46) Toluene		11.603	11.603	0.888	0m	N.D.	d	
47) trans-1,3-Dichloroprop...		11.780	11.780	0.902	0m	N.D.	d	
48) 1,1,2-Trichloroethane		11.914	11.999	0.912	0m	N.D.	d	
49) 2-Hexanone		12.182	12.182	0.933	0m	N.D.	d	
50) 1,3-Dichloropropane		0.000	12.188	0.000	0	N.D.		
51) Tetrachloroethylene		12.189	12.188	0.933	0m	N.D.	d	
52) Dibromochloromethane		12.451	12.457	0.953	0m	N.D.	d	
53) 1,2-Dibromoethane		0.000	12.621	0.000	0	N.D.		
54) Chlorobenzene		13.097	13.097	1.003	0m	N.D.	d	
55) 1,1,1,2-Tetrachloroethane		13.140	13.152	1.006	0m	N.D.	d	
56) Ethylbenzene		13.152	13.158	1.007	0m	N.D.	d	
57) m,p-Xylenes		13.274	13.267	1.016	0m	N.D.	d	
58) o-Xylene		13.707	13.700	1.049	0m	N.D.	d	
59) Styrene		13.713	13.706	1.050	0m	N.D.	d	
61) Bromoform		13.975	13.975	0.903	0m	N.D.	d	
62) Isopropylbenzene		14.060	14.060	0.908	0m	N.D.	d	
64) 1,1,2,2-Tetrachloroethane		14.353	14.359	0.927	0m	N.D.	d	
65) 1,2,3-Trichloropropane		0.000	14.444	0.000	0	N.D.		
66) Bromobenzene		14.469	14.468	0.935	0m	N.D.	d	
67) n-Propylbenzene		14.487	14.487	0.936	0m	N.D.	d	
68) 1,3,5-Trimethylbenzene		14.645	14.639	0.946	0m	N.D.	d	
69) 2-Chlorotoluene		14.633	14.633	0.945	0m	N.D.	d	
70) 4-Chlorotoluene		14.743	14.743	0.952	0m	N.D.	d	
71) tert-Butylbenzene		15.011	15.011	0.970	0m	N.D.	d	
72) 1,2,4-Trimethylbenzene		15.054	15.054	0.972	0m	N.D.	d	
73) sec-Butylbenzene		15.231	15.237	0.984	0m	N.D.	d	
74) 4-Isopropyltoluene		15.353	15.359	0.992	0m	N.D.	d	
75) 1,3-Dichlorobenzene		15.426	15.419	0.996	0m	N.D.	d	
76) 1,4-Dichlorobenzene		15.499	15.505	1.001	0m	N.D.	d	
77) n-Butylbenzene		15.785	15.791	1.020	0m	N.D.	d	
78) 1,2-Dichlorobenzene		15.913	15.919	1.028	0m	N.D.	d	
79) 1,2-Dibromo-3-chloropr...		16.791	16.785	1.085	0m	N.D.	d	
80) 1,2,4-Trichlorobenzene		17.791	17.791	1.149	0m	N.D.	d	
81) Hexachlorobutadiene		17.943	17.949	1.159	0m	N.D.	d	
82) Naphthalene		18.163	18.163	1.173	0m	N.D.	d	
83) 1,2,3-Trichlorobenzene		18.492	18.492	1.195	0m	N.D.	d	
85) Acrolein	56	6.476	6.470	0.655	4181	8.61	ug/L #	14
86) Trichlorotrifluoroethane	85	6.586	6.586	0.666	789336	406.02	ug/L	97

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W124.D
Acq On : 19 Dec 2022 20:57
Operator : KP2
InstName : VOA3
Sample : |1205275619|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2 MIX[B] 604449002MS
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Dec 20 08:13:03 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

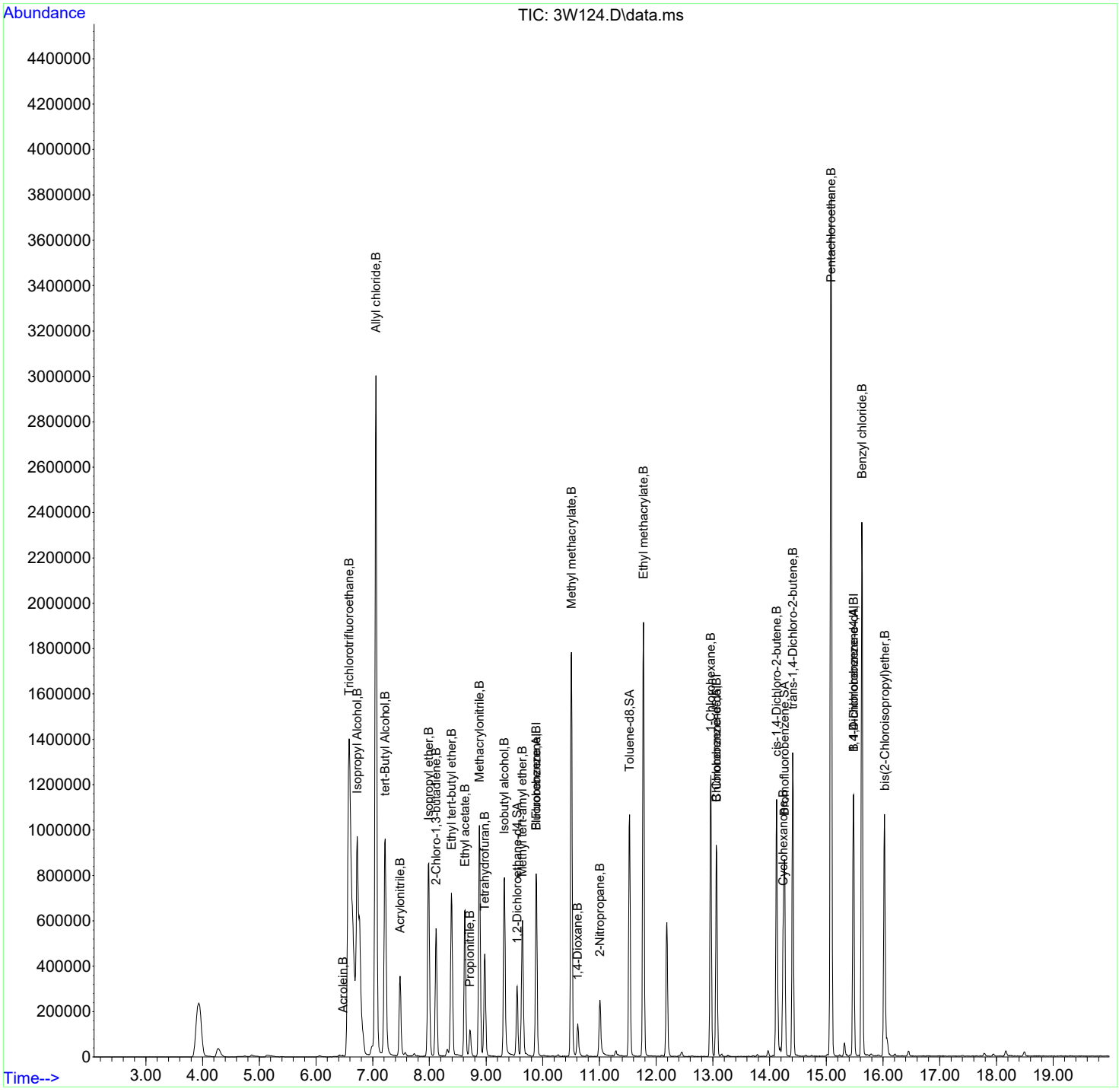
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
87) Isopropyl Alcohol	45	6.726	6.732	0.681	1358945	5888.75	ug/L	99	A
88) Allyl chloride	76	7.055	7.062	0.714	773649	358.75	ug/L	99	
89) tert-Butyl Alcohol	59	7.220	7.220	0.730	1277575	3567.38	ug/L	94	
90) Acrylonitrile	53	7.482	7.482	0.757	325937	309.02	ug/L	98	
91) Isopropyl ether	45	7.988	7.988	0.808	908195	73.41	ug/L	97	
92) 2-Chloro-1,3-butadiene	53	8.116	8.122	0.821	404593	65.76	ug/L	97	
93) Ethyl tert-butyl ether	59	8.390	8.391	0.849	732018	64.17	ug/L	97	
94) Ethyl acetate	43	8.628	8.628	0.873	866643	312.63	ug/L	97	
95) Propionitrile	54	8.714	8.720	0.882	133103	327.64	ug/L	97	
96) Methacrylonitrile	52	8.884	8.884	0.899	157676	313.89	ug/L	95	
97) Tetrahydrofuran	72	8.976	8.976	0.908	120234	335.33	ug/L	94	
98) Isobutyl alcohol	43	9.323	9.323	0.943	576497	3532.81	ug/L	97	
99) Methyl tert-amyl ether	87	9.640	9.640	0.975	113888	54.24	ug/L	92	
100) Methyl methacrylate	69	10.506	10.506	1.063	696850	357.69	ug/L	93	
101) 1,4-Dioxane	88	10.616	10.616	1.074	113246	3188.61	ug/L	96	
102) 2-Nitropropane	43	11.006	11.006	1.113	128457	185.45	ug/L	83	
104) Ethyl methacrylate	69	11.774	11.774	0.902	1006914	259.13	ug/L	95	
106) 1-Chlorohexane	55	12.963	12.963	0.837	327832	75.49	ug/L	97	
107) cis-1,4-Dichloro-2-butene	53	14.121	14.121	0.912	268840	222.75	ug/L	87	
108) Cyclohexanone	42	14.237	14.237	0.920	164130	1602.07	ug/L	95	
109) trans-1,4-Dichloro-2-b...	53	14.408	14.408	0.931	332003	278.28	ug/L	92	
110) Pentachloroethane	167	15.084	15.084	0.974	732239	311.80	ug/L	83	
111) Benzyl chloride	91	15.627	15.627	1.009	1810829	265.99	ug/L	99	
112) bis(2-Chloroisopropyl)...	121	16.029	16.023	1.035	153645	372.95	ug/L #	81	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W124.D
Acq On : 19 Dec 2022 20:57
Operator : KP2
InstName : VOA3
Sample : |1205275619|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2 MIX[B] 604449002MS
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Dec 20 08:13:03 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**1205275618**	**Date Received:**	**12/16/2022 09:15**		
Client Sample:	**QC for batch 2358452**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265371RAPS**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 22:29**	**Analyst:**	**JM6**	**Purge Vol:**	**5 mL**
Prep Date:	**12/20/2022 22:29**				
Data File:	**122022V3\3W235.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
542-75-6	1,3-Dichloropropylene		104	ug/L	0.500	2.00
75-71-8	Dichlorodifluoromethane		47.5	ug/L	0.355	1.00
74-87-3	Chloromethane		59.9	ug/L	0.333	1.00
75-01-4	Vinyl chloride		64.6	ug/L	0.333	1.00
74-83-9	Bromomethane		60.2	ug/L	0.337	1.00
75-69-4	Trichlorofluoromethane		55.2	ug/L	0.333	1.00
75-35-4	1,1-Dichloroethylene		55.2	ug/L	0.333	1.00
75-09-2	Methylene chloride		48.4	ug/L	0.500	5.00
1634-04-4	tert-Butyl methyl ether		46.7	ug/L	0.333	1.00
156-60-5	trans-1,2-Dichloroethylene		61.3	ug/L	0.333	1.00
75-34-3	1,1-Dichloroethane		62.0	ug/L	0.333	1.00
156-59-2	cis-1,2-Dichloroethylene		55.9	ug/L	0.333	1.00
67-66-3	Chloroform		58.4	ug/L	0.333	1.00
71-55-6	1,1,1-Trichloroethane		60.9	ug/L	0.333	1.00
56-23-5	Carbon tetrachloride		59.9	ug/L	0.333	1.00
107-06-2	1,2-Dichloroethane		54.2	ug/L	0.333	1.00
71-43-2	Benzene		64.2	ug/L	0.333	1.00
79-01-6	Trichloroethylene		62.4	ug/L	0.333	1.00
78-87-5	1,2-Dichloropropane		56.6	ug/L	0.333	1.00
74-95-3	Dibromomethane		53.5	ug/L	0.333	1.00
75-27-4	Bromodichloromethane		57.7	ug/L	0.333	1.00
108-88-3	Toluene		62.0	ug/L	0.333	1.00
79-00-5	1,1,2-Trichloroethane		55.6	ug/L	0.333	1.00
127-18-4	Tetrachloroethylene		64.1	ug/L	0.333	1.00
106-93-4	1,2-Dibromoethane		54.7	ug/L	0.333	1.00
108-90-7	Chlorobenzene		60.7	ug/L	0.333	1.00
100-41-4	Ethylbenzene		61.1	ug/L	0.333	1.00
179601-23-1	m,p-Xylenes		122	ug/L	0.500	2.00
95-47-6	o-Xylene		59.8	ug/L	0.333	1.00
100-42-5	Styrene		52.3	ug/L	0.333	1.00
75-25-2	Bromoform		63.1	ug/L	0.333	1.00
79-34-5	1,1,2,2-Tetrachloroethane		57.7	ug/L	0.333	1.00
106-46-7	1,4-Dichlorobenzene		54.6	ug/L	0.333	1.00
107-02-8	Acrolein	U	1.67	ug/L	1.67	5.00
107-13-1	Acrylonitrile	U	1.67	ug/L	1.67	5.00
1330-20-7	Xylenes (total)		182	ug/L	1.00	3.00
120-82-1	1,2,4-Trichlorobenzene		43.4	ug/L	0.333	1.00
95-50-1	1,2-Dichlorobenzene		52.9	ug/L	0.333	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**1205275618**	**Date Received:**	**12/16/2022 09:15**		
Client Sample:	**QC for batch 2358452**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265371RAPS**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 22:29**	**Analyst:**	**JM6**	**Purge Vol:**	**5 mL**
Prep Date:	**12/20/2022 22:29**				
Data File:	**122022V3\3W235.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	50.3	50.0	ug/L	101	(73%-129%)
Bromofluorobenzene	49.3	50.0	ug/L	99	(72%-125%)
Toluene-d8	53.7	50.0	ug/L	107	(75%-123%)

Quantitation Report
GEL Laboratories, LLC

12/21/2022

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W235.D
Acq On : 20 Dec 2022 22:29
Operator : JM6
InstName : VOA3
Sample : |1205275618|2358452|1|VOA|2|VOA8260D_L|
Misc : TNSL 5ML PH<2 MIX[A] 604449002PS
ALS Vial : 35 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 21 06:40:04 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		Dev(Min)
Internal Standards									
1) Fluorobenzene	96	9.884	9.884	1.000	1063769	50.00	ug/L		0.00
43) Chlorobenzene-d5	117	13.060	13.066	1.000	771091	50.00	ug/L		0.00
60) 1,4-Dichlorobenzene-d4	152	15.481	15.480	1.000	458483	50.00	ug/L		0.00
84) B Fluorobenzene	96	9.884	9.884	1.000	1063790	50.00	ug/L		0.00
103) B Chlorobenzene-d5	117	13.060	13.060	1.000	771091	50.00	ug/L		0.00
105) B 1,4-Dichlorobenzene-d4	152	15.481	15.481	1.000	458483	50.00	ug/L		0.00
System Monitoring Compounds									Dev(Min)
30) 1,2-Dichloroethane-d4	67	9.543	9.549	0.965	163298	50.30	ug/L		0.00
45) Toluene-d8	98	11.530	11.530	0.883	1111239	53.72	ug/L		0.00
63) Bromofluorobenzene	95	14.261	14.261	0.921	423856	49.29	ug/L		0.00

Compound	Amount	Range	Recovery
30) 1,2-Dichloroethane-d4	50.000	73 - 129	101%
45) Toluene-d8	50.000	75 - 123	107%
63) Bromofluorobenzene	50.000	72 - 125	99%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		QValue
2) Dichlorodifluoromethane	85	4.260	4.260	0.431	384416	47.53	ug/L		99
3) Chloromethane	50	4.644	4.644	0.470	603493	59.91	ug/L		99
4) Vinyl chloride	62	4.808	4.826	0.486	522637	64.55	ug/L		99
5) Bromomethane	94	5.411	5.411	0.547	350154	60.16	ug/L		98
6) Chloroethane	64	5.538	5.557	0.560	340128	59.42	ug/L		100
7) Trichlorofluoromethane	101	5.885	5.904	0.595	603801	55.22	ug/L		99
8) Ethyl ether	59	6.232	6.232	0.631	146730	44.89	ug/L		93
9) Acetone	43	6.635	6.647	0.671	370091	311.09	ug/L		94
10) 1,1-Dichloroethylene	61	6.610	6.616	0.669	549995	55.22	ug/L		98
11) Iodomethane	142	6.854	6.866	0.693	2178912	238.56	ug/L		100
12) Acetonitrile	41	7.007	7.013	0.709	728721	1222.61	ug/L		99
13) Methyl acetate	74	7.013	7.025	0.709	153373	274.02	ug/L	#	85
14) Carbon disulfide	76	6.970	6.982	0.705	5303056	272.81	ug/L		100
15) Methylene chloride	84	7.196	7.202	0.728	302905	48.41	ug/L		94
16) tert-Butyl methyl ether	73	7.476	7.482	0.756	613606	46.65	ug/L		98
17) trans-1,2-Dichloroethy...	61	7.519	7.531	0.761	529282	61.30	ug/L		95
18) Hexane	57	7.799	7.799	0.789	1088	N.D.			
19) Vinyl acetate	43	7.982	7.988	0.808	2621585	273.97	ug/L		97
20) 1,1-Dichloroethane	63	8.012	8.018	0.811	619501	62.02	ug/L		99
21) 2-Butanone	43	8.616	8.622	0.872	542549	272.20	ug/L		97
22) cis-1,2-Dichloroethylene	96	8.653	8.659	0.875	335387	55.86	ug/L		95
23) 2,2-Dichloropropane	77	8.671	8.671	0.877	412895	59.43	ug/L		90
24) Bromochloromethane	49	8.927	8.933	0.903	312298	57.10	ug/L		95
25) Chloroform	83	8.963	8.970	0.907	546919	58.35	ug/L		99
26) 1,1,1-Trichloroethane	97	9.226	9.226	0.933	521763	60.91	ug/L		97
27) Cyclohexane	56	9.299	9.305	0.941	653868	68.75	ug/L		98
28) 1,1-Dichloropropene	75	9.378	9.384	0.949	453283	59.23	ug/L		96
29) Carbon tetrachloride	117	9.409	9.415	0.952	416251	59.87	ug/L		100
31) 1,2-Dichloroethane	62	9.622	9.628	0.973	364125	54.20	ug/L		98
32) Benzene	78	9.628	9.628	0.974	1248182	64.21	ug/L		100

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W235.D
Acq On : 20 Dec 2022 22:29
Operator : JM6
InstName : VOA3
Sample : |1205275618|2358452|1|VOA|2|VOA8260D_L|
Misc : TNSL 5ML PH<2 MIX[A] 604449002PS
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Dec 21 06:40:04 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
33) Cyclohexene	67	9.726	9.732	0.984	749132	64.37	ug/L	98
34) n-Butyl alcohol	56	10.006	10.012	1.012	788278	5683.00	ug/L	94
35) Trichloroethylene	95	10.262	10.268	1.038	344525	62.35	ug/L	99
36) 2-Pentanone	43	10.390	10.378	1.051	1011	N.D.		
37) 1,2-Dichloropropane	63	10.524	10.530	1.065	313095	56.64	ug/L	99
38) Methylcyclohexane	83	10.494	10.494	1.062	616043	65.26	ug/L	97
39) Dibromomethane	93	10.658	10.664	1.078	146162	53.50	ug/L	96
40) Bromodichloromethane	83	10.774	10.780	1.090	369094	57.69	ug/L	99
41) 2-Chloroethylvinyl ether	63	11.006	11.006	1.113	346467	133.74	ug/L	97
42) cis-1,3-Dichloropropylene	75	11.225	11.231	1.136	404969	50.86	ug/L	98
44) 4-Methyl-2-pentanone	43	11.329	11.329	0.867	1302390	313.44	ug/L	96
46) Toluene	91	11.597	11.603	0.888	1339185	61.96	ug/L	98
47) trans-1,3-Dichloroprop...	75	11.774	11.780	0.902	342170	53.11	ug/L	96
48) 1,1,2-Trichloroethane	97	11.993	11.999	0.918	213423	55.62	ug/L	99
49) 2-Hexanone	43	12.182	12.182	0.933	915708	315.13	ug/L	96
50) 1,3-Dichloropropane	76	12.188	12.188	0.933	375668	57.14	ug/L	95
51) Tetrachloroethylene	164	12.182	12.188	0.933	275357	64.05	ug/L	99
52) Dibromochloromethane	129	12.451	12.457	0.953	226880	58.40	ug/L	99
53) 1,2-Dibromoethane	107	12.621	12.621	0.966	200913	54.65	ug/L	97
54) Chlorobenzene	112	13.091	13.097	1.002	800392	60.69	ug/L	99
55) 1,1,1,2-Tetrachloroethane	131	13.152	13.152	1.007	252926	58.79	ug/L	99
56) Ethylbenzene	91	13.158	13.158	1.007	1563078	61.13	ug/L	98
57) m,p-Xylenes	106	13.261	13.267	1.015	1146638	122.11	ug/L	96
58) o-Xylene	106	13.700	13.700	1.049	555112	59.75	ug/L	98
59) Styrene	104	13.706	13.706	1.049	800001	52.26	ug/L	97
61) Bromoform	173	13.975	13.975	0.903	133984	63.14	ug/L	100
62) Isopropylbenzene	105	14.060	14.060	0.908	1479481	59.60	ug/L	99
64) 1,1,2,2-Tetrachloroethane	83	14.359	14.359	0.928	284053	57.65	ug/L	98
65) 1,2,3-Trichloropropane	110	14.444	14.444	0.933	78595	57.01	ug/L	93
66) Bromobenzene	156	14.469	14.468	0.935	340276	55.87	ug/L	94
67) n-Propylbenzene	91	14.487	14.487	0.936	1993789	62.27	ug/L	98
68) 1,3,5-Trimethylbenzene	105	14.639	14.639	0.946	1324160	59.00	ug/L	98
69) 2-Chlorotoluene	126	14.633	14.633	0.945	358176	60.90	ug/L	99
70) 4-Chlorotoluene	126	14.737	14.743	0.952	361525	58.47	ug/L	100
71) tert-Butylbenzene	134	15.011	15.011	0.970	269619	58.90	ug/L	97
72) 1,2,4-Trimethylbenzene	105	15.054	15.054	0.972	1318306	56.03	ug/L	98
73) sec-Butylbenzene	105	15.231	15.237	0.984	1799493	59.73	ug/L	99
74) 4-Isopropyltoluene	119	15.359	15.359	0.992	1456061	56.13	ug/L	100
75) 1,3-Dichlorobenzene	146	15.420	15.419	0.996	669224	54.37	ug/L	99
76) 1,4-Dichlorobenzene	146	15.505	15.505	1.002	668524	54.64	ug/L	99
77) n-Butylbenzene	91	15.785	15.791	1.020	1555386	55.89	ug/L	98
78) 1,2-Dichlorobenzene	146	15.919	15.919	1.028	630040	52.90	ug/L	99
79) 1,2-Dibromo-3-chloropr...	157	16.779	16.785	1.084	51183	49.68	ug/L	95
80) 1,2,4-Trichlorobenzene	180	17.785	17.791	1.149	475431	43.39	ug/L	99
81) Hexachlorobutadiene	225	17.943	17.949	1.159	281366	40.61	ug/L	99
82) Naphthalene	128	18.163	18.163	1.173	962978	46.80	ug/L	100
83) 1,2,3-Trichlorobenzene	180	18.486	18.492	1.194	435941	43.86	ug/L	100
85) Acrolein		0.000	6.470	0.000	0	N.D.		
86) Trichlorotrifluoroethane		6.592	6.586	0.667	0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W235.D
Acq On : 20 Dec 2022 22:29
Operator : JM6
InstName : VOA3
Sample : |1205275618|2358452|1|VOA|2|VOA8260D_L|
Misc : TNSL 5ML PH<2 MIX[A] 604449002PS
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Dec 21 06:40:04 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

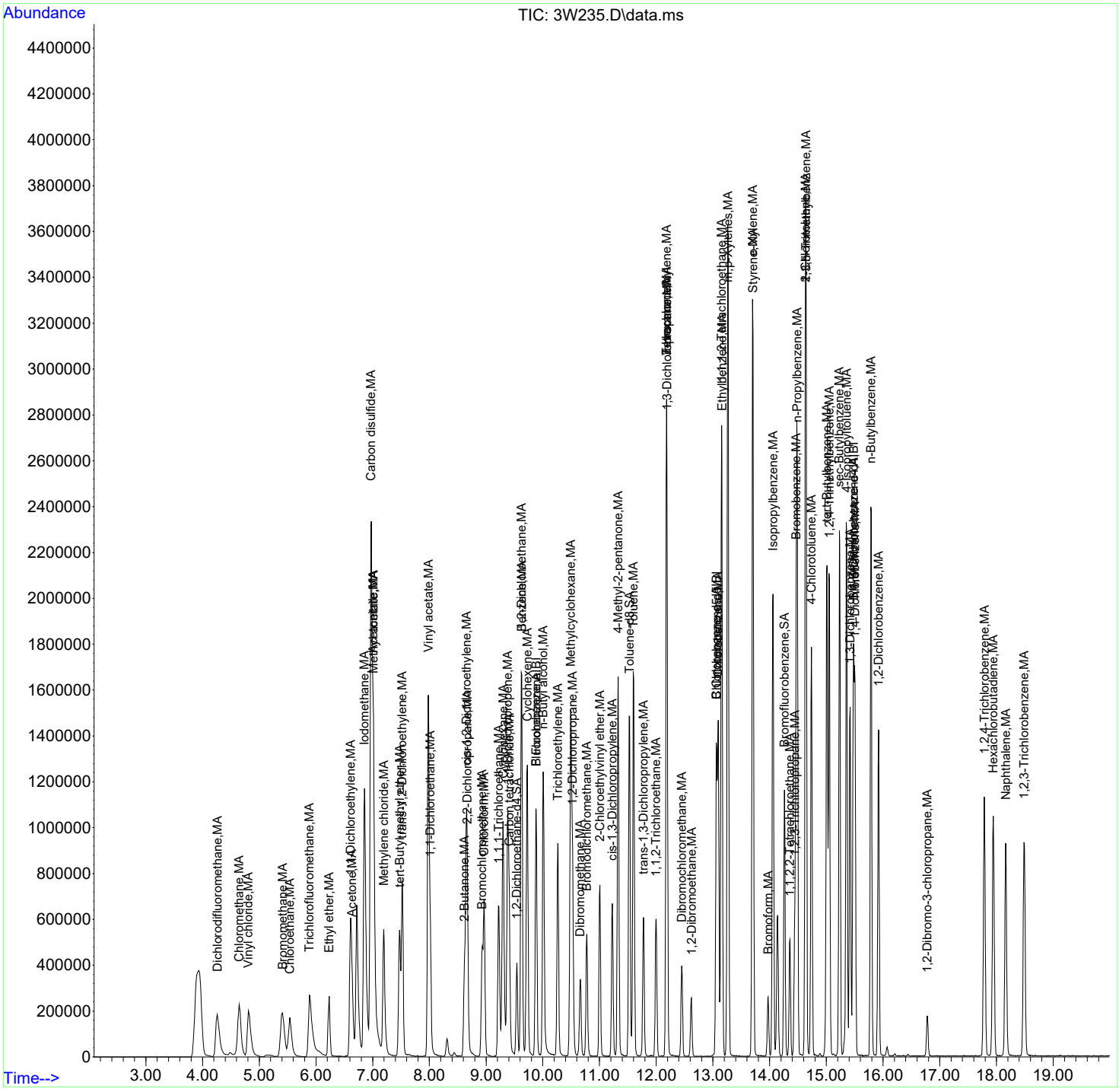
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
87) Isopropyl Alcohol		6.720	6.732	0.680	0m	N.D.	d
88) Allyl chloride		6.970	7.062	0.705	0m	N.D.	d
89) tert-Butyl Alcohol		7.214	7.220	0.730	0m	N.D.	d
90) Acrylonitrile		7.476	7.482	0.756	0m	N.D.	d
91) Isopropyl ether		7.976	7.988	0.807	0m	N.D.	d
92) 2-Chloro-1,3-butadiene		7.988	8.122	0.808	0m	N.D.	d
93) Ethyl tert-butyl ether		8.311	8.391	0.841	0m	N.D.	d
94) Ethyl acetate		8.616	8.628	0.872	0m	N.D.	d
95) Propionitrile		8.616	8.720	0.872	0m	N.D.	d
96) Methacrylonitrile		8.927	8.884	0.903	0m	N.D.	d
97) Tetrahydrofuran		8.963	8.976	0.907	0m	N.D.	d
98) Isobutyl alcohol		9.299	9.323	0.941	0m	N.D.	d
99) Methyl tert-amyl ether		0.000	9.640	0.000	0	N.D.	
100) Methyl methacrylate		10.494	10.506	1.062	0m	N.D.	d
101) 1,4-Dioxane		10.658	10.616	1.078	0m	N.D.	d
102) 2-Nitropropane		11.006	11.006	1.113	0m	N.D.	d
104) Ethyl methacrylate		11.743	11.774	0.899	0m	N.D.	d
106) 1-Chlorohexane		12.951	12.963	0.837	0m	N.D.	d
107) cis-1,4-Dichloro-2-butene		14.121	14.121	0.912	0m	N.D.	d
108) Cyclohexanone		14.225	14.237	0.919	0m	N.D.	d
109) trans-1,4-Dichloro-2-b...		14.401	14.408	0.930	0m	N.D.	d
110) Pentachloroethane		15.084	15.084	0.974	0m	N.D.	d
111) Benzyl chloride		15.785	15.627	1.020	0m	N.D.	d
112) bis(2-Chloroisopropyl)...		15.926	16.023	1.029	0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W235.D
Acq On : 20 Dec 2022 22:29
Operator : JM6
InstName : VOA3
Sample : |1205275618|2358452|1|VOA|2|VOA8260D_L|
Misc : TNSL 5ML PH<2 MIX[A] 604449002PS
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Dec 21 06:40:04 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**1205275621**	**Date Received:**	**12/16/2022 09:15**		
Client Sample:	**QC for batch 2358452**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265371PSD**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 21:23**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 21:23**				
Data File:	**121922V3\3W125.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
542-75-6	1,3-Dichloropropylene	U	0.500	ug/L	0.500	2.00
75-71-8	Dichlorodifluoromethane	U	0.355	ug/L	0.355	1.00
74-87-3	Chloromethane	U	0.333	ug/L	0.333	1.00
75-01-4	Vinyl chloride	U	0.333	ug/L	0.333	1.00
74-83-9	Bromomethane	U	0.337	ug/L	0.337	1.00
75-69-4	Trichlorofluoromethane	U	0.333	ug/L	0.333	1.00
75-35-4	1,1-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-09-2	Methylene chloride	U	0.500	ug/L	0.500	5.00
1634-04-4	tert-Butyl methyl ether	U	0.333	ug/L	0.333	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
75-34-3	1,1-Dichloroethane	U	0.333	ug/L	0.333	1.00
156-59-2	cis-1,2-Dichloroethylene	U	0.333	ug/L	0.333	1.00
67-66-3	Chloroform	U	0.333	ug/L	0.333	1.00
71-55-6	1,1,1-Trichloroethane	U	0.333	ug/L	0.333	1.00
56-23-5	Carbon tetrachloride	U	0.333	ug/L	0.333	1.00
107-06-2	1,2-Dichloroethane	U	0.333	ug/L	0.333	1.00
71-43-2	Benzene	U	0.333	ug/L	0.333	1.00
79-01-6	Trichloroethylene	U	0.333	ug/L	0.333	1.00
78-87-5	1,2-Dichloropropane	U	0.333	ug/L	0.333	1.00
74-95-3	Dibromomethane	U	0.333	ug/L	0.333	1.00
75-27-4	Bromodichloromethane	U	0.333	ug/L	0.333	1.00
108-88-3	Toluene	U	0.333	ug/L	0.333	1.00
79-00-5	1,1,2-Trichloroethane	U	0.333	ug/L	0.333	1.00
127-18-4	Tetrachloroethylene	U	0.333	ug/L	0.333	1.00
106-93-4	1,2-Dibromoethane	U	0.333	ug/L	0.333	1.00
108-90-7	Chlorobenzene	U	0.333	ug/L	0.333	1.00
100-41-4	Ethylbenzene	U	0.333	ug/L	0.333	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.333	ug/L	0.333	1.00
100-42-5	Styrene	U	0.333	ug/L	0.333	1.00
75-25-2	Bromoform	U	0.333	ug/L	0.333	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.333	ug/L	0.333	1.00
106-46-7	1,4-Dichlorobenzene	U	0.333	ug/L	0.333	1.00
107-02-8	Acrolein		6.49	ug/L	1.67	5.00
107-13-1	Acrylonitrile		247	ug/L	1.67	5.00
1330-20-7	Xylenes (total)	U	1.00	ug/L	1.00	3.00
120-82-1	1,2,4-Trichlorobenzene	U	0.333	ug/L	0.333	1.00
95-50-1	1,2-Dichlorobenzene	U	0.333	ug/L	0.333	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**1205275621**	**Date Received:**	**12/16/2022 09:15**		
Client Sample:	**QC for batch 2358452**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265371PSD**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 21:23**	**Analyst:**	**KP2**	**Purge Vol:**	**5 mL**
Prep Date:	**12/19/2022 21:23**				
Data File:	**121922V3\3W125.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	53.4	50.0	ug/L	107	(73%-129%)
Bromofluorobenzene	50.0	50.0	ug/L	100	(72%-125%)
Toluene-d8	53.2	50.0	ug/L	106	(75%-123%)

Quantitation Report
GEL Laboratories, LLC

12/21/2022

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W125.D
Acq On : 19 Dec 2022 21:23
Operator : KP2
InstName : VOA3
Sample : |1205275621|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2 MIX[B] 604449002MSD
ALS Vial : 25 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 20 08:13:13 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	96	9.884	9.884	1.000	903687	50.00	ug/L	0.00
43) Chlorobenzene-d5	117	13.060	13.066	1.000	649505	50.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	152	15.481	15.480	1.000	386064	50.00	ug/L	0.00
84) B Fluorobenzene	96	9.884	9.884	1.000	903624	50.00	ug/L	0.00
103) B Chlorobenzene-d5	117	13.060	13.060	1.000	649505	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	15.481	15.481	1.000	386064	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
30) 1,2-Dichloroethane-d4	67	9.549	9.549	0.966	147329	53.42	ug/L	0.00
45) Toluene-d8	98	11.530	11.530	0.883	925979	53.15	ug/L	0.00
63) Bromofluorobenzene	95	14.261	14.261	0.921	361814	49.97	ug/L	0.00

Compound	Amount	Range	Recovery
30) 1,2-Dichloroethane-d4	50.000	73 - 129	107%
45) Toluene-d8	50.000	75 - 123	106%
63) Bromofluorobenzene	50.000	72 - 125	100%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		4.278	4.260	0.433	0m	N.D.	d	
3) Chloromethane		4.644	4.644	0.470	0m	N.D.	d	
4) Vinyl chloride		4.826	4.826	0.488	0m	N.D.	d	
5) Bromomethane		5.447	5.411	0.551	0m	N.D.	d	
6) Chloroethane		0.000	5.557	0.000	0	N.D.		
7) Trichlorofluoromethane		5.904	5.904	0.597	0m	N.D.	d	
8) Ethyl ether		6.251	6.232	0.632	0m	N.D.	d	
9) Acetone		6.647	6.647	0.672	0m	N.D.	d	
10) 1,1-Dichloroethylene		6.610	6.616	0.669	0m	N.D.	d	
11) Iodomethane		6.879	6.866	0.696	0m	N.D.	d	
12) Acetonitrile		7.055	7.013	0.714	0m	N.D.	d	
13) Methyl acetate		7.031	7.025	0.711	0m	N.D.	d	
14) Carbon disulfide		6.988	6.982	0.707	0m	N.D.	d	
15) Methylene chloride		7.202	7.202	0.729	0m	N.D.	d	
16) tert-Butyl methyl ether		7.482	7.482	0.757	0m	N.D.	d	
17) trans-1,2-Dichloroethy...		0.000	7.531	0.000	0	N.D.		
18) Hexane		7.799	7.799	0.789	0m	N.D.	d	
19) Vinyl acetate		7.988	7.988	0.808	0m	N.D.	d	
20) 1,1-Dichloroethane		8.110	8.018	0.821	0m	N.D.	d	
21) 2-Butanone		8.622	8.622	0.872	0m	N.D.	d	
22) cis-1,2-Dichloroethylene		0.000	8.659	0.000	0	N.D.		
23) 2,2-Dichloropropane		0.000	8.671	0.000	0	N.D.		
24) Bromochloromethane		8.884	8.933	0.899	0m	N.D.	d	
25) Chloroform		8.976	8.970	0.908	0m	N.D.	d	
26) 1,1,1-Trichloroethane		0.000	9.226	0.000	0	N.D.		
27) Cyclohexane		9.323	9.305	0.943	0m	N.D.	d	
28) 1,1-Dichloropropene		9.329	9.384	0.944	0m	N.D.	d	
29) Carbon tetrachloride		0.000	9.415	0.000	0	N.D.		
31) 1,2-Dichloroethane		9.640	9.628	0.975	0m	N.D.	d	
32) Benzene		9.634	9.628	0.975	0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W125.D
Acq On : 19 Dec 2022 21:23
Operator : KP2
InstName : VOA3
Sample : |1205275621|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2 MIX[B] 604449002MSD
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Dec 20 08:13:13 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
33)	Cyclohexene		9.726	9.732	0.984	0m	N.D.	d	
34)	n-Butyl alcohol		10.024	10.012	1.014	0m	N.D.	d	
35)	Trichloroethylene		10.268	10.268	1.039	0m	N.D.	d	
36)	2-Pentanone		10.500	10.378	1.062	0m	N.D.	d	
37)	1,2-Dichloropropane		0.000	10.530	0.000	0	N.D.		
38)	Methylcyclohexane		10.506	10.494	1.063	0m	N.D.	d	
39)	Dibromomethane		10.671	10.664	1.080	0m	N.D.	d	
40)	Bromodichloromethane		10.780	10.780	1.091	0m	N.D.	d	
41)	2-Chloroethylvinyl ether		0.000	11.006	0.000	0	N.D.		
42)	cis-1,3-Dichloropropylene		0.000	11.231	0.000	0	N.D.		
44)	4-Methyl-2-pentanone		0.000	11.329	0.000	0	N.D.		
46)	Toluene		11.603	11.603	0.888	0m	N.D.	d	
47)	trans-1,3-Dichloroprop...		11.750	11.780	0.900	0m	N.D.	d	
48)	1,1,2-Trichloroethane		11.908	11.999	0.912	0m	N.D.	d	
49)	2-Hexanone		12.189	12.182	0.933	0m	N.D.	d	
50)	1,3-Dichloropropane		12.195	12.188	0.934	0m	N.D.	d	
51)	Tetrachloroethylene		12.189	12.188	0.933	0m	N.D.	d	
52)	Dibromochloromethane		12.451	12.457	0.953	0m	N.D.	d	
53)	1,2-Dibromoethane		0.000	12.621	0.000	0	N.D.		
54)	Chlorobenzene		13.097	13.097	1.003	0m	N.D.	d	
55)	1,1,1,2-Tetrachloroethane		13.152	13.152	1.007	0m	N.D.	d	
56)	Ethylbenzene		13.158	13.158	1.007	0m	N.D.	d	
57)	m,p-Xylenes		13.262	13.267	1.015	0m	N.D.	d	
58)	o-Xylene		13.725	13.700	1.051	0m	N.D.	d	
59)	Styrene		13.700	13.706	1.049	0m	N.D.	d	
61)	Bromoform		13.981	13.975	0.903	0m	N.D.	d	
62)	Isopropylbenzene		14.060	14.060	0.908	0m	N.D.	d	
64)	1,1,2,2-Tetrachloroethane		14.408	14.359	0.931	0m	N.D.	d	
65)	1,2,3-Trichloropropane		0.000	14.444	0.000	0	N.D.		
66)	Bromobenzene		14.469	14.468	0.935	0m	N.D.	d	
67)	n-Propylbenzene		14.481	14.487	0.935	0m	N.D.	d	
68)	1,3,5-Trimethylbenzene		14.645	14.639	0.946	0m	N.D.	d	
69)	2-Chlorotoluene		14.633	14.633	0.945	0m	N.D.	d	
70)	4-Chlorotoluene		14.743	14.743	0.952	0m	N.D.	d	
71)	tert-Butylbenzene		15.084	15.011	0.974	0m	N.D.	d	
72)	1,2,4-Trimethylbenzene		15.054	15.054	0.972	0m	N.D.	d	
73)	sec-Butylbenzene		15.231	15.237	0.984	0m	N.D.	d	
74)	4-Isopropyltoluene		15.322	15.359	0.990	0m	N.D.	d	
75)	1,3-Dichlorobenzene		15.420	15.419	0.996	0m	N.D.	d	
76)	1,4-Dichlorobenzene		15.505	15.505	1.002	0m	N.D.	d	
77)	n-Butylbenzene		15.627	15.791	1.009	0m	N.D.	d	
78)	1,2-Dichlorobenzene		15.926	15.919	1.029	0m	N.D.	d	
79)	1,2-Dibromo-3-chloropr...		0.000	16.785	0.000	0	N.D.		
80)	1,2,4-Trichlorobenzene		17.797	17.791	1.150	0m	N.D.	d	
81)	Hexachlorobutadiene		17.950	17.949	1.159	0m	N.D.	d	
82)	Naphthalene		18.169	18.163	1.174	0m	N.D.	d	
83)	1,2,3-Trichlorobenzene		18.480	18.492	1.194	0m	N.D.	d	
85)	Acrolein	56	6.476	6.470	0.655	3711	6.49	ug/L #	14
86)	Trichlorotrifluoroethane	85	6.592	6.586	0.667	795884	347.73	ug/L	97

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W125.D
Acq On : 19 Dec 2022 21:23
Operator : KP2
InstName : VOA3
Sample : |1205275621|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2 MIX[B] 604449002MSD
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Dec 20 08:13:13 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

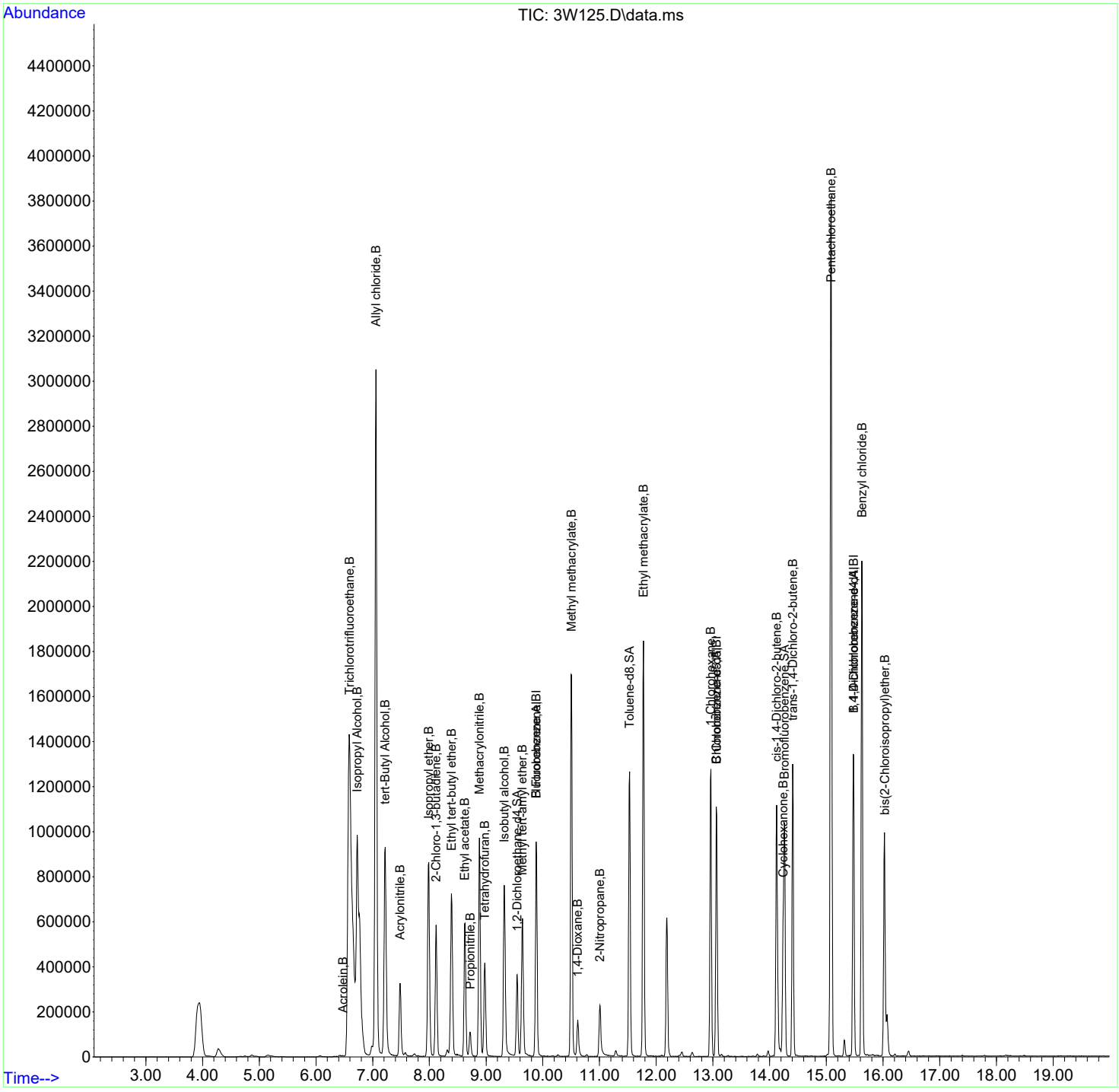
	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
87)	Isopropyl Alcohol	45	6.726	6.732	0.681	1383330	5091.53	ug/L		100 A
88)	Allyl chloride	76	7.055	7.062	0.714	790916	311.52	ug/L		99
89)	tert-Butyl Alcohol	59	7.220	7.220	0.730	1236810	2933.37	ug/L		94
90)	Acrylonitrile	53	7.482	7.482	0.757	306396	246.74	ug/L		99
91)	Isopropyl ether	45	7.988	7.988	0.808	931068	63.92	ug/L		98
92)	2-Chloro-1,3-butadiene	53	8.116	8.122	0.821	416277	57.47	ug/L		97
93)	Ethyl tert-butyl ether	59	8.391	8.391	0.849	744780	55.45	ug/L		97
94)	Ethyl acetate	43	8.622	8.628	0.872	802129	245.78	ug/L		97
95)	Propionitrile	54	8.720	8.720	0.882	124766	260.86	ug/L		97
96)	Methacrylonitrile	52	8.884	8.884	0.899	146864	248.33	ug/L		94
97)	Tetrahydrofuran	72	8.976	8.976	0.908	110948	262.82	ug/L		95
98)	Isobutyl alcohol	43	9.323	9.323	0.943	564841	2940.02	ug/L		98
99)	Methyl tert-amyl ether	87	9.640	9.640	0.975	117281	47.44	ug/L		95
100)	Methyl methacrylate	69	10.506	10.506	1.063	662403	288.79	ug/L		92
101)	1,4-Dioxane	88	10.616	10.616	1.074	131243	3138.74	ug/L		98
102)	2-Nitropropane	43	11.006	11.006	1.113	117518	144.11	ug/L		87
104)	Ethyl methacrylate	69	11.774	11.774	0.902	958370	208.95	ug/L		94
106)	1-Chlorohexane	55	12.963	12.963	0.837	340699	67.69	ug/L		95
107)	cis-1,4-Dichloro-2-butene	53	14.121	14.121	0.912	252453	180.47	ug/L		88
108)	Cyclohexanone	42	14.237	14.237	0.920	172958	1456.57	ug/L		96
109)	trans-1,4-Dichloro-2-b...	53	14.408	14.408	0.931	316279	228.72	ug/L		92
110)	Pentachloroethane	167	15.084	15.084	0.974	745214	273.78	ug/L		84
111)	Benzyl chloride	91	15.627	15.627	1.009	1732860	219.61	ug/L		99
112)	bis(2-Chloroisopropyl)...	121	16.029	16.023	1.035	142160	297.72	ug/L	#	82

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\121922V3\
Data File : 3W125.D
Acq On : 19 Dec 2022 21:23
Operator : KP2
InstName : VOA3
Sample : |1205275621|2358452|1|VOA|1|VOA8260D_L|
Misc : TNSL 5ML PH<2 MIX[B] 604449002MSD
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Dec 20 08:13:13 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**1205275620**	**Date Received:**	**12/16/2022 09:15**		
Client Sample:	**QC for batch 2358452**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265371RAPSD**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 22:55**	**Analyst:**	**JM6**	**Purge Vol:**	**5 mL**
Prep Date:	**12/20/2022 22:55**				
Data File:	**122022V3\3W236.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
542-75-6	1,3-Dichloropropylene		95.0	ug/L	0.500	2.00
75-71-8	Dichlorodifluoromethane		52.0	ug/L	0.355	1.00
74-87-3	Chloromethane		63.1	ug/L	0.333	1.00
75-01-4	Vinyl chloride		67.5	ug/L	0.333	1.00
74-83-9	Bromomethane		62.0	ug/L	0.337	1.00
75-69-4	Trichlorofluoromethane		58.3	ug/L	0.333	1.00
75-35-4	1,1-Dichloroethylene		59.4	ug/L	0.333	1.00
75-09-2	Methylene chloride		46.9	ug/L	0.500	5.00
1634-04-4	tert-Butyl methyl ether		44.2	ug/L	0.333	1.00
156-60-5	trans-1,2-Dichloroethylene		59.8	ug/L	0.333	1.00
75-34-3	1,1-Dichloroethane		60.3	ug/L	0.333	1.00
156-59-2	cis-1,2-Dichloroethylene		54.5	ug/L	0.333	1.00
67-66-3	Chloroform		56.4	ug/L	0.333	1.00
71-55-6	1,1,1-Trichloroethane		62.4	ug/L	0.333	1.00
56-23-5	Carbon tetrachloride		61.4	ug/L	0.333	1.00
107-06-2	1,2-Dichloroethane		49.5	ug/L	0.333	1.00
71-43-2	Benzene		62.6	ug/L	0.333	1.00
79-01-6	Trichloroethylene		61.9	ug/L	0.333	1.00
78-87-5	1,2-Dichloropropane		54.3	ug/L	0.333	1.00
74-95-3	Dibromomethane		48.2	ug/L	0.333	1.00
75-27-4	Bromodichloromethane		54.0	ug/L	0.333	1.00
108-88-3	Toluene		60.1	ug/L	0.333	1.00
79-00-5	1,1,2-Trichloroethane		48.4	ug/L	0.333	1.00
127-18-4	Tetrachloroethylene		62.7	ug/L	0.333	1.00
106-93-4	1,2-Dibromoethane		48.0	ug/L	0.333	1.00
108-90-7	Chlorobenzene		57.3	ug/L	0.333	1.00
100-41-4	Ethylbenzene		59.5	ug/L	0.333	1.00
179601-23-1	m,p-Xylenes		117	ug/L	0.500	2.00
95-47-6	o-Xylene		58.1	ug/L	0.333	1.00
100-42-5	Styrene		49.1	ug/L	0.333	1.00
75-25-2	Bromoform		53.9	ug/L	0.333	1.00
79-34-5	1,1,2,2-Tetrachloroethane		51.6	ug/L	0.333	1.00
106-46-7	1,4-Dichlorobenzene		50.2	ug/L	0.333	1.00
107-02-8	Acrolein	U	1.67	ug/L	1.67	5.00
107-13-1	Acrylonitrile	U	1.67	ug/L	1.67	5.00
1330-20-7	Xylenes (total)		175	ug/L	1.00	3.00
120-82-1	1,2,4-Trichlorobenzene		42.6	ug/L	0.333	1.00
95-50-1	1,2-Dichlorobenzene		49.7	ug/L	0.333	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**1205275620**	**Date Received:**	**12/16/2022 09:15**		
Client Sample:	**QC for batch 2358452**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265371RAPSD**	**Method:**	**SW846 8260D**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**2358452**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 22:55**	**Analyst:**	**JM6**	**Purge Vol:**	**5 mL**
Prep Date:	**12/20/2022 22:55**				
Data File:	**122022V3\3W236.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	52.1	50.0	ug/L	104	(73%-129%)
Bromofluorobenzene	48.1	50.0	ug/L	96	(72%-125%)
Toluene-d8	54.1	50.0	ug/L	108	(75%-123%)

Quantitation Report
GEL Laboratories, LLC

12/21/2022

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W236.D
Acq On : 20 Dec 2022 22:55
Operator : JM6
InstName : VOA3
Sample : |1205275620|2358452|1|VOA|2|VOA8260D_L|
Misc : TNSL 5ML PH<2 MIX[A] 604449002PSD
ALS Vial : 36 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 21 06:40:09 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	96	9.884	9.884	1.000	970143	50.00	ug/L	0.00
43) Chlorobenzene-d5	117	13.060	13.066	1.000	698661	50.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	152	15.480	15.480	1.000	424657	50.00	ug/L	0.00
84) B Fluorobenzene	96	9.884	9.884	1.000	970165	50.00	ug/L	0.00
103) B Chlorobenzene-d5	117	13.060	13.060	1.000	698661	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	15.480	15.481	1.000	424657	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
30) 1,2-Dichloroethane-d4	67	9.549	9.549	0.966	154144	52.07	ug/L	0.00
45) Toluene-d8	98	11.530	11.530	0.883	1014053	54.11	ug/L	0.00
63) Bromofluorobenzene	95	14.261	14.261	0.921	383219	48.12	ug/L	0.00

Compound	Amount	Range	Recovery
30) 1,2-Dichloroethane-d4	50.000	73 - 129	104%
45) Toluene-d8	50.000	75 - 123	108%
63) Bromofluorobenzene	50.000	72 - 125	96%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	85	4.260	4.260	0.431	383423	51.98	ug/L	100
3) Chloromethane	50	4.644	4.644	0.470	579594	63.09	ug/L	99
4) Vinyl chloride	62	4.826	4.826	0.488	498198	67.47	ug/L	100
5) Bromomethane	94	5.411	5.411	0.547	329203	62.02	ug/L	97
6) Chloroethane	64	5.538	5.557	0.560	331768	63.56	ug/L	100
7) Trichlorofluoromethane	101	5.904	5.904	0.597	581310	58.30	ug/L	99
8) Ethyl ether	59	6.232	6.232	0.631	140821	47.24	ug/L	75
9) Acetone	43	6.641	6.647	0.672	307660	283.57	ug/L	97
10) 1,1-Dichloroethylene	61	6.616	6.616	0.669	539563	59.41	ug/L	96
11) Iodomethane	142	6.866	6.866	0.695	2017765	242.24	ug/L	99
12) Acetonitrile	41	7.013	7.013	0.709	618252	1137.37	ug/L	98
13) Methyl acetate	74	7.019	7.025	0.710	127351	249.49	ug/L	91
14) Carbon disulfide	76	6.982	6.982	0.706	5007137	282.45	ug/L	100
15) Methylene chloride	84	7.202	7.202	0.729	267743	46.92	ug/L	96
16) tert-Butyl methyl ether	73	7.482	7.482	0.757	530575	44.23	ug/L	99
17) trans-1,2-Dichloroethy...	61	7.525	7.531	0.761	470542	59.75	ug/L	97
18) Hexane	57	7.799	7.799	0.789	1217	N.D.		
19) Vinyl acetate	43	7.988	7.988	0.808	2041515	233.94	ug/L	97
20) 1,1-Dichloroethane	63	8.019	8.018	0.811	549210	60.29	ug/L	100
21) 2-Butanone	43	8.622	8.622	0.872	433952	238.73	ug/L	96
22) cis-1,2-Dichloroethylene	96	8.659	8.659	0.876	298333	54.49	ug/L	95
23) 2,2-Dichloropropane	77	8.671	8.671	0.877	399494	63.05	ug/L	90
24) Bromochloromethane	49	8.933	8.933	0.904	267679	53.66	ug/L	94
25) Chloroform	83	8.970	8.970	0.907	482218	56.41	ug/L	99
26) 1,1,1-Trichloroethane	97	9.226	9.226	0.933	487713	62.43	ug/L	97
27) Cyclohexane	56	9.305	9.305	0.941	623091	71.84	ug/L	99
28) 1,1-Dichloropropene	75	9.384	9.384	0.949	410297	58.79	ug/L	96
29) Carbon tetrachloride	117	9.415	9.415	0.953	389527	61.44	ug/L	99
31) 1,2-Dichloroethane	62	9.628	9.628	0.974	303046	49.46	ug/L	100
32) Benzene	78	9.628	9.628	0.974	1108941	62.55	ug/L	100

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W236.D
Acq On : 20 Dec 2022 22:55
Operator : JM6
InstName : VOA3
Sample : |1205275620|2358452|1|VOA|2|VOA8260D_L|
Misc : TNSL 5ML PH<2 MIX[A] 604449002PSD
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Dec 21 06:40:09 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
33) Cyclohexene	67	9.726	9.732	0.984	679341	64.01	ug/L		98
34) n-Butyl alcohol	56	10.012	10.012	1.013	643352	5085.79	ug/L		94
35) Trichloroethylene	95	10.268	10.268	1.039	311693	61.85	ug/L		98
36) 2-Pentanone	43	10.427	10.378	1.055	127	N.D.			
37) 1,2-Dichloropropane	63	10.524	10.530	1.065	273750	54.30	ug/L		98
38) Methylcyclohexane	83	10.494	10.494	1.062	577939	67.13	ug/L		97
39) Dibromomethane	93	10.664	10.664	1.079	120069	48.19	ug/L		97
40) Bromodichloromethane	83	10.780	10.780	1.091	314986	53.98	ug/L		100
41) 2-Chloroethylvinyl ether	63	11.006	11.006	1.113	248828	105.32	ug/L		98
42) cis-1,3-Dichloropropylene	75	11.225	11.231	1.136	341867	47.08	ug/L		98
44) 4-Methyl-2-pentanone	43	11.329	11.329	0.867	1044245	277.36	ug/L		97
46) Toluene	91	11.603	11.603	0.888	1176792	60.09	ug/L		98
47) trans-1,3-Dichloroprop...	75	11.774	11.780	0.902	279542	47.88	ug/L		96
48) 1,1,2-Trichloroethane	97	11.999	11.999	0.919	168118	48.36	ug/L		98
49) 2-Hexanone	43	12.182	12.182	0.933	742158	281.88	ug/L		95
50) 1,3-Dichloropropane	76	12.188	12.188	0.933	307724	51.66	ug/L		96
51) Tetrachloroethylene	164	12.188	12.188	0.933	244225	62.70	ug/L		99
52) Dibromochloromethane	129	12.451	12.457	0.953	187423	53.25	ug/L		100
53) 1,2-Dibromoethane	107	12.615	12.621	0.966	159975	48.03	ug/L		100
54) Chlorobenzene	112	13.097	13.097	1.003	685010	57.33	ug/L		100
55) 1,1,1,2-Tetrachloroethane	131	13.152	13.152	1.007	215489	55.28	ug/L		99
56) Ethylbenzene	91	13.158	13.158	1.007	1377517	59.46	ug/L		98
57) m,p-Xylenes	106	13.261	13.267	1.015	998023	117.30	ug/L		97
58) o-Xylene	106	13.700	13.700	1.049	489314	58.13	ug/L		97
59) Styrene	104	13.706	13.706	1.049	680347	49.05	ug/L		96
61) Bromoform	173	13.975	13.975	0.903	105996	53.93	ug/L		100
62) Isopropylbenzene	105	14.060	14.060	0.908	1348993	58.67	ug/L		99
64) 1,1,2,2-Tetrachloroethane	83	14.359	14.359	0.928	235255	51.55	ug/L		99
65) 1,2,3-Trichloropropane	110	14.444	14.444	0.933	63496	49.72	ug/L	#	83
66) Bromobenzene	156	14.468	14.468	0.935	292568	51.86	ug/L		95
67) n-Propylbenzene	91	14.487	14.487	0.936	1782754	60.11	ug/L		98
68) 1,3,5-Trimethylbenzene	105	14.639	14.639	0.946	1205650	57.99	ug/L		98
69) 2-Chlorotoluene	126	14.633	14.633	0.945	316837	58.17	ug/L		99
70) 4-Chlorotoluene	126	14.737	14.743	0.952	307272	53.66	ug/L		97
71) tert-Butylbenzene	134	15.011	15.011	0.970	251337	59.28	ug/L		98
72) 1,2,4-Trimethylbenzene	105	15.054	15.054	0.972	1184974	54.37	ug/L		99
73) sec-Butylbenzene	105	15.231	15.237	0.984	1690738	60.59	ug/L		98
74) 4-Isopropyltoluene	119	15.359	15.359	0.992	1372915	57.14	ug/L		99
75) 1,3-Dichlorobenzene	146	15.420	15.419	0.996	585967	51.39	ug/L		99
76) 1,4-Dichlorobenzene	146	15.505	15.505	1.002	568601	50.18	ug/L		100
77) n-Butylbenzene	91	15.791	15.791	1.020	1464471	56.82	ug/L		98
78) 1,2-Dichlorobenzene	146	15.919	15.919	1.028	548711	49.74	ug/L		100
79) 1,2-Dibromo-3-chloropr...	157	16.779	16.785	1.084	44797	46.94	ug/L		95
80) 1,2,4-Trichlorobenzene	180	17.785	17.791	1.149	431908	42.56	ug/L		100
81) Hexachlorobutadiene	225	17.943	17.949	1.159	295079	45.99	ug/L		98
82) Naphthalene	128	18.163	18.163	1.173	915216	48.02	ug/L		100
83) 1,2,3-Trichlorobenzene	180	18.492	18.492	1.195	411050	44.65	ug/L		100
85) Acrolein		0.000	6.470	0.000	0	N.D.			
86) Trichlorotrifluoroethane		0.000	6.586	0.000	0	N.D.			

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W236.D
Acq On : 20 Dec 2022 22:55
Operator : JM6
InstName : VOA3
Sample : |1205275620|2358452|1|VOA|2|VOA8260D_L|
Misc : TNSL 5ML PH<2 MIX[A] 604449002PSD
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Dec 21 06:40:09 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE

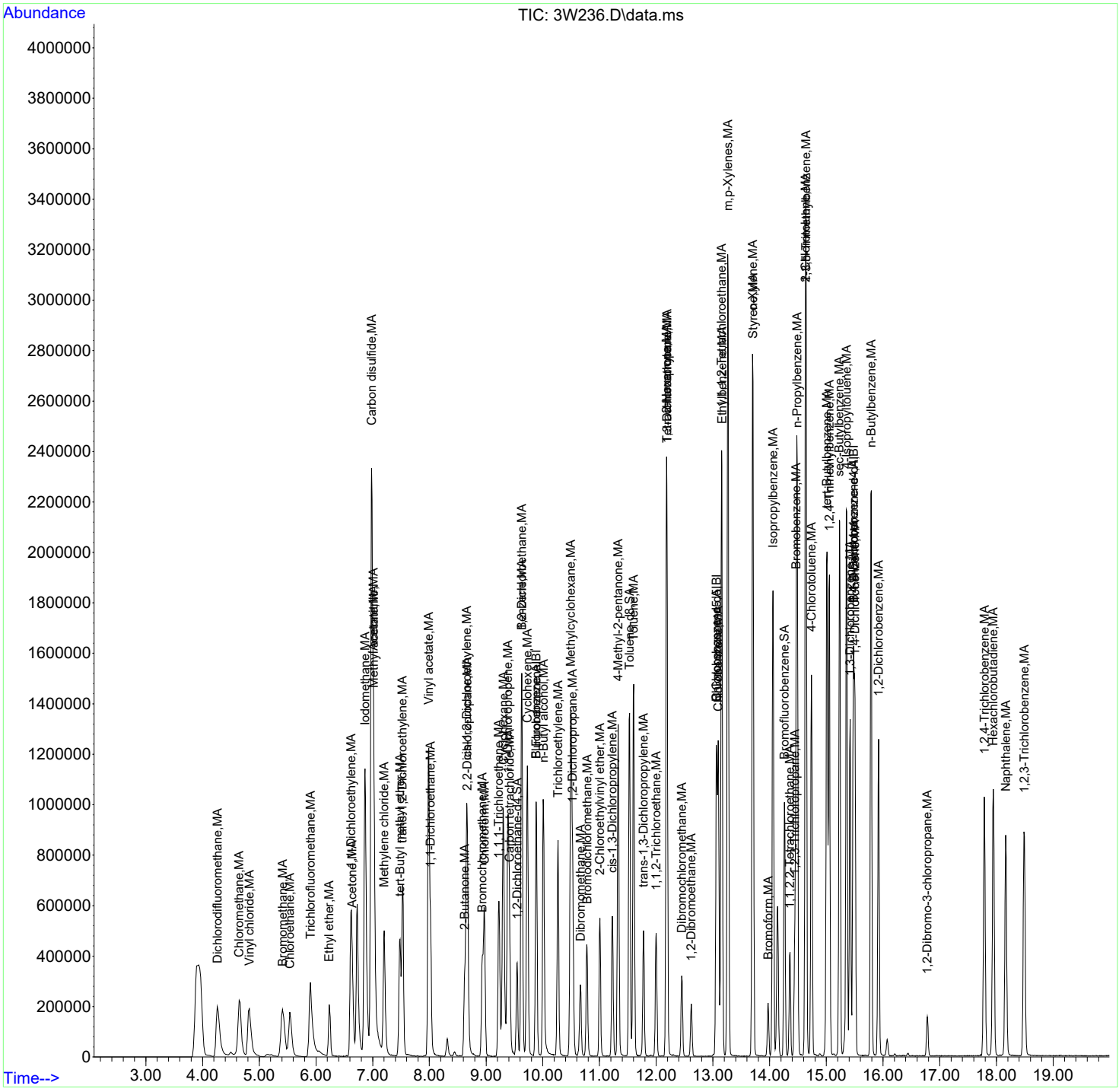
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
87) Isopropyl Alcohol		6.726	6.732	0.681	0m	N.D.	d
88) Allyl chloride		6.982	7.062	0.706	0m	N.D.	d
89) tert-Butyl Alcohol		7.244	7.220	0.733	0m	N.D.	d
90) Acrylonitrile		7.470	7.482	0.756	0m	N.D.	d
91) Isopropyl ether		7.988	7.988	0.808	0m	N.D.	d
92) 2-Chloro-1,3-butadiene		8.287	8.122	0.838	0m	N.D.	d
93) Ethyl tert-butyl ether		8.311	8.391	0.841	0m	N.D.	d
94) Ethyl acetate		8.622	8.628	0.872	0m	N.D.	d
95) Propionitrile		8.616	8.720	0.872	0m	N.D.	d
96) Methacrylonitrile		8.927	8.884	0.903	0m	N.D.	d
97) Tetrahydrofuran		8.970	8.976	0.907	0m	N.D.	d
98) Isobutyl alcohol		9.305	9.323	0.941	0m	N.D.	d
99) Methyl tert-amyl ether		0.000	9.640	0.000	0	N.D.	
100) Methyl methacrylate		10.494	10.506	1.062	0m	N.D.	d
101) 1,4-Dioxane		10.658	10.616	1.078	0m	N.D.	d
102) 2-Nitropropane		11.006	11.006	1.113	0m	N.D.	d
104) Ethyl methacrylate		11.768	11.774	0.901	0m	N.D.	d
106) 1-Chlorohexane		13.005	12.963	0.840	0m	N.D.	d
107) cis-1,4-Dichloro-2-butene		14.054	14.121	0.908	0m	N.D.	d
108) Cyclohexanone		14.231	14.237	0.919	0m	N.D.	d
109) trans-1,4-Dichloro-2-b...		14.401	14.408	0.930	0m	N.D.	d
110) Pentachloroethane		15.072	15.084	0.974	0m	N.D.	d
111) Benzyl chloride		15.791	15.627	1.020	0m	N.D.	d
112) bis(2-Chloroisopropyl)...		15.919	16.023	1.028	0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\122022V3\
Data File : 3W236.D
Acq On : 20 Dec 2022 22:55
Operator : JM6
InstName : VOA3
Sample : |1205275620|2358452|1|VOA|2|VOA8260D_L|
Misc : TNSL 5ML PH<2 MIX[A] 604449002PSD
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Dec 21 06:40:09 2022
Quant Method : D:\MSDCHEM\1\Data\113022V3_ICAL\VOA3-8260D-113022.M
Quant Title : Volatile Organics SubList :
QLast Update : Thu Dec 01 08:04:56 2022
Response via : Initial Calibration
Integrator: RTE



Miscellaneous

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA3

12/01/2022

12/01/2022

Date: 11/30/2022 Method 8260 Operator: JM6

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 50 Daily Instrument Readings:

Multiplier Voltage: 1906

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/30/2022

(See pg. _____ for ICAL Std. Ids)

CI test lot # _____

Sequence Number: 113022V3

	Daily Standard Solution ID#	Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV[A]			5		
IS	UVM220826-01	1	1	1	
SS	UVM220826-02	1	1	1	
ICV[A]	W3VM221130-10			5	
BFB	IVM221104-01				1
CCV[B]			5		
ICV[B]	W3VM221201-01			5	

Purge Amount	
5ML	Water Purge Vol:
5.0G	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	CI test (Y/N)	Acceptable(O/X)	Comments
11/30/2022 11:39	3T301.D	IVM221104-01	GEL	BFB1	10ML	1	N/A	1	w	JM6	N/A	O	
11/30/2022 12:04	3T302.D	W3VM221130-01	VSTD0005	ICAL	5UL/5ML	1	N/A	2	w	JM6	N/A	O	MIX[A] UVM221112-01/UVM220819-01C/UVM221021-01B
11/30/2022 12:32	3T303.D	W3VM221130-02	VSTD001	ICAL	5UL/5ML	1	N/A	3	w	JM6	N/A	O	MIX[A] UVM221112-02/UVM220819-02C/UVM221021-02B
11/30/2022 12:59	3T304.D	W3VM221130-03	VSTD002	ICAL	5UL/5ML	1	N/A	4	w	JM6	N/A	O	MIX[A] UVM221112-03/UVM220819-03C/UVM221021-03B
11/30/2022 13:26	3T305.D	W3VM221130-04	VSTD005	ICAL	5UL/5ML	1	N/A	5	w	JM6	N/A	O	MIX[A] UVM221112-04/UVM220819-04C/UVM221021-04B
11/30/2022 13:53	3T306.D	W3VM221130-05	VSTD010	ICAL	5UL/5ML	1	N/A	6	w	JM6	N/A	O	MIX[A] UVM221112-05/UVM220819-05C/UVM221021-05B
11/30/2022 14:21	3T307.D	W3VM221130-06	VSTD020	ICAL	5UL/5ML	1	N/A	7	w	JM6	N/A	O	MIX[A] UVM221112-06/UVM220819-06C/UVM221021-06B
11/30/2022 14:48	3T308.D	W3VM221130-07	VSTD050	ICAL	5UL/5ML	1	N/A	8	w	JM6	N/A	O	MIX[A] UVM221112-07/UVM220819-07C/UVM221021-07B
11/30/2022 15:16	3T309.D	W3VM221130-08	VSTD080	ICAL	4UL/5ML	1	N/A	9	w	JM6	N/A	O	MIX[A] UVM221112-07/UVM220819-07C/UVM221021-07B
11/30/2022 15:43	3T310.D	W3VM221130-09	VSTD100	ICAL	5UL/5ML	1	N/A	10	w	JM6	N/A	O	MIX[A] UVM221112-07/UVM220819-07C/UVM221021-07B
11/30/2022 16:11	3T311.D	1204	GEL	BLK	5ML	1	N/A	11	w	JM6	N/A	X	RINSE
11/30/2022 16:38	3T312.D	W3VM221130-10	VSTD050	ICV	5UL/5ML	1	N/A	12	w	JM6	N/A	O	MIX[A] UVM221014-10D/UVM220829-10E/UVM220825-09F
11/30/2022 17:05	3T313.D	W3VM221130-11	VSTD005	ICAL	5UL/5ML	1	N/A	13	w	JM6	N/A	O	MIX[B] UVM221106-01A/UVM221027-01
11/30/2022 17:32	3T314.D	W3VM221130-12	VSTD010	ICAL	5UL/5ML	1	N/A	14	w	JM6	N/A	O	MIX[B] UVM221106-02A/UVM221027-02
11/30/2022 17:59	3T315.D	W3VM221130-13	VSTD025	ICAL	5UL/5ML	1	N/A	15	w	JM6	N/A	O	MIX[B] UVM221106-03A/UVM221027-03
11/30/2022 18:26	3T316.D	W3VM221130-14	VSTD050	ICAL	5UL/5ML	1	N/A	16	w	JM6	N/A	O	MIX[B] UVM221106-04A/UVM221027-04
11/30/2022 18:53	3T317.D	W3VM221130-15	VSTD100	ICAL	5UL/5ML	1	N/A	17	w	JM6	N/A	O	MIX[B] UVM221106-05A/UVM221027-05
11/30/2022 19:20	3T318.D	W3VM221130-16	VSTD250	ICAL	5UL/5ML	1	N/A	18	w	JM6	N/A	O	MIX[B] UVM221106-06A/UVM221027-06
11/30/2022 19:47	3T319.D	W3VM221130-17	VSTD300	ICAL	3UL/5ML	1	N/A	19	w	JM6	N/A	O	MIX[B] UVM221106-07A/UVM221027-07
11/30/2022 20:13	3T320.D	W3VM221130-18	VSTD500	ICAL	5UL/5ML	1	N/A	20	w	JM6	N/A	O	MIX[B] UVM221106-07A/UVM221027-07
11/30/2022 20:40	3T321.D	1204	GEL	BLK	5ML	1	N/A	21	w	JM6	N/A	X	RINSE
11/30/2022 21:07	3T322.D	W3VM221130-19	VSTD250	ICV	5UL/5ML	1	N/A	22	w	JM6	N/A	X	MIX[B] SEE FILE 3T325
11/30/2022 21:34	3T323.D	1204	GEL	BLK	5ML	1	N/A	23	w	JM6	N/A	X	RINSE
12/1/2022 7:47	3T324.D	IVM221104-01	GEL	BFB1	10ML	1	N/A	24	w	JM6	N/A	O	
12/1/2022 8:12	3T325.D	W3VM221201-01	VSTD250	ICV	5UL/5ML	1	N/A	25	w	JM6	N/A	O	MIX[B] UVM221106-08A/UVM221128-09A

GEL Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA3

12/21/2022

Date: 12/19/2022 Method 8260 Operator: KP2

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 50 Daily Instrument Readings:

12/22/2022

Multiplier Voltage: 1941

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/30/2022

(See pg. _____ for ICAL Std. Ids)

CI test lot # _____

Sequence Number: 121922V3

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV[A]	W3VM221219-01			5	
IS	UVM220826-01	1		1	
SS	UVM220826-02	1	1	1	
LCS[A]	W3VM221219-01			5	
BFB	IVM221122-01				1
CCV[B]	W3VM221219-03			5	
LCS[B]	W3VM221219-03			5	

Purge Amount	
5ML	Water Purge Vol:
5.0G	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	CI test (Y/N)	Acceptable(O/X)	Comments
12/19/2022 10:27	3W101.D	IVM221122-01	GEL	BFB1	10ML	1	N/A	1	w	KP2	N/A	O	
12/19/2022 10:52	3W102.D	W3VM221219-01	GEL	CCV/LCS	5ML	1	N/A	2	w	KP2	N/A	O	MIX[A] UVM221112-10A/UVM220819-10H/UVM221021-09A
12/19/2022 11:18	3W103.D	W3VM221219-02	GEL	LCS	5G	1	N/A	3	s	KP2	N/A	O	SOIL MIX[A] UVM221112-10A/UVM220819-10H/UVM221021-09A
12/19/2022 11:45	3W104.D	W3VM221219-03	GEL	CCV/LCS	5ML	1	N/A	4	w	KP2	N/A	O	MIX[B] UVM221106-08B/UVM221128-09B
12/19/2022 12:12	3W105.D	BLANK	GEL	BLANK	5G	1	N/A	5	s	KP2	N/A	O	SOIL
12/19/2022 12:39	3W106.D	BLANK	GEL	BLANK	5ML	1	N/A	6	w	KP2	N/A	O	
12/19/2022 13:28	3W107.D	603708001	BRKL	2358452	5ML	1	PH<2	7	w	KP2	N	O	
12/19/2022 13:54	3W108.D	603708004	BRKL	2358452	5ML	1	PH<2	8	w	KP2	N	O	
12/19/2022 14:20	3W109.D	603708005	BRKL	2358452	5ML	1	PH<2	9	w	KP2	N	O	
12/19/2022 14:47	3W110.D	604449002	TNSL	2358452	5ML	1	PH<2	10	w	KP2	N	O	BROMOFORM HIT, LCS HIGH SEE FILE 3W238
12/19/2022 15:13	3W111.D	604449003	TNSL	2358452	5ML	1	PH<2	11	w	KP2	N	O	
12/19/2022 15:39	3W112.D	602922012	UCOR	2355028	5.0G	1	N/A	12	s	KP2	N/A	X	SOIL IS FAILURE CONFIRMED SEE FILE 3W115
12/19/2022 16:06	3W113.D	604449006	TNSL	2358452	5ML	1	PH<2	13	w	KP2	N	O	BROMOFORM HIT, LCS HIGH SEE FILE 3W239
12/19/2022 16:32	3W114.D	604449007	TNSL	2358452	5ML	1	PH<2	14	w	KP2	N	O	
12/19/2022 16:59	3W115.D	602922012	UCOR	2355028	5.2G	1	N/A	15	s	KP2	N/A	O	SOIL IS FAILURE CONFIRMED SEE FILE 3W112
12/19/2022 17:26	3W116.D	604449010	TNSL	2358452	5ML	1	PH<2	16	w	KP2	N	O	
12/19/2022 17:52	3W117.D	604449011	TNSL	2358452	5ML	1	PH<2	17	w	KP2	N	O	
12/19/2022 18:19	3W118.D	604449014	TNSL	2358452	5ML	1	PH<2	18	w	KP2	N	O	
12/19/2022 18:45	3W119.D	604449015	TNSL	2358452	5ML	1	PH<2	19	w	KP2	N	O	
12/19/2022 19:12	3W120.D	604449018	TNSL	2358452	5ML	1	PH<2	20	w	KP2	N	O	
12/19/2022 19:38	3W121.D	604449019	TNSL	2358452	5ML	1	PH<2	21	w	KP2	N	O	
12/19/2022 20:04	3W122.D	1205275618	TNSL	2358452	5ML	1	PH<2	22	w	KP2	N	X	MIX[A] UVM221112-10A/UVM220819-10H 604449002MS BROMOFORM HIT IN PARENT, LCS HIGH SEE FILE 3W235
12/19/2022 20:31	3W123.D	1205275620	TNSL	2358452	5ML	1	PH<2	23	w	KP2	N	X	MIX[A] UVM221112-10A/UVM220819-10H 604449002MSD BROMOFORM HIT IN PARENT, LCS HIGH SEE FILE 3W236
12/19/2022 20:57	3W124.D	1205275619	TNSL	2358452	5ML	1	PH<2	24	w	KP2	N	O	MIX[B] UVM221106-08B/UVM221128-09B 604449002MS
12/19/2022 21:23	3W125.D	1205275621	TNSL	2358452	5ML	1	PH<2	25	w	KP2	N	O	MIX[B] UVM221106-08B/UVM221128-09B 604449002MSD
12/19/2022 21:49	3W126.D	BLANK	GEL	BLANK	5ML	1	N/A	26	w	KP2	N/A	X	RINSE

ORGANIC RUN LOG - INSTRUMENT ID#VOA3

12/21/2022

12/22/2022

Date: 12/20/2022 Method 8260 Operator:

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 50 Daily Instrument Readings:

Multiplier Voltage: 1988

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 11/30/2022

(See pg. for ICAL Std. Ids)

CI test lot #

Sequence Number:

Daily Standard Volume Added for Purge (ul)

	Solution ID#	Blk/ Smpl	CCV	MS/ LCS	BFB
CCV[A]	W3VM221220-08		5		
IS	UVM220826-01	1	1	1	
SS	UVM220826-02	1	1	1	
LCS[A]	W3VM221220-09			5	
BFB	IVM221220-01				1
CCV[B]			5		
LCS[B]				5	

Purge Amount

5ML	Water Purge Vol:
5.0G	Soil Purge Wt.
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
X	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	CI test (Y/N)	Acceptable(O/X)	Comments
12/20/2022 19:26	3W228.D	IVM221220-01	GEL	BFB2	10ML	1	N/A	28	w	JM6	N/A	O	
12/20/2022 19:51	3W229.D	W3VM221220-06	GEL	CCV	5ML	1	N/A	29	w	JM6	N/A	X	MIX[A] UVM221014-07C/UVM220903-07I/UVM220422-01B
12/20/2022 20:17	3W230.D	W3VM221220-07	GEL	CCV/LCS	5ML	1	N/A	30	w	JM6	N/A	O	MIX[A] UVM221112-10B/UVM220819-10H/UVM221021-09B
12/20/2022 20:44	3W231.D	W3VM221220-08	GEL	CCV	5ML	1	N/A	31	w	JM6	N/A	O	MIX[B] UVM221106-06F/UVM221128-08A
12/20/2022 21:10	3W232.D	W3VM221220-09	GEL	LCS	5ML	1	N/A	32	w	JM6	N/A	O	MIX[B] UVM221106-08C/UVM221128-09B
12/20/2022 21:36	3W233.D	BLANK	GEL	BLANK	5ML	1	N/A	33	w	JM6	N/A	O	
12/20/2022 22:02	3W234.D	BLANK	GEL	BLANK	5ML	1	N/A	34	w	JM6	N/A	X	
12/20/2022 22:29	3W235.D	1205275618	TNSL	2358452	5ML	1	PH<2	35	w	JM6	N	O	MIX[A] UVM221112-10B/UVM220819-10H 604449002PS SEE FILE 3W122
12/20/2022 22:55	3W236.D	1205275620	TNSL	2358452	5ML	1	PH<2	36	w	JM6	N	O	MIX[A] UVM221112-10B/UVM220819-10H 604449002PSD SEE FILE 3W123
12/20/2022 23:21	3W237.D	BLANK	GEL	BLANK	5ML	1	N/A	37	w	JM6	N/A	X	RINSE
12/20/2022 23:47	3W238.D	604449002	TNSL	2358452	5ML	1	PH<2	38	w	JM6	N	O	SEE FILE 3W238
12/21/2022 0:13	3W239.D	604449006	TNSL	2358452	5ML	1	PH<2	39	w	JM6	N	O	SEE FILE 3W239 OVER RANGE NON-TARGET
12/21/2022 0:39	3W240.D	603842001	CPRC	2358046	5ML	1	PH<2	40	w	JM6	N	O	SEE FILE 3V611 POSSIBLE CARRYOVER NON-TARGET
12/21/2022 1:05	3W241.D	603842003	CPRC	2358046	5ML	1	PH<2	41	w	JM6	N	O	SEE FILE 3V613 POSSIBLE CARRYOVER NON-TARGET
12/21/2022 1:31	3W242.D	603842004	CPRC	2358046	5ML	1	PH<2	42	w	JM6	N	O	SEE FILE 3V614
12/21/2022 1:57	3W243.D	603842005	CPRC	2358046	250UL	20	PH<2	43	w	JM6	N	O	SEE FILE 3V615
12/21/2022 2:23	3W244.D	603842006	CPRC	2358046	500UL	10	PH<2	44	w	JM6	N	O	SEE FILE 3V616
12/21/2022 2:50	3W245.D	603842007	CPRC	2358046	500UL	10	PH<2	45	w	JM6	N	O	SEE FILE 3V617
12/21/2022 3:15	3W246.D	BLANK	GEL	BLANK	5ML	1	N/A	46	w	JM6	N/A	X	RINSE

Semi-Volatile Analysis

Case Narrative

GC/MS Semivolatile
Technical Case Narrative
Triad National Security, LLC
SDG #: 2023-289
Work Order #: 604449

Product: **Analysis of Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry**
Analytical Method: SW846 3510C/8270E
Analytical Procedure: GL-OA-E-009 REV# 46
Analytical Batch: 2358006

Preparation Method: SW846 3510C
Preparation Procedure: GL-OA-E-013 REV# 35
Preparation Batch: 2358005

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
604449002	SMEB01-23-265371
604449006	SMEB02-23-265372
604449010	SMEB03-23-265373
604449014	SMEB04-23-265374
604449018	SMEB05-23-265375
1205274620	Method Blank (MB)
1205274621	Laboratory Control Sample (LCS)
1205274624	604449006(SMEB02-23-265372) Matrix Spike (MS)
1205274625	604449006(SMEB02-23-265372) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Quality Control (QC) Information

Surrogate Recoveries
Samples (See Below) did not meet surrogate recovery limits. The samples were described as being very emulsive during extraction and the extracts were dark green in color. Following analysis, the GC/MS required extensive maintenance and column rinsing in order to restore adequate response for various acid compounds, particularly pentachlorophenol. It appears the low surrogate recoveries are associated with the matrix of the samples and the samples were not re-extracted.

Sample	Analyte	Value
1205274624 (SMEB02-23-265372MS)	2-Fluorobiphenyl	36* (39%-112%)
	Nitrobenzene-d5	37* (39%-112%)
	p-Terphenyl-d14	23* (24%-129%)
604449002 (SMEB01-23-265371)	2-Fluorobiphenyl	29* (39%-112%)

	Nitrobenzene-d5	34* (39%-112%)
	p-Terphenyl-d14	19* (24%-129%)
604449006 (SMEB02-23-265372)	2-Fluorobiphenyl	36* (39%-112%)
	Nitrobenzene-d5	34* (39%-112%)
	p-Terphenyl-d14	20* (24%-129%)
604449010 (SMEB03-23-265373)	2-Fluorobiphenyl	26* (39%-112%)
	p-Terphenyl-d14	12* (24%-129%)
604449014 (SMEB04-23-265374)	p-Terphenyl-d14	16* (24%-129%)
604449018 (SMEB05-23-265375)	2, 4, 6-Tribromophenol	603* (37%-132%)
	2-Fluorobiphenyl	393* (39%-112%)
	2-Fluorophenol	399* (11%-79%)
	Nitrobenzene-d5	580* (39%-112%)
	Phenol-d5	343* (15%-85%)
	p-Terphenyl-d14	13* (24%-129%)

Laboratory Control Sample (LCS) Recovery
The LCS and/or LCSD (See Below) did not meet spike recovery acceptance criteria. The failures are known to be poor responding analytes as stated per the Method. This may account for the low recoveries and the data were reported.

Sample	Analyte	Value
1205274621 (LCS)	1, 4-Dioxane	41* (43%-70%)
	Hexachlorocyclopentadiene	26* (30%-95%)

Spike Recovery Statement
The MS or MSD (See Below) spike recoveries were not within the acceptance limits. The MS and MSD were analyzed at a dilution. As a result, the spikes were diluted outside of the acceptance limits.

Sample	Analyte	Value
1205274624 (SMEB02-23-265372MS)	2, 4, 5-Trichlorophenol	46* (49%-125%)
	2, 4, 6-Trichlorophenol	41* (47%-130%)
	2, 4-Dichlorophenol	41* (49%-119%)
	3, 3’-Dichlorobenzidine	0* (38%-130%)
	Benzidine	0* (8%-128%)
	Hexachlorocyclopentadiene	0* (18%-89%)
	Isophorone	36* (42%-116%)
	N-Nitrosopyrrolidine	50* (52%-127%)
1205274625 (SMEB02-23-265372MSD)	3, 3’-Dichlorobenzidine	0* (38%-130%)
	Benzidine	0* (8%-128%)
	Hexachlorocyclopentadiene	7* (18%-89%)

MS/MSD Relative Percent Difference (RPD) Statement
The RPD values between the MS and MSD, (See Below), were not within the acceptance limits due to the large difference between the individual recoveries in each MS and MSD analyte pair. The failures may be attributed to an error in the extraction process.

Sample	Analyte	Value
1205274624MS and 1205274625MSD (SMEB02-23-265372)	2, 4-Dichlorophenol	RPD 66* (0%-42%)
	2, 4-Dinitrotoluene	RPD 47* (0%-42%)
	Atrazine	RPD 48* (0%-42%)
	Hexachlorocyclopentadiene	RPD 200* (0%-92%)
	Isophorone	RPD 48* (0%-43%)
	N-Nitrosopyrrolidine	RPD 41* (0%-36%)

Technical Information

Sample Dilutions
Samples 1205274624 (SMEB02-23-265372MS), 1205274625 (SMEB02-23-265372MSD), 604449002 (SMEB01-23-265371), 604449006 (SMEB02-23-265372), 604449010 (SMEB03-23-265373) and 604449018 (SMEB05-23-265375) were diluted because the extracts were very dark and/or viscous. The data from the dilutions are reported.

Miscellaneous Information

TIC Comment
Tentatively identified compounds (TIC) were requested for samples 604449002 (SMEB01-23-265371), 604449006 (SMEB02-23-265372), 604449010 (SMEB03-23-265373), 604449014 (SMEB04-23-265374) and 604449018 (SMEB05-23-265375) in this SDG in this batch.

Additional Comments
Diphenylamine Statement
Diphenylamine has superseded the reporting of N-Nitroso-diphenylamine. As per the EPA, N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine. Studies of these two compounds at GEL, both independent of each other and together, showed that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine are therefore reported as Diphenylamine on all reports and forms.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Qualifier Definition Report
for

TNSL001 Triad National Security, LLC (620266)

Client SDG: 2023-289 GEL Work Order: 604449

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria
** Analyte is a surrogate compound
J Value is estimated
U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

DL Indicates that sample is diluted.
RA Indicates that sample is re-analyzed without re-extraction.
RE Indicates that sample is re-extracted.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature: Cameron Bearden **Name: Cameron Bearden**

Date: 22 DEC 2022 **Title: Group Leader**

Sample Data Summary

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**604449002**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265371**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 15:16**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**984.36 mL**	**Final Volume:**	**1 mL**
Data File:	**S122022\s4L2008.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
1610-18-0	Prometon	U	3.05	ug/L	3.05	10.2
126-33-0	Sulfolane	U	3.05	ug/L	3.05	10.2
PAH-tot-3a	Total PAHs 3a	U	0.000	ug/L		
62-75-9	N-Methyl-N-nitrosomethylamine	U	3.05	ug/L	3.05	10.2
108-95-2	Phenol	U	3.05	ug/L	3.05	10.2
111-44-4	bis(2-Chloroethyl) ether	U	3.05	ug/L	3.05	10.2
108-60-1	bis(2-Chloro-1-methylethyl)ether	U	3.05	ug/L	3.05	10.2
67-72-1	Hexachloroethane	U	3.05	ug/L	3.05	10.2
98-95-3	Nitrobenzene	U	3.05	ug/L	3.05	10.2
78-59-1	Isophorone	U	3.56	ug/L	3.56	10.2
120-83-2	2,4-Dichlorophenol	U	3.05	ug/L	3.05	10.2
87-68-3	Hexachlorobutadiene	U	3.05	ug/L	3.05	10.2
91-57-6	2-Methylnaphthalene	U	0.305	ug/L	0.305	1.02
91-20-3	Naphthalene	U	0.305	ug/L	0.305	1.02
90-12-0	1-Methylnaphthalene	U	0.305	ug/L	0.305	1.02
77-47-4	Hexachlorocyclopentadiene	U	3.05	ug/L	3.05	10.2
88-06-2	2,4,6-Trichlorophenol	U	3.05	ug/L	3.05	10.2
95-95-4	2,4,5-Trichlorophenol	U	3.05	ug/L	3.05	10.2
131-11-3	Dimethylphthalate	U	0.305	ug/L	0.305	1.02
606-20-2	2,6-Dinitrotoluene	U	3.05	ug/L	3.05	10.2
121-14-2	2,4-Dinitrotoluene	U	3.05	ug/L	3.05	10.2
51-28-5	2,4-Dinitrophenol	U	5.08	ug/L	5.08	20.3
84-66-2	Diethylphthalate	U	0.305	ug/L	0.305	1.02
86-73-7	Fluorene	U	0.305	ug/L	0.305	1.02
534-52-1	2-Methyl-4,6-dinitrophenol	U	3.05	ug/L	3.05	10.2
122-39-4	Diphenylamine	U	3.05	ug/L	3.05	10.2
103-33-3	Azobenzene	U	3.05	ug/L	3.05	10.2
122-66-7	*1,2-Diphenylhydrazine*					
118-74-1	Hexachlorobenzene	U	3.05	ug/L	3.05	10.2
87-86-5	Pentachlorophenol	U	3.05	ug/L	3.05	10.2
85-01-8	Phenanthrene	U	0.305	ug/L	0.305	1.02
120-12-7	Anthracene	U	0.305	ug/L	0.305	1.02
84-74-2	Di-n-butylphthalate	U	0.305	ug/L	0.305	1.02
206-44-0	Fluoranthene	U	0.305	ug/L	0.305	1.02
129-00-0	Pyrene	U	0.305	ug/L	0.305	1.02
117-81-7	bis(2-Ethylhexyl)phthalate	U	0.305	ug/L	0.305	1.02
205-99-2	Benzo(b)fluoranthene	U	0.305	ug/L	0.305	1.02
207-08-9	Benzo(k)fluoranthene	U	0.305	ug/L	0.305	1.02
50-32-8	Benzo(a)pyrene	U	0.305	ug/L	0.305	1.02

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**604449002**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265371**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 15:16**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**984.36 mL**	**Final Volume:**	**1 mL**
Data File:	**S122022\s4L2008.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
123-91-1	1,4-Dioxane	U	3.05	ug/L	3.05	10.2
55-18-5	N-Nitrosodiethylamine	U	3.05	ug/L	3.05	10.2
930-55-2	N-Nitrosopyrrolidine	U	3.05	ug/L	3.05	10.2
924-16-3	N-Nitrosodi-n-butylamine	U	3.05	ug/L	3.05	10.2
95-94-3	1,2,4,5-Tetrachlorobenzene	U	3.05	ug/L	3.05	10.2
608-93-5	Pentachlorobenzene	U	3.05	ug/L	3.05	10.2
1912-24-9	Atrazine	U	3.05	ug/L	3.05	10.2
92-87-5	Benzidine	U	3.96	ug/L	3.96	10.2
91-94-1	3,3'-Dichlorobenzidine	U	3.05	ug/L	3.05	10.2

Surrogate/Tracer recovery	Result	Nominal		Recovery%		Acceptable Limits
2,4,6-Tribromophenol	46.8	102	ug/L	46		(37%-132%)
2-Fluorobiphenyl	14.9	50.8	ug/L	29	*	(39%-112%)
2-Fluorophenol	33.1	102	ug/L	33		(11%-79%)
Nitrobenzene-d5	17.0	50.8	ug/L	34	*	(39%-112%)
Phenol-d5	35.5	102	ug/L	35		(15%-85%)
p-Terphenyl-d14	9.58	50.8	ug/L	19	*	(24%-129%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	2.973	20.7	ug/L	50	J
	unknown	3.336	19.1	ug/L	59	J
000067-71-0	Dimethyl sulfone	4.443	4.97	ug/L	94	NJ
	unknown	5.957	8.9	ug/L	35	J
000112-36-7	Diethyl carbitol	6.364	5.06	ug/L	90	NJ
	unknown	8.744	14.3	ug/L	64	J
000126-86-3	2,4,7,9-Tetramethyl-5-decyn-4,7-diol	9.68	4.98	ug/L	91	NJ
000095-14-7	1H-Benzotriazole	10.274	13.3	ug/L	94	NJ
000143-24-8	Tetraglyme	10.466	5.77	ug/L	90	NJ
000050-84-0	Benzoic acid, 2,4-dichloro-	10.648	33.6	ug/L	98	NJ
029878-31-7	1H-Benzotriazole, 4-methyl-	10.824	10.5	ug/L	98	NJ
013798-23-7	Hexathiane	10.964	14.2	ug/L	96	NJ
000136-85-6	1H-Benzotriazole, 5-methyl-	11.183	6.13	ug/L	94	NJ
064744-50-9	Gabapentin lactam	11.381	12.1	ug/L	98	NJ
	unknown	11.916	8.97	ug/L	72	J
	unknown	12.515	4.9	ug/L	25	J
	unknown	12.568	11.9	ug/L	55	J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**604449002**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265371**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 15:16**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**984.36 mL**	**Final Volume:**	**1 mL**
Data File:	**S122022\s4L2008.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	13.092	11.3	ug/L	64	J
	unknown	13.162	6.32	ug/L	53	J
	unknown	13.258	4.17	ug/L	47	J
	unknown	13.397	8.48	ug/L	38	J
000057-10-3	n-Hexadecanoic acid	13.916	5.45	ug/L	99	NJ
010544-50-0	Cyclic octaatomic sulfur	15.039	7.28	ug/L	95	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:36**	**Matrix:**	**W**
Lab Sample ID:	**604449006**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB02-23-265372**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 15:46**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**S122022\s4L2009.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
1610-18-0	Prometon	U	3.00	ug/L	3.00	10.0
126-33-0	Sulfolane	U	3.00	ug/L	3.00	10.0
PAH-tot-3a	Total PAHs 3a	U	0.000	ug/L		
62-75-9	N-Methyl-N-nitrosomethylamine	U	3.00	ug/L	3.00	10.0
108-95-2	Phenol	U	3.00	ug/L	3.00	10.0
111-44-4	bis(2-Chloroethyl) ether	U	3.00	ug/L	3.00	10.0
108-60-1	bis(2-Chloro-1-methylethyl)ether	U	3.00	ug/L	3.00	10.0
67-72-1	Hexachloroethane	U	3.00	ug/L	3.00	10.0
98-95-3	Nitrobenzene	U	3.00	ug/L	3.00	10.0
78-59-1	Isophorone	U	3.50	ug/L	3.50	10.0
120-83-2	2,4-Dichlorophenol	U	3.00	ug/L	3.00	10.0
87-68-3	Hexachlorobutadiene	U	3.00	ug/L	3.00	10.0
91-57-6	2-Methylnaphthalene	U	0.300	ug/L	0.300	1.00
91-20-3	Naphthalene	U	0.300	ug/L	0.300	1.00
90-12-0	1-Methylnaphthalene	U	0.300	ug/L	0.300	1.00
77-47-4	Hexachlorocyclopentadiene	U	3.00	ug/L	3.00	10.0
88-06-2	2,4,6-Trichlorophenol	U	3.00	ug/L	3.00	10.0
95-95-4	2,4,5-Trichlorophenol	U	3.00	ug/L	3.00	10.0
131-11-3	Dimethylphthalate	U	0.300	ug/L	0.300	1.00
606-20-2	2,6-Dinitrotoluene	U	3.00	ug/L	3.00	10.0
121-14-2	2,4-Dinitrotoluene	U	3.00	ug/L	3.00	10.0
51-28-5	2,4-Dinitrophenol	U	5.00	ug/L	5.00	20.0
84-66-2	Diethylphthalate	U	0.300	ug/L	0.300	1.00
86-73-7	Fluorene	U	0.300	ug/L	0.300	1.00
534-52-1	2-Methyl-4,6-dinitrophenol	U	3.00	ug/L	3.00	10.0
122-39-4	Diphenylamine	U	3.00	ug/L	3.00	10.0
103-33-3	Azobenzene	U	3.00	ug/L	3.00	10.0
122-66-7	*1,2-Diphenylhydrazine*					
118-74-1	Hexachlorobenzene	U	3.00	ug/L	3.00	10.0
87-86-5	Pentachlorophenol	U	3.00	ug/L	3.00	10.0
85-01-8	Phenanthrene	U	0.300	ug/L	0.300	1.00
120-12-7	Anthracene	U	0.300	ug/L	0.300	1.00
84-74-2	Di-n-butylphthalate	U	0.300	ug/L	0.300	1.00
206-44-0	Fluoranthene	U	0.300	ug/L	0.300	1.00
129-00-0	Pyrene	U	0.300	ug/L	0.300	1.00
117-81-7	bis(2-Ethylhexyl)phthalate	U	0.300	ug/L	0.300	1.00
205-99-2	Benzo(b)fluoranthene	U	0.300	ug/L	0.300	1.00
207-08-9	Benzo(k)fluoranthene	U	0.300	ug/L	0.300	1.00
50-32-8	Benzo(a)pyrene	U	0.300	ug/L	0.300	1.00

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:36**	**Matrix:**	**W**
Lab Sample ID:	**604449006**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB02-23-265372**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 15:46**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**S122022\s4L2009.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
123-91-1	1,4-Dioxane	U	3.00	ug/L	3.00	10.0
55-18-5	N-Nitrosodiethylamine	U	3.00	ug/L	3.00	10.0
930-55-2	N-Nitrosopyrrolidine	U	3.00	ug/L	3.00	10.0
924-16-3	N-Nitrosodi-n-butylamine	U	3.00	ug/L	3.00	10.0
95-94-3	1,2,4,5-Tetrachlorobenzene	U	3.00	ug/L	3.00	10.0
608-93-5	Pentachlorobenzene	U	3.00	ug/L	3.00	10.0
1912-24-9	Atrazine	U	3.00	ug/L	3.00	10.0
92-87-5	Benzidine	U	3.90	ug/L	3.90	10.0
91-94-1	3,3'-Dichlorobenzidine	U	3.00	ug/L	3.00	10.0

Surrogate/Tracer recovery	Result	Nominal		Recovery%		Acceptable Limits
2,4,6-Tribromophenol	44.9	100	ug/L	45		(37%-132%)
2-Fluorobiphenyl	18.2	50.0	ug/L	36	*	(39%-112%)
2-Fluorophenol	32.5	100	ug/L	32		(11%-79%)
Nitrobenzene-d5	17.2	50.0	ug/L	34	*	(39%-112%)
Phenol-d5	34.3	100	ug/L	34		(15%-85%)
p-Terphenyl-d14	9.87	50.0	ug/L	20	*	(24%-129%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	Estimated RT		Units	Fit	Qual
	unknown	2.973	26.1	ug/L	38	J
	unknown	3.331	23.3	ug/L	56	J
000067-71-0	Dimethyl sulfone	4.443	6.53	ug/L	94	NJ
	unknown	5.952	9.23	ug/L	39	J
000077-71-4	2,4-Imidazolidinedione, 5,5-dimethyl-	8.728	8.98	ug/L	86	NJ
000126-86-3	2,4,7,9-Tetramethyl-5-decyn-4,7-diol	9.68	6.64	ug/L	91	NJ
000095-14-7	1H-Benzotriazole	10.274	11.3	ug/L	96	NJ
000143-24-8	Tetraglyme	10.466	8.32	ug/L	86	NJ
000050-84-0	Benzoic acid, 2,4-dichloro-	10.643	17.9	ug/L	99	NJ
029878-31-7	1H-Benzotriazole, 4-methyl-	10.83	10.1	ug/L	98	NJ
000136-85-6	1H-Benzotriazole, 5-methyl-	11.183	5.02	ug/L	97	NJ
064744-50-9	Gabapentin lactam	11.386	13	ug/L	98	NJ
	unknown	11.536	5.46	ug/L	45	J
023192-82-7	9-Tetradecen-1-ol, acetate, (E)-	11.889	10.3	ug/L	90	NJ
	unknown	11.921	12.6	ug/L	46	J
	unknown	12.573	13.5	ug/L	49	J
	unknown	13.092	12.6	ug/L	72	J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:36**	**Matrix:**	**W**
Lab Sample ID:	**604449006**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB02-23-265372**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 15:46**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**S122022\s4L2009.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	13.167	7.35	ug/L	52	J
021964-49-8	1,13-Tetradecadiene	13.354	11.4	ug/L	98	NJ
	unknown	13.397	7.21	ug/L	27	J
000057-10-3	n-Hexadecanoic acid	13.916	5.28	ug/L	96	NJ
056797-43-4	cis,cis,cis-7,10,13-Hexadecatrienal	15.082	7.54	ug/L	91	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:35**	**Matrix:**	**W**
Lab Sample ID:	**604449010**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB03-23-265373**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 17:13**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**1112.92 mL**	**Final Volume:**	**1 mL**
Data File:	**S122022\s4L2012.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
1610-18-0	Prometon	U	2.70	ug/L	2.70	8.99
126-33-0	Sulfolane	U	2.70	ug/L	2.70	8.99
PAH-tot-3a	Total PAHs 3a	U	0.000	ug/L		
62-75-9	N-Methyl-N-nitrosomethylamine	U	2.70	ug/L	2.70	8.99
108-95-2	Phenol	J	6.19	ug/L	2.70	8.99
111-44-4	bis(2-Chloroethyl) ether	U	2.70	ug/L	2.70	8.99
108-60-1	bis(2-Chloro-1-methylethyl)ether	U	2.70	ug/L	2.70	8.99
67-72-1	Hexachloroethane	U	2.70	ug/L	2.70	8.99
98-95-3	Nitrobenzene	U	2.70	ug/L	2.70	8.99
78-59-1	Isophorone	U	3.14	ug/L	3.14	8.99
120-83-2	2,4-Dichlorophenol	U	2.70	ug/L	2.70	8.99
87-68-3	Hexachlorobutadiene	U	2.70	ug/L	2.70	8.99
91-57-6	2-Methylnaphthalene	U	0.270	ug/L	0.270	0.899
91-20-3	Naphthalene	U	0.270	ug/L	0.270	0.899
90-12-0	1-Methylnaphthalene	U	0.270	ug/L	0.270	0.899
77-47-4	Hexachlorocyclopentadiene	U	2.70	ug/L	2.70	8.99
88-06-2	2,4,6-Trichlorophenol	U	2.70	ug/L	2.70	8.99
95-95-4	2,4,5-Trichlorophenol	U	2.70	ug/L	2.70	8.99
131-11-3	Dimethylphthalate	U	0.270	ug/L	0.270	0.899
606-20-2	2,6-Dinitrotoluene	U	2.70	ug/L	2.70	8.99
121-14-2	2,4-Dinitrotoluene	U	2.70	ug/L	2.70	8.99
51-28-5	2,4-Dinitrophenol	U	4.49	ug/L	4.49	18.0
84-66-2	Diethylphthalate	U	0.270	ug/L	0.270	0.899
86-73-7	Fluorene	U	0.270	ug/L	0.270	0.899
534-52-1	2-Methyl-4,6-dinitrophenol	U	2.70	ug/L	2.70	8.99
122-39-4	Diphenylamine	U	2.70	ug/L	2.70	8.99
103-33-3	Azobenzene	U	2.70	ug/L	2.70	8.99
122-66-7	*1,2-Diphenylhydrazine*					
118-74-1	Hexachlorobenzene	U	2.70	ug/L	2.70	8.99
87-86-5	Pentachlorophenol	U	2.70	ug/L	2.70	8.99
85-01-8	Phenanthrene	U	0.270	ug/L	0.270	0.899
120-12-7	Anthracene	U	0.270	ug/L	0.270	0.899
84-74-2	Di-n-butylphthalate	U	0.270	ug/L	0.270	0.899
206-44-0	Fluoranthene	U	0.270	ug/L	0.270	0.899
129-00-0	Pyrene	U	0.270	ug/L	0.270	0.899
117-81-7	bis(2-Ethylhexyl)phthalate	U	0.270	ug/L	0.270	0.899
205-99-2	Benzo(b)fluoranthene	U	0.270	ug/L	0.270	0.899
207-08-9	Benzo(k)fluoranthene	U	0.270	ug/L	0.270	0.899
50-32-8	Benzo(a)pyrene	U	0.270	ug/L	0.270	0.899

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:35**	**Matrix:**	**W**
Lab Sample ID:	**604449010**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB03-23-265373**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 17:13**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**1112.92 mL**	**Final Volume:**	**1 mL**
Data File:	**S122022\s4L2012.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
123-91-1	1,4-Dioxane	U	2.70	ug/L	2.70	8.99
55-18-5	N-Nitrosodiethylamine	U	2.70	ug/L	2.70	8.99
930-55-2	N-Nitrosopyrrolidine	U	2.70	ug/L	2.70	8.99
924-16-3	N-Nitrosodi-n-butylamine	U	2.70	ug/L	2.70	8.99
95-94-3	1,2,4,5-Tetrachlorobenzene	U	2.70	ug/L	2.70	8.99
608-93-5	Pentachlorobenzene	U	2.70	ug/L	2.70	8.99
1912-24-9	Atrazine	U	2.70	ug/L	2.70	8.99
92-87-5	Benzidine	U	3.50	ug/L	3.50	8.99
91-94-1	3,3'-Dichlorobenzidine	U	2.70	ug/L	2.70	8.99

Surrogate/Tracer recovery	Result	Nominal		Recovery%		Acceptable Limits
2,4,6-Tribromophenol	52.9	89.9	ug/L	59		(37%-132%)
2-Fluorobiphenyl	11.7	44.9	ug/L	26	*	(39%-112%)
2-Fluorophenol	55.6	89.9	ug/L	62		(11%-79%)
Nitrobenzene-d5	34.2	44.9	ug/L	76		(39%-112%)
Phenol-d5	55.3	89.9	ug/L	62		(15%-85%)
p-Terphenyl-d14	5.18	44.9	ug/L	12	*	(24%-129%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.502	10.5	ug/L	83	J
000067-71-0	Dimethyl sulfone	4.454	24.8	ug/L	94	NJ
	unknown	5.481	12.4	ug/L	47	J
	unknown	6.166	8.72	ug/L	35	J
	unknown	6.331	9.96	ug/L	35	J
	unknown	7.588	8.23	ug/L	43	J
	unknown	7.808	8.4	ug/L	45	J
	unknown	8.171	9.82	ug/L	76	J
	unknown	8.278	10.9	ug/L	25	J
	unknown	8.348	8.49	ug/L	45	J
000099-94-5	Benzoic acid, 4-methyl-	8.433	14.9	ug/L	96	NJ
	unknown	8.803	8.81	ug/L	74	J
	unknown	8.835	13.2	ug/L	32	J
	unknown	8.926	13	ug/L	47	J
	unknown	9.081	9.08	ug/L	10	J
	unknown	9.273	9.67	ug/L	47	J
	unknown	10.097	8.13	ug/L	47	J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:35**	**Matrix:**	**W**
Lab Sample ID:	**604449010**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB03-23-265373**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 17:13**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**1112.92 mL**	**Final Volume:**	**1 mL**
Data File:	**S122022\s4L2012.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
000095-14-7	1H-Benzotriazole	10.322	10.1	ug/L	96	NJ
000050-84-0	Benzoic acid, 2,4-dichloro-	10.664	42.7	ug/L	99	NJ
000050-84-0	Benzoic acid, 2,4-dichloro-	10.691	33.9	ug/L	90	NJ
029878-31-7	1H-Benzotriazole, 4-methyl-	10.862	15.3	ug/L	98	NJ
015356-74-8	2(4H)-Benzofuranone, 5,6,7,7a-tetrahydro-4,4,7a-tr	10.947	21.2	ug/L	97	NJ
064744-50-9	Gabapentin lactam	11.445	39.9	ug/L	93	NJ
	unknown	11.766	8.98	ug/L	64	J
	unknown	12.162	11.8	ug/L	50	J
	unknown	12.547	8.66	ug/L	35	J
	unknown	12.589	11.6	ug/L	42	J
000504-96-1	Neophytadiene	13.092	12.4	ug/L	91	NJ
	unknown	13.467	9.61	ug/L	33	J
000057-10-3	n-Hexadecanoic acid	13.932	8.2	ug/L	98	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:01**	**Matrix:**	**W**
Lab Sample ID:	**604449014**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB04-23-265374**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 17:42**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**1057.42 mL**	**Final Volume:**	**1 mL**
Data File:	**S122022\s4L2013.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
1610-18-0	Prometon	U	2.84	ug/L	2.84	9.46
126-33-0	Sulfolane	U	2.84	ug/L	2.84	9.46
PAH-tot-3a	Total PAHs 3a	U	0.000	ug/L		
62-75-9	N-Methyl-N-nitrosomethylamine	U	2.84	ug/L	2.84	9.46
108-95-2	Phenol	U	2.84	ug/L	2.84	9.46
111-44-4	bis(2-Chloroethyl) ether	U	2.84	ug/L	2.84	9.46
108-60-1	bis(2-Chloro-1-methylethyl)ether	U	2.84	ug/L	2.84	9.46
67-72-1	Hexachloroethane	U	2.84	ug/L	2.84	9.46
98-95-3	Nitrobenzene	U	2.84	ug/L	2.84	9.46
78-59-1	Isophorone	U	3.31	ug/L	3.31	9.46
120-83-2	2,4-Dichlorophenol	U	2.84	ug/L	2.84	9.46
87-68-3	Hexachlorobutadiene	U	2.84	ug/L	2.84	9.46
91-57-6	2-Methylnaphthalene	U	0.284	ug/L	0.284	0.946
91-20-3	Naphthalene	U	0.284	ug/L	0.284	0.946
90-12-0	1-Methylnaphthalene	U	0.284	ug/L	0.284	0.946
77-47-4	Hexachlorocyclopentadiene	U	2.84	ug/L	2.84	9.46
88-06-2	2,4,6-Trichlorophenol	U	2.84	ug/L	2.84	9.46
95-95-4	2,4,5-Trichlorophenol	U	2.84	ug/L	2.84	9.46
131-11-3	Dimethylphthalate	U	0.284	ug/L	0.284	0.946
606-20-2	2,6-Dinitrotoluene	U	2.84	ug/L	2.84	9.46
121-14-2	2,4-Dinitrotoluene	U	2.84	ug/L	2.84	9.46
51-28-5	2,4-Dinitrophenol	U	4.73	ug/L	4.73	18.9
84-66-2	Diethylphthalate	U	0.284	ug/L	0.284	0.946
86-73-7	Fluorene	U	0.284	ug/L	0.284	0.946
534-52-1	2-Methyl-4,6-dinitrophenol	U	2.84	ug/L	2.84	9.46
122-39-4	Diphenylamine	U	2.84	ug/L	2.84	9.46
103-33-3	Azobenzene	U	2.84	ug/L	2.84	9.46
122-66-7	*1,2-Diphenylhydrazine*					
118-74-1	Hexachlorobenzene	U	2.84	ug/L	2.84	9.46
87-86-5	Pentachlorophenol	U	2.84	ug/L	2.84	9.46
85-01-8	Phenanthrene	U	0.284	ug/L	0.284	0.946
120-12-7	Anthracene	U	0.284	ug/L	0.284	0.946
84-74-2	Di-n-butylphthalate	U	0.284	ug/L	0.284	0.946
206-44-0	Fluoranthene	U	0.284	ug/L	0.284	0.946
129-00-0	Pyrene	U	0.284	ug/L	0.284	0.946
117-81-7	bis(2-Ethylhexyl)phthalate	J	0.463	ug/L	0.284	0.946
205-99-2	Benzo(b)fluoranthene	U	0.284	ug/L	0.284	0.946
207-08-9	Benzo(k)fluoranthene	U	0.284	ug/L	0.284	0.946
50-32-8	Benzo(a)pyrene	U	0.284	ug/L	0.284	0.946

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:01**	**Matrix:**	**W**
Lab Sample ID:	**604449014**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB04-23-265374**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 17:42**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**1057.42 mL**	**Final Volume:**	**1 mL**
Data File:	**S122022\s4L2013.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
123-91-1	1,4-Dioxane	U	2.84	ug/L	2.84	9.46
55-18-5	N-Nitrosodiethylamine	U	2.84	ug/L	2.84	9.46
930-55-2	N-Nitrosopyrrolidine	U	2.84	ug/L	2.84	9.46
924-16-3	N-Nitrosodi-n-butylamine	U	2.84	ug/L	2.84	9.46
95-94-3	1,2,4,5-Tetrachlorobenzene	U	2.84	ug/L	2.84	9.46
608-93-5	Pentachlorobenzene	U	2.84	ug/L	2.84	9.46
1912-24-9	Atrazine	U	2.84	ug/L	2.84	9.46
92-87-5	Benzidine	U	3.69	ug/L	3.69	9.46
91-94-1	3,3'-Dichlorobenzidine	U	2.84	ug/L	2.84	9.46

Surrogate/Tracer recovery	Result	Nominal		Recovery%		Acceptable Limits
2,4,6-Tribromophenol	77.6	94.6	ug/L	82		(37%-132%)
2-Fluorobiphenyl	23.6	47.3	ug/L	50		(39%-112%)
2-Fluorophenol	48.5	94.6	ug/L	51		(11%-79%)
Nitrobenzene-d5	34.1	47.3	ug/L	72		(39%-112%)
Phenol-d5	43.7	94.6	ug/L	46		(15%-85%)
p-Terphenyl-d14	7.49	47.3	ug/L	16	*	(24%-129%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
000067-71-0	Dimethyl sulfone	4.449	11.9	ug/L	94	NJ
	unknown	5.952	8.33	ug/L	39	J
	unknown	7.562	4.2	ug/L	64	J
	unknown	8.332	7.44	ug/L	64	J
	unknown	8.765	18.5	ug/L	64	J
	unknown	9.076	4.71	ug/L	50	J
000126-86-3	2,4,7,9-Tetramethyl-5-decyn-4,7-diol	9.68	9.34	ug/L	91	NJ
	unknown	10.06	4.77	ug/L	49	J
000095-14-7	1H-Benzotriazole	10.284	5.97	ug/L	96	NJ
000143-24-8	Tetraglyme	10.466	12.3	ug/L	90	NJ
000050-84-0	Benzoic acid, 2,4-dichloro-	10.664	23.3	ug/L	99	NJ
029878-31-7	1H-Benzotriazole, 4-methyl-	10.841	12.9	ug/L	98	NJ
067130-04-5	4-Chloro-3H-1,2,3-benzotriazole	11.162	4.09	ug/L	93	NJ
064744-50-9	Gabapentin lactam	11.392	18.7	ug/L	98	NJ
	unknown	11.932	4.68	ug/L	43	J
	unknown	12.579	5.3	ug/L	55	J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:12**	**Matrix:**	**W**
Lab Sample ID:	**604449018**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB05-23-265375**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 18:11**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**952.03 mL**	**Final Volume:**	**1 mL**
Data File:	**S122022\s4L2014.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
1610-18-0	Prometon	U	3.15	ug/L	3.15	10.5
126-33-0	Sulfolane	U	3.15	ug/L	3.15	10.5
PAH-tot-3a	Total PAHs 3a	U	0.000	ug/L		
62-75-9	N-Methyl-N-nitrosomethylamine	U	3.15	ug/L	3.15	10.5
108-95-2	Phenol	U	3.15	ug/L	3.15	10.5
111-44-4	bis(2-Chloroethyl) ether	U	3.15	ug/L	3.15	10.5
108-60-1	bis(2-Chloro-1-methylethyl)ether	U	3.15	ug/L	3.15	10.5
67-72-1	Hexachloroethane	U	3.15	ug/L	3.15	10.5
98-95-3	Nitrobenzene	U	3.15	ug/L	3.15	10.5
78-59-1	Isophorone	U	3.68	ug/L	3.68	10.5
120-83-2	2,4-Dichlorophenol	U	3.15	ug/L	3.15	10.5
87-68-3	Hexachlorobutadiene	U	3.15	ug/L	3.15	10.5
91-57-6	2-Methylnaphthalene	U	0.315	ug/L	0.315	1.05
91-20-3	Naphthalene	U	0.315	ug/L	0.315	1.05
90-12-0	1-Methylnaphthalene	U	0.315	ug/L	0.315	1.05
77-47-4	Hexachlorocyclopentadiene	U	3.15	ug/L	3.15	10.5
88-06-2	2,4,6-Trichlorophenol	U	3.15	ug/L	3.15	10.5
95-95-4	2,4,5-Trichlorophenol	U	3.15	ug/L	3.15	10.5
131-11-3	Dimethylphthalate	U	0.315	ug/L	0.315	1.05
606-20-2	2,6-Dinitrotoluene	U	3.15	ug/L	3.15	10.5
121-14-2	2,4-Dinitrotoluene	U	3.15	ug/L	3.15	10.5
51-28-5	2,4-Dinitrophenol	U	5.25	ug/L	5.25	21.0
84-66-2	Diethylphthalate	U	0.315	ug/L	0.315	1.05
86-73-7	Fluorene	U	0.315	ug/L	0.315	1.05
534-52-1	2-Methyl-4,6-dinitrophenol	U	3.15	ug/L	3.15	10.5
122-39-4	Diphenylamine	U	3.15	ug/L	3.15	10.5
103-33-3	Azobenzene	U	3.15	ug/L	3.15	10.5
122-66-7	*1,2-Diphenylhydrazine*					
118-74-1	Hexachlorobenzene	U	3.15	ug/L	3.15	10.5
87-86-5	Pentachlorophenol	U	3.15	ug/L	3.15	10.5
85-01-8	Phenanthrene	U	0.315	ug/L	0.315	1.05
120-12-7	Anthracene	U	0.315	ug/L	0.315	1.05
84-74-2	Di-n-butylphthalate	U	0.315	ug/L	0.315	1.05
206-44-0	Fluoranthene	U	0.315	ug/L	0.315	1.05
129-00-0	Pyrene	U	0.315	ug/L	0.315	1.05
117-81-7	bis(2-Ethylhexyl)phthalate	U	0.315	ug/L	0.315	1.05
205-99-2	Benzo(b)fluoranthene	U	0.315	ug/L	0.315	1.05
207-08-9	Benzo(k)fluoranthene	U	0.315	ug/L	0.315	1.05
50-32-8	Benzo(a)pyrene	U	0.315	ug/L	0.315	1.05

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:12**	**Matrix:**	**W**
Lab Sample ID:	**604449018**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB05-23-265375**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 18:11**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**952.03 mL**	**Final Volume:**	**1 mL**
Data File:	**S122022\s4L2014.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
123-91-1	1,4-Dioxane	U	3.15	ug/L	3.15	10.5
55-18-5	N-Nitrosodiethylamine	U	3.15	ug/L	3.15	10.5
930-55-2	N-Nitrosopyrrolidine	U	3.15	ug/L	3.15	10.5
924-16-3	N-Nitrosodi-n-butylamine	U	3.15	ug/L	3.15	10.5
95-94-3	1,2,4,5-Tetrachlorobenzene	U	3.15	ug/L	3.15	10.5
608-93-5	Pentachlorobenzene	U	3.15	ug/L	3.15	10.5
1912-24-9	Atrazine	U	3.15	ug/L	3.15	10.5
92-87-5	Benzidine	U	4.10	ug/L	4.10	10.5
91-94-1	3,3'-Dichlorobenzidine	U	3.15	ug/L	3.15	10.5

Surrogate/Tracer recovery	Result	Nominal		Recovery%		Acceptable Limits
2,4,6-Tribromophenol	63.3	105	ug/L	60		(37%-132%)
2-Fluorobiphenyl	20.7	52.5	ug/L	39		(39%-112%)
2-Fluorophenol	41.9	105	ug/L	40		(11%-79%)
Nitrobenzene-d5	30.5	52.5	ug/L	58		(39%-112%)
Phenol-d5	36.0	105	ug/L	34		(15%-85%)
p-Terphenyl-d14	6.94	52.5	ug/L	13	*	(24%-129%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	Estimated RT		Units	Fit	Qual
	unknown	5.465	4.71	ug/L	49	J
	unknown	5.957	9.82	ug/L	45	J
000112-36-7	Diethyl carbitol	6.364	13.3	ug/L	90	NJ
	unknown	8.723	6.84	ug/L	52	J
000126-86-3	2,4,7,9-Tetramethyl-5-decyn-4,7-diol	9.68	13.4	ug/L	91	NJ
000095-14-7	1H-Benzotriazole	10.279	7.31	ug/L	96	NJ
000143-24-8	Tetraglyme	10.466	4.67	ug/L	90	NJ
000050-84-0	Benzoic acid, 2,4-dichloro-	10.648	5.13	ug/L	99	NJ
029878-31-7	1H-Benzotriazole, 4-methyl-	10.825	6.59	ug/L	98	NJ
013798-23-7	Hexathiane	10.98	14.4	ug/L	96	NJ
000136-85-6	1H-Benzotriazole, 5-methyl-	11.188	4.74	ug/L	97	NJ
064744-50-9	Gabapentin lactam	11.381	7.49	ug/L	98	NJ
010544-50-0	Cyclic octaatomic sulfur	15.045	9.65	ug/L	93	NJ

Quality Control Summary

Semi-Volatile

Surrogate Recovery Report

SDG Number: 2023-289

Matrix Type: LIQUID

Sample ID	Client ID	2FP %REC	PHL %REC	NBZ %REC	FBP %REC	TBP %REC	TPH %REC
1205274620	MB for batch 2358005	37	28	69	74	69	77
1205274621	LCS for batch 2358005	35	28	71	79	79	80
604449002	SMEB01-23-265371	33	35	34 *	29 *	46	19 *
604449006	SMEB02-23-265372	32	34	34 *	36 *	45	20 *
1205274624	SMEB02-23-265372MS	30	34	37 *	36 *	42	23 *
1205274625	SMEB02-23-265372MSD	46	51	58	59	83	33
604449010	SMEB03-23-265373	62	62	76	26 *	59	12 *
604449014	SMEB04-23-265374	51	46	72	50	82	16 *
604449018	SMEB05-23-265375	40	34	58	39	60	13 *

Surrogate	Parmname	Acceptance Limits
2FP	= 2-Fluorophenol	(11%-79%)
PHL	= Phenol-d5	(15%-85%)
NBZ	= Nitrobenzene-d5	(39%-112%)
FBP	= 2-Fluorobiphenyl	(39%-112%)
TBP	= 2,4,6-Tribromophenol	(37%-132%)
TPH	= p-Terphenyl-d14	(24%-129%)

* Recovery outside Acceptance Limits

Column to be used to flag recovery values

D Sample Diluted

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 2023-289
Sample Type: Laboratory Control Sample
Client ID: LCS for batch 2358005
Matrix: WATER
Lab Sample ID 1205274621
Instrument: MSD4.I
Analysis Date: 12/19/2022 18:51
Dilution: 1
Analyst: NM1
Prep Batch ID: 2358005
Inj. Vol: 1 uL
Batch ID: 2358006

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L	Spike Conc. ug/L	Recovery %	Acceptance Limits
126-33-0	LCS	Sulfolane	50.0	0.0	33.8	68	50-150
1610-18-0	LCS	Prometon	50.0	0.0	56.7	113	50-150
62-75-9	LCS	N-Methyl-N-nitrosomethylamine	50.0	0.0	25.4	51	32-84
108-95-2	LCS	Phenol	50.0	0.0	14.4	29	12-90
111-44-4	LCS	bis(2-Chloroethyl) ether	50.0	0.0	38.2	76	47-108
108-60-1	LCS	bis(2-Chloro-1-methylethyl)ether	50.0	0.0	36.3	73	42-115
67-72-1	LCS	Hexachloroethane	50.0	0.0	31.7	63	36-90
98-95-3	LCS	Nitrobenzene	50.0	0.0	37.9	76	55-110
78-59-1	LCS	Isophorone	50.0	0.0	35.6	71	58-113
120-83-2	LCS	2,4-Dichlorophenol	50.0	0.0	38.0	76	50-119
87-68-3	LCS	Hexachlorobutadiene	50.0	0.0	35.5	71	39-103
91-57-6	LCS	2-Methylnaphthalene	50.0	0.0	41.8	84	48-104
91-20-3	LCS	Naphthalene	50.0	0.0	40.1	80	49-103
90-12-0	LCS	1-Methylnaphthalene	50.0	0.0	43.6	87	50-111
77-47-4	LCS	Hexachlorocyclopentadiene	50.0	0.0	12.9	26 *	30-95
88-06-2	LCS	2,4,6-Trichlorophenol	50.0	0.0	43.2	86	50-127
95-95-4	LCS	2,4,5-Trichlorophenol	50.0	0.0	43.1	86	50-137
131-11-3	LCS	Dimethylphthalate	50.0	0.0	50.2	100	62-123
606-20-2	LCS	2,6-Dinitrotoluene	50.0	0.0	46.5	93	59-126
121-14-2	LCS	2,4-Dinitrotoluene	50.0	0.0	48.1	96	50-134
51-28-5	LCS	2,4-Dinitrophenol	50.0	0.0	45.4	91	28-151
84-66-2	LCS	Diethylphthalate	50.0	0.0	50.9	102	60-121

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 2023-289
Sample Type: Laboratory Control Sample
Client ID: LCS for batch 2358005
Matrix: WATER
Lab Sample ID 1205274621
Instrument: MSD4.I
Analysis Date: 12/19/2022 18:51
Dilution: 1
Analyst: NM1
Prep Batch ID: 2358005
Inj. Vol: 1 uL
Batch ID: 2358006

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L	Spike Conc. ug/L	Recovery %	Acceptance Limits
86-73-7	LCS	Fluorene	50.0	0.0	46.3	93	56-111
534-52-1	LCS	2-Methyl-4,6-dinitrophenol	50.0	0.0	51.6	103	42-149
122-39-4	LCS	Diphenylamine	50.0	0.0	47.0	94	48-117
122-66-7	LCS	Azobenzene *1,2-Diphenylhydrazine*	50.0	0.0	44.6	89	50-111
118-74-1	LCS	Hexachlorobenzene	50.0	0.0	47.3	95	51-118
87-86-5	LCS	Pentachlorophenol	50.0	0.0	47.5	95	42-132
85-01-8	LCS	Phenanthrene	50.0	0.0	47.1	94	56-110
120-12-7	LCS	Anthracene	50.0	0.0	46.4	93	56-110
84-74-2	LCS	Di-n-butylphthalate	50.0	0.0	52.5	105	55-122
206-44-0	LCS	Fluoranthene	50.0	0.0	50.0	100	54-121
129-00-0	LCS	Pyrene	50.0	0.0	49.6	99	43-122
117-81-7	LCS	bis(2-Ethylhexyl)phthalate	50.0	0.0	50.0	100	47-118
205-99-2	LCS	Benzo(b)fluoranthene	50.0	0.0	46.3	93	54-111
207-08-9	LCS	Benzo(k)fluoranthene	50.0	0.0	47.9	96	54-117
50-32-8	LCS	Benzo(a)pyrene	50.0	0.0	49.6	99	55-110
123-91-1	LCS	1,4-Dioxane	50.0	0.0	20.6	41 *	43-70
930-55-2	LCS	N-Nitrosopyrrolidine	50.0	0.0	39.2	78	59-119
95-94-3	LCS	1,2,4,5-Tetrachlorobenzene	50.0	0.0	39.5	79	41-111
1912-24-9	LCS	Atrazine	50.0	0.0	52.3	105	54-133
92-87-5	LCS	Benzidine	100	0.0	63.7	64	13-141
91-94-1	LCS	3,3'-Dichlorobenzidine	50.0	0.0	45.9	92	50-137

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 2023-289
Sample Type: Matrix Spike
Client ID: SMEB02-23-265372MS
Matrix: W
Lab Sample ID 1205274624
Instrument: MSD4.I
Analysis Date: 12/20/2022 16:15
Dilution: 1
Analyst: NM1
Prep Batch ID: 2358005
Inj. Vol: 1 uL
Batch ID: 2358006

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits
62-75-9	MS	N-Methyl-N-nitrosomethylamine	111	0.000	U	45.7	41	27-101
108-95-2	MS	Phenol	111	0.000	U	38.8	35	23-71
111-44-4	MS	bis(2-Chloroethyl) ether	111	0.000	U	46.4	42	39-112
108-60-1	MS	bis(2-Chloro-1-methylethyl)ether	111	0.000	U	41.4	37	32-122
67-72-1	MS	Hexachloroethane	111	0.000	U	32.8	29	27-95
98-95-3	MS	Nitrobenzene	111	0.000	U	61.0	55	44-119
78-59-1	MS	Isophorone	111	0.000	U	40.3	36 *	42-116
120-83-2	MS	2,4-Dichlorophenol	111	0.000	U	45.4	41 *	49-119
87-68-3	MS	Hexachlorobutadiene	111	0.000	U	37.7	34	24-102
91-57-6	MS	2-Methylnaphthalene	111	0.000	U	45.9	41	37-109
91-20-3	MS	Naphthalene	111	0.000	U	43.5	39	34-104
90-12-0	MS	1-Methylnaphthalene	111	0.000	U	48.6	44	38-108
77-47-4	MS	Hexachlorocyclopentadiene	111	0.000	U	0.000	0 *	18-89
88-06-2	MS	2,4,6-Trichlorophenol	111	0.000	U	45.9	41 *	47-130
95-95-4	MS	2,4,5-Trichlorophenol	111	0.000	U	51.1	46 *	49-125
131-11-3	MS	Dimethylphthalate	111	0.000	U	63.9	57	50-130
606-20-2	MS	2,6-Dinitrotoluene	111	0.000	U	59.7	54	49-126
121-14-2	MS	2,4-Dinitrotoluene	111	0.000	U	63.3	57	49-136
51-28-5	MS	2,4-Dinitrophenol	111	0.000	U	53.7	48	25-154
84-66-2	MS	Diethylphthalate	111	0.000	U	67.3	61	49-128
86-73-7	MS	Fluorene	111	0.000	U	54.9	49	44-119
534-52-1	MS	2-Methyl-4,6-dinitrophenol	111	0.000	U	53.0	48	30-145

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 2023-289
Sample Type: Matrix Spike
Client ID: SMEB02-23-265372MS
Matrix: W
Lab Sample ID 1205274624
Instrument: MSD4.I
Analysis Date: 12/20/2022 16:15
Dilution: 1
Analyst: NM1
Prep Batch ID: 2358005
Inj. Vol: 1 uL
Batch ID: 2358006

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits
122-39-4	MS	Diphenylamine	111	0.000	U	55.4	50	41-118
122-66-7	MS	Azobenzene *1,2-Diphenylhydrazine*	111	0.000	U	49.9	45	40-124
118-74-1	MS	Hexachlorobenzene	111	0.000	U	51.0	46	46-116
87-86-5	MS	Pentachlorophenol	111	0.000	U	44.0	40	36-139
85-01-8	MS	Phenanthrene	111	0.000	U	55.9	50	48-112
120-12-7	MS	Anthracene	111	0.000	U	54.1	49	46-117
84-74-2	MS	Di-n-butylphthalate	111	0.000	U	60.6	55	45-124
206-44-0	MS	Fluoranthene	111	0.000	U	60.4	54	44-121
129-00-0	MS	Pyrene	111	0.000	U	59.3	53	39-120
117-81-7	MS	bis(2-Ethylhexyl)phthalate	111	0.000	U	53.6	48	37-120
205-99-2	MS	Benzo(b)fluoranthene	111	0.000	U	50.3	45	43-118
207-08-9	MS	Benzo(k)fluoranthene	111	0.000	U	51.4	46	46-118
50-32-8	MS	Benzo(a)pyrene	111	0.000	U	52.1	47	42-112
123-91-1	MS	1,4-Dioxane	111	0.000	U	36.6	33	29-96
930-55-2	MS	N-Nitrosopyrrolidine	111	0.000	U	55.4	50 *	52-127
95-94-3	MS	1,2,4,5-Tetrachlorobenzene	111	0.000	U	40.5	36	35-117
1912-24-9	MS	Atrazine	111	0.000	U	65.2	59	43-133
92-87-5	MS	Benzidine	222	0.000	U	0.000	0 *	8-128
91-94-1	MS	3,3'-Dichlorobenzidine	111	0.000	U	0.000	0 *	38-130

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 2023-289
Sample Type: Matrix Spike Duplicate
Client ID: SMEB02-23-265372MSD
Matrix: W
Lab Sample ID 1205274625
Instrument: MSD4.I
Analysis Date: 12/20/2022 16:44
Dilution: 1
Analyst: NM1
Prep Batch ID: 2358005
Inj. Vol: 1 uL
Batch ID: 2358006

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
62-75-9	MSD	N-Methyl-N-nitrosomethylamine	111	0.000	U	57.2	51	27-101	22	0-34
108-95-2	MSD	Phenol	111	0.000	U	58.2	52	23-71	40	0-42
111-44-4	MSD	bis(2-Chloroethyl) ether	111	0.000	U	67.2	60	39-112	37	0-45
108-60-1	MSD	bis(2-Chloro-1-methylethyl)ether	111	0.000	U	62.2	56	32-122	40	0-81
67-72-1	MSD	Hexachloroethane	111	0.000	U	44.9	40	27-95	31	0-104
98-95-3	MSD	Nitrobenzene	111	0.000	U	90.0	81	44-119	38	0-79
78-59-1	MSD	Isophorone	111	0.000	U	65.5	59	42-116	48 *	0-43
120-83-2	MSD	2,4-Dichlorophenol	111	0.000	U	89.8	81	49-119	66 *	0-42
87-68-3	MSD	Hexachlorobutadiene	111	0.000	U	54.3	49	24-102	36	0-47
91-57-6	MSD	2-Methylnaphthalene	111	0.000	U	72.1	65	37-109	44	0-53
91-20-3	MSD	Naphthalene	111	0.000	U	66.4	60	34-104	42	0-54
90-12-0	MSD	1-Methylnaphthalene	111	0.000	U	78.2	70	38-108	47	0-50
77-47-4	MSD	Hexachlorocyclopentadiene	111	0.000	U	8.16	7 *	18-89	200 *	0-92
88-06-2	MSD	2,4,6-Trichlorophenol	111	0.000	U	93.1	84	47-130	68	0-79
95-95-4	MSD	2,4,5-Trichlorophenol	111	0.000	U	98.5	89	49-125	63	0-78
131-11-3	MSD	Dimethylphthalate	111	0.000	U	105	94	50-130	48	0-50
606-20-2	MSD	2,6-Dinitrotoluene	111	0.000	U	96.4	87	49-126	47	0-78
121-14-2	MSD	2,4-Dinitrotoluene	111	0.000	U	102	92	49-136	47 *	0-42
51-28-5	MSD	2,4-Dinitrophenol	111	0.000	U	104	94	25-154	64	0-106
84-66-2	MSD	Diethylphthalate	111	0.000	U	108	98	49-128	47	0-50
86-73-7	MSD	Fluorene	111	0.000	U	86.0	77	44-119	44	0-47
534-52-1	MSD	2-Methyl-4,6-dinitrophenol	111	0.000	U	106	96	30-145	67	0-86

Semi-Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: 2023-289
Sample Type: Matrix Spike Duplicate
Client ID: SMEB02-23-265372MSD
Matrix: W
Lab Sample ID 1205274625
Instrument: MSD4.I
Analysis Date: 12/20/2022 16:44
Dilution: 1
Analyst: NM1
Prep Batch ID: 2358005
Inj. Vol: 1 uL
Batch ID: 2358006

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
122-39-4	MSD	Diphenylamine	111	0.000	U	89.7	81	41-118	47	0-79
122-66-7	MSD	Azobenzene *1,2-Diphenylhydrazine*	111	0.000	U	77.6	70	40-124	43	0-43
118-74-1	MSD	Hexachlorobenzene	111	0.000	U	74.5	67	46-116	37	0-75
87-86-5	MSD	Pentachlorophenol	111	0.000	U	91.7	83	36-139	70	0-82
85-01-8	MSD	Phenanthrene	111	0.000	U	82.6	74	48-112	39	0-47
120-12-7	MSD	Anthracene	111	0.000	U	80.7	73	46-117	39	0-49
84-74-2	MSD	Di-n-butylphthalate	111	0.000	U	90.6	82	45-124	40	0-47
206-44-0	MSD	Fluoranthene	111	0.000	U	87.5	79	44-121	37	0-49
129-00-0	MSD	Pyrene	111	0.000	U	85.0	76	39-120	36	0-53
117-81-7	MSD	bis(2-Ethylhexyl)phthalate	111	0.000	U	78.1	70	37-120	37	0-49
205-99-2	MSD	Benzo(b)fluoranthene	111	0.000	U	71.8	65	43-118	35	0-45
207-08-9	MSD	Benzo(k)fluoranthene	111	0.000	U	70.3	63	46-118	31	0-54
50-32-8	MSD	Benzo(a)pyrene	111	0.000	U	73.8	66	42-112	34	0-78
123-91-1	MSD	1,4-Dioxane	111	0.000	U	44.7	40	29-96	20	0-74
930-55-2	MSD	N-Nitrosopyrrolidine	111	0.000	U	83.8	75	52-127	41 *	0-36
95-94-3	MSD	1,2,4,5-Tetrachlorobenzene	111	0.000	U	63.5	57	35-117	44	0-44
1912-24-9	MSD	Atrazine	111	0.000	U	106	95	43-133	48 *	0-42
92-87-5	MSD	Benzidine	222	0.000	U	0.000	0 *	8-128	0	0-174
91-94-1	MSD	3,3'-Dichlorobenzidine	111	0.000	U	0.000	0 *	38-130	0	0-55

Method Blank Summary

SDG Number:	**2023-289**	**Client:**	**TNSL001**	**Matrix:**	**WATER**
Client ID:	**MB for batch 2358005**	**Instrument ID:**	**MSD4.I**	**Data File:**	**S121922\s4L1908.D**
Lab Sample ID:	**1205274620**	**Prep Date:**	**12/19/2022 11:35**	**Analyzed:**	**12/19/22 18:23**
Column:	**DB-5ms**				

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 2358005	1205274621	S121922\s4L1909.D	12/19/22	1851
02	SMEB01-23-265371	604449002	S122022\s4L2008.D	12/20/22	1516
03	SMEB02-23-265372	604449006	S122022\s4L2009.D	12/20/22	1546
04	SMEB02-23-265372MS	1205274624	S122022\s4L2010.D	12/20/22	1615
05	SMEB02-23-265372MSD	1205274625	S122022\s4L2011.D	12/20/22	1644
06	SMEB03-23-265373	604449010	S122022\s4L2012.D	12/20/22	1713
07	SMEB04-23-265374	604449014	S122022\s4L2013.D	12/20/22	1742
08	SMEB05-23-265375	604449018	S122022\s4L2014.D	12/20/22	1811

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 2023-289

Instrument ID: MSD4.I **Injection Date/Time:** 05-NOV-22 15:15

Column Description: DB-5ms **Lab File ID** S110522SCANICAL\s4K0501.D

m/e	Ion Abundance Criteria	% Relative Abundance
68	Less than 2% of mass 69	1.7
69	Present	42
70	Less than 2% of mass 69	0.6
197	Less than 2% of mass 198	0.7
198	Base Peak or Present	74.1
199	5 - 9% of mass 198	7
365	Greater than 1% of Base Peak	4
441	Less than 150% of mass 443	78.9
442	Base Peak or Present	100
443	15 - 24% of mass 442	19.3

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
ICALMIX[A]	WBN221010-01.1	S110522SCANICAL\s4K0502.D	05-NOV-22 15:30
ICALMIX[A]	WBN221010-02.1	S110522SCANICAL\s4K0503.D	05-NOV-22 16:03
ICALMIX[A]	WBN221010-03.1	S110522SCANICAL\s4K0504.D	05-NOV-22 16:37
ICALMIX[A]	WBN221010-04.1	S110522SCANICAL\s4K0505.D	05-NOV-22 17:10
ICALMIX[A]	WBN221010-05	S110522SCANICAL\s4K0506.D	05-NOV-22 17:43
ICALMIX[A]	WBN221010-06	S110522SCANICAL\s4K0507.D	05-NOV-22 18:16
ICALMIX[A]	WBN221010-07	S110522SCANICAL\s4K0508.D	05-NOV-22 18:49
ICALMIX[A]	WBN221010-08	S110522SCANICAL\s4K0509.D	05-NOV-22 19:22
ICVMIX[A]01	WBN221012-43	S110522SCANICAL\s4K0510.D	05-NOV-22 19:55
ICALMIX[J]	WBN220915-42.1	S110522SCANICAL\s4K0511.D	05-NOV-22 20:28
ICALMIX[J]	WBN220915-43	S110522SCANICAL\s4K0512.D	05-NOV-22 20:54
ICALMIX[J]	WBN220915-44.1	S110522SCANICAL\s4K0513.D	05-NOV-22 21:20
ICALMIX[J]	WBN220915-45	S110522SCANICAL\s4K0514.D	05-NOV-22 21:46
ICALMIX[J]	WBN220915-46	S110522SCANICAL\s4K0515.D	05-NOV-22 22:12
ICALMIX[J]	WBN220915-47	S110522SCANICAL\s4K0516.D	05-NOV-22 22:39
ICALMIX[J]	WBN220915-48	S110522SCANICAL\s4K0517.D	05-NOV-22 23:05
ICVMIX[J]02	WBN221104-50	S110522SCANICAL\s4K0518.D	05-NOV-22 23:31

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 2023-289

Instrument ID: MSD4.I **Injection Date/Time:** 05-NOV-22 23:57

Column Description: DB-5ms **Lab File ID** S110522SCANICAL\s4K0519.D

m/e	Ion Abundance Criteria	% Relative Abundance
68	Less than 2% of mass 69	1.8
69	Present	40.8
70	Less than 2% of mass 69	0.6
197	Less than 2% of mass 198	0.7
198	Base Peak or Present	68.1
199	5 - 9% of mass 198	6.8
365	Greater than 1% of Base Peak	4.4
441	Less than 150% of mass 443	78.7
442	Base Peak or Present	100
443	15 - 24% of mass 442	19.7

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
ICALMIX[B]	WBN221026-10.1	S110522SCANICAL\s4K0520.D	06-NOV-22 00:12
ICALMIX[B]	WBN221026-11	S110522SCANICAL\s4K0521.D	06-NOV-22 00:41
ICALMIX[B]	WBN221026-14	S110522SCANICAL\s4K0524.D	06-NOV-22 01:08
ICALMIX[B]	WBN221026-12	S110522SCANICAL\s4K0522.D	06-NOV-22 01:10
ICALMIX[B]	WBN221026-15	S110522SCANICAL\s4K0525.D	06-NOV-22 01:37
ICALMIX[B]	WBN221026-13.1	S110522SCANICAL\s4K0523.D	06-NOV-22 01:39
ICALMIX[B]	WBN221026-16	S110522SCANICAL\s4K0526.D	06-NOV-22 02:06
ICALMIX[B]	WBN221026-17	S110522SCANICAL\s4K0527.D	06-NOV-22 02:35
ICALMIX[B]	WBN221026-18	S110522SCANICAL\s4K0528.D	06-NOV-22 03:04
ICVMIX[B]03	WBN220915-20	S110522SCANICAL\s4K0529.D	06-NOV-22 03:33

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 2023-289

Instrument ID: MSD4.I **Injection Date/Time:** 19-DEC-22 13:51

Column Description: DB-5ms **Lab File ID** S121922\s4L1901.D

m/e	Ion Abundance Criteria	% Relative Abundance
68	Less than 2% of mass 69	1.5
69	Present	34.7
70	Less than 2% of mass 69	0.6
197	Less than 2% of mass 198	0.7
198	Base Peak or Present	73.4
199	5 - 9% of mass 198	6.9
365	Greater than 1% of Base Peak	3.8
441	Less than 150% of mass 443	77.5
442	Base Peak or Present	100
443	15 - 24% of mass 442	19.2

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
CCVMIX[A]01	WBN221213-04.17	S121922\s4L1902.D	19-DEC-22 14:07
CCVMIX[B]02	WBN221215-13.3	S121922\s4L1903.D	19-DEC-22 14:40
CCVMIX[J]03	WBN221027-44.7	S121922\s4L1904.D	19-DEC-22 15:09
BLK01	1205274620	S121922\s4L1908.D	19-DEC-22 18:23
BLK01LCS	1205274621	S121922\s4L1909.D	19-DEC-22 18:51

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 2023-289

Instrument ID: MSD4.I **Injection Date/Time:** 20-DEC-22 12:05

Column Description: DB-5ms **Lab File ID** S122022\s4L2001.D

m/e	Ion Abundance Criteria	% Relative Abundance
68	Less than 2% of mass 69	1.2
69	Present	33.9
70	Less than 2% of mass 69	0.4
197	Less than 2% of mass 198	0.5
198	Base Peak or Present	71.6
199	5 - 9% of mass 198	7
365	Greater than 1% of Base Peak	4.3
441	Less than 150% of mass 443	77.9
442	Base Peak or Present	100
443	15 - 24% of mass 442	19.6

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
CCVMIX[A]04	WBN221213-04.17	S122022\s4L2002.D	20-DEC-22 12:21
CCVMIX[B]05	WBN221215-13.3	S122022\s4L2003.D	20-DEC-22 12:54
CCVMIX[J]06	WBN221027-44.7	S122022\s4L2004.D	20-DEC-22 13:23
SMEB01-23-265371	604449002	S122022\s4L2008.D	20-DEC-22 15:16
SMEB02-23-265372	604449006	S122022\s4L2009.D	20-DEC-22 15:46
SMEB02-23-265372MS	1205274624	S122022\s4L2010.D	20-DEC-22 16:15
SMEB02-23-265372MSD	1205274625	S122022\s4L2011.D	20-DEC-22 16:44
SMEB03-23-265373	604449010	S122022\s4L2012.D	20-DEC-22 17:13
SMEB04-23-265374	604449014	S122022\s4L2013.D	20-DEC-22 17:42
SMEB05-23-265375	604449018	S122022\s4L2014.D	20-DEC-22 18:11

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 2023-289

Instrument: MSD4.I

STD Analysis Time: 19-DEC-22 14:07

GC Column: DB-5ms

Data File: S121922\s4L1902.D

	1,4-Dichlorobenzene-d4		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10		Chrysene-d12		Perylene-d12	
	Area #	RT #	Area #	RT #	Area #	RT #	Area #	RT #	Area #	RT #	Area #	RT #
12 Hour STD	155883	5.75	601223	7.69	331625	10.5	690559	13.0	762539	17.3	814615	20.3
Upper Limit	311766	6.25	1202446	8.19	663250	11.0	1381118	13.5	1525078	17.8	1629230	20.8
Lower Limit	77942	5.25	300612	7.19	165813	10.0	345280	12.5	381270	16.8	407308	19.8
Sample ID												
BLK01	146422	5.75	564949	7.69	306417	10.5	623835	13.0	645046	17.3	687528	20.3
BLK01LCS	121009	5.75	478682	7.69	261600	10.5	529837	13.0	580803	17.3	628002	20.3

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 2023-289

Instrument: MSD4.I

STD Analysis Time: 20-DEC-22 12:21

GC Column: DB-5ms

Data File: S122022\s4L2002.D

	1,4-Dichlorobenzene-d4		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10		Chrysene-d12		Perylene-d12	
	Area #	RT #	Area #	RT #	Area #	RT #	Area #	RT #	Area #	RT #	Area #	RT #
12 Hour STD	150429	5.75	616937	7.7	358395	10.5	788745	13.0	943910	17.3	1009512	20.3
Upper Limit	300858	6.25	1233874	8.2	716790	11.0	1577490	13.5	1887820	17.8	2019024	20.8
Lower Limit	75215	5.25	308469	7.2	179198	10.0	394373	12.5	471955	16.8	504756	19.8
Sample ID												
SMEB01-23-265371	142935	5.75	590521	7.69	349627	10.5	744117	13.0	872083	17.3	923778	20.3
SMEB02-23-265372	137274	5.75	575129	7.69	340659	10.5	722518	13.0	854927	17.3	890792	20.3
SMEB02-23-265372MS	134074	5.75	555926	7.69	327692	10.5	719138	13.0	850476	17.3	885963	20.3
SMEB02-23-265372MSD	127720	5.75	525777	7.69	311922	10.5	666290	13.0	795686	17.3	830310	20.3
SMEB03-23-265373	132035	5.75	541152	7.69	313708	10.5	687110	13.0	779756	17.3	771563	20.3
SMEB04-23-265374	122909	5.75	520973	7.69	310517	10.5	685600	13.0	826186	17.3	892628	20.3
SMEB05-23-265375	134203	5.75	568552	7.69	331149	10.5	733285	13.0	864833	17.3	897718	20.3

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Value outside of QC Limits

Sample Data

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**604449002**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265371**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 15:16**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**984.36 mL**	**Final Volume:**	**1 mL**
Data File:	**S122022\s4L2008.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
1610-18-0	Prometon	U	3.05	ug/L	3.05	10.2
126-33-0	Sulfolane	U	3.05	ug/L	3.05	10.2
PAH-tot-3a	Total PAHs 3a	U	0.000	ug/L		
62-75-9	N-Methyl-N-nitrosomethylamine	U	3.05	ug/L	3.05	10.2
108-95-2	Phenol	U	3.05	ug/L	3.05	10.2
111-44-4	bis(2-Chloroethyl) ether	U	3.05	ug/L	3.05	10.2
108-60-1	bis(2-Chloro-1-methylethyl)ether	U	3.05	ug/L	3.05	10.2
67-72-1	Hexachloroethane	U	3.05	ug/L	3.05	10.2
98-95-3	Nitrobenzene	U	3.05	ug/L	3.05	10.2
78-59-1	Isophorone	U	3.56	ug/L	3.56	10.2
120-83-2	2,4-Dichlorophenol	U	3.05	ug/L	3.05	10.2
87-68-3	Hexachlorobutadiene	U	3.05	ug/L	3.05	10.2
91-57-6	2-Methylnaphthalene	U	0.305	ug/L	0.305	1.02
91-20-3	Naphthalene	U	0.305	ug/L	0.305	1.02
90-12-0	1-Methylnaphthalene	U	0.305	ug/L	0.305	1.02
77-47-4	Hexachlorocyclopentadiene	U	3.05	ug/L	3.05	10.2
88-06-2	2,4,6-Trichlorophenol	U	3.05	ug/L	3.05	10.2
95-95-4	2,4,5-Trichlorophenol	U	3.05	ug/L	3.05	10.2
131-11-3	Dimethylphthalate	U	0.305	ug/L	0.305	1.02
606-20-2	2,6-Dinitrotoluene	U	3.05	ug/L	3.05	10.2
121-14-2	2,4-Dinitrotoluene	U	3.05	ug/L	3.05	10.2
51-28-5	2,4-Dinitrophenol	U	5.08	ug/L	5.08	20.3
84-66-2	Diethylphthalate	U	0.305	ug/L	0.305	1.02
86-73-7	Fluorene	U	0.305	ug/L	0.305	1.02
534-52-1	2-Methyl-4,6-dinitrophenol	U	3.05	ug/L	3.05	10.2
122-39-4	Diphenylamine	U	3.05	ug/L	3.05	10.2
103-33-3	Azobenzene	U	3.05	ug/L	3.05	10.2
122-66-7	*1,2-Diphenylhydrazine*					
118-74-1	Hexachlorobenzene	U	3.05	ug/L	3.05	10.2
87-86-5	Pentachlorophenol	U	3.05	ug/L	3.05	10.2
85-01-8	Phenanthrene	U	0.305	ug/L	0.305	1.02
120-12-7	Anthracene	U	0.305	ug/L	0.305	1.02
84-74-2	Di-n-butylphthalate	U	0.305	ug/L	0.305	1.02
206-44-0	Fluoranthene	U	0.305	ug/L	0.305	1.02
129-00-0	Pyrene	U	0.305	ug/L	0.305	1.02
117-81-7	bis(2-Ethylhexyl)phthalate	U	0.305	ug/L	0.305	1.02
205-99-2	Benzo(b)fluoranthene	U	0.305	ug/L	0.305	1.02
207-08-9	Benzo(k)fluoranthene	U	0.305	ug/L	0.305	1.02
50-32-8	Benzo(a)pyrene	U	0.305	ug/L	0.305	1.02

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**604449002**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265371**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 15:16**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**984.36 mL**	**Final Volume:**	**1 mL**
Data File:	**S122022\s4L2008.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
123-91-1	1,4-Dioxane	U	3.05	ug/L	3.05	10.2
55-18-5	N-Nitrosodiethylamine	U	3.05	ug/L	3.05	10.2
930-55-2	N-Nitrosopyrrolidine	U	3.05	ug/L	3.05	10.2
924-16-3	N-Nitrosodi-n-butylamine	U	3.05	ug/L	3.05	10.2
95-94-3	1,2,4,5-Tetrachlorobenzene	U	3.05	ug/L	3.05	10.2
608-93-5	Pentachlorobenzene	U	3.05	ug/L	3.05	10.2
1912-24-9	Atrazine	U	3.05	ug/L	3.05	10.2
92-87-5	Benzidine	U	3.96	ug/L	3.96	10.2
91-94-1	3,3'-Dichlorobenzidine	U	3.05	ug/L	3.05	10.2

Surrogate/Tracer recovery	Result	Nominal		Recovery%		Acceptable Limits
2,4,6-Tribromophenol	46.8	102	ug/L	46		(37%-132%)
2-Fluorobiphenyl	14.9	50.8	ug/L	29	*	(39%-112%)
2-Fluorophenol	33.1	102	ug/L	33		(11%-79%)
Nitrobenzene-d5	17.0	50.8	ug/L	34	*	(39%-112%)
Phenol-d5	35.5	102	ug/L	35		(15%-85%)
p-Terphenyl-d14	9.58	50.8	ug/L	19	*	(24%-129%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	2.973	20.7	ug/L	50	J
	unknown	3.336	19.1	ug/L	59	J
000067-71-0	Dimethyl sulfone	4.443	4.97	ug/L	94	NJ
	unknown	5.957	8.9	ug/L	35	J
000112-36-7	Diethyl carbitol	6.364	5.06	ug/L	90	NJ
	unknown	8.744	14.3	ug/L	64	J
000126-86-3	2,4,7,9-Tetramethyl-5-decyn-4,7-diol	9.68	4.98	ug/L	91	NJ
000095-14-7	1H-Benzotriazole	10.274	13.3	ug/L	94	NJ
000143-24-8	Tetraglyme	10.466	5.77	ug/L	90	NJ
000050-84-0	Benzoic acid, 2,4-dichloro-	10.648	33.6	ug/L	98	NJ
029878-31-7	1H-Benzotriazole, 4-methyl-	10.824	10.5	ug/L	98	NJ
013798-23-7	Hexathiane	10.964	14.2	ug/L	96	NJ
000136-85-6	1H-Benzotriazole, 5-methyl-	11.183	6.13	ug/L	94	NJ
064744-50-9	Gabapentin lactam	11.381	12.1	ug/L	98	NJ
	unknown	11.916	8.97	ug/L	72	J
	unknown	12.515	4.9	ug/L	25	J
	unknown	12.568	11.9	ug/L	55	J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**604449002**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265371**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 15:16**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**984.36 mL**	**Final Volume:**	**1 mL**
Data File:	**S122022\s4L2008.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	13.092	11.3	ug/L	64	J
	unknown	13.162	6.32	ug/L	53	J
	unknown	13.258	4.17	ug/L	47	J
	unknown	13.397	8.48	ug/L	38	J
000057-10-3	n-Hexadecanoic acid	13.916	5.45	ug/L	99	NJ
010544-50-0	Cyclic octaatomic sulfur	15.039	7.28	ug/L	95	NJ

Quantitation Report

12/22/2022

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2008.D
Acq On : 20 Dec 2022 15:16
Operator : NM1
Sample : |604449002|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB01-23-265371|MIX[A,B,J,D,E]||
ALS Vial : 8 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 21 12:00:08 2022
Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	5.754	5.754	1.000	142935	40.00	ng/uL	0.00
22) A Naphthalene-d8	136	7.690	7.695	1.000	590521	40.00	ng/uL	0.00
39) A Acenaphthene-d10	164	10.525	10.525	1.000	349627	40.00	ng/uL	0.00
64) A Phenanthrene-d10	188	12.948	12.948	1.000	744117	40.00	ng/uL	0.00
80) A Chrysene-d12	240	17.286	17.296	1.000	872083	40.00	ng/uL	-0.01
88) A Perylene-d12	264	20.308	20.307	1.000	923778	40.00	ng/uL	0.00
96) B 1,4-Dichlorobenzene-d4	152	5.754	5.754	1.000	142935	40.00	ng/uL	0.00
112) B Naphthalene-d8	136	7.690	7.695	1.000	590521	40.00	ng/uL	0.00
120) B Acenaphthene-d10	164	10.525	10.525	1.000	349627	40.00	ng/uL	0.00
129) B Phenanthrene-d10	188	12.948	12.948	1.000	744117	40.00	ng/uL	0.00
142) B Chrysene-d12	240	17.286	17.296	1.000	872083	40.00	ng/uL	-0.01
148) B Perylene-d12	264	20.308	20.307	1.000	923778	40.00	ng/uL	0.00
151) J Naphthalene-d8	136	7.690	7.695	1.000	590521	40.00	ng/uL	0.00
153) J Phenanthrene-d10	188	12.948	12.948	1.000	744117	40.00	ng/uL	0.00
156) J Chrysene-d12	240	17.286	17.296	1.000	872083	40.00	ng/uL	-0.01
159) D Naphthalene-d8	136	7.690	7.695	1.000	590521	40.00	ng/uL	0.00
161) D Acenaphthene-d10	164	10.525	10.525	1.000	349627	40.00	ng/uL	0.00
164) D Phenanthrene-d10	188	12.948	12.948	1.000	744117	40.00	ng/uL	0.00
171) D Chrysene-d12	240	17.286	17.296	1.000	872083	40.00	ng/uL	-0.01
173) E Naphthalene-d8	136	7.690	7.695	1.000	590521	40.00	ng/uL	0.00
175) E Perylene-d12	264	20.308	20.307	1.000	923778	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	3.957	3.951	0.688	155451	32.57	ng/uL	0.00
8) Phenol-d5	99	5.203	5.203	0.904	210575	34.90	ng/uL	0.00
23) Nitrobenzene-d5	82	6.572	6.577	0.855	103535	16.78	ng/uL	0.00
44) 2-Fluorobiphenyl	172	9.439	9.439	0.897	190885	14.70	ng/uL	0.00
63) 2,4,6-Tribromophenol	330	11.814	11.814	1.122	137558	46.08	ng/uL	0.00
79) p-Terphenyl-d14	244	15.574	15.579	1.203	185396	9.43	ng/uL	0.00

Compound	Amount	Range	Recovery
5) 2-Fluorophenol	100.000	11 - 79	33%
8) Phenol-d5	100.000	15 - 85	35%
23) Nitrobenzene-d5	50.000	39 - 112	34%#
44) 2-Fluorobiphenyl	50.000	39 - 112	29%#
63) 2,4,6-Tribromophenol	100.000	37 - 132	46%
79) p-Terphenyl-d14	50.000	24 - 129	19%#

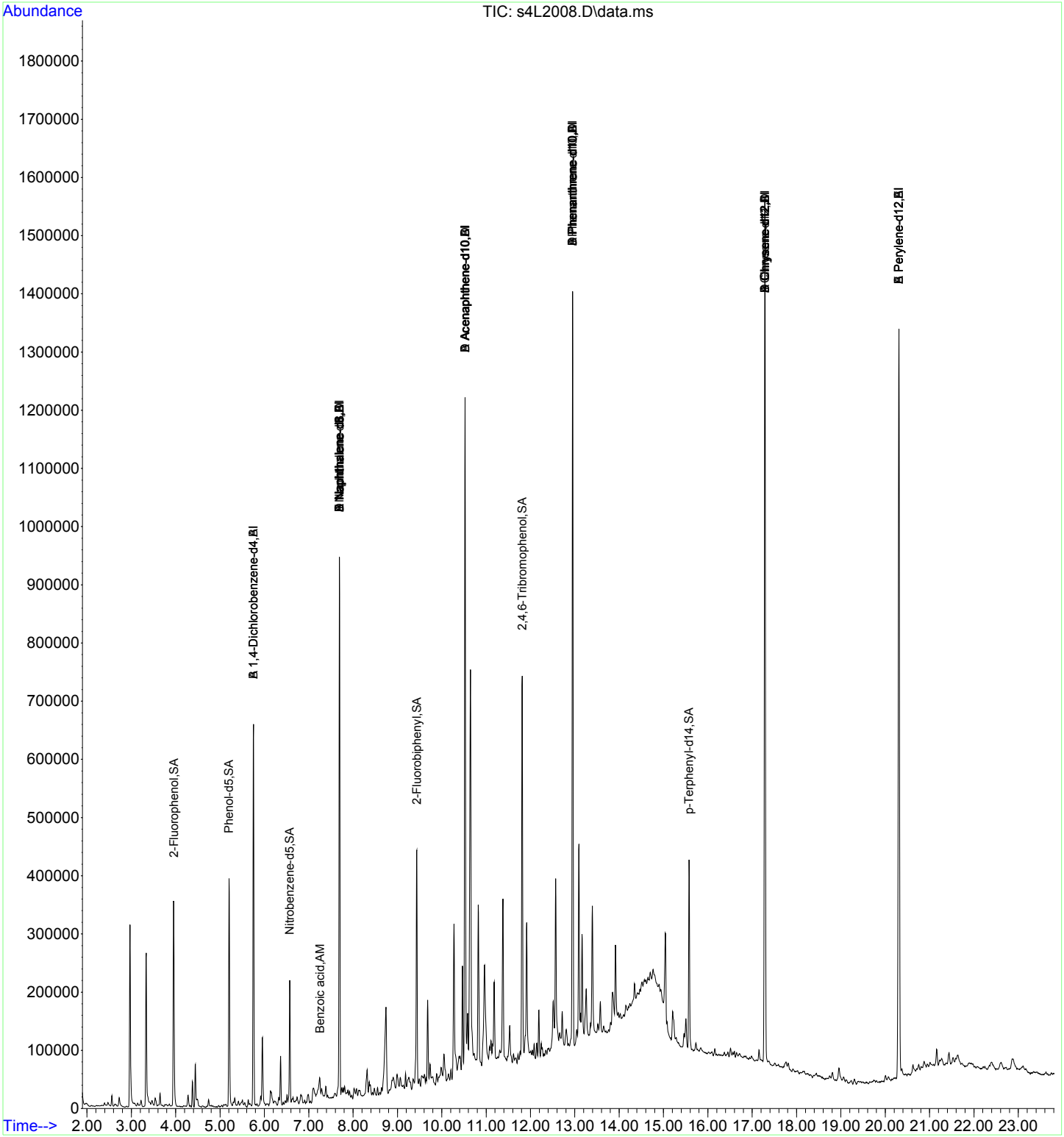
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
30) Benzoic acid	105	7.252	7.310	0.943	17719	11.76	ng/uL	92

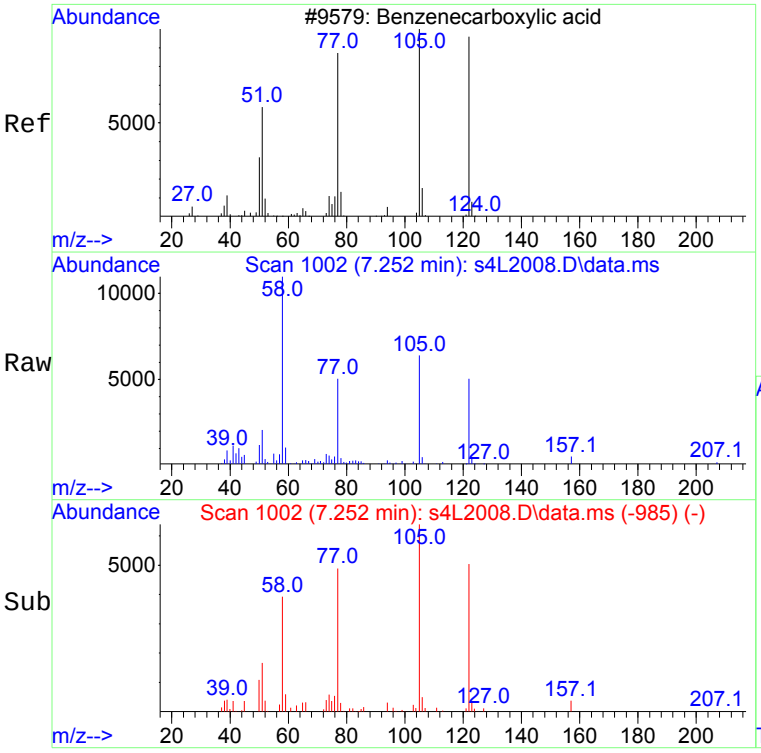
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2008.D
Acq On : 20 Dec 2022 15:16
Operator : NM1
Sample : |604449002|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB01-23-265371|MIX[A,B,J,D,E]||
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 21 12:00:08 2022
Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

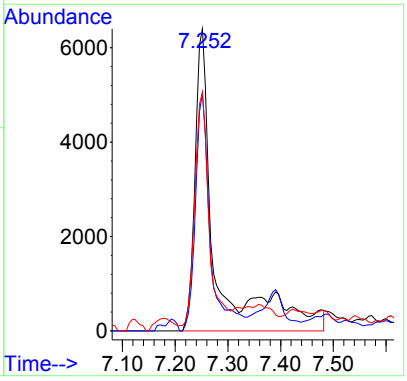


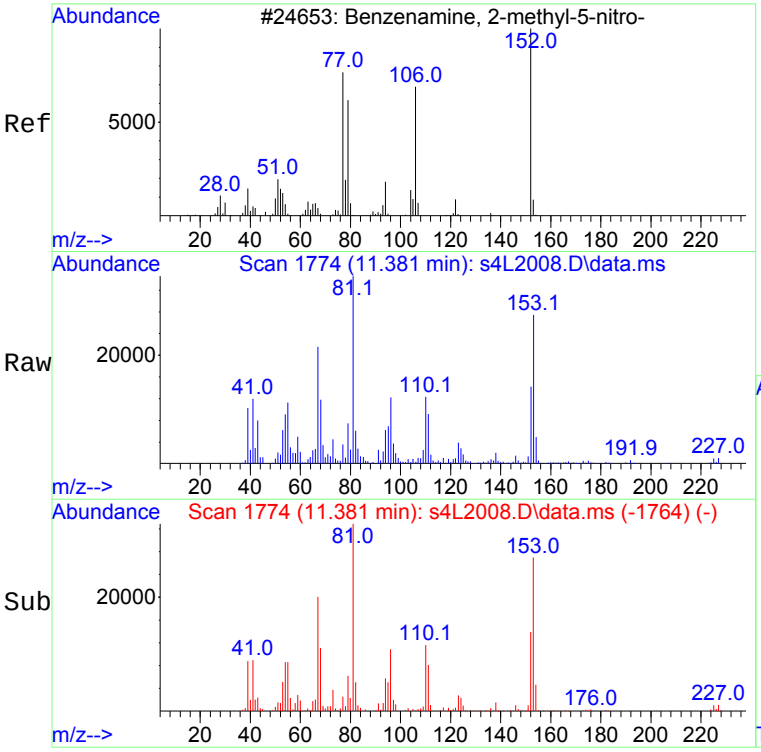


#30
Benzoic acid
Concen: 11.76 ng/uL
RT: 7.252 min Scan# 1002
Delta R.T. -0.059 min
Lab File: s4L2008.D
Acq: 20 Dec 2022 15:16

Tgt Ion:105 Resp: 17719

Ion	Ratio	Lower	Upper
105	100		
122	74.7	50.8	110.8
77	70.8	49.7	109.7

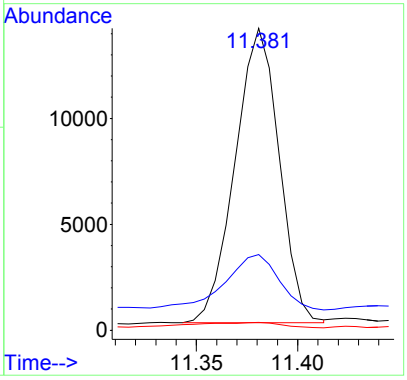




#128 BEFORE analyst DELETION
5-Nitro-o-toluidine
Concen: 6.72 ng/uL
RT: 11.381 min Scan# 1774
Delta R.T. -0.048 min
Lab File: s4L2008.D
Acq: 20 Dec 2022 15:16

Tgt Ion:152 Resp: 21107

Ion	Ratio	Lower	Upper
152	100		
77	22.5	76.7	136.7#
106	0.0	52.6	112.6#



Library Search Compound Report

12/22/2022

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2008.D
Acq On : 20 Dec 2022 15:16
Operator : NM1
Sample : |604449002|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB01-23-265371|MIX[A,B,J,D,E]||
ALS Vial : 8 Sample Multiplier: 1

12/22/2022

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

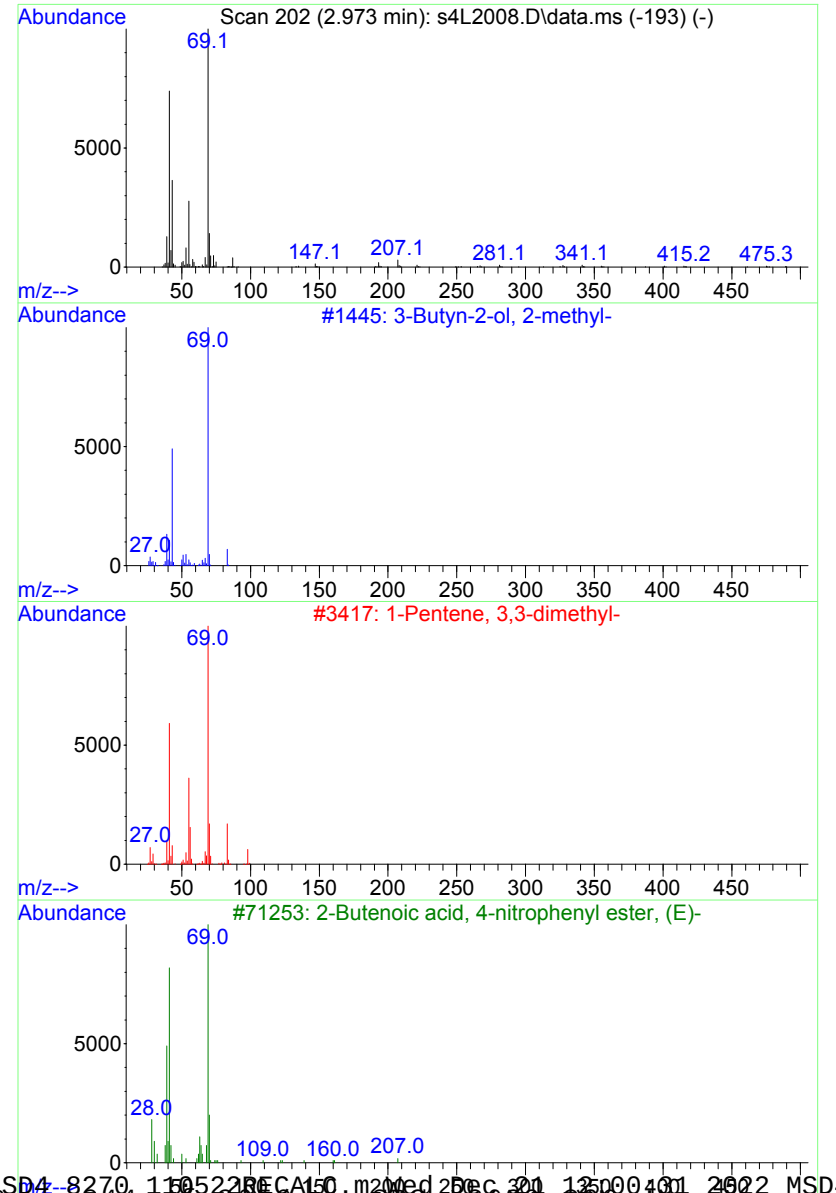
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

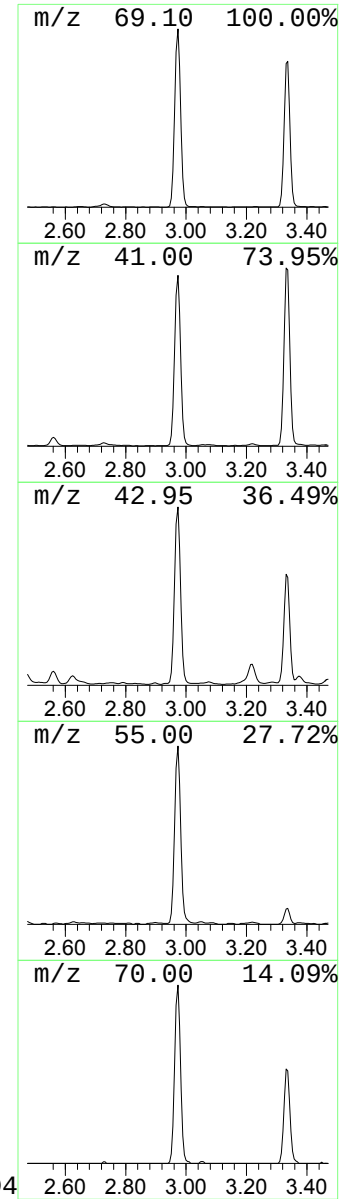
****

Peak Number 1 unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.973	20.38 ng/uL	460776	A 1,4-Dichlorobenzene-d4	5.754

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Butyn-2-ol, 2-methyl-	84	C5H8O	000115-19-5	50
2	1-Pentene, 3,3-dimethyl-	98	C7H14	003404-73-7	45
3	2-Butenoic acid, 4-nitrophenyl e...	207	C10H9NO4	014617-88-0	9
4	6,11-Dimethyl-2,6,10-dodecatrien...	208	C14H24O	1000196-53-3	9
5	2-Butene, 1-bromo-3-methyl-	148	C5H9Br	000870-63-3	9





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2008.D
Acq On : 20 Dec 2022 15:16
Operator : NM1
Sample : |604449002|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB01-23-265371|MIX[A,B,J,D,E]||
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

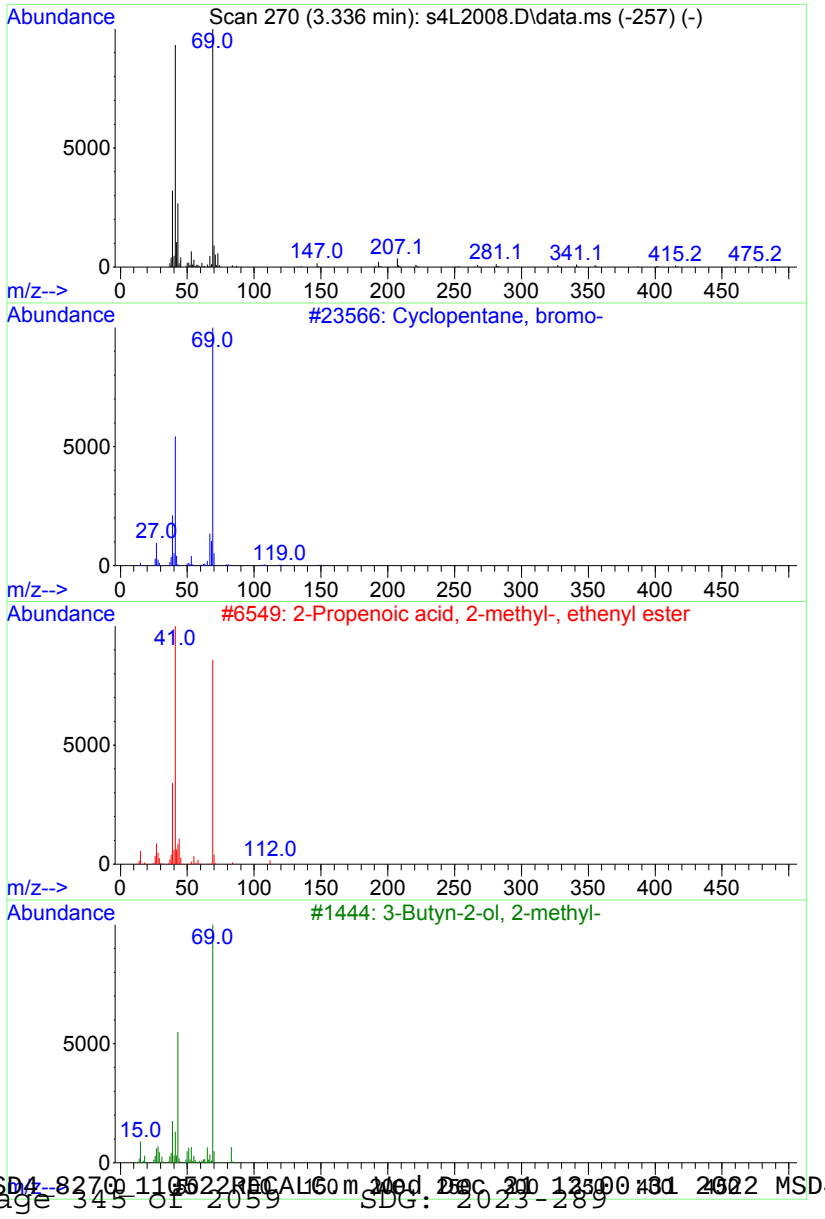
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

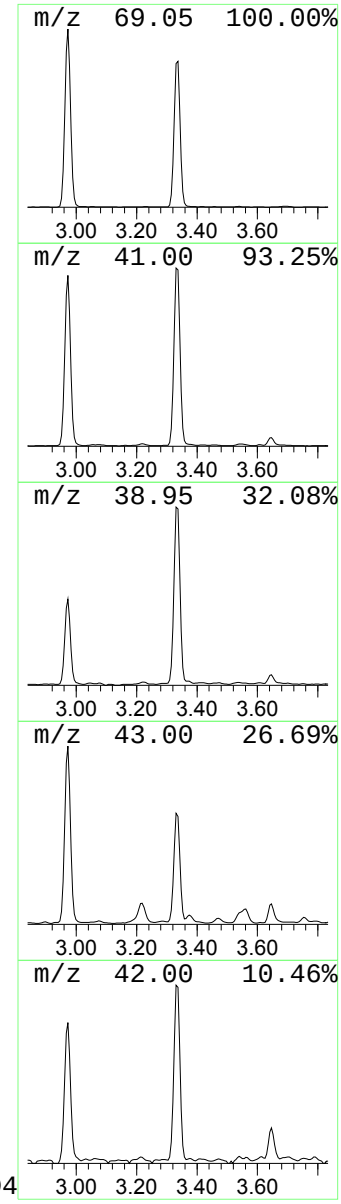
****

Peak Number 2 unknown Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.336	18.77 ng/uL	424431	A 1,4-Dichlorobenzene-d4	5.754

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentane, bromo-	148	C5H9Br	000137-43-9	59
2	2-Propenoic acid, 2-methyl-, eth...	112	C6H8O2	004245-37-8	45
3	3-Butyn-2-ol, 2-methyl-	84	C5H8O	000115-19-5	45
4	2-Propenoic acid, 2-methyl-, eth...	112	C6H8O2	004245-37-8	38
5	Cyclopentane, nitro-	115	C5H9NO2	002562-38-1	38





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2008.D
Acq On : 20 Dec 2022 15:16
Operator : NM1
Sample : |604449002|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB01-23-265371|MIX[A,B,J,D,E]||
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

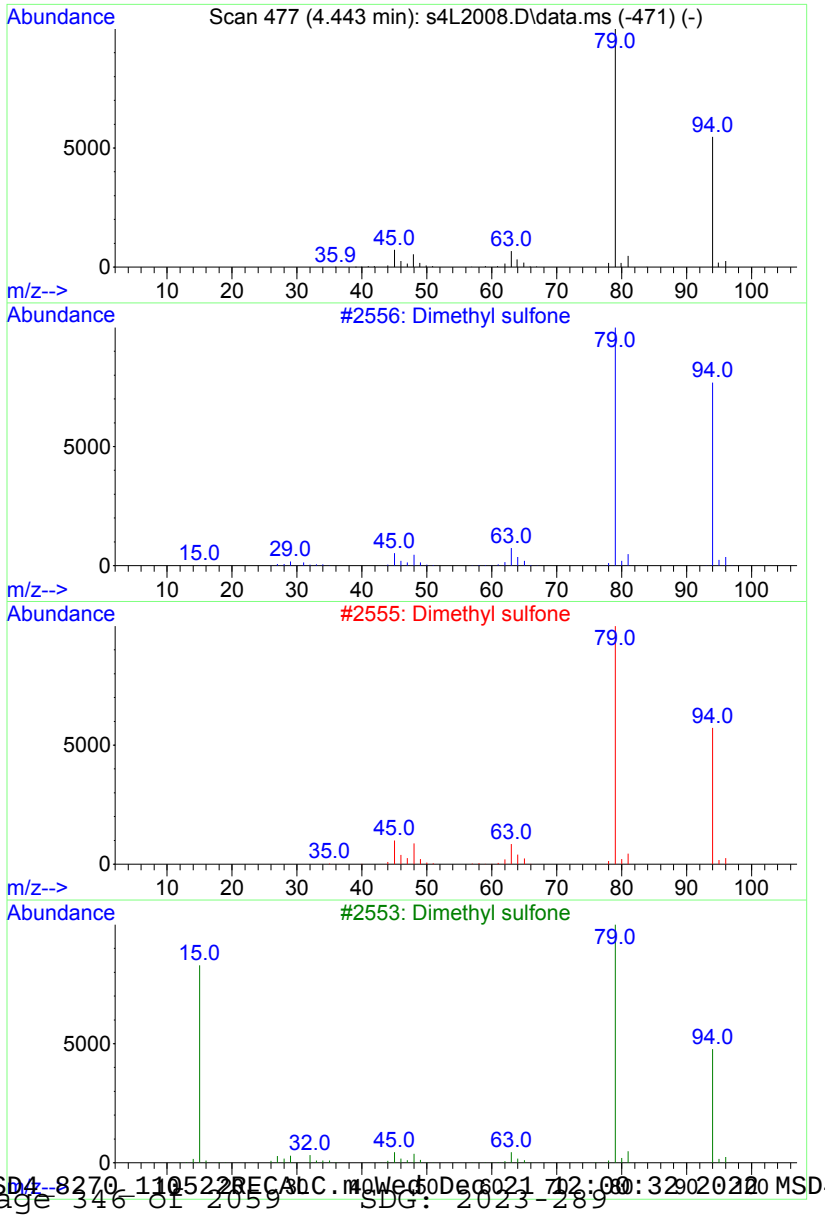
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

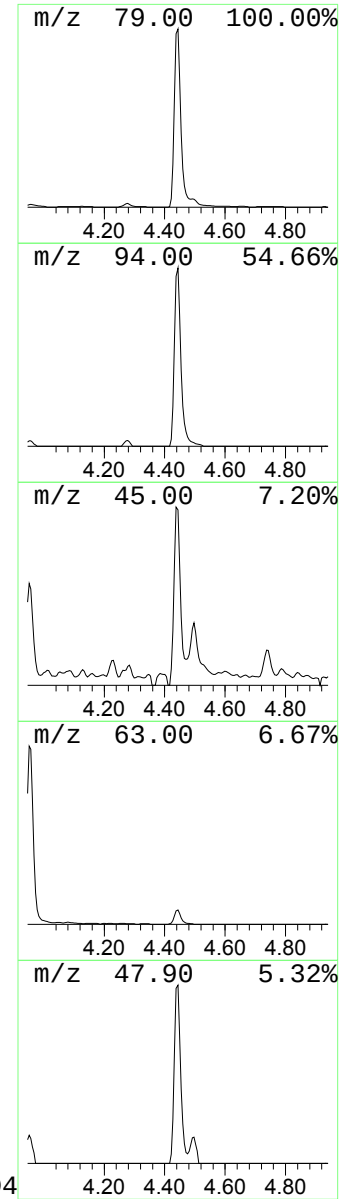
****

Peak Number 3 Dimethyl sulfone Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.443	4.89 ng/uL	110572	A 1,4-Dichlorobenzene-d4	5.754

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dimethyl sulfone	94	C2H6O2S	000067-71-0	94
2	Dimethyl sulfone	94	C2H6O2S	000067-71-0	94
3	Dimethyl sulfone	94	C2H6O2S	000067-71-0	91
4	Disulfide, dimethyl	94	C2H6S2	000624-92-0	43
5	Dimethyl sulfone	94	C2H6O2S	000067-71-0	43





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2008.D
Acq On : 20 Dec 2022 15:16
Operator : NM1
Sample : |604449002|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB01-23-265371|MIX[A,B,J,D,E]||
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

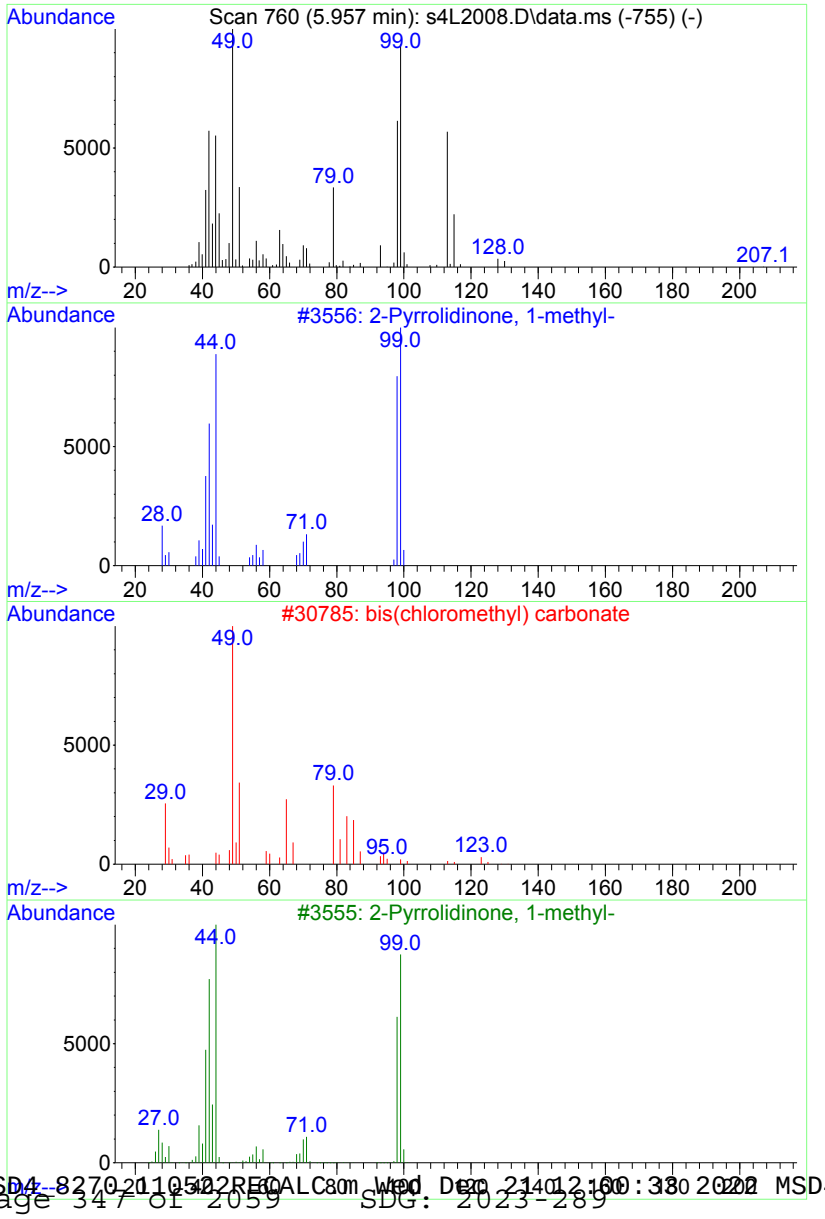
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

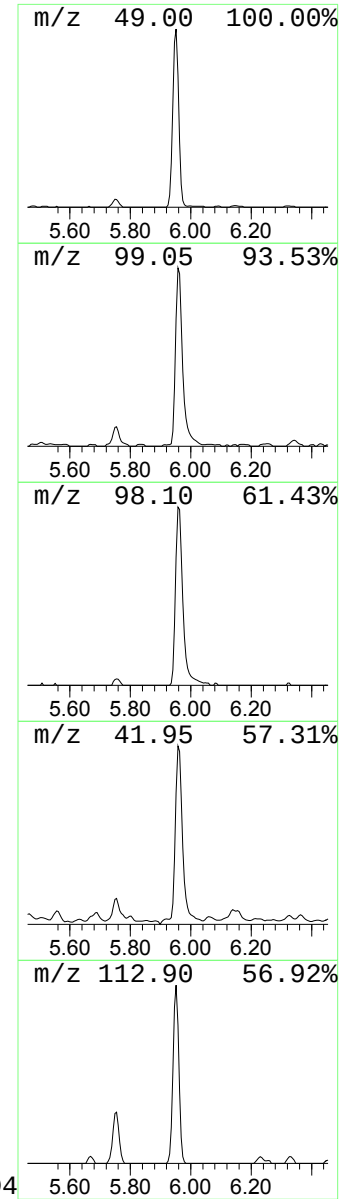
****

Peak Number 4 unknown Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.957	8.76 ng/uL	197985	B 1,4-Dichlorobenzene-d4	5.754

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pyrrolidinone, 1-methyl-	99	C5H9NO	000872-50-4	35
2	bis(chloromethyl) carbonate	158	C3H4Cl2O3	1000404-37-0	25
3	2-Pyrrolidinone, 1-methyl-	99	C5H9NO	000872-50-4	20
4	2-Pyrrolidinone, 1-methyl-	99	C5H9NO	000872-50-4	14
5	Imidosulfurous difluoride, methyl-	99	CH3F2NS	000758-20-3	11





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2008.D
Acq On : 20 Dec 2022 15:16
Operator : NM1
Sample : |604449002|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB01-23-265371|MIX[A,B,J,D,E]||
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

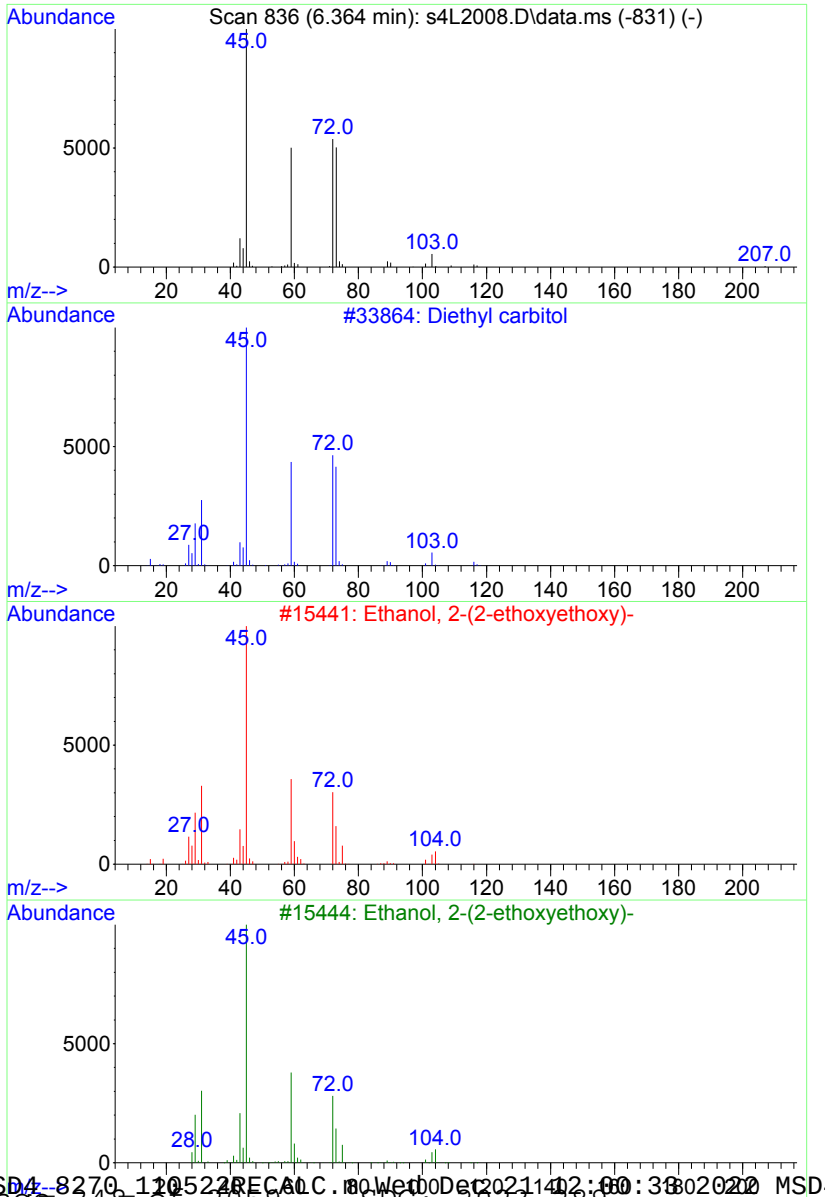
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

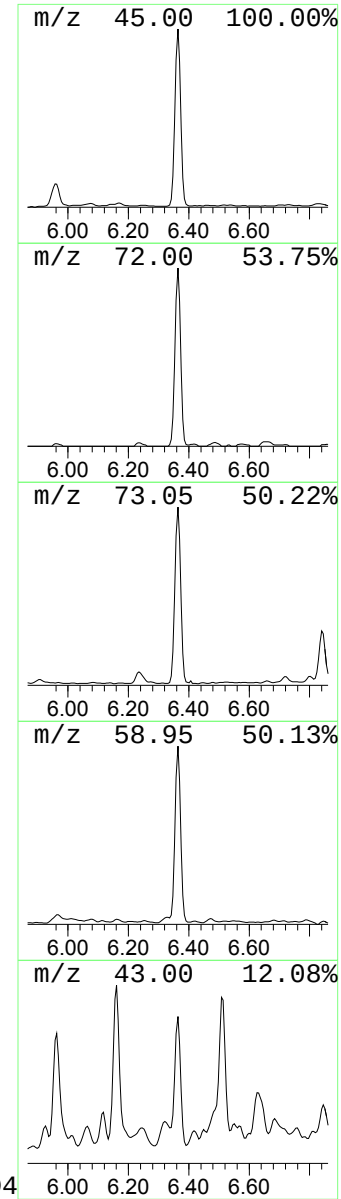
****

Peak Number 5 Diethyl carbitol Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.364	4.98 ng/uL	112582	B 1,4-Dichlorobenzene-d4	5.754

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Diethyl carbitol	162	C8H18O3	000112-36-7	90
2	Ethanol, 2-(2-ethoxyethoxy)-	134	C6H14O3	000111-90-0	83
3	Ethanol, 2-(2-ethoxyethoxy)-	134	C6H14O3	000111-90-0	83
4	Diethyl carbitol	162	C8H18O3	000112-36-7	64
5	Tetraethylene glycol diethyl ether	250	C12H26O5	004353-28-0	64





Library Search Compound Report

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Acq On : 20 Dec 2022 15:16
Operator : NM1
Sample : |604449002|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB01-23-265371|MIX[A,B,J,D,E]||
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

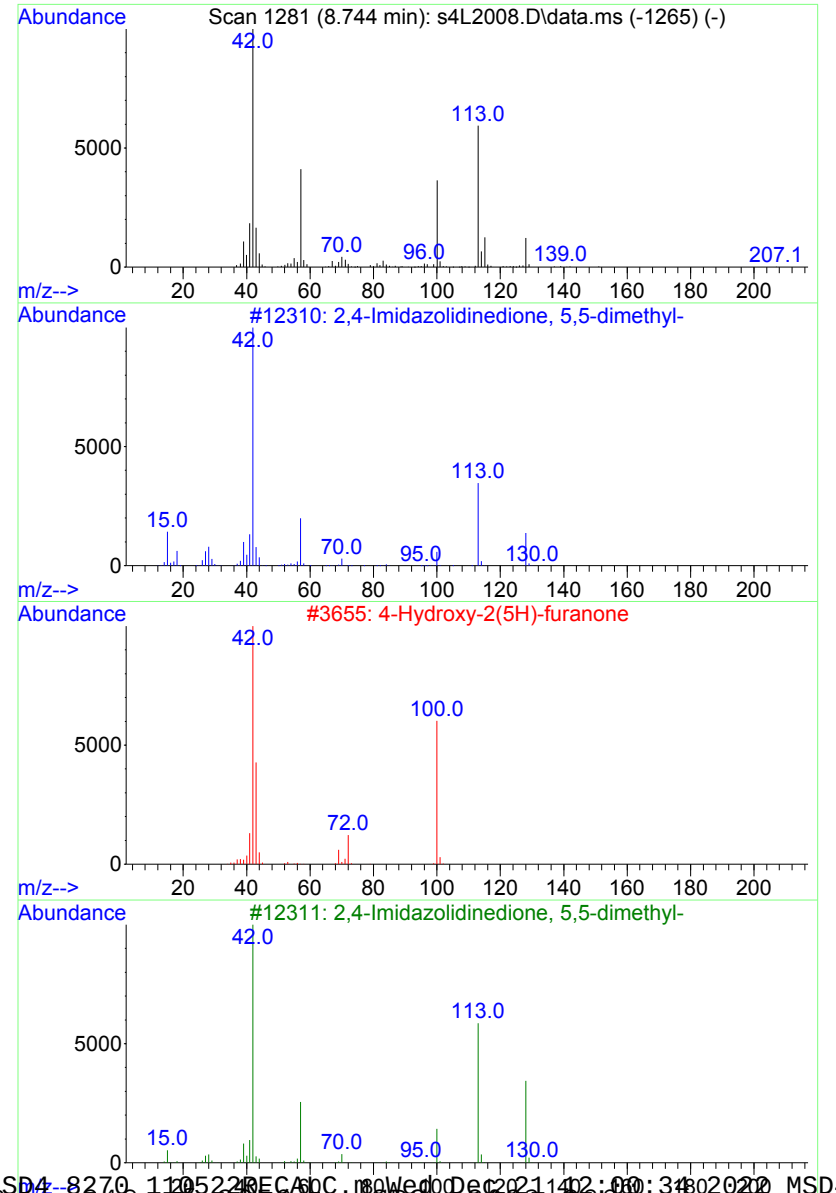
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

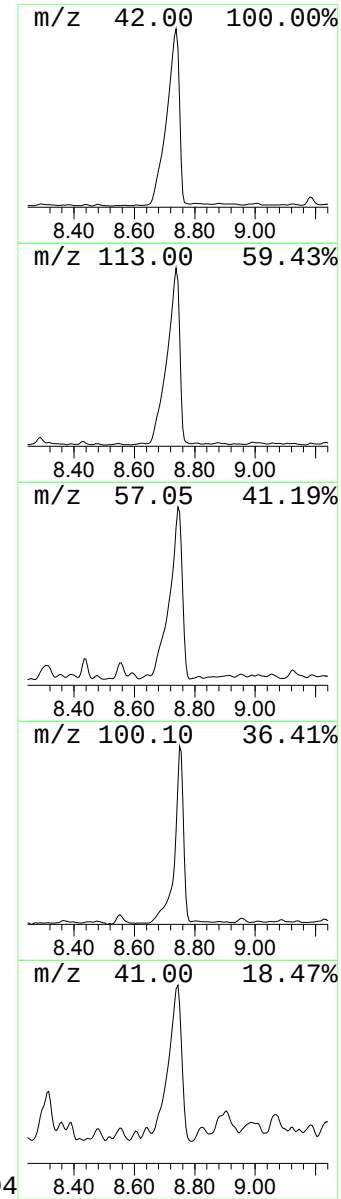
****

Peak Number 6 unknown Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.744	14.09 ng/uL	450109	E Naphthalene-d8	7.690

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,4-Imidazolidinedione, 5,5-dime...	128	C5H8N2O2	000077-71-4	64
2	4-Hydroxy-2(5H)-furanone	100	C4H4O3	000541-57-1	46
3	2,4-Imidazolidinedione, 5,5-dime...	128	C5H8N2O2	000077-71-4	45
4	2,4(3H,5H)-Furandione	100	C4H4O3	004971-56-6	43
5	1,2,4-Triazine-3,5(2H,4H)-dione	113	C3H3N3O2	000461-89-2	40





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2008.D
Acq On : 20 Dec 2022 15:16
Operator : NM1
Sample : |604449002|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB01-23-265371|MIX[A,B,J,D,E]||
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

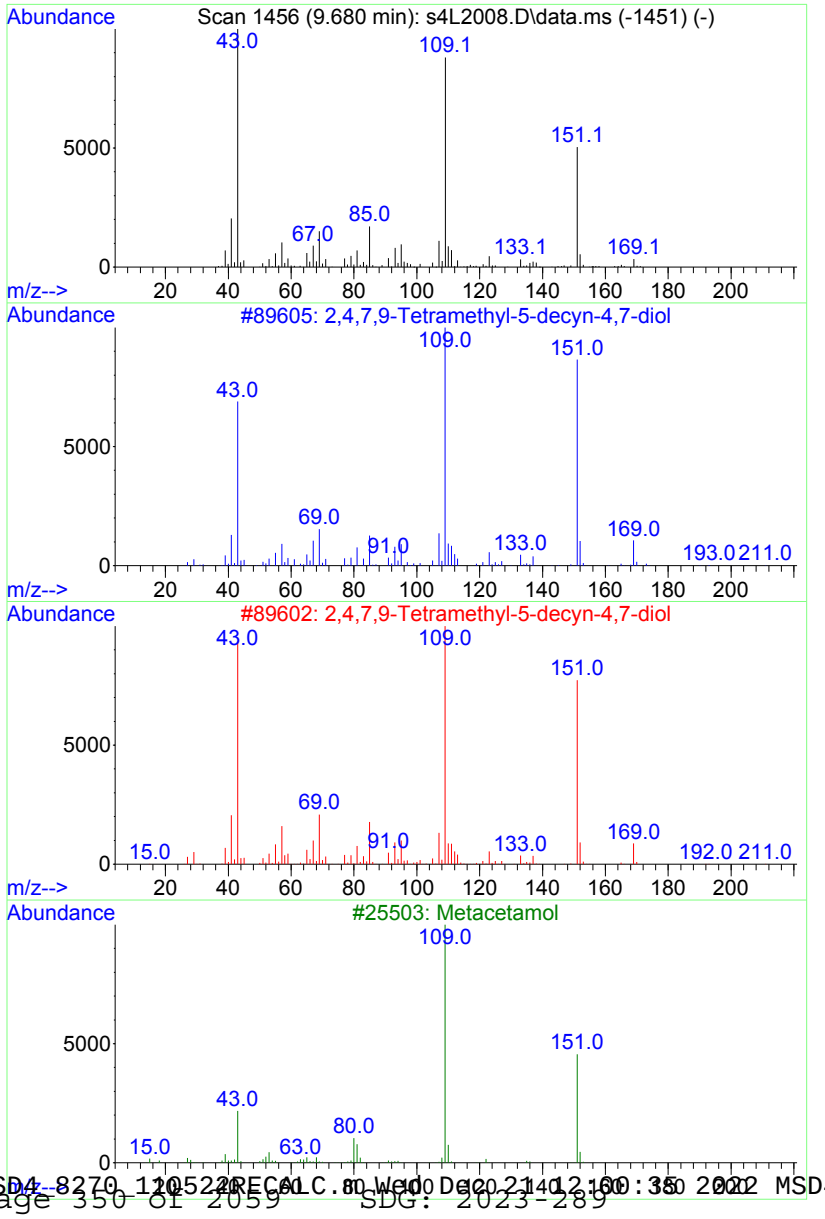
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

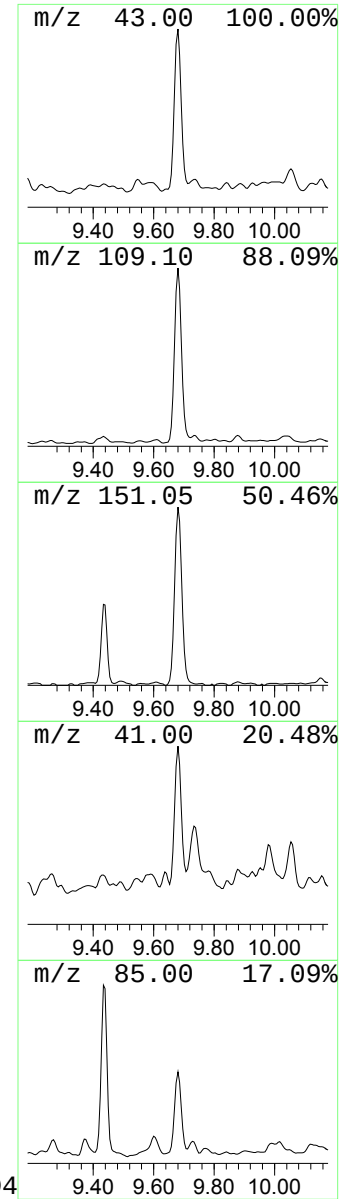
****

Peak Number 7 2,4,7,9-Tetramethyl-5-decyn... Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.680	4.90 ng/uL	205973	A Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,4,7,9-Tetramethyl-5-decyn-4,7-...	226	C14H26O2	000126-86-3	91
2	2,4,7,9-Tetramethyl-5-decyn-4,7-...	226	C14H26O2	000126-86-3	58
3	Metacetamol	151	C8H9NO2	000621-42-1	53
4	Metacetamol	151	C8H9NO2	000621-42-1	53
5	m-Isopropoxyaniline	151	C9H13NO	041406-00-2	47





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ALS Vial : 8 Sample Multiplier: 1

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Quant Title : BNA01

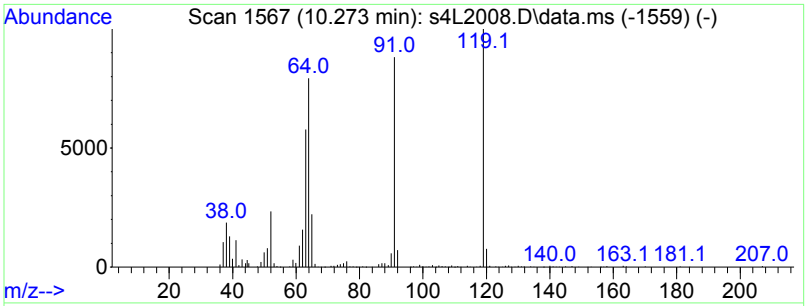
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

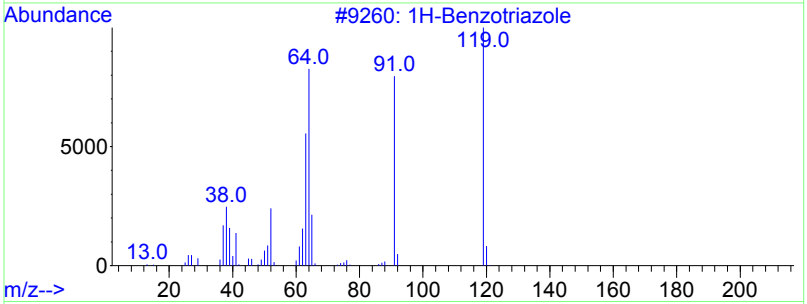
****

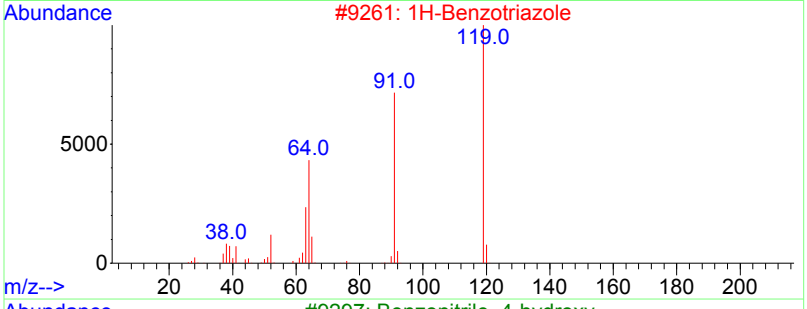
Peak Number 8 1H-Benzotriazole Concentration Rank 6

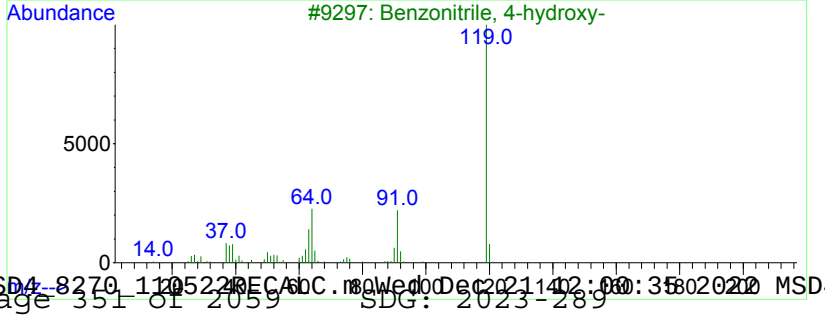
R.T.	EstConc	Area	Relative to ISTD	R.T.
10.274	13.10 ng/uL	550340	A Acenaphthene-d10	10.525

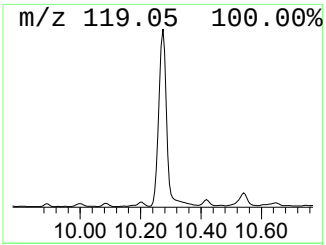
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Benzotriazole	119	C6H5N3	000095-14-7	94
2	1H-Benzotriazole	119	C6H5N3	000095-14-7	93
3	Benzonitrile, 4-hydroxy-	119	C7H5NO	000767-00-0	87
4	Benzonitrile, 3-hydroxy-	119	C7H5NO	000873-62-1	87
5	Benzoxazole	119	C7H5NO	000273-53-0	87

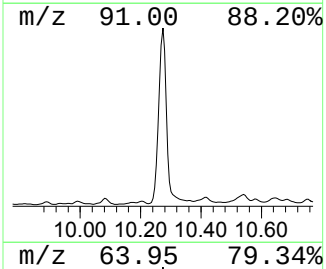


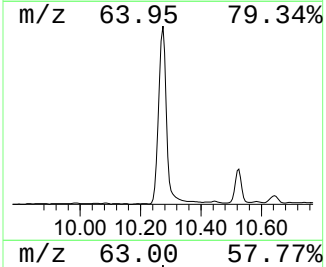


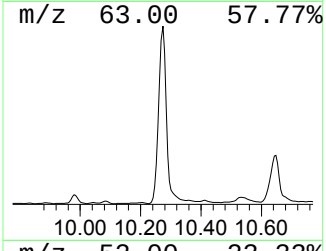


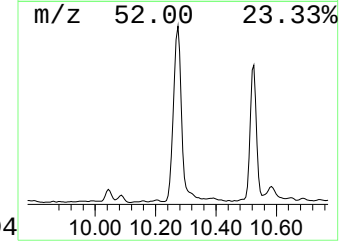












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Acq On : 20 Dec 2022 15:16
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Misc : |MSD1C70E_L|WATER|SMEB01-23-265371|MIX[A,B,J,D,E]||
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

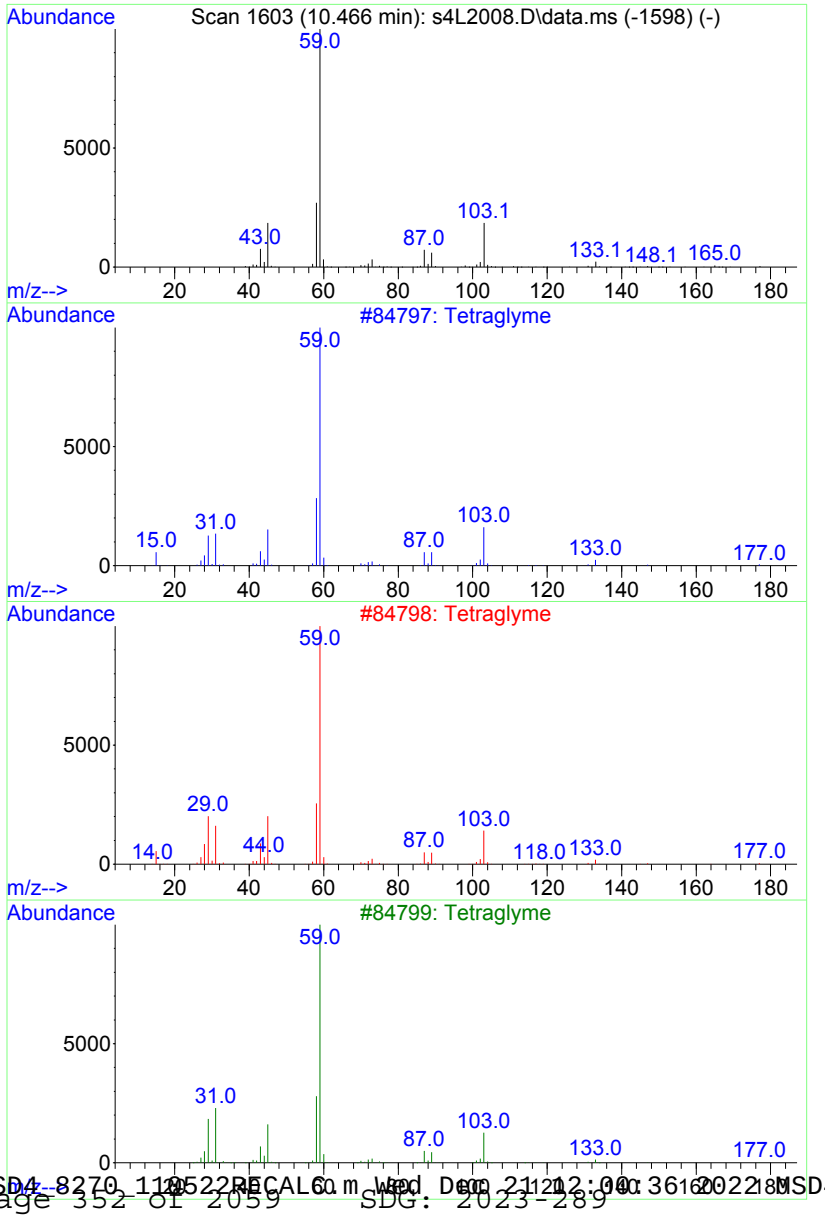
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

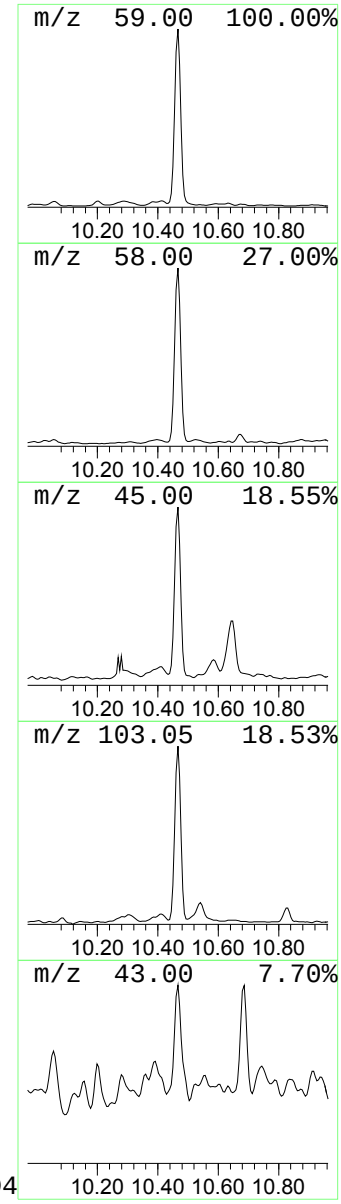
****

Peak Number 9 Tetraglyme Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.466	5.68 ng/uL	238761	A Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tetraglyme	222	C10H22O5	000143-24-8	90
2	Tetraglyme	222	C10H22O5	000143-24-8	90
3	Tetraglyme	222	C10H22O5	000143-24-8	90
4	Methyl 2,5,8,11-tetraoxatridecan...	236	C10H20O6	1000366-78-2	83
5	2,5,8,11-Tetraoxadodecane	178	C8H18O4	000112-49-2	78





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ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

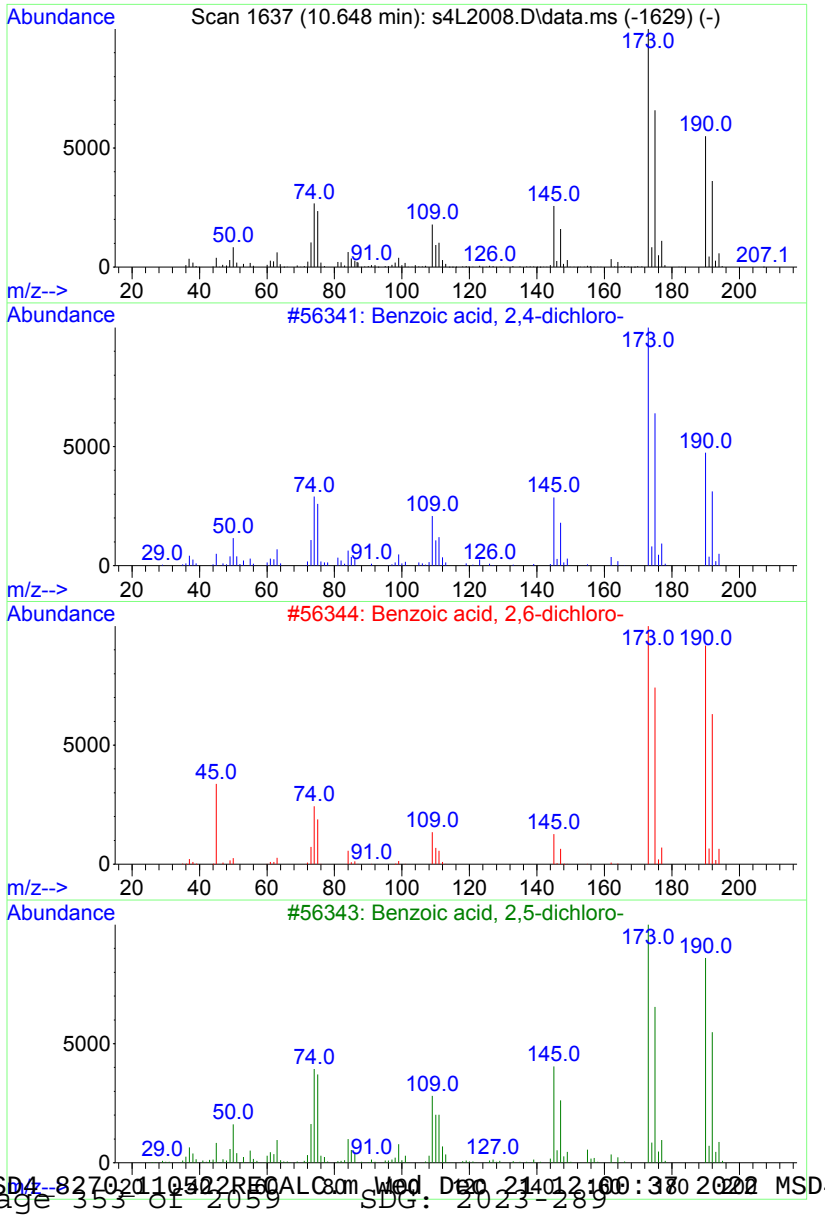
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

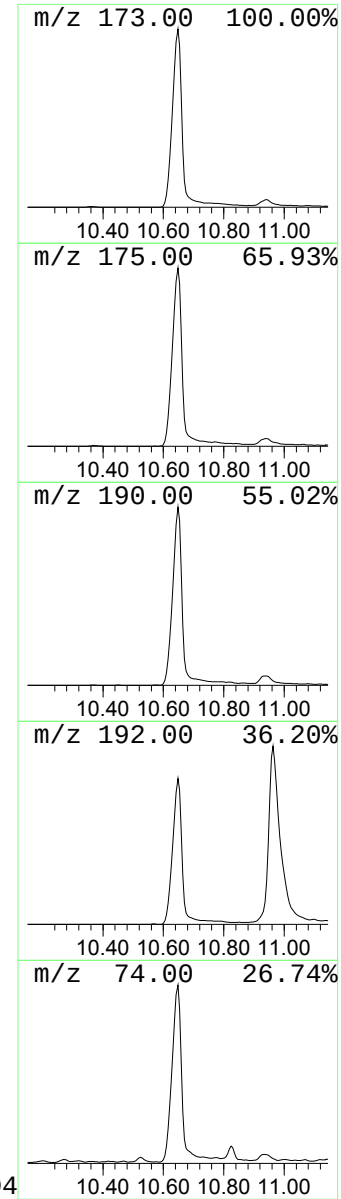
****

Peak Number 10 Benzoic acid, 2,4-dichloro- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.648	33.03 ng/uL	1387470	D Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzoic acid, 2,4-dichloro-	190	C7H4Cl2O2	000050-84-0	98
2	Benzoic acid, 2,6-dichloro-	190	C7H4Cl2O2	000050-30-6	97
3	Benzoic acid, 2,5-dichloro-	190	C7H4Cl2O2	000050-79-3	96
4	Benzoic acid, 2,6-dichloro-	190	C7H4Cl2O2	000050-30-6	96
5	Benzoic acid, 2,4-dichloro-	190	C7H4Cl2O2	000050-84-0	96





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ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

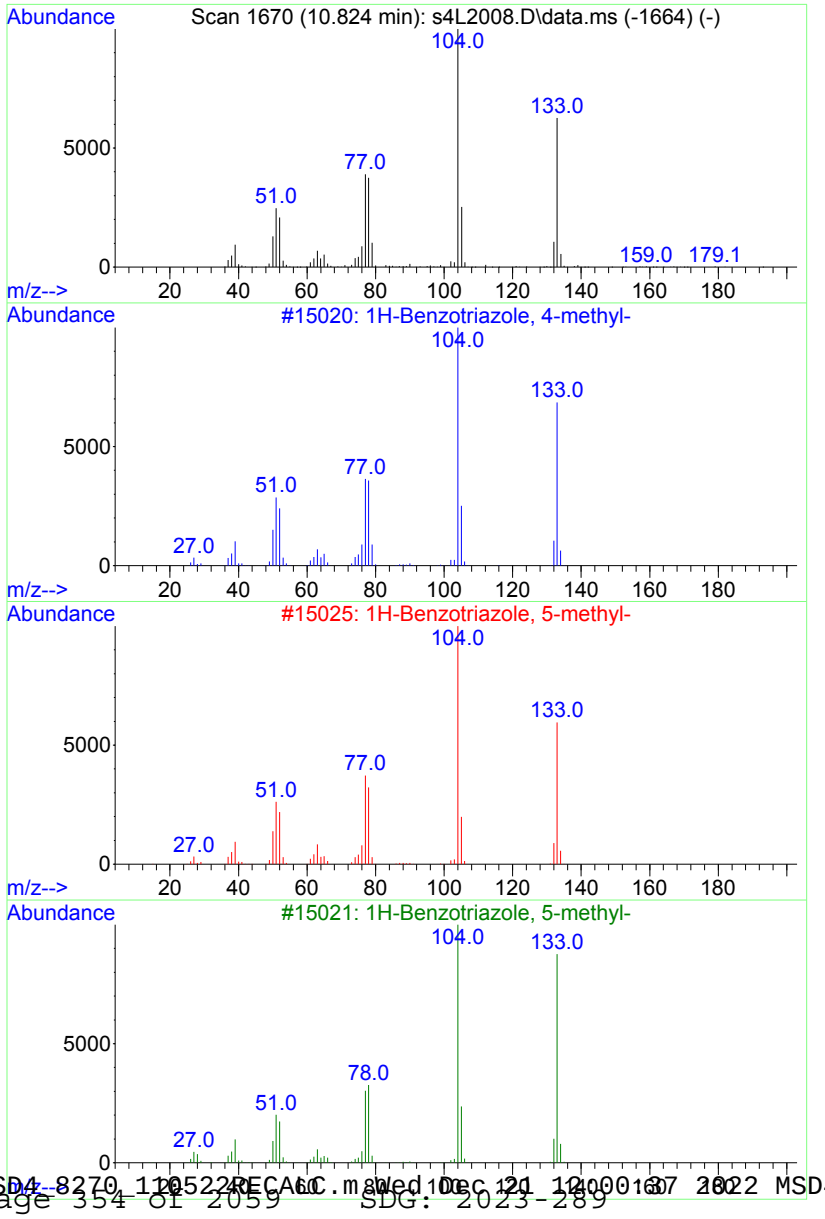
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

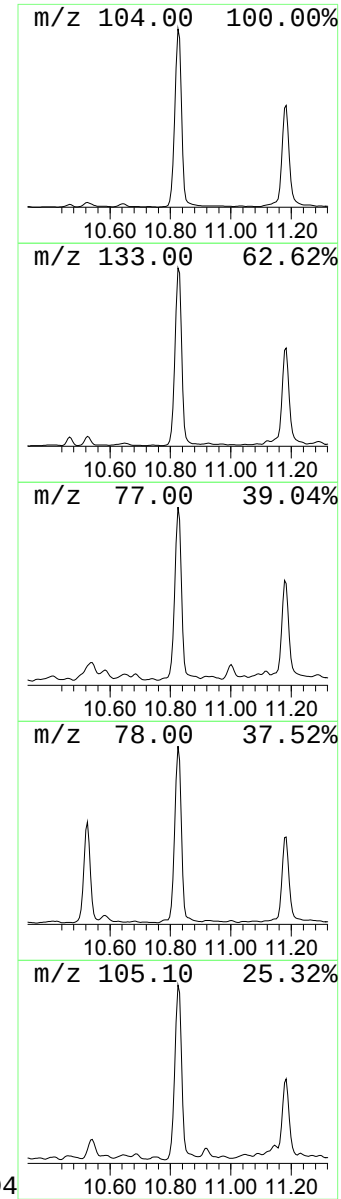
****

Peak Number 11 1H-Benzotriazole, 4-methyl- Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.824	10.29 ng/uL	432292	D Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Benzotriazole, 4-methyl-	133	C7H7N3	029878-31-7	98
2	1H-Benzotriazole, 5-methyl-	133	C7H7N3	000136-85-6	96
3	1H-Benzotriazole, 5-methyl-	133	C7H7N3	000136-85-6	95
4	1H-Benzotriazole, 4-methyl-	133	C7H7N3	029878-31-7	94
5	1H-Benzotriazole, 5-methyl-	133	C7H7N3	000136-85-6	93





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Misc : |MSD1C70E_L|WATER|SMEB01-23-265371|MIX[A,B,J,D,E]||
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

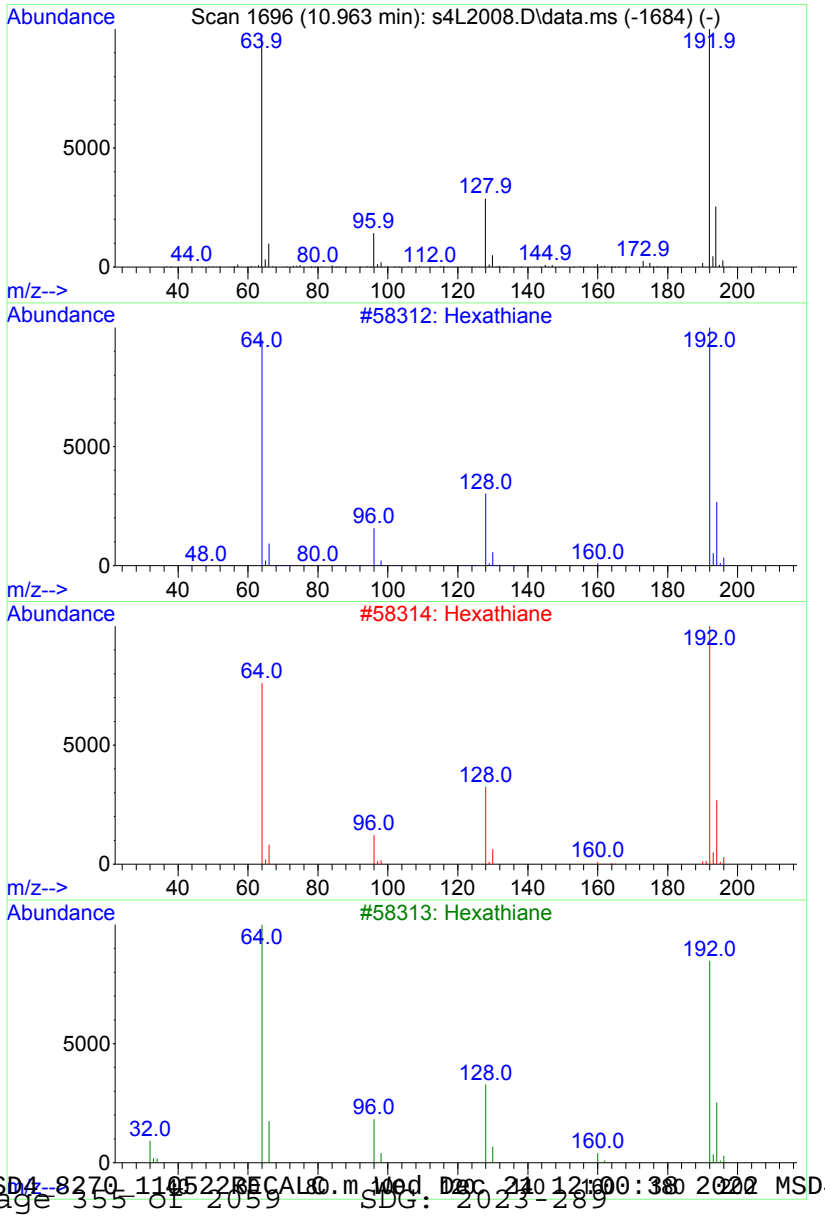
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

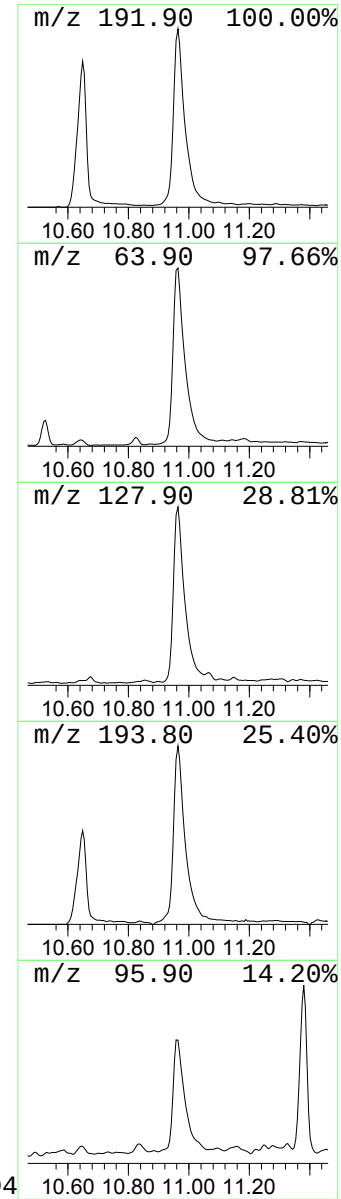
****

Peak Number 12 Hexathiane Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.964	13.93 ng/uL	585306	D Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexathiane	192	S6	013798-23-7	96
2	Hexathiane	192	S6	013798-23-7	95
3	Hexathiane	192	S6	013798-23-7	43
4	1,2-Dimethyl-5-nitro-1H-imidazo[...	192	C8H8N4O2	1000296-10-0	9
5	2,4-Diamino-6-methylpteridine-8-...	192	C7H8N6O	019994-63-9	9





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ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

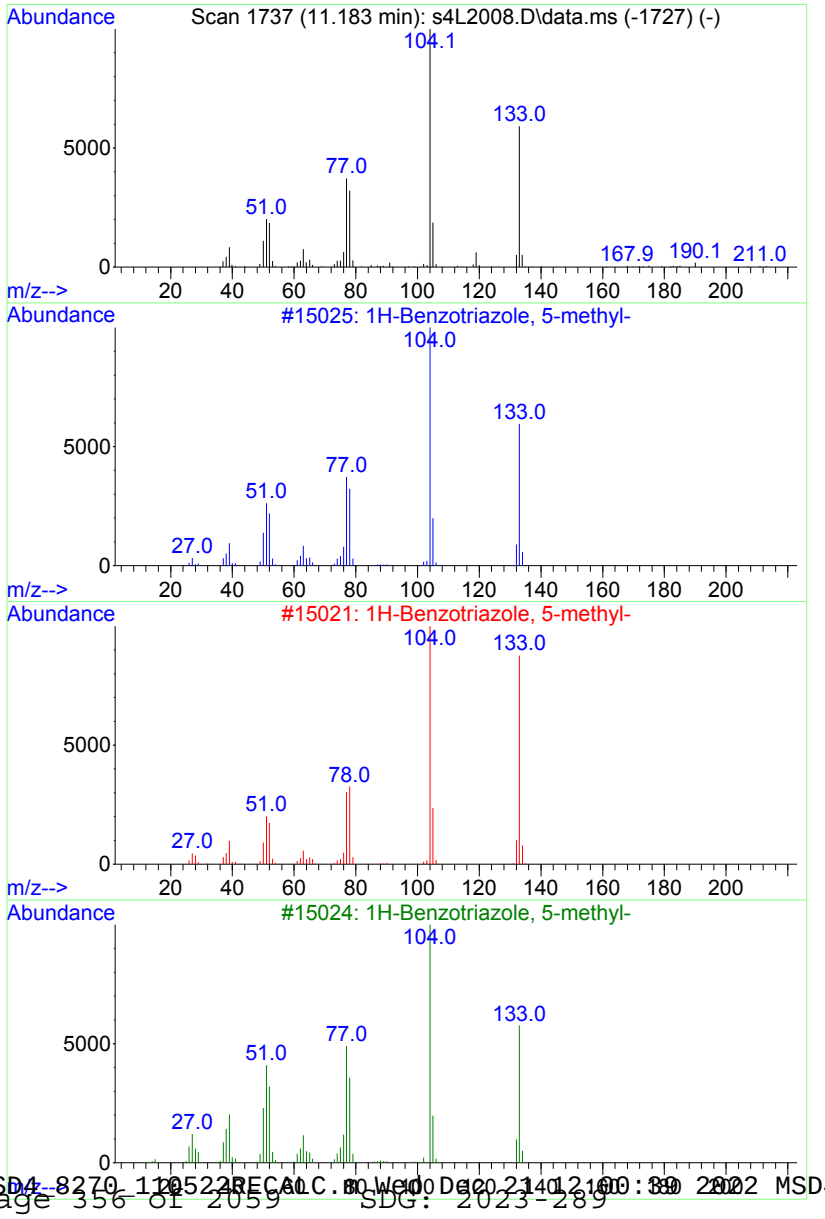
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

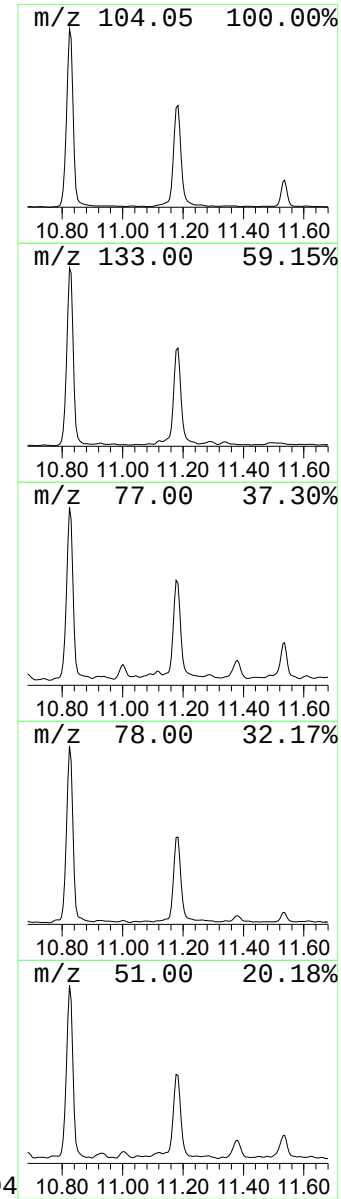
****

Peak Number 13 1H-Benzotriazole, 5-methyl- Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.183	6.03 ng/uL	253419	D Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Benzotriazole, 5-methyl-	133	C7H7N3	000136-85-6	94
2	1H-Benzotriazole, 5-methyl-	133	C7H7N3	000136-85-6	87
3	1H-Benzotriazole, 5-methyl-	133	C7H7N3	000136-85-6	86
4	1H-Benzotriazole, 4-methyl-	133	C7H7N3	029878-31-7	72
5	2H-Indol-2-one, 1,3-dihydro-	133	C8H7NO	000059-48-3	64





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ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

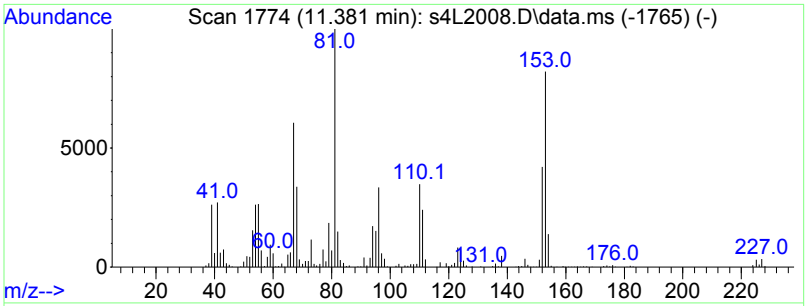
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

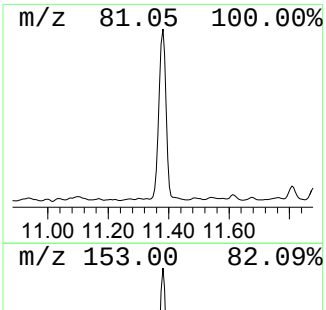
****

Peak Number 14 Gabapentin lactam Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.381	11.89 ng/uL	499436	D Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Gabapentin lactam	153	C9H15NO	064744-50-9	98
2	Cyclohexanone, 5-methyl-2-(1-met...	152	C10H16O	000529-00-0	49
3	Cyclohexene, 3-methyl-	96	C7H12	000591-48-0	42
4	Cyclohexane, ethylidene-	110	C8H14	001003-64-1	41
5	Cyclohexane, ethylidene-	110	C8H14	001003-64-1	38





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ALS Vial : 8 Sample Multiplier: 1

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Quant Title : BNA01

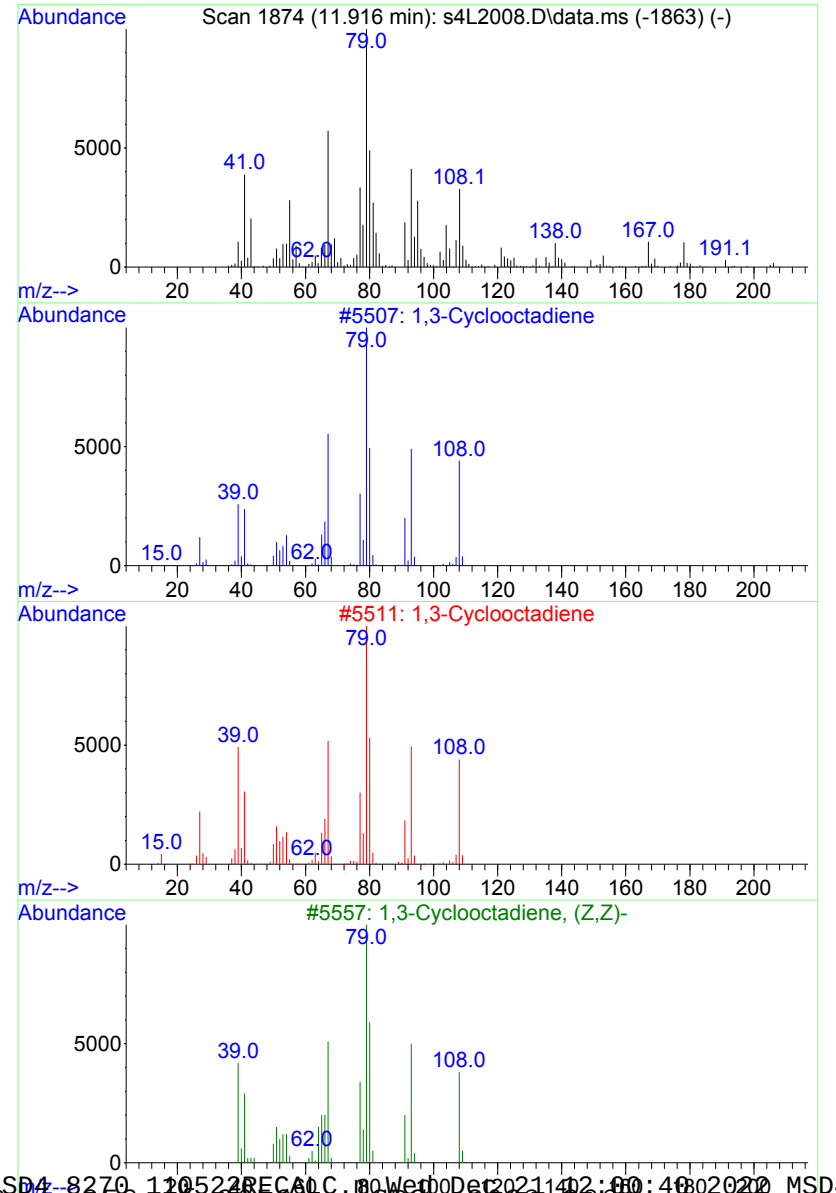
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

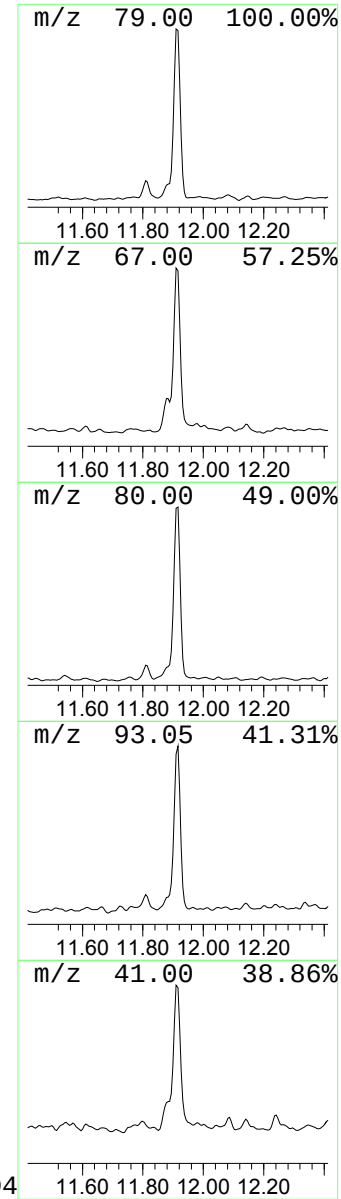
****

Peak Number 15 unknown Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.916	8.83 ng/uL	409977	A Phenanthrene-d10	12.948

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,3-Cyclooctadiene	108	C8H12	001700-10-3	72
2	1,3-Cyclooctadiene	108	C8H12	001700-10-3	72
3	1,3-Cyclooctadiene, (Z,Z)-	108	C8H12	003806-59-5	59
4	Bicyclo[3.2.0]heptane, 2-methylene-	108	C8H12	089243-94-7	49
5	Bicyclo(3.2.1)oct-2-ene	108	C8H12	000823-02-9	49





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ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

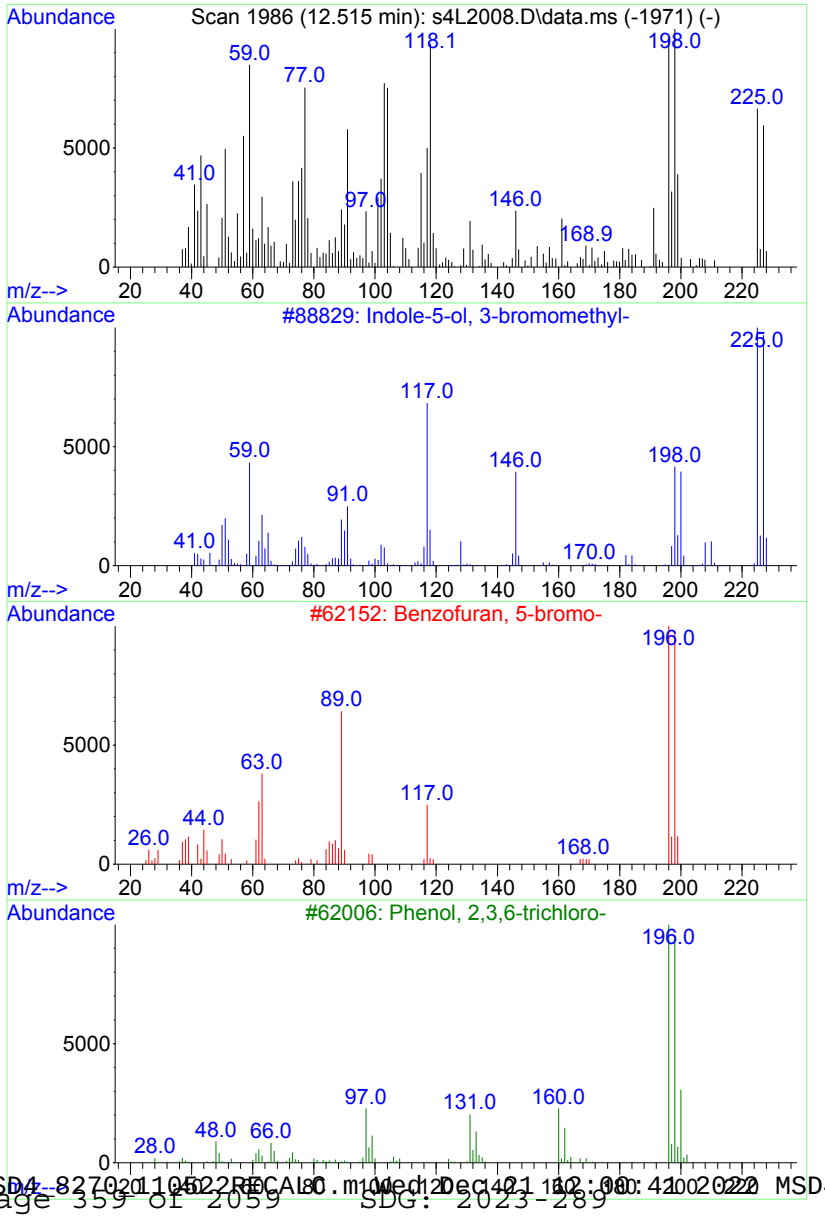
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

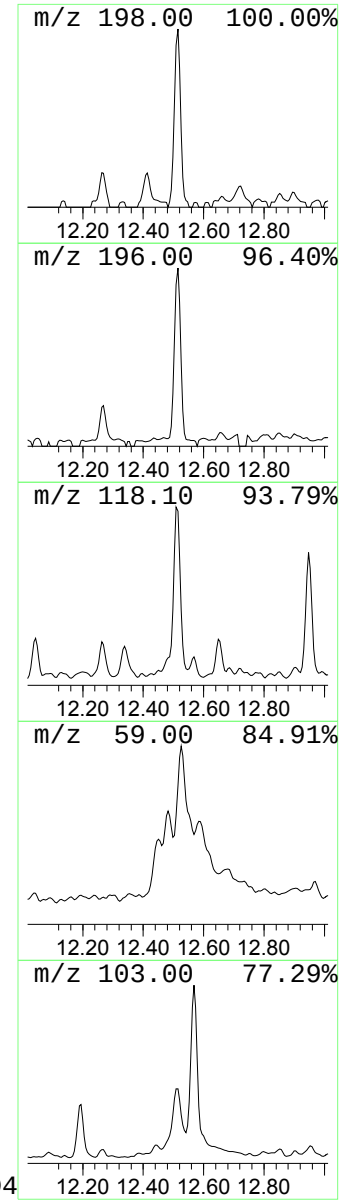
****

Peak Number 16 unknown Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.515	4.82 ng/uL	223877	A Phenanthrene-d10	12.948

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Indole-5-ol, 3-bromomethyl-	225	C9H8BrNO	1000128-68-5	25
2	Benzofuran, 5-bromo-	196	C8H5BrO	023145-07-5	18
3	Phenol, 2,3,6-trichloro-	196	C6H3Cl3O	000933-75-5	15
4	Acetic acid, 4-hydroxy-4-methyl-...	236	C14H20O3	1000191-00-7	14
5	Phenol, 2,4,5-trichloro-	196	C6H3Cl3O	000095-95-4	11





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Sample : |604449002|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB01-23-265371|MIX[A,B,J,D,E]||
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

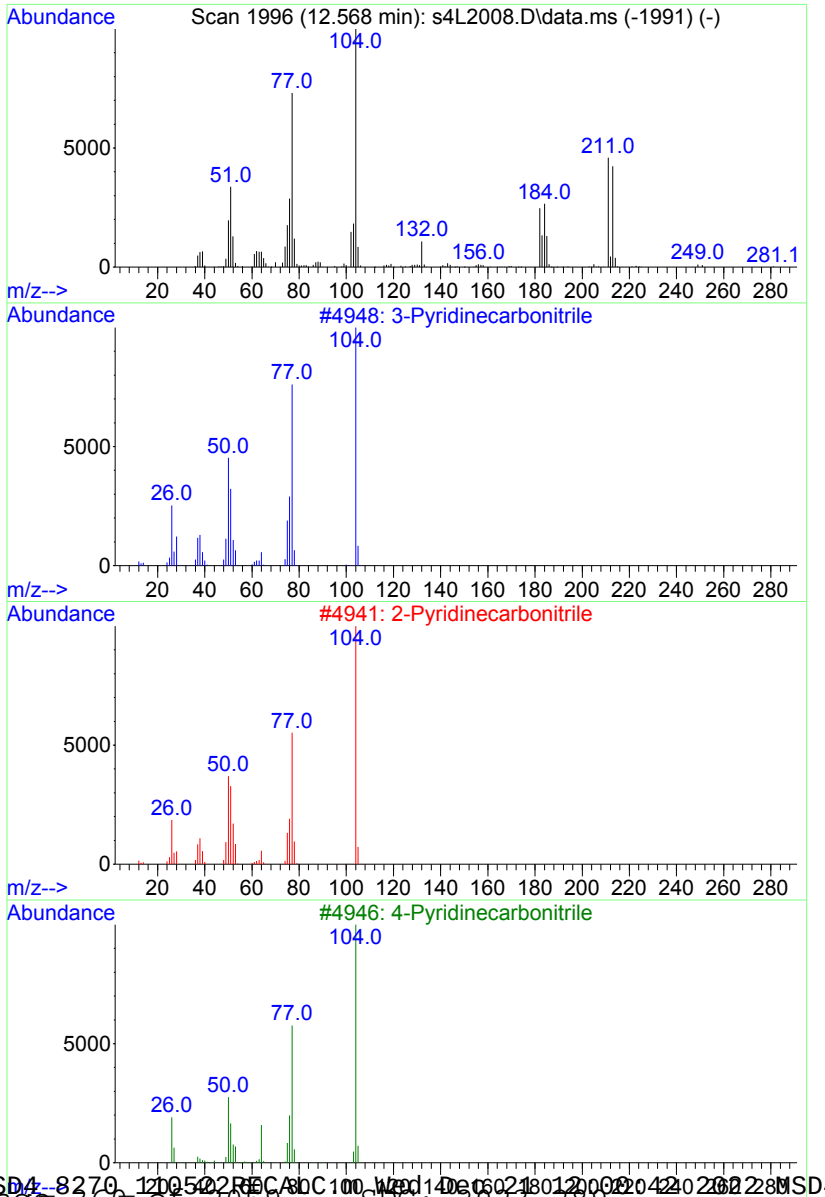
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

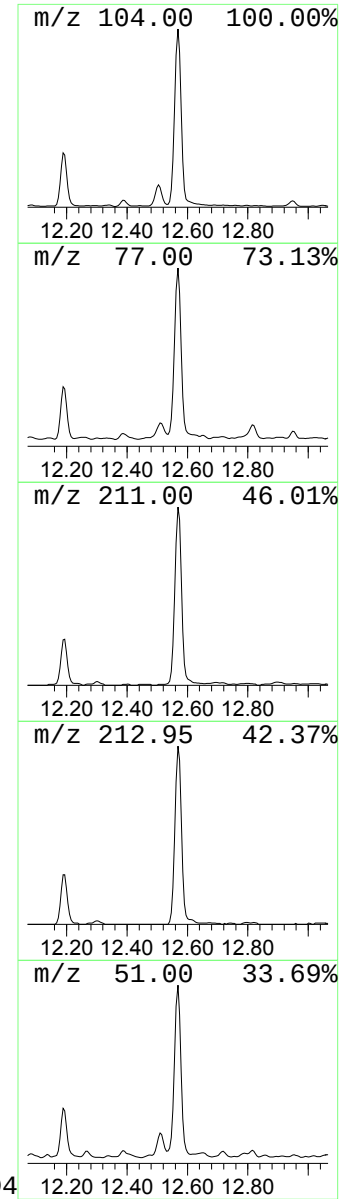
****

Peak Number 17 unknown Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.568	11.74 ng/uL	544973	A Phenanthrene-d10	12.948

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Pyridinecarbonitrile	104	C6H4N2	000100-54-9	55
2	2-Pyridinecarbonitrile	104	C6H4N2	000100-70-9	49
3	4-Pyridinecarbonitrile	104	C6H4N2	000100-48-1	46
4	3-Pyridinecarbonitrile	104	C6H4N2	000100-54-9	46
5	4-Pyridinecarbonitrile	104	C6H4N2	000100-48-1	46





Library Search Compound Report

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Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2008.D
Acq On    : 20 Dec 2022  15:16
Operator  : NM1
Sample    : |604449002|2358006|1|SVM|1|TNSL|||
Misc      : |MSD1C70E_L|WATER|SMEB01-23-265371|MIX[A,B,J,D,E]||
ALS Vial  : 8   Sample Multiplier: 1

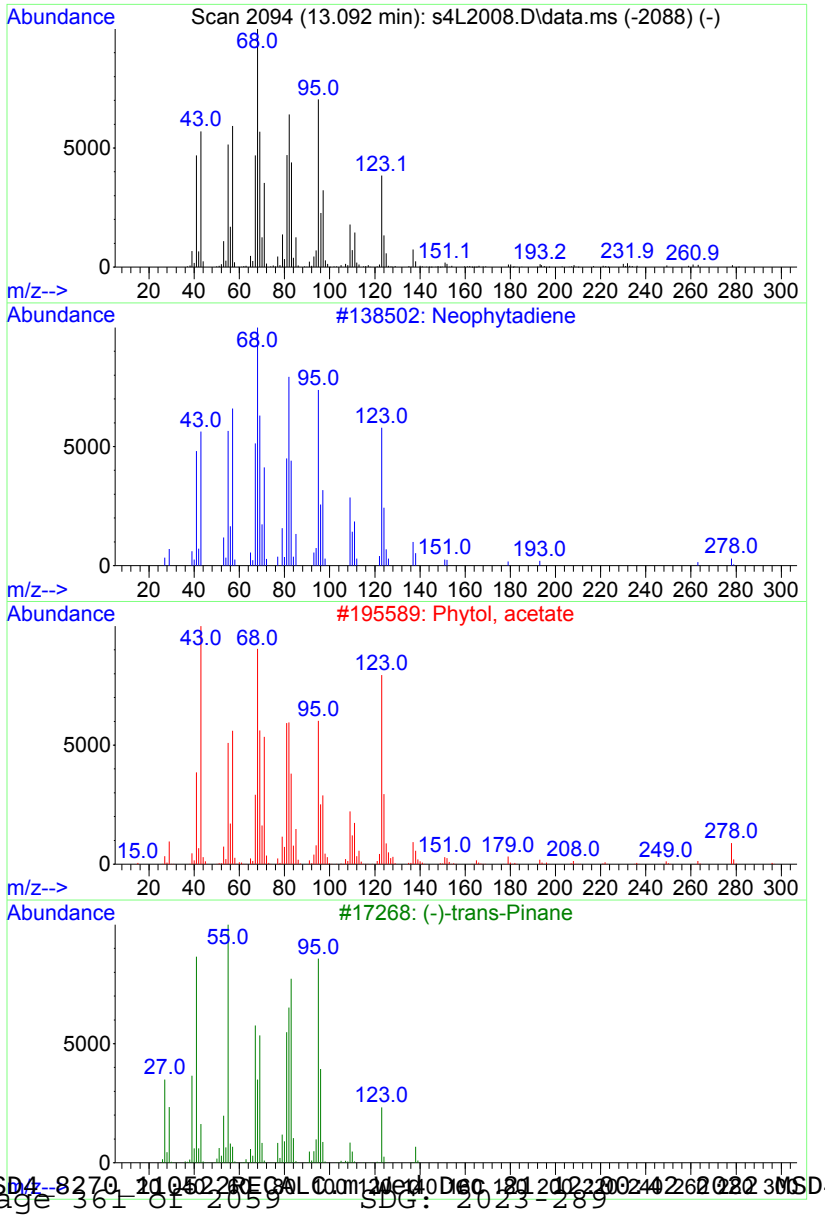
Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title  : BNA01

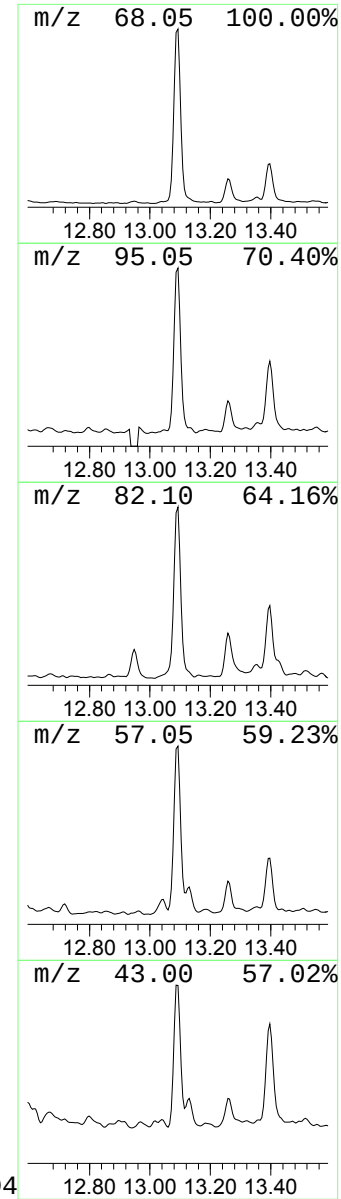
TIC Library    : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

*********************************************************************
Peak Number 18  unknown                          Concentration Rank  9

  R.T.     EstConc          Area       Relative to ISTD         R.T.
---------------------------------------------------------------------
 13.092   11.16 ng/uL      517931   D Phenanthrene-d10         12.948

 Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
---------------------------------------------------------------------
 1 Neophytadiene                         278 C20H38         000504-96-1 64
 2 Phytol, acetate                       338 C22H42O2       1000375-01-4 38
 3 (-)-trans-Pinane                      138 C10H18         033626-25-4 35
 4 6,6-Dimethyl-cyclooct-4-enone         152 C10H16O        1000194-10-0 35
 5 Cycloheptane, 1-methyl-4-methylene-   124 C9H16          023799-25-9 35
```





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2008.D
Acq On : 20 Dec 2022 15:16
Operator : NM1
Sample : |604449002|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB01-23-265371|MIX[A,B,J,D,E]||
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

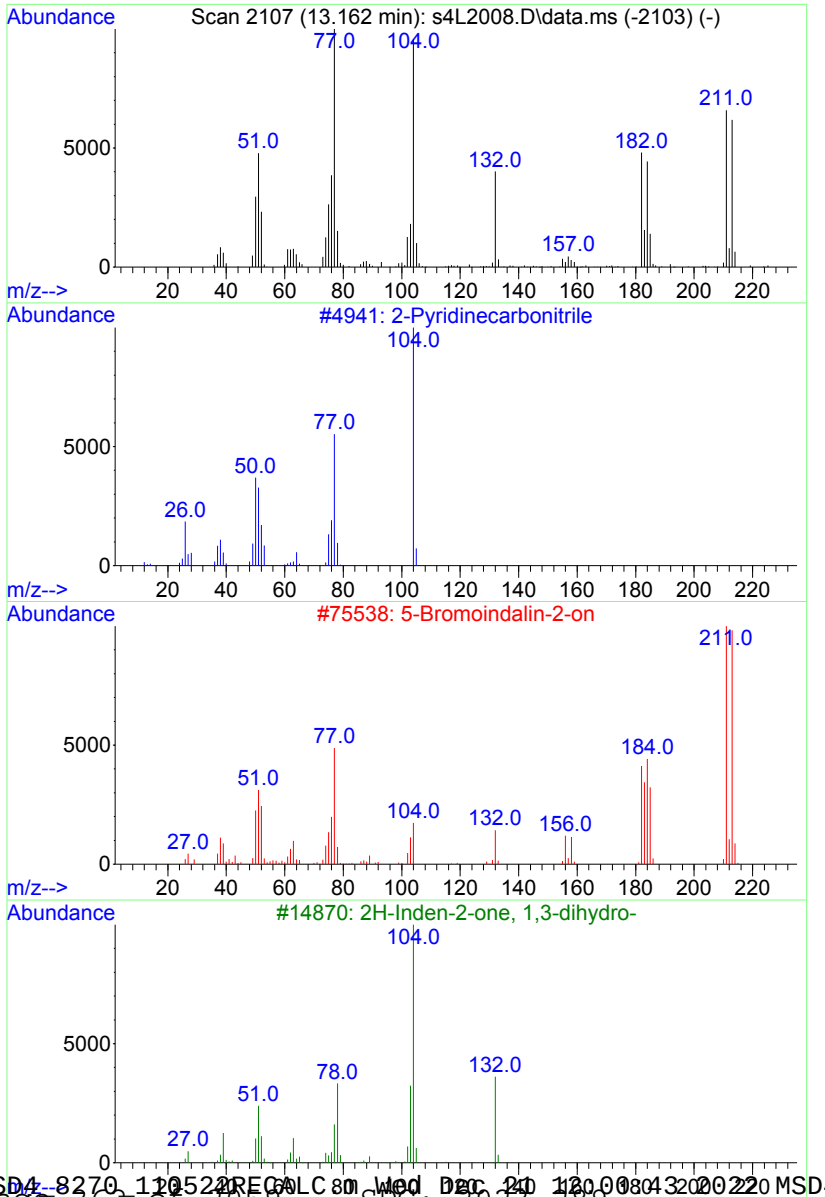
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

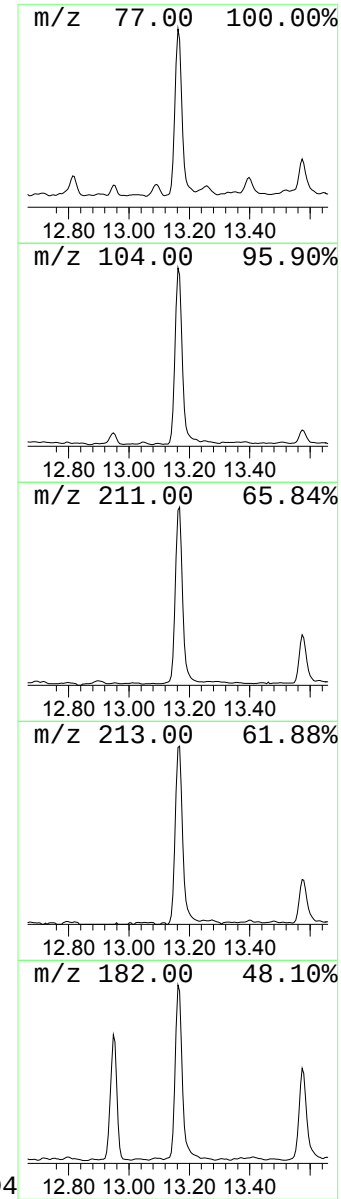
****

Peak Number 19 unknown Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.162	6.22 ng/uL	288995	D Phenanthrene-d10	12.948

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pyridinecarbonitrile	104	C6H4N2	000100-70-9	53
2	5-Bromoindalin-2-on	211	C8H6BrNO	020870-78-4	53
3	2H-Inden-2-one, 1,3-dihydro-	132	C9H8O	000615-13-4	45
4	3-Pyridinecarbonitrile	104	C6H4N2	000100-54-9	42
5	1,3,5,7-Cyclooctatetraene	104	C8H8	000629-20-9	38





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2008.D
Acq On : 20 Dec 2022 15:16
Operator : NM1
Sample : |604449002|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB01-23-265371|MIX[A,B,J,D,E]||
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

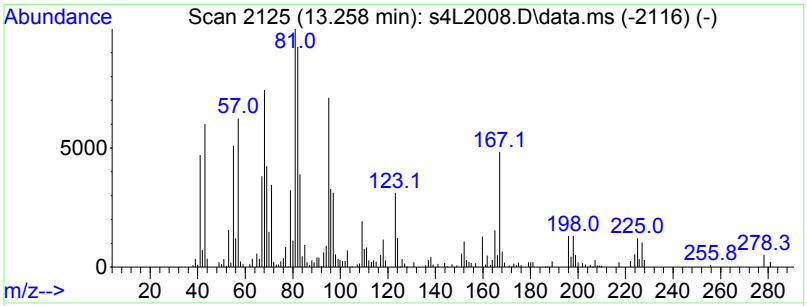
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

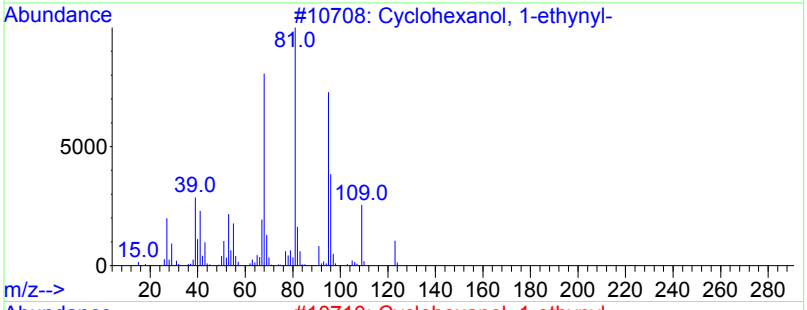
****

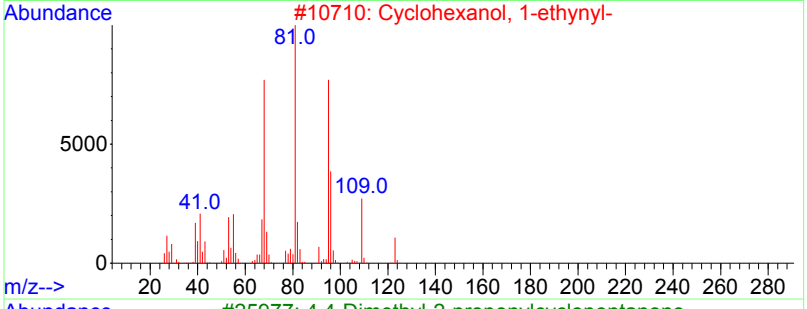
Peak Number 20 unknown Concentration Rank 23

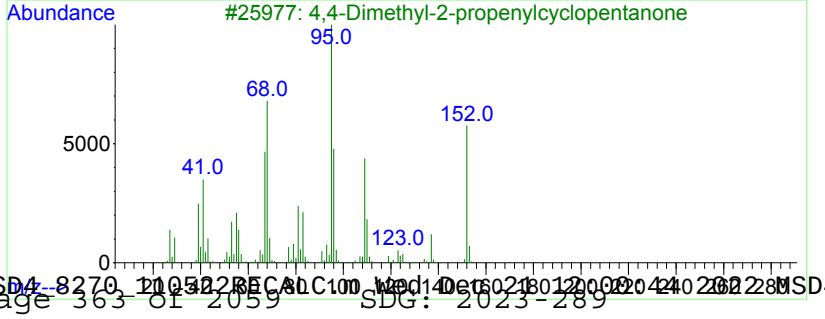
R.T.	EstConc	Area	Relative to ISTD	R.T.
13.258	4.10 ng/uL	190583	D Phenanthrene-d10	12.948

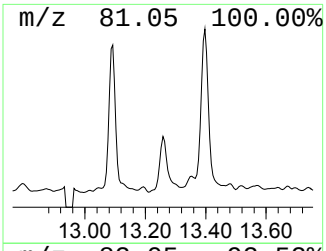
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexanol, 1-ethynyl-	124	C8H12O	000078-27-3	47
2	Cyclohexanol, 1-ethynyl-	124	C8H12O	000078-27-3	47
3	4,4-Dimethyl-2-propenylcyclopent...	152	C10H16O	068261-88-1	30
4	Cyclopentane, 1,2-dimethyl-3-(1-...	138	C10H18	006983-03-5	22
5	1,7-Hexadecadiene	222	C16H30	125110-62-5	18

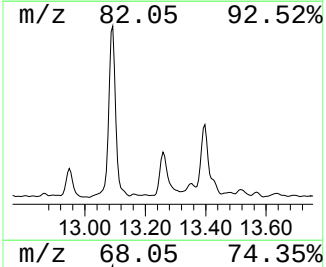


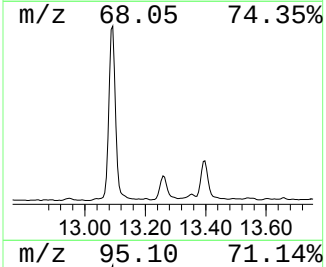


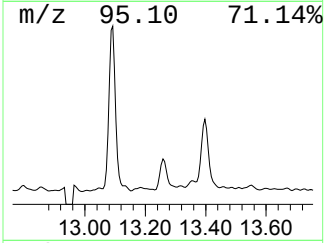


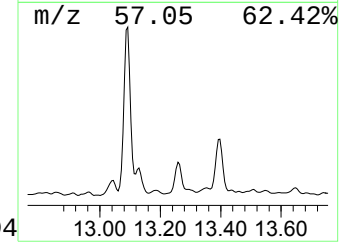












Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2008.D
Acq On : 20 Dec 2022 15:16
Operator : NM1
Sample : |604449002|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB01-23-265371|MIX[A,B,J,D,E]||
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

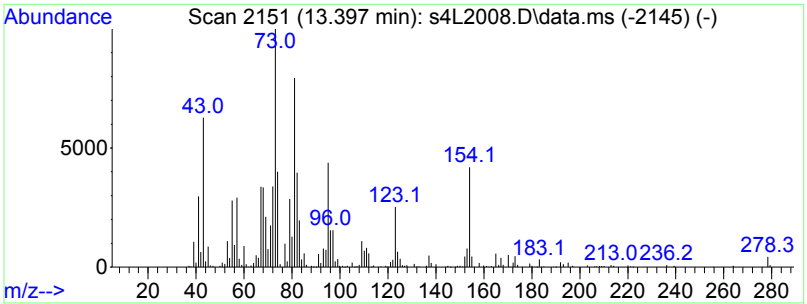
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

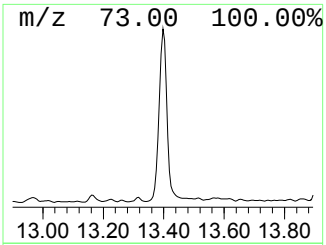
****

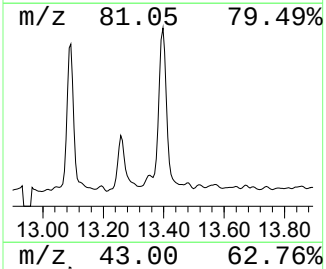
Peak Number 21 unknown Concentration Rank 13

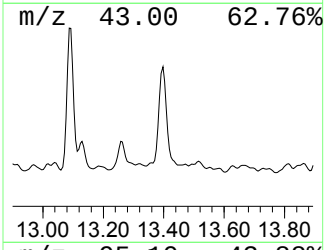
R.T.	EstConc	Area	Relative to ISTD	R.T.
13.397	8.35 ng/uL	387569	D Phenanthrene-d10	12.948

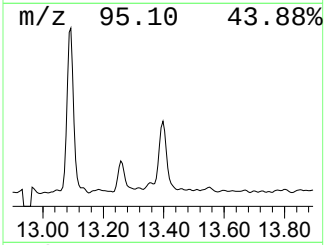
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Tridecyne	180	C13H24	026186-02-7	38
2	Bicyclo[2.2.1]heptane, 1,3,3-tri...	138	C10H18	006248-88-0	38
3	Cyclohexene, 3-(2-methylpropyl)-	138	C10H18	004104-56-7	35
4	Cyclohexene, 3-(2-methylpropyl)-	138	C10H18	004104-56-7	35
5	Cyclohexene, 3-(2-methylpropyl)-	138	C10H18	004104-56-7	32

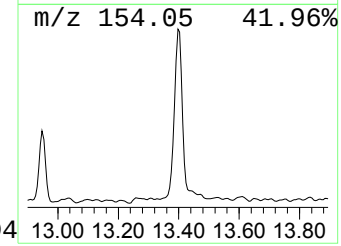












Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2008.D
Acq On : 20 Dec 2022 15:16
Operator : NM1
Sample : |604449002|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB01-23-265371|MIX[A,B,J,D,E]||
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

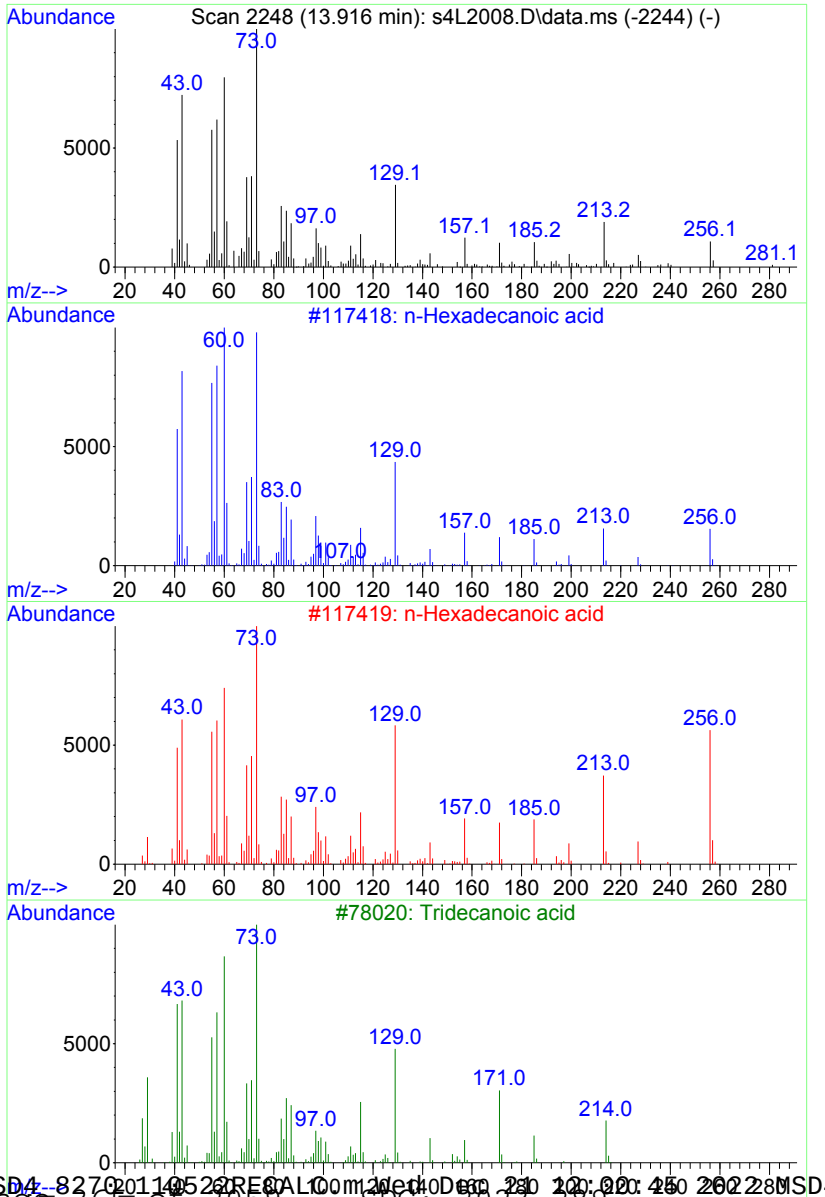
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

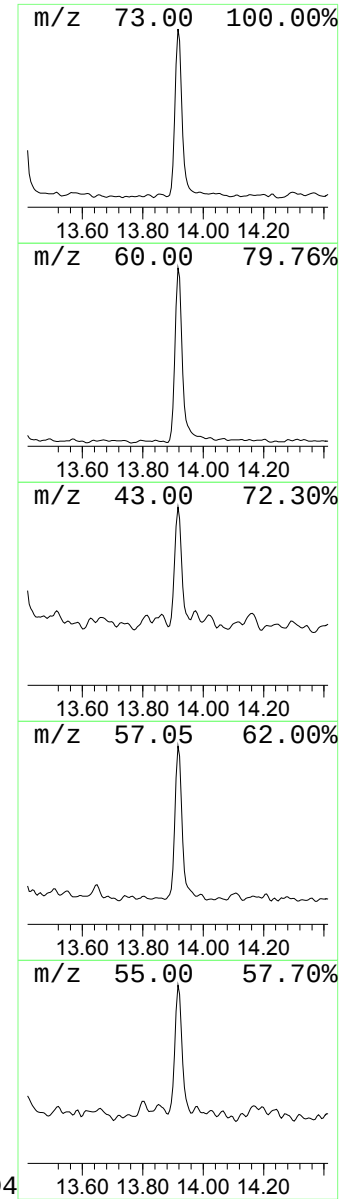
****

Peak Number 22 n-Hexadecanoic acid Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.916	5.36 ng/uL	248731	D Phenanthrene-d10	12.948

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
3	Tridecanoic acid	214	C13H26O2	000638-53-9	94
4	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	94
5	Tridecanoic acid	214	C13H26O2	000638-53-9	93





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2008.D
Acq On : 20 Dec 2022 15:16
Operator : NM1
Sample : |604449002|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB01-23-265371|MIX[A,B,J,D,E]||
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

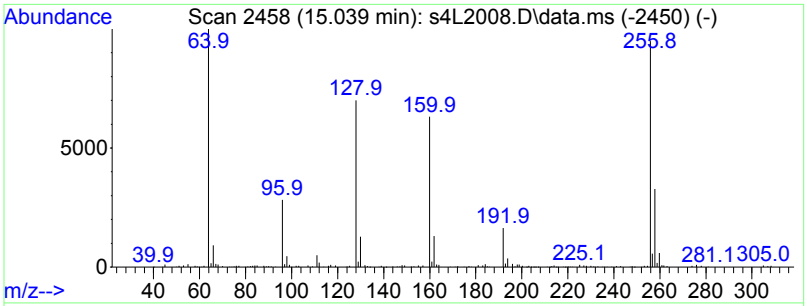
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

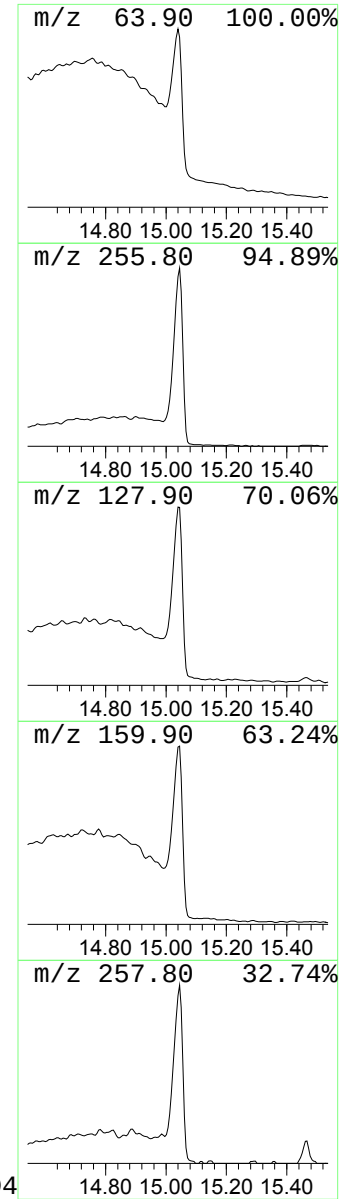
****

Peak Number 23 Cyclic octaatomic sulfur Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.039	7.17 ng/uL	332682	D Phenanthrene-d10	12.948

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclic octaatomic sulfur	256	S8	010544-50-0	95
2	Cyclic octaatomic sulfur	256	S8	010544-50-0	93
3	7-Amino-7H-S-triazolo[5,1-c]-S-t...	156	C3H4N6S	013728-28-4	33
4	3-Chloro-1-methylanthraquinone	256	C15H9ClO2	052643-89-7	9
5	Benzofuran, 3-(4-chlorophenyl)-2...	256	C16H13ClO	074228-99-2	9





Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2008.D
Acq On : 20 Dec 2022 15:16
Operator : NM1
Sample : |604449002|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB01-23-265371|MIX[A,B,J,D,E]||
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

			(ng/uL)		Internal Standard			
TIC Top Hit name	CAS #	RT	EstConc	Response	#	RT	Resp	Conc
unknown	000115-19-5	2.973	20.4	460776	1	5.754	904434	40.0
unknown	000137-43-9	3.336	18.8	424431	1	5.754	904434	40.0
Dimethyl sulfone	000067-71-0	4.443	4.9	110572	1	5.754	904434	40.0
unknown	000872-50-4	5.957	8.8	197985	2	5.754	904434	40.0
Diethyl carbitol	000112-36-7	6.364	5.0	112582	2	5.754	904434	40.0
unknown	000077-71-4	8.744	14.1	450109	7	7.690	1277450	40.0
2,4,7,9-Tetramethyl-5-decyn...	000126-86-3	9.680	4.9	205973	8	10.525	1680460	40.0
1H-Benzotriazole	000095-14-7	10.274	13.1	550340	8	10.525	1680460	40.0
Tetraglyme	000143-24-8	10.466	5.7	238761	8	10.525	1680460	40.0
Benzoic acid, 2,4-dichloro-	000050-84-0	10.648	33.0	1387470	10	10.525	1680460	40.0
1H-Benzotriazole, 4-methyl-	029878-31-7	10.824	10.3	432292	10	10.525	1680460	40.0
Hexathiane	013798-23-7	10.964	13.9	585306	10	10.525	1680460	40.0
1H-Benzotriazole, 5-methyl-	000136-85-6	11.183	6.0	253419	10	10.525	1680460	40.0
Gabapentin lactam	064744-50-9	11.381	11.9	499436	10	10.525	1680460	40.0
unknown	001700-10-3	11.916	8.8	409977	11	12.948	1857090	40.0
unknown	1000128-68-5	12.515	4.8	223877	11	12.948	1857090	40.0
unknown	000100-54-9	12.568	11.7	544973	11	12.948	1857090	40.0
unknown	000504-96-1	13.092	11.2	517931	14	12.948	1857090	40.0
unknown	000100-70-9	13.162	6.2	288995	14	12.948	1857090	40.0
unknown	000078-27-3	13.258	4.1	190583	14	12.948	1857090	40.0
unknown	026186-02-7	13.397	8.3	387569	14	12.948	1857090	40.0
n-Hexadecanoic acid	000057-10-3	13.916	5.4	248731	14	12.948	1857090	40.0
Cyclic octaatomic sulfur	010544-50-0	15.039	7.2	332682	14	12.948	1857090	40.0

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:36**	**Matrix:**	**W**
Lab Sample ID:	**604449006**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB02-23-265372**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 15:46**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**S122022\s4L2009.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
1610-18-0	Prometon	U	3.00	ug/L	3.00	10.0
126-33-0	Sulfolane	U	3.00	ug/L	3.00	10.0
PAH-tot-3a	Total PAHs 3a	U	0.000	ug/L		
62-75-9	N-Methyl-N-nitrosomethylamine	U	3.00	ug/L	3.00	10.0
108-95-2	Phenol	U	3.00	ug/L	3.00	10.0
111-44-4	bis(2-Chloroethyl) ether	U	3.00	ug/L	3.00	10.0
108-60-1	bis(2-Chloro-1-methylethyl)ether	U	3.00	ug/L	3.00	10.0
67-72-1	Hexachloroethane	U	3.00	ug/L	3.00	10.0
98-95-3	Nitrobenzene	U	3.00	ug/L	3.00	10.0
78-59-1	Isophorone	U	3.50	ug/L	3.50	10.0
120-83-2	2,4-Dichlorophenol	U	3.00	ug/L	3.00	10.0
87-68-3	Hexachlorobutadiene	U	3.00	ug/L	3.00	10.0
91-57-6	2-Methylnaphthalene	U	0.300	ug/L	0.300	1.00
91-20-3	Naphthalene	U	0.300	ug/L	0.300	1.00
90-12-0	1-Methylnaphthalene	U	0.300	ug/L	0.300	1.00
77-47-4	Hexachlorocyclopentadiene	U	3.00	ug/L	3.00	10.0
88-06-2	2,4,6-Trichlorophenol	U	3.00	ug/L	3.00	10.0
95-95-4	2,4,5-Trichlorophenol	U	3.00	ug/L	3.00	10.0
131-11-3	Dimethylphthalate	U	0.300	ug/L	0.300	1.00
606-20-2	2,6-Dinitrotoluene	U	3.00	ug/L	3.00	10.0
121-14-2	2,4-Dinitrotoluene	U	3.00	ug/L	3.00	10.0
51-28-5	2,4-Dinitrophenol	U	5.00	ug/L	5.00	20.0
84-66-2	Diethylphthalate	U	0.300	ug/L	0.300	1.00
86-73-7	Fluorene	U	0.300	ug/L	0.300	1.00
534-52-1	2-Methyl-4,6-dinitrophenol	U	3.00	ug/L	3.00	10.0
122-39-4	Diphenylamine	U	3.00	ug/L	3.00	10.0
103-33-3	Azobenzene	U	3.00	ug/L	3.00	10.0
122-66-7	*1,2-Diphenylhydrazine*					
118-74-1	Hexachlorobenzene	U	3.00	ug/L	3.00	10.0
87-86-5	Pentachlorophenol	U	3.00	ug/L	3.00	10.0
85-01-8	Phenanthrene	U	0.300	ug/L	0.300	1.00
120-12-7	Anthracene	U	0.300	ug/L	0.300	1.00
84-74-2	Di-n-butylphthalate	U	0.300	ug/L	0.300	1.00
206-44-0	Fluoranthene	U	0.300	ug/L	0.300	1.00
129-00-0	Pyrene	U	0.300	ug/L	0.300	1.00
117-81-7	bis(2-Ethylhexyl)phthalate	U	0.300	ug/L	0.300	1.00
205-99-2	Benzo(b)fluoranthene	U	0.300	ug/L	0.300	1.00
207-08-9	Benzo(k)fluoranthene	U	0.300	ug/L	0.300	1.00
50-32-8	Benzo(a)pyrene	U	0.300	ug/L	0.300	1.00

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:36**	**Matrix:**	**W**
Lab Sample ID:	**604449006**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB02-23-265372**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 15:46**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**S122022\s4L2009.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
123-91-1	1,4-Dioxane	U	3.00	ug/L	3.00	10.0
55-18-5	N-Nitrosodiethylamine	U	3.00	ug/L	3.00	10.0
930-55-2	N-Nitrosopyrrolidine	U	3.00	ug/L	3.00	10.0
924-16-3	N-Nitrosodi-n-butylamine	U	3.00	ug/L	3.00	10.0
95-94-3	1,2,4,5-Tetrachlorobenzene	U	3.00	ug/L	3.00	10.0
608-93-5	Pentachlorobenzene	U	3.00	ug/L	3.00	10.0
1912-24-9	Atrazine	U	3.00	ug/L	3.00	10.0
92-87-5	Benzidine	U	3.90	ug/L	3.90	10.0
91-94-1	3,3'-Dichlorobenzidine	U	3.00	ug/L	3.00	10.0

Surrogate/Tracer recovery	Result	Nominal		Recovery%		Acceptable Limits
2,4,6-Tribromophenol	44.9	100	ug/L	45		(37%-132%)
2-Fluorobiphenyl	18.2	50.0	ug/L	36	*	(39%-112%)
2-Fluorophenol	32.5	100	ug/L	32		(11%-79%)
Nitrobenzene-d5	17.2	50.0	ug/L	34	*	(39%-112%)
Phenol-d5	34.3	100	ug/L	34		(15%-85%)
p-Terphenyl-d14	9.87	50.0	ug/L	20	*	(24%-129%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	Estimated RT		Units	Fit	Qual
	unknown	2.973	26.1	ug/L	38	J
	unknown	3.331	23.3	ug/L	56	J
000067-71-0	Dimethyl sulfone	4.443	6.53	ug/L	94	NJ
	unknown	5.952	9.23	ug/L	39	J
000077-71-4	2,4-Imidazolidinedione, 5,5-dimethyl-	8.728	8.98	ug/L	86	NJ
000126-86-3	2,4,7,9-Tetramethyl-5-decyn-4,7-diol	9.68	6.64	ug/L	91	NJ
000095-14-7	1H-Benzotriazole	10.274	11.3	ug/L	96	NJ
000143-24-8	Tetraglyme	10.466	8.32	ug/L	86	NJ
000050-84-0	Benzoic acid, 2,4-dichloro-	10.643	17.9	ug/L	99	NJ
029878-31-7	1H-Benzotriazole, 4-methyl-	10.83	10.1	ug/L	98	NJ
000136-85-6	1H-Benzotriazole, 5-methyl-	11.183	5.02	ug/L	97	NJ
064744-50-9	Gabapentin lactam	11.386	13	ug/L	98	NJ
	unknown	11.536	5.46	ug/L	45	J
023192-82-7	9-Tetradecen-1-ol, acetate, (E)-	11.889	10.3	ug/L	90	NJ
	unknown	11.921	12.6	ug/L	46	J
	unknown	12.573	13.5	ug/L	49	J
	unknown	13.092	12.6	ug/L	72	J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:36**	**Matrix:**	**W**
Lab Sample ID:	**604449006**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB02-23-265372**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 15:46**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**S122022\s4L2009.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	13.167	7.35	ug/L	52	J
021964-49-8	1,13-Tetradecadiene	13.354	11.4	ug/L	98	NJ
	unknown	13.397	7.21	ug/L	27	J
000057-10-3	n-Hexadecanoic acid	13.916	5.28	ug/L	96	NJ
056797-43-4	cis,cis,cis-7,10,13-Hexadecatrienal	15.082	7.54	ug/L	91	NJ

Quantitation Report

12/22/2022

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2009.D
Acq On : 20 Dec 2022 15:46
Operator : NM1
Sample : |604449006|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB02-23-265372|MIX[A,B,J,D,E]||
ALS Vial : 9 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 21 12:00:48 2022
Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	5.749	5.754	1.000	137274	40.00	ng/uL	0.00
22) A Naphthalene-d8	136	7.690	7.695	1.000	575129	40.00	ng/uL	0.00
39) A Acenaphthene-d10	164	10.525	10.525	1.000	340659	40.00	ng/uL	0.00
64) A Phenanthrene-d10	188	12.948	12.948	1.000	722518	40.00	ng/uL	0.00
80) A Chrysene-d12	240	17.291	17.296	1.000	854927	40.00	ng/uL	0.00
88) A Perylene-d12	264	20.308	20.307	1.000	890792	40.00	ng/uL	0.00
96) B 1,4-Dichlorobenzene-d4	152	5.749	5.754	1.000	137274	40.00	ng/uL	0.00
112) B Naphthalene-d8	136	7.690	7.695	1.000	575129	40.00	ng/uL	0.00
120) B Acenaphthene-d10	164	10.525	10.525	1.000	340659	40.00	ng/uL	0.00
129) B Phenanthrene-d10	188	12.948	12.948	1.000	722518	40.00	ng/uL	0.00
142) B Chrysene-d12	240	17.291	17.296	1.000	854927	40.00	ng/uL	0.00
148) B Perylene-d12	264	20.308	20.307	1.000	890792	40.00	ng/uL	0.00
151) J Naphthalene-d8	136	7.690	7.695	1.000	575129	40.00	ng/uL	0.00
153) J Phenanthrene-d10	188	12.948	12.948	1.000	722518	40.00	ng/uL	0.00
156) J Chrysene-d12	240	17.291	17.296	1.000	854927	40.00	ng/uL	0.00
159) D Naphthalene-d8	136	7.690	7.695	1.000	575129	40.00	ng/uL	0.00
161) D Acenaphthene-d10	164	10.525	10.525	1.000	340659	40.00	ng/uL	0.00
164) D Phenanthrene-d10	188	12.948	12.948	1.000	722518	40.00	ng/uL	0.00
171) D Chrysene-d12	240	17.291	17.296	1.000	854927	40.00	ng/uL	0.00
173) E Naphthalene-d8	136	7.690	7.695	1.000	575129	40.00	ng/uL	0.00
175) E Perylene-d12	264	20.308	20.307	1.000	890792	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	3.957	3.951	0.688	148754	32.46	ng/uL	0.00
8) Phenol-d5	99	5.203	5.203	0.905	198453	34.25	ng/uL	0.00
23) Nitrobenzene-d5	82	6.572	6.577	0.855	103464	17.22	ng/uL	0.00
44) 2-Fluorobiphenyl	172	9.439	9.439	0.897	230078	18.18	ng/uL	0.00
63) 2,4,6-Tribromophenol	330	11.814	11.814	1.122	130670	44.93	ng/uL	0.00
79) p-Terphenyl-d14	244	15.579	15.579	1.203	188322	9.87	ng/uL	0.00

Compound	Amount	Range	Recovery
5) 2-Fluorophenol	100.000	11 - 79	32%
8) Phenol-d5	100.000	15 - 85	34%
23) Nitrobenzene-d5	50.000	39 - 112	34%#
44) 2-Fluorobiphenyl	50.000	39 - 112	36%#
63) 2,4,6-Tribromophenol	100.000	37 - 132	45%
79) p-Terphenyl-d14	50.000	24 - 129	20%#

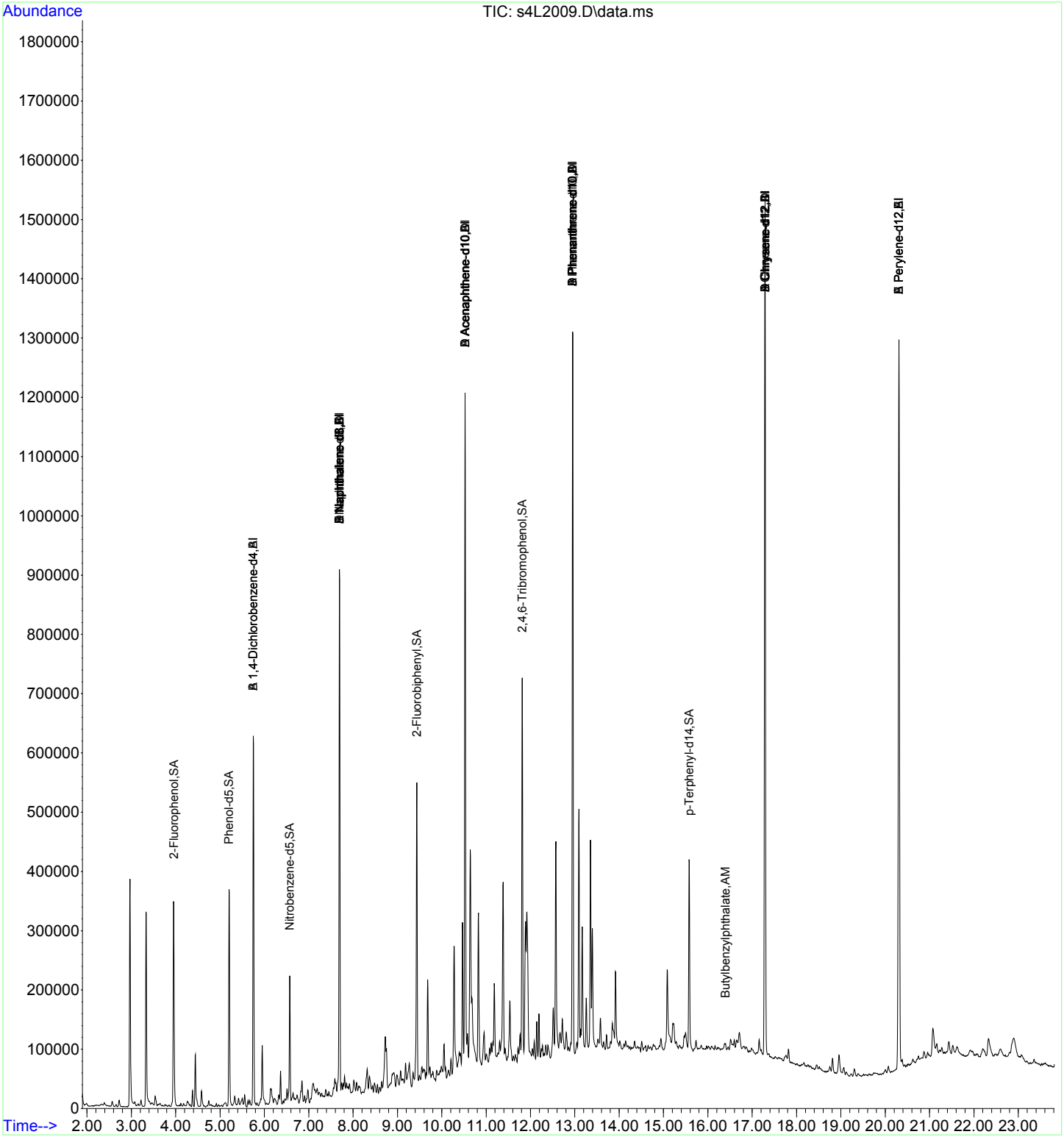
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
81) Butylbenzylphthalate	149	16.398	16.398	0.948	3470	1.00	ng/uL	96

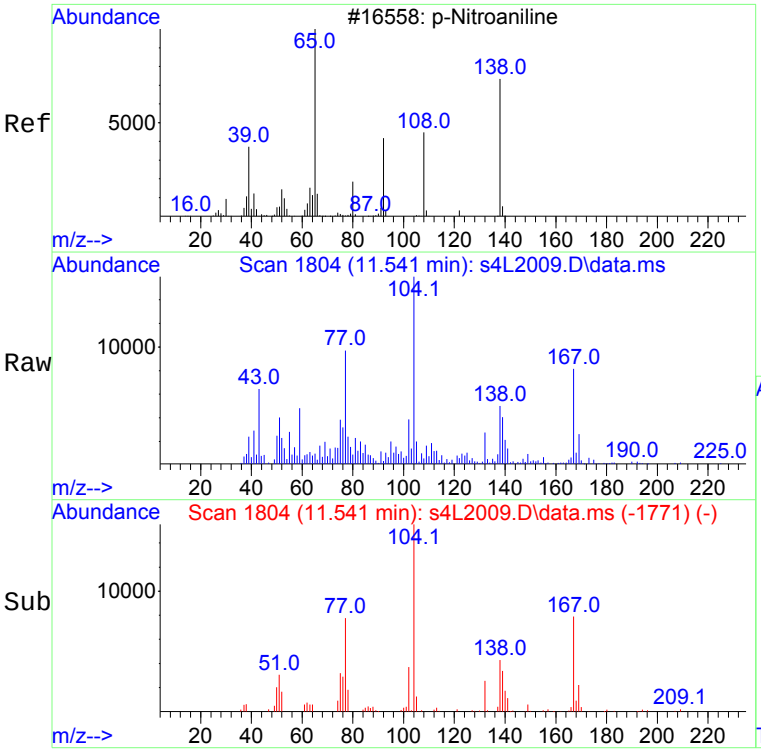
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2009.D
Acq On : 20 Dec 2022 15:46
Operator : NM1
Sample : |604449006|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB02-23-265372|MIX[A,B,J,D,E]||
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 21 12:00:48 2022
Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

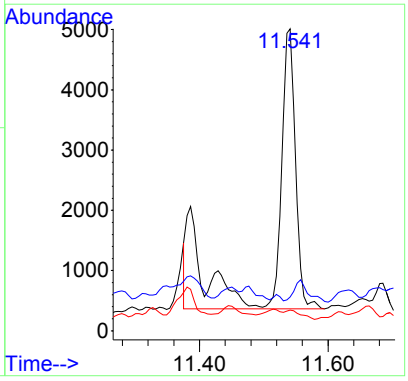


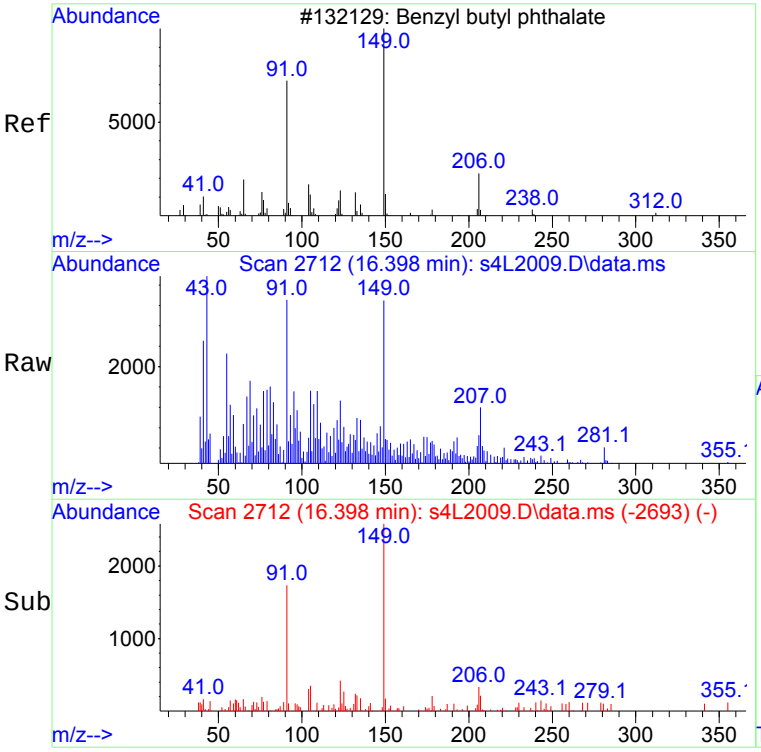


#62 BEFORE analyst DELETION
p-Nitroaniline
Concen: 3.37 ng/uL
RT: 11.541 min Scan# 1804
Delta R.T. 0.075 min
Lab File: s4L2009.D
Acq: 20 Dec 2022 15:46

Tgt Ion:138 Resp: 10171

Ion	Ratio	Lower	Upper
138	100		
108	0.0	47.9	107.9#
92	10.3	24.3	84.3#

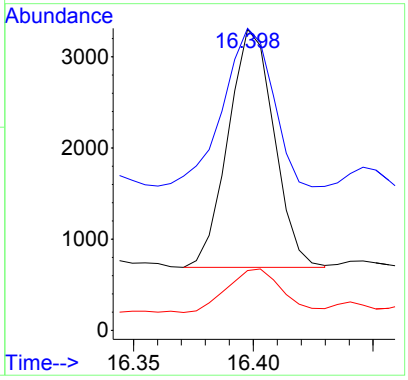


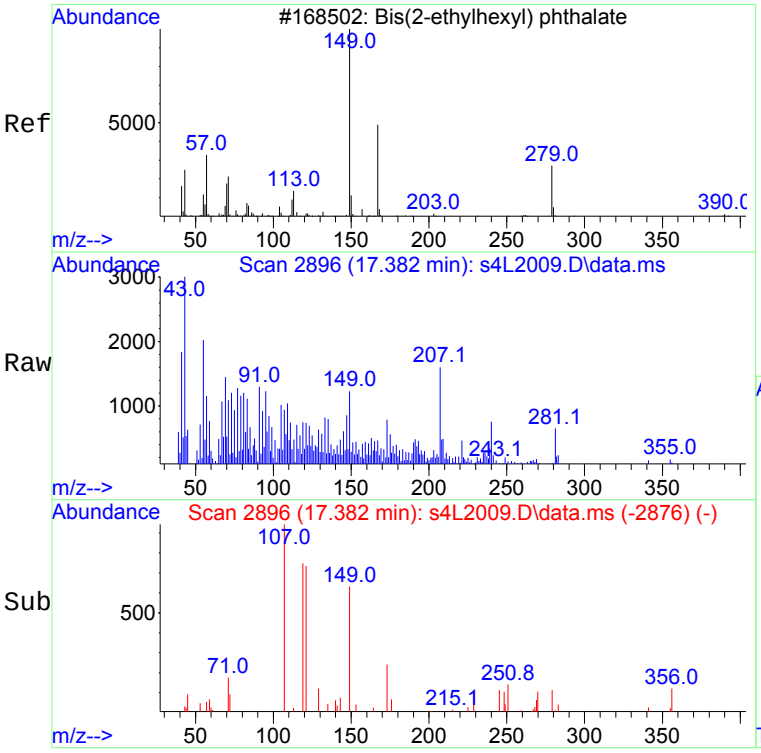


#81
Butylbenzylphthalate
Concen: 1.00 ng/uL
RT: 16.398 min Scan# 2712
Delta R.T. 0.000 min
Lab File: s4L2009.D
Acq: 20 Dec 2022 15:46

Tgt Ion:149 Resp: 3470

Ion	Ratio	Lower	Upper
149	100		
91	76.0	49.8	109.8
206	21.6	0.0	52.5

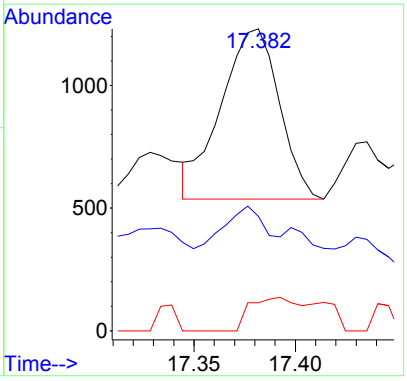


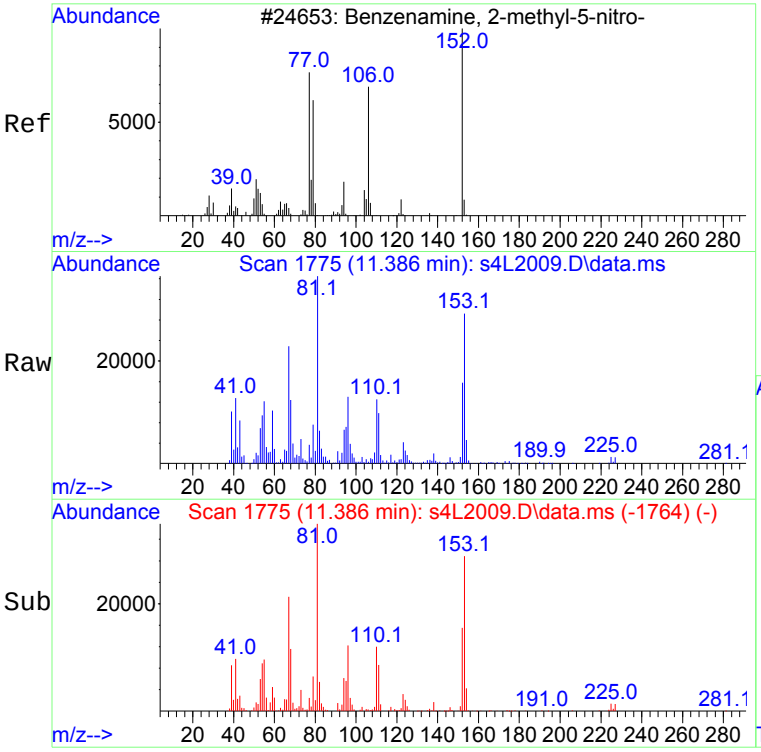


#82 BEFORE analyst DELETION
bis(2-Ethylhexyl)phthalate
Concen: 0.50 ng/uL
RT: 17.382 min Scan# 2896
Delta R.T. 0.005 min
Lab File: s4L2009.D
Acq: 20 Dec 2022 15:46

Tgt Ion:149 Resp: 1390

Ion	Ratio	Lower	Upper
149	100		
167	16.7	0.0	57.6
279	0.0	0.0	35.2

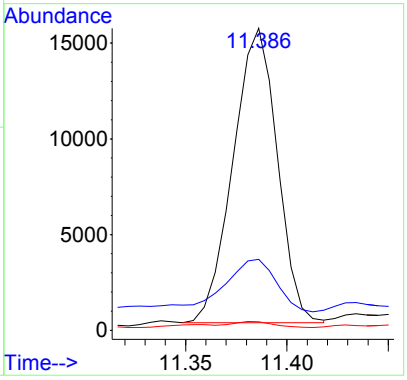




#128 BEFORE analyst DELETION
5-Nitro-o-toluidine
Concen: 7.65 ng/uL
RT: 11.386 min Scan# 1775
Delta R.T. -0.043 min
Lab File: s4L2009.D
Acq: 20 Dec 2022 15:46

Tgt Ion:152 Resp: 23417

Ion	Ratio	Lower	Upper
152	100		
77	20.3	76.7	136.7#
106	0.0	52.6	112.6#



Library Search Compound Report

12/22/2022

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2009.D
Acq On : 20 Dec 2022 15:46
Operator : NM1
Sample : |604449006|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB02-23-265372|MIX[A,B,J,D,E]||
ALS Vial : 9 Sample Multiplier: 1

12/22/2022

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

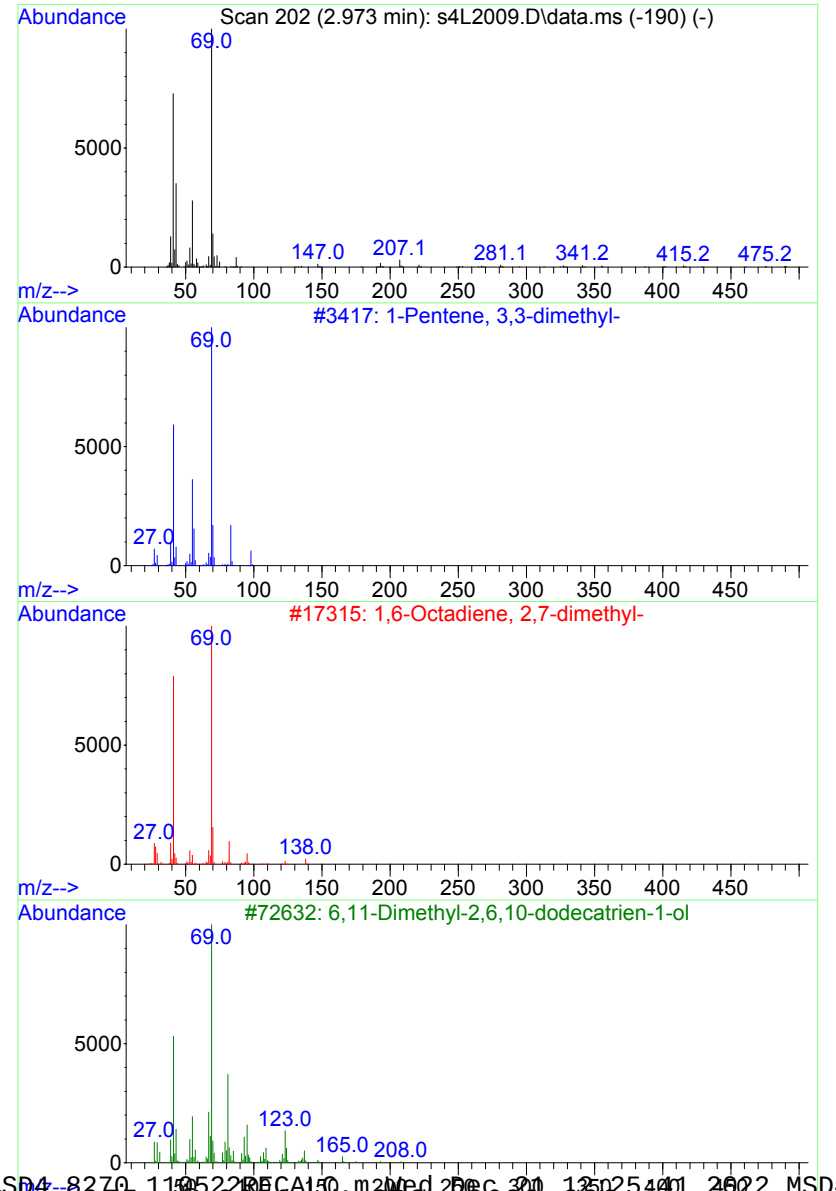
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

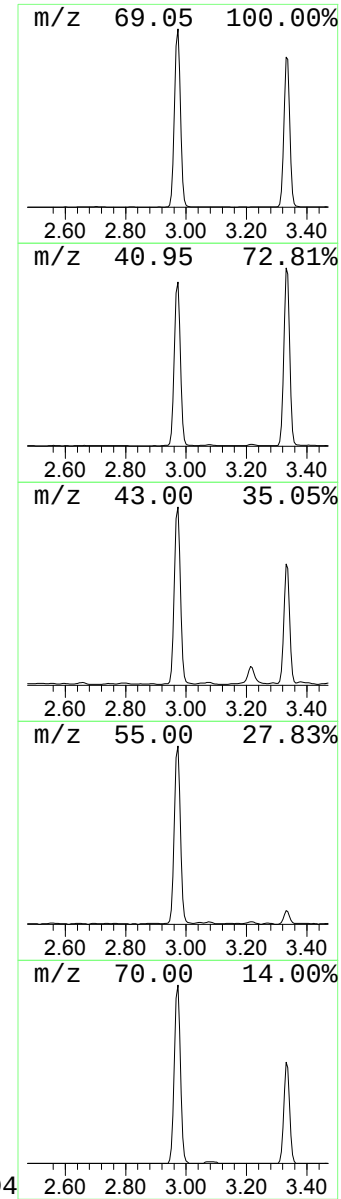
****

Peak Number 1 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.973	26.11 ng/uL	568623	A 1,4-Dichlorobenzene-d4	5.749

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Pentene, 3,3-dimethyl-	98	C7H14	003404-73-7	38
2	1,6-Octadiene, 2,7-dimethyl-	138	C10H18	040195-09-3	38
3	6,11-Dimethyl-2,6,10-dodecatrien...	208	C14H24O	1000196-53-3	9
4	2-Butenoic acid, 4-nitrophenyl e...	207	C10H9NO4	014617-88-0	9
5	1,5-Heptadiene, 3,3,5-trimethyl-	138	C10H18	074630-29-8	9





Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2009.D
Acq On : 20 Dec 2022 15:46
Operator : NM1
Sample : |604449006|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB02-23-265372|MIX[A,B,J,D,E]||
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

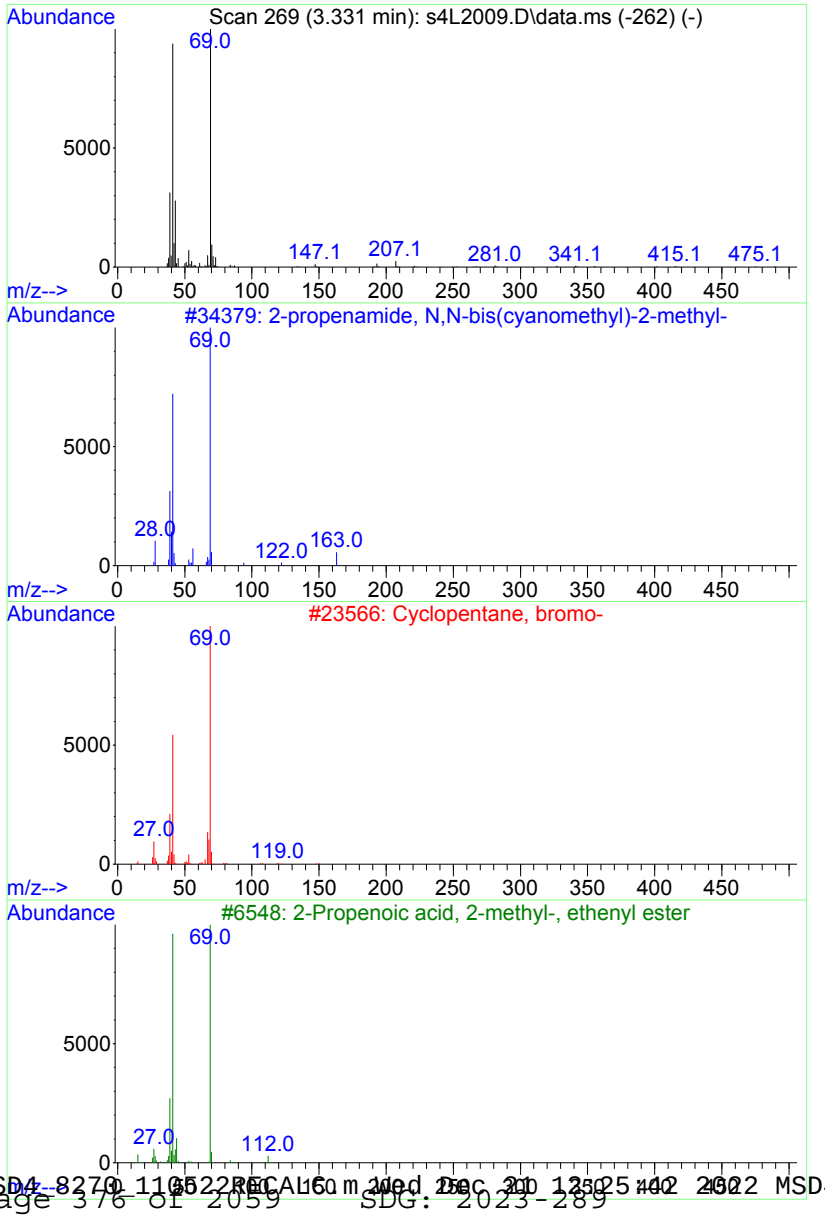
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

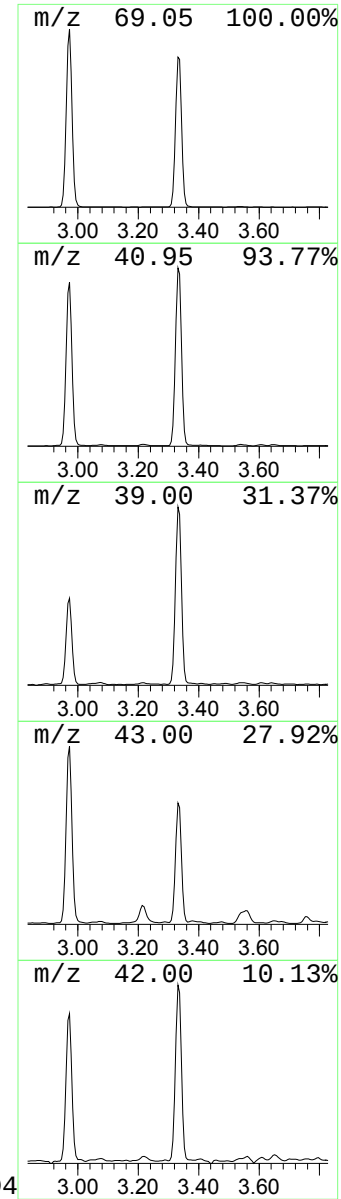
****

Peak Number 2 unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.331	23.27 ng/uL	506609	A 1,4-Dichlorobenzene-d4	5.749

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-propenamide, N,N-bis(cyanometh...	163	C8H9N3O	1000404-44-4	56
2	Cyclopentane, bromo-	148	C5H9Br	000137-43-9	50
3	2-Propenoic acid, 2-methyl-, eth...	112	C6H8O2	004245-37-8	50
4	Cyclopentane, nitro-	115	C5H9NO2	002562-38-1	40
5	2-Propenamide, N-(2-hydroxyethyl...	129	C6H11NO2	005238-56-2	40





Library Search Compound Report

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ALS Vial : 9 Sample Multiplier: 1

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Quant Title : BNA01

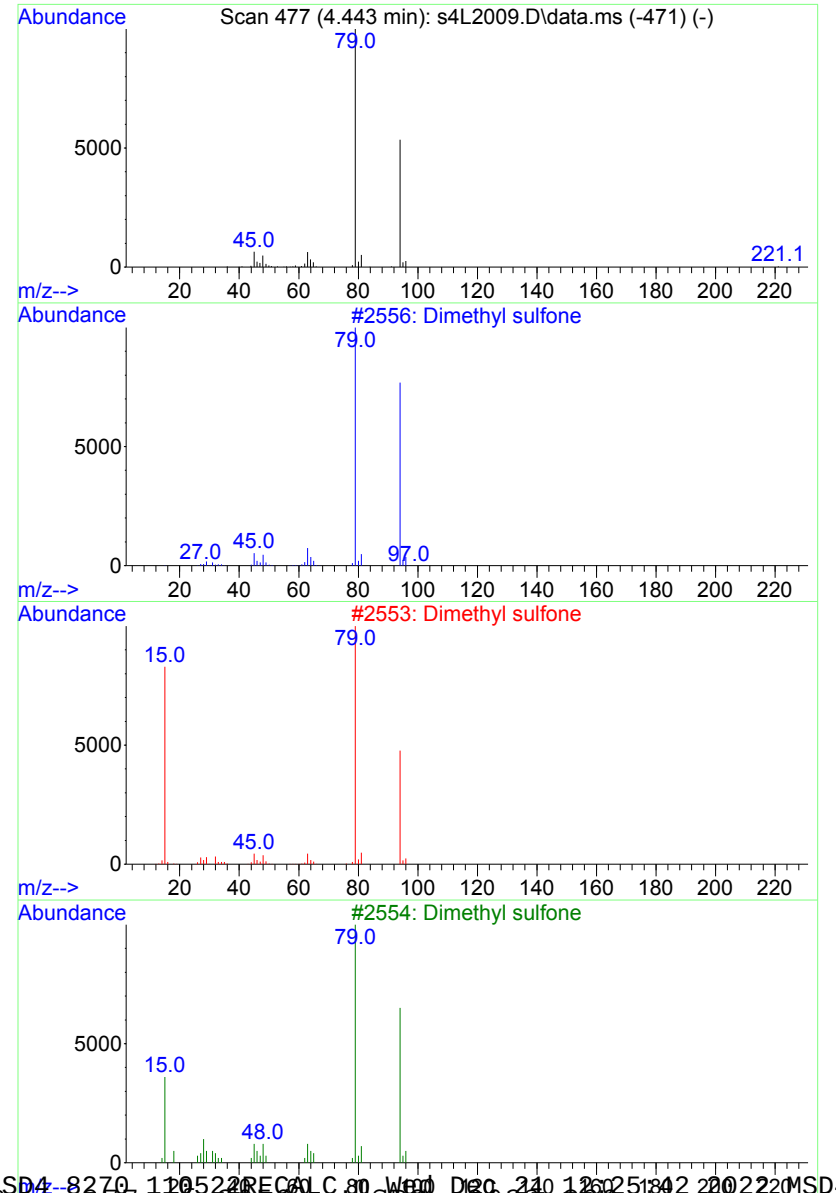
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

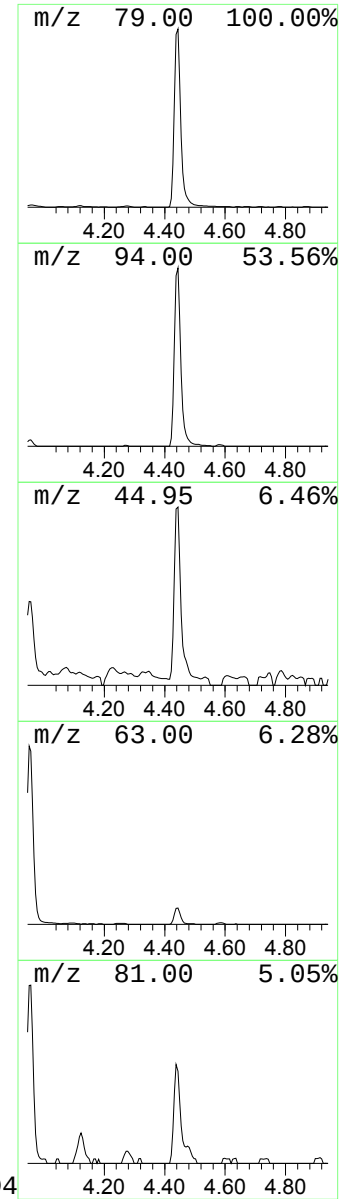
****

Peak Number 3 Dimethyl sulfone Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.443	6.53 ng/uL	142248	A 1,4-Dichlorobenzene-d4	5.749

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dimethyl sulfone	94	C2H6O2S	000067-71-0	94
2	Dimethyl sulfone	94	C2H6O2S	000067-71-0	91
3	Dimethyl sulfone	94	C2H6O2S	000067-71-0	43
4	Dimethyl sulfone	94	C2H6O2S	000067-71-0	43
5	1,3,5-Hexatriene, 2-methyl-	94	C7H10	019264-50-7	40





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ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

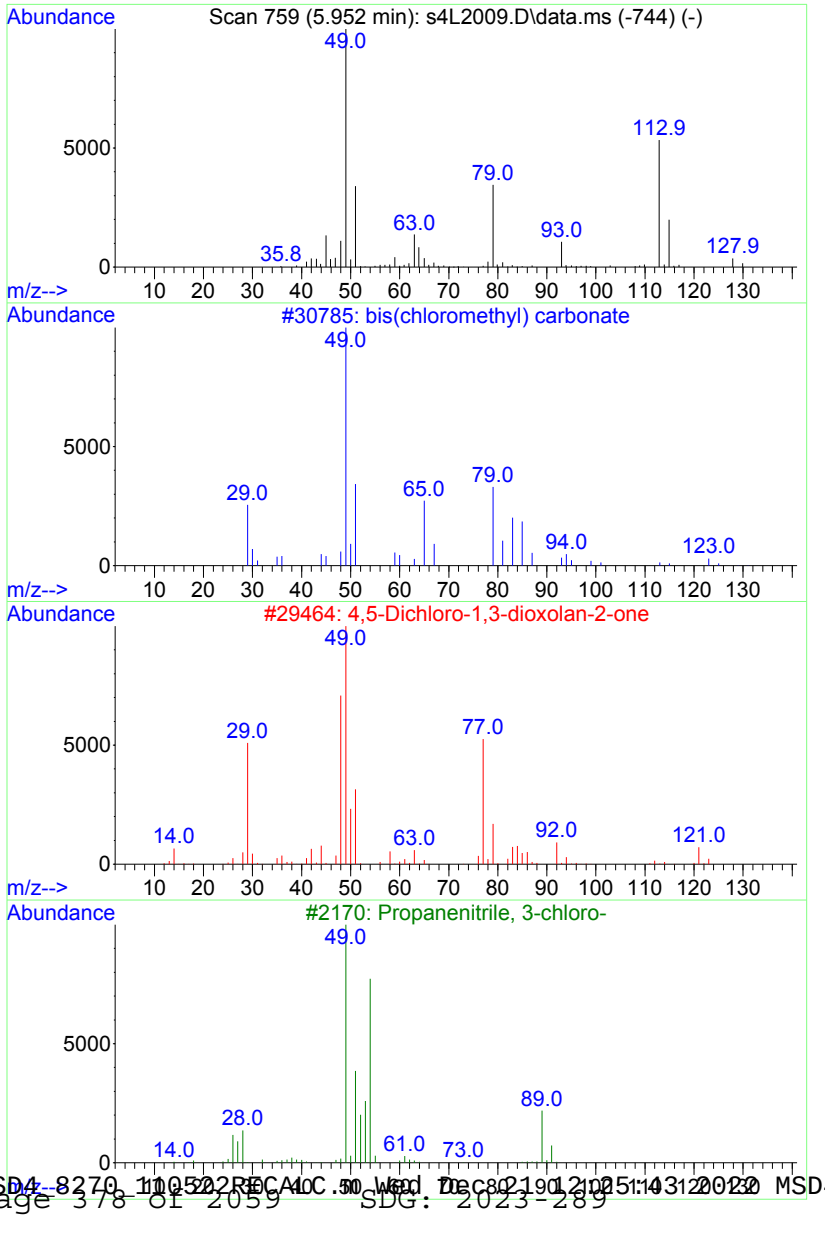
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

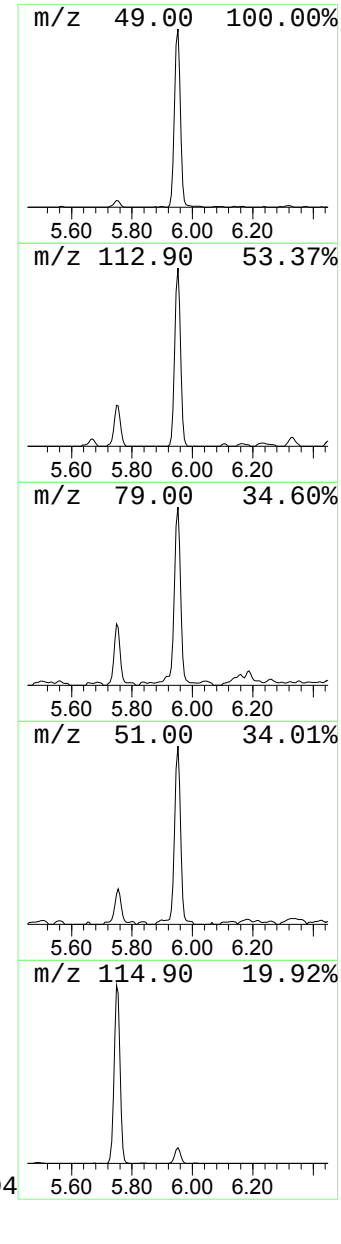
****

Peak Number 4 unknown Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.952	9.23 ng/uL	200926	B 1,4-Dichlorobenzene-d4	5.749

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	bis(chloromethyl) carbonate	158	C3H4Cl2O3	1000404-37-0	39
2	4,5-Dichloro-1,3-dioxolan-2-one	156	C3H2Cl2O3	003967-55-3	9
3	Propanenitrile, 3-chloro-	89	C3H4ClN	000542-76-7	4
4	Methylene chloride	84	CH2Cl2	000075-09-2	4
5	Propanenitrile, 2,2,3-trichloro-	157	C3H2Cl3N	000813-74-1	4





Library Search Compound Report

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ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

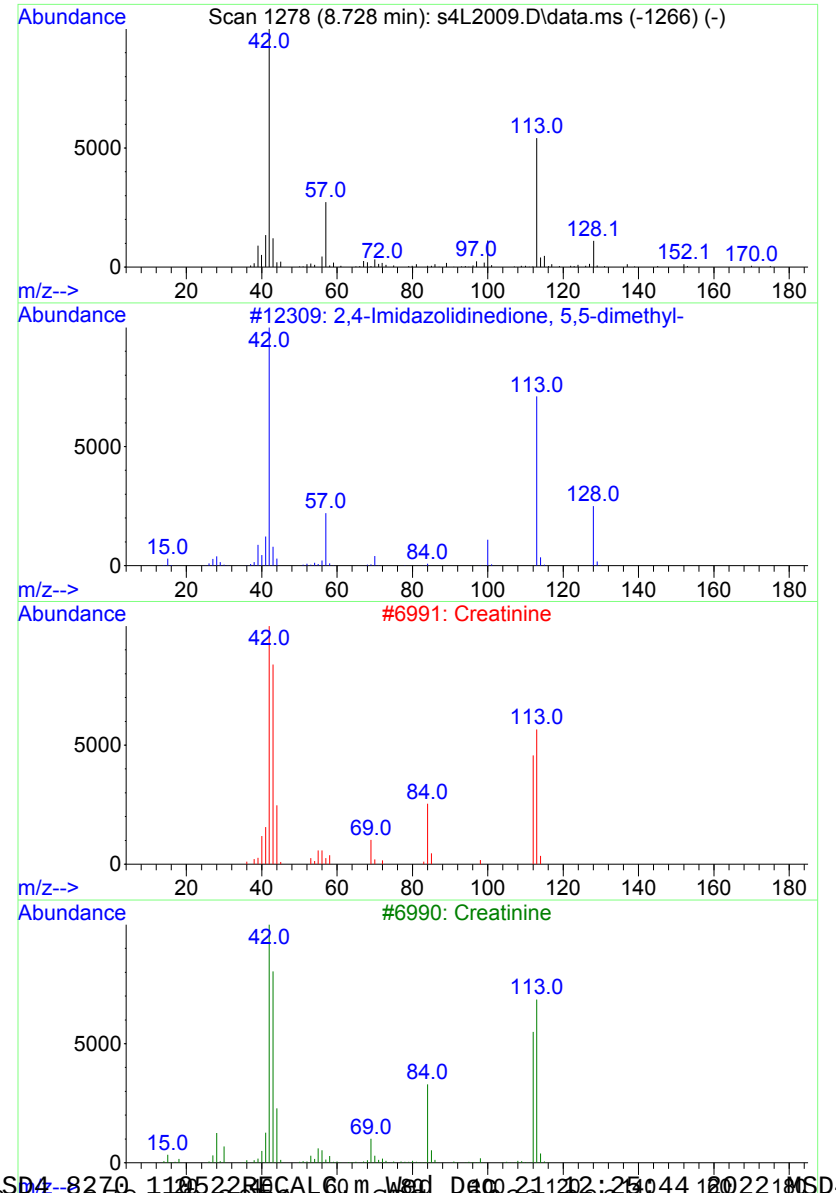
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

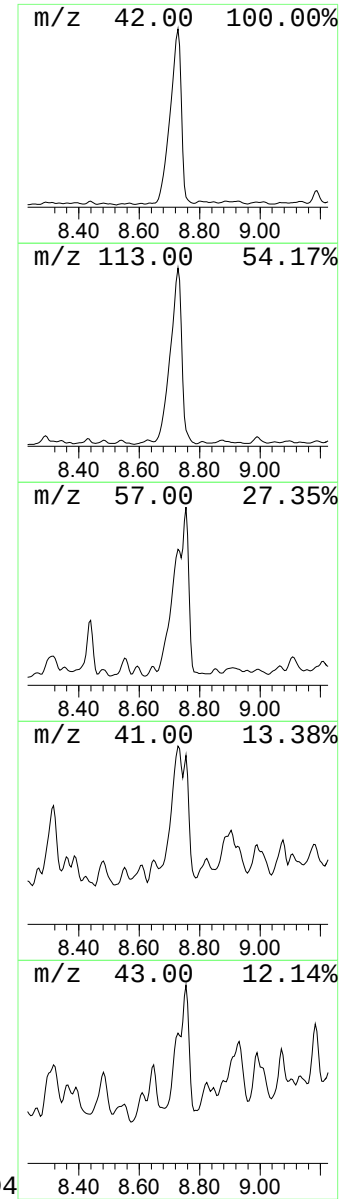
****

Peak Number 5 2,4-Imidazolidinedione, 5,5... Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.728	8.98 ng/uL	282411	E Naphthalene-d8	7.690

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,4-Imidazolidinedione, 5,5-dime...	128	C5H8N2O2	000077-71-4	86
2	Creatinine	113	C4H7N3O	000060-27-5	64
3	Creatinine	113	C4H7N3O	000060-27-5	50
4	1-Imidazolidinemethanol, 4,4-dim...	158	C6H10N2O3	016228-00-5	50
5	Creatinine	113	C4H7N3O	000060-27-5	50





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Misc : |MSD1C70E_L|WATER|SMEB02-23-265372|MIX[A,B,J,D,E]||
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

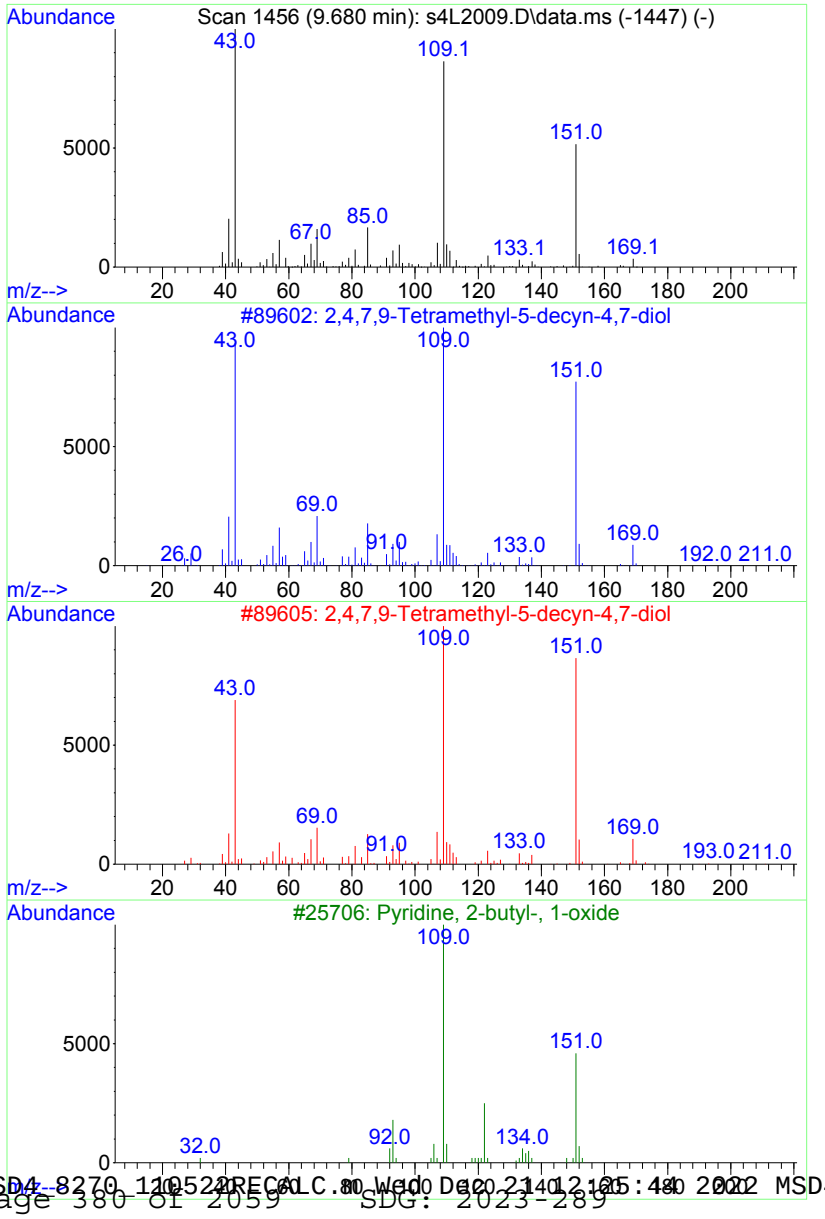
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

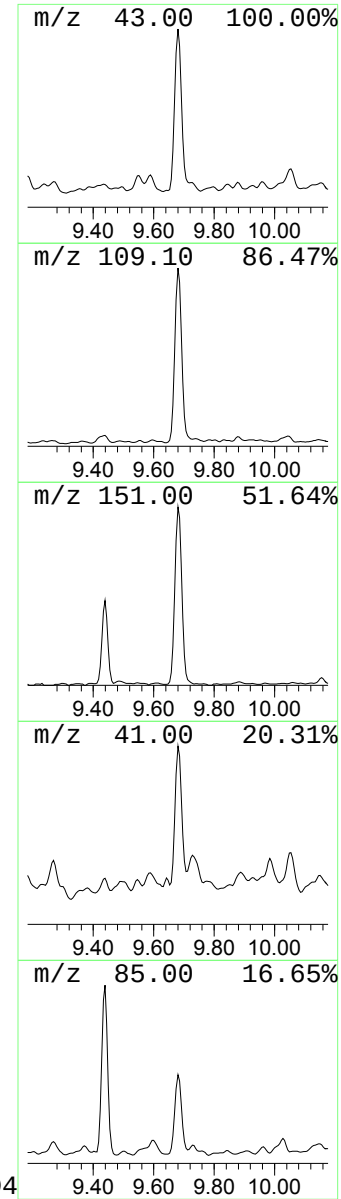
****

Peak Number 6 2,4,7,9-Tetramethyl-5-decyn... Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.680	6.64 ng/uL	262477	A Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,4,7,9-Tetramethyl-5-decyn-4,7-...	226	C14H26O2	000126-86-3	91
2	2,4,7,9-Tetramethyl-5-decyn-4,7-...	226	C14H26O2	000126-86-3	90
3	Pyridine, 2-butyl-, 1-oxide	151	C9H13NO	031396-32-4	59
4	Acetaminophen	151	C8H9NO2	000103-90-2	59
5	Metacetamol	151	C8H9NO2	000621-42-1	59





Library Search Compound Report

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Misc : |MSD1C70E_L|WATER|SMEB02-23-265372|MIX[A,B,J,D,E]||
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

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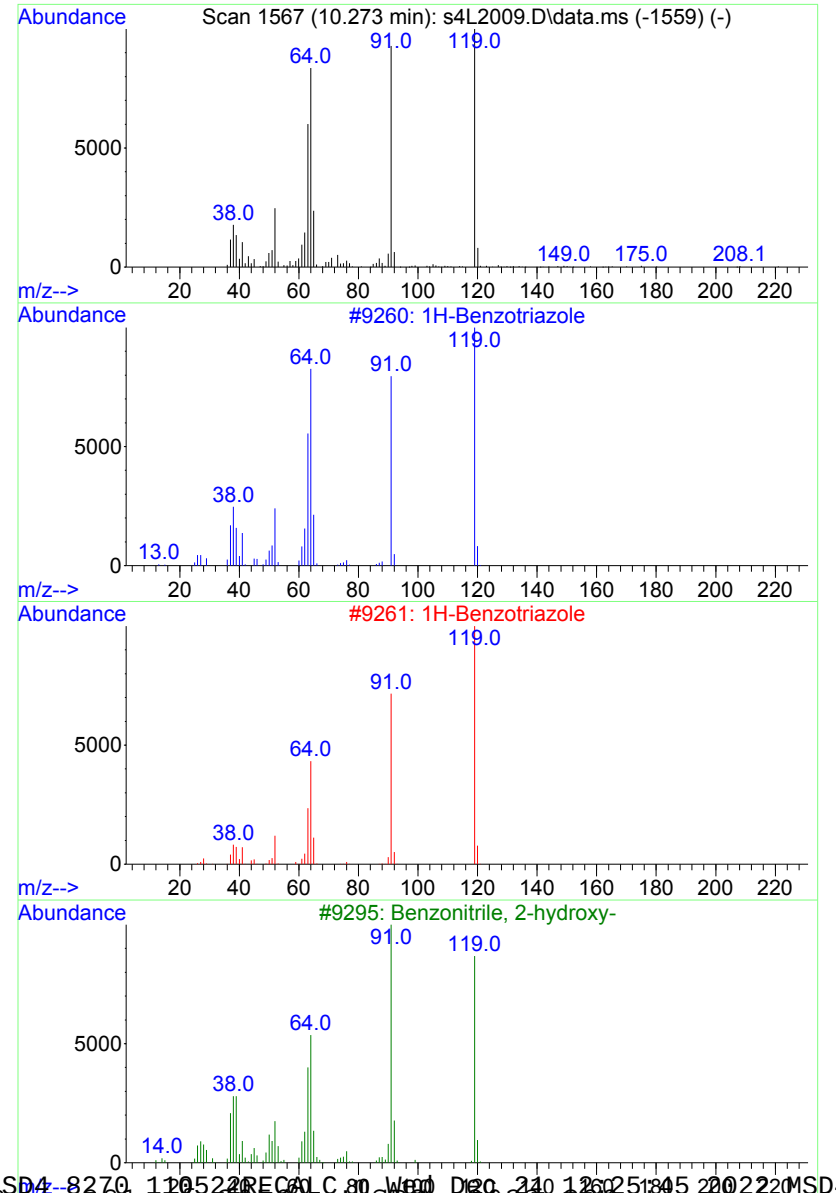
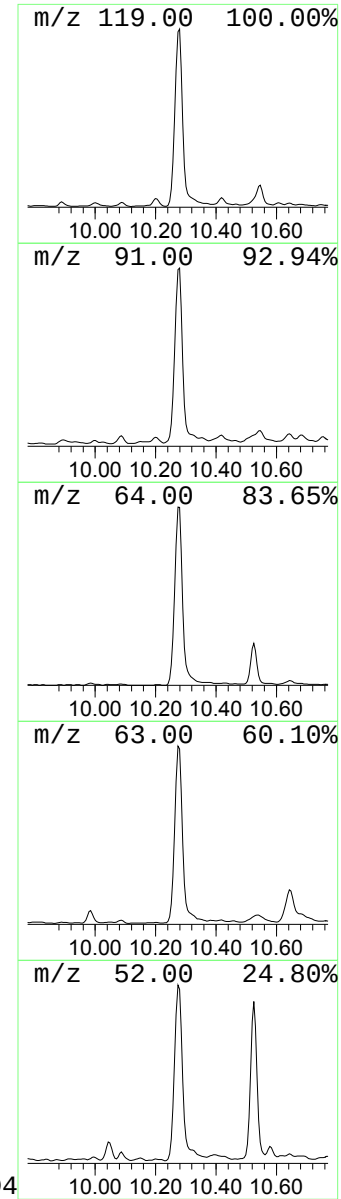
Peak Number 7 1H-Benzotriazole Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.274	11.34 ng/uL	448283	A Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Benzotriazole	119	C6H5N3	000095-14-7	96
2	1H-Benzotriazole	119	C6H5N3	000095-14-7	95
3	Benzonitrile, 2-hydroxy-	119	C7H5NO	000611-20-1	86
4	1H-Benzotriazole-1-carboxaldehyde	147	C7H5N3O	072773-04-7	83
5	Benzonitrile, 3-hydroxy-	119	C7H5NO	000873-62-1	83





Library Search Compound Report

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Misc : |MSD1C70E_L|WATER|SMEB02-23-265372|MIX[A,B,J,D,E]||
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

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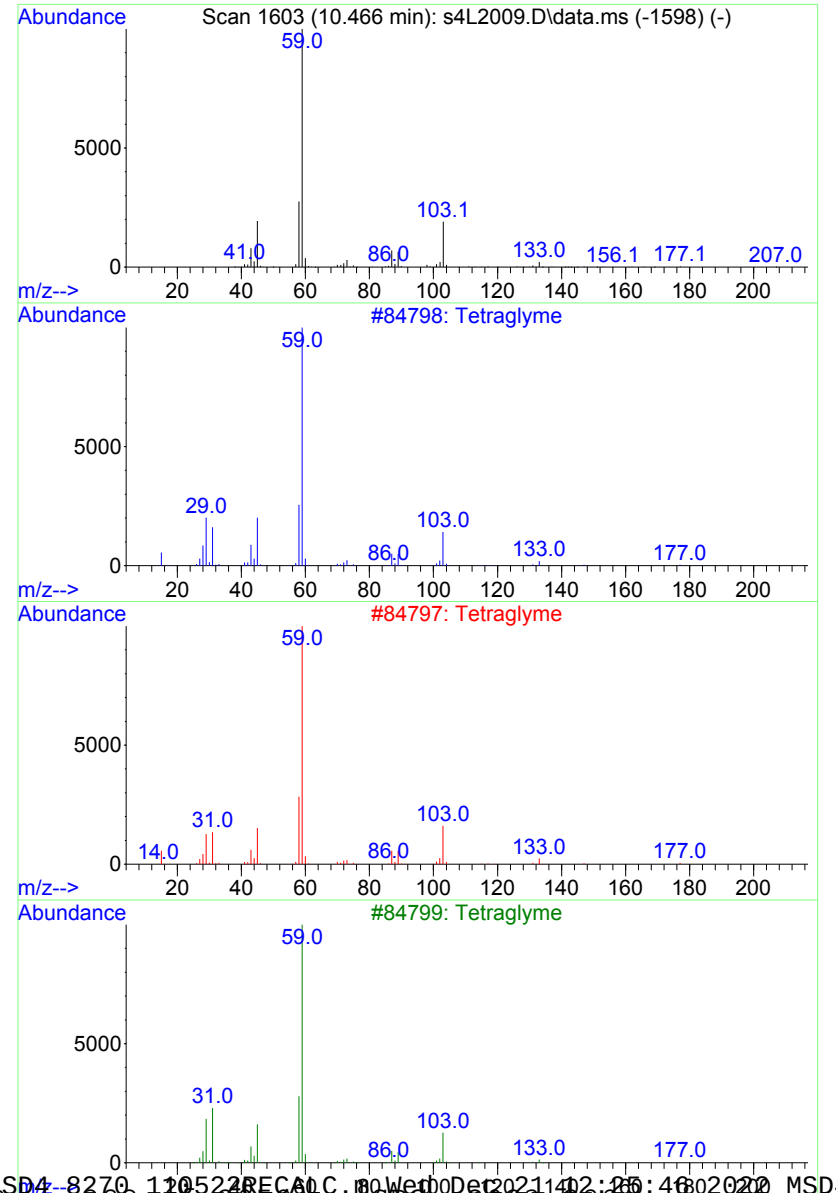
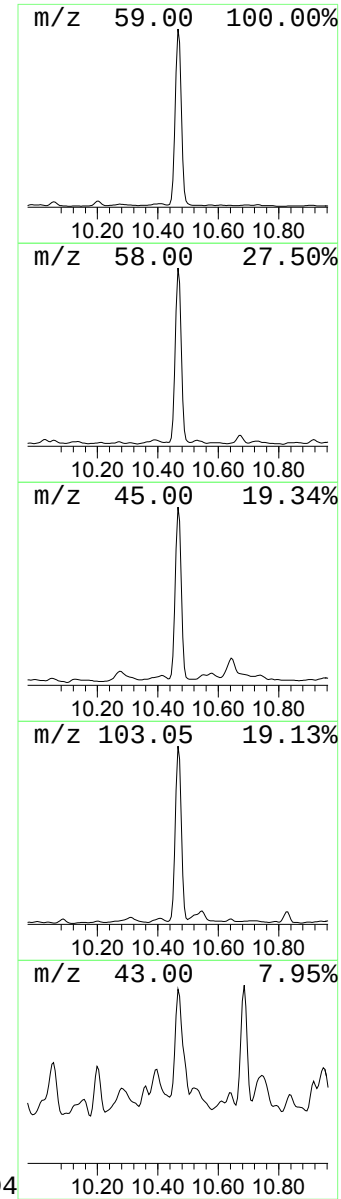
Peak Number 8 Tetraglyme Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.466	8.32 ng/uL	328847	A Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tetraglyme	222	C10H22O5	000143-24-8	86
2	Tetraglyme	222	C10H22O5	000143-24-8	86
3	Tetraglyme	222	C10H22O5	000143-24-8	86
4	Methyl 2,5,8,11,14,17-hexaoxanon...	324	C14H28O8	1000366-81-4	78
5	2,5,8,11-Tetraoxadodecane	178	C8H18O4	000112-49-2	78





Library Search Compound Report

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Misc : |MSD1C70E_L|WATER|SMEB02-23-265372|MIX[A,B,J,D,E]||
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

****

Peak Number 9 Benzoic acid, 2,4-dichloro- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.643	17.93 ng/uL	708459	D Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzoic acid, 2,4-dichloro-	190	C7H4Cl2O2	000050-84-0	99
2	Benzoic acid, 2,4-dichloro-	190	C7H4Cl2O2	000050-84-0	99
3	Benzoic acid, 2,6-dichloro-	190	C7H4Cl2O2	000050-30-6	98
4	Benzoic acid, 2,6-dichloro-	190	C7H4Cl2O2	000050-30-6	97
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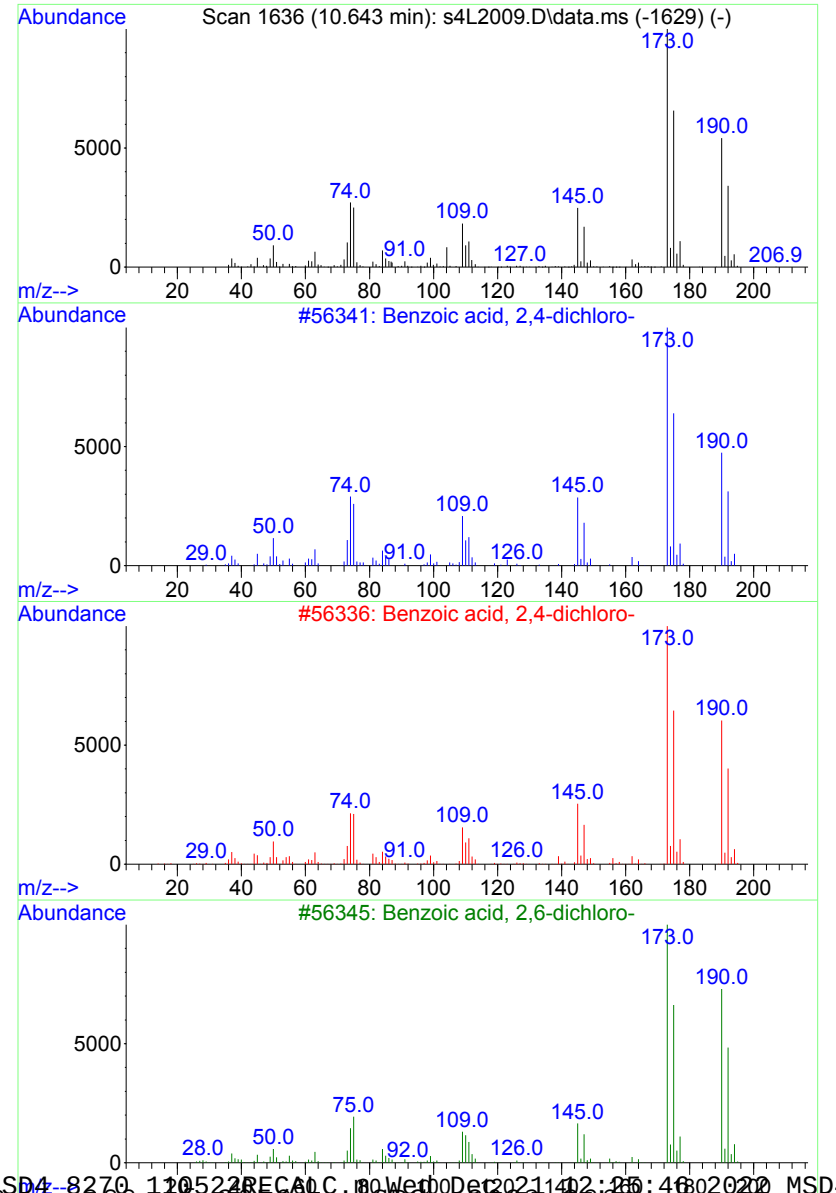

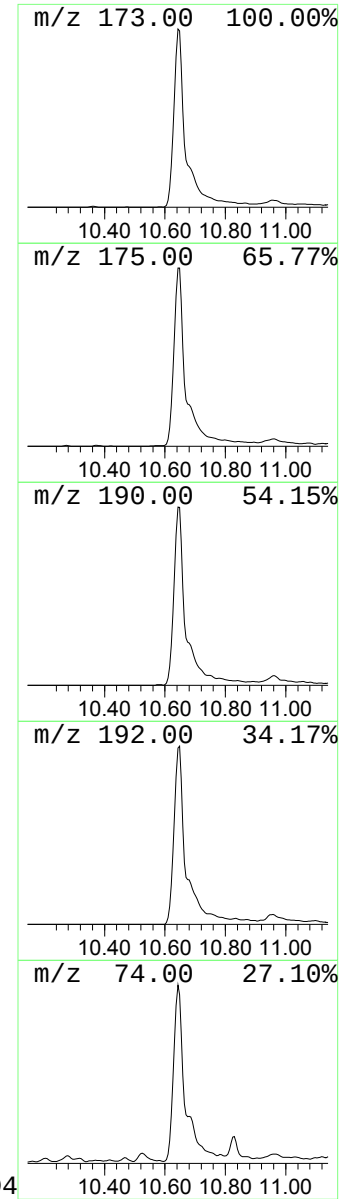

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ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

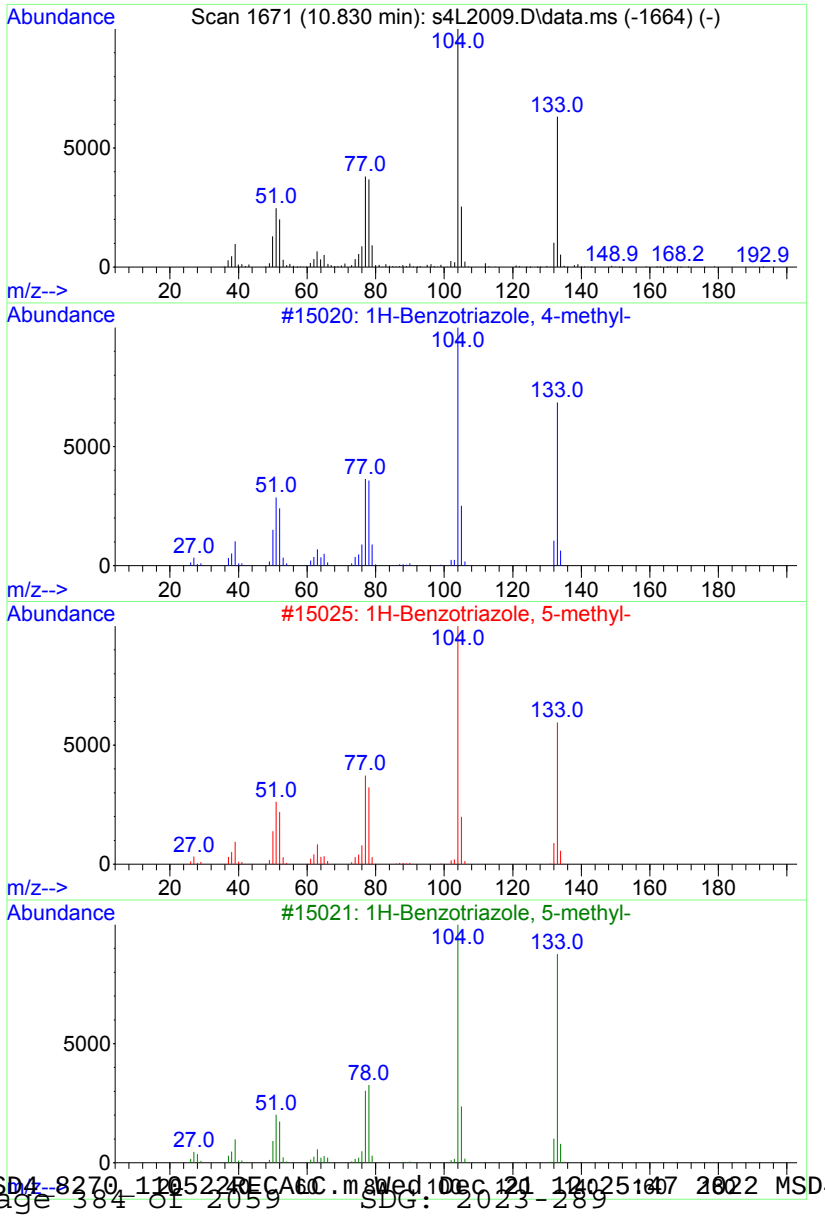
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

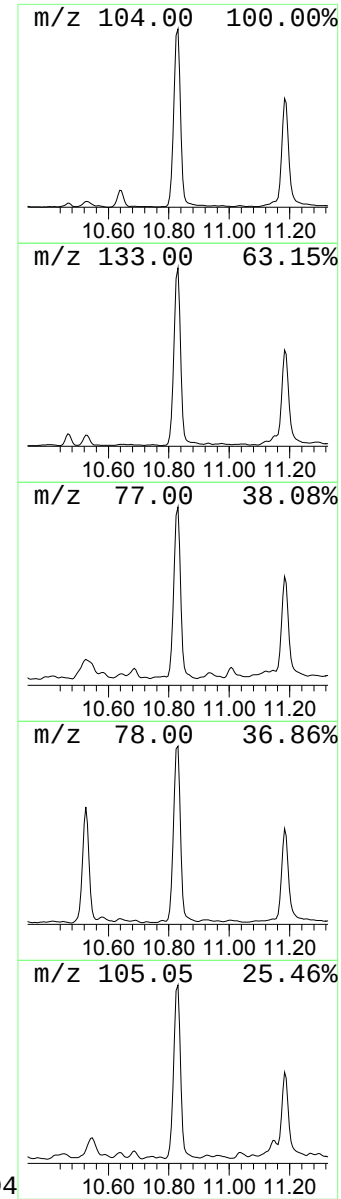
****

Peak Number 10 1H-Benzotriazole, 4-methyl- Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.830	10.11 ng/uL	399577	D Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Benzotriazole, 4-methyl-	133	C7H7N3	029878-31-7	98
2	1H-Benzotriazole, 5-methyl-	133	C7H7N3	000136-85-6	96
3	1H-Benzotriazole, 5-methyl-	133	C7H7N3	000136-85-6	95
4	1H-Benzotriazole, 5-methyl-	133	C7H7N3	000136-85-6	93
5	1H-Benzotriazole, 4-methyl-	133	C7H7N3	029878-31-7	93





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ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

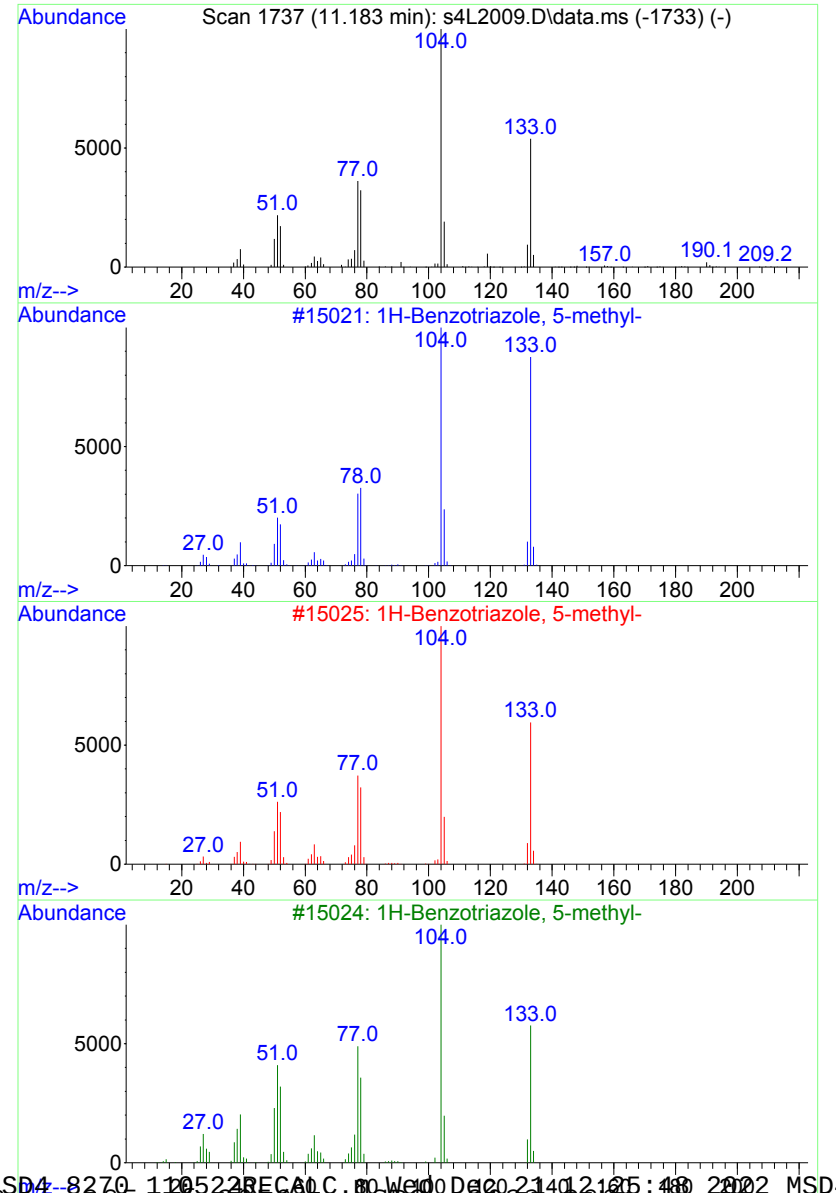
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

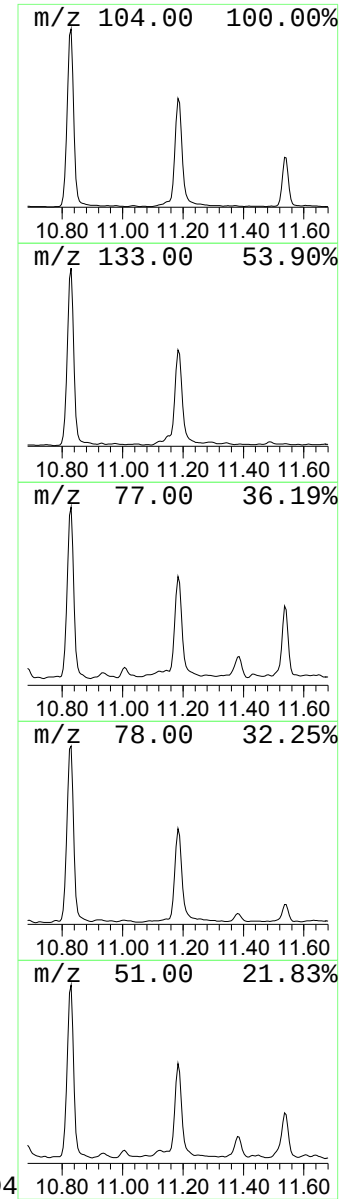
****

Peak Number 11 1H-Benzotriazole, 5-methyl- Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.183	5.02 ng/uL	198289	D Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Benzotriazole, 5-methyl-	133	C7H7N3	000136-85-6	97
2	1H-Benzotriazole, 5-methyl-	133	C7H7N3	000136-85-6	94
3	1H-Benzotriazole, 5-methyl-	133	C7H7N3	000136-85-6	91
4	1H-Benzotriazole, 4-methyl-	133	C7H7N3	029878-31-7	91
5	Isoquinoline, 1,2,3,4-tetrahydro-	133	C9H11N	000091-21-4	64





Library Search Compound Report

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ALS Vial : 9 Sample Multiplier: 1

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Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

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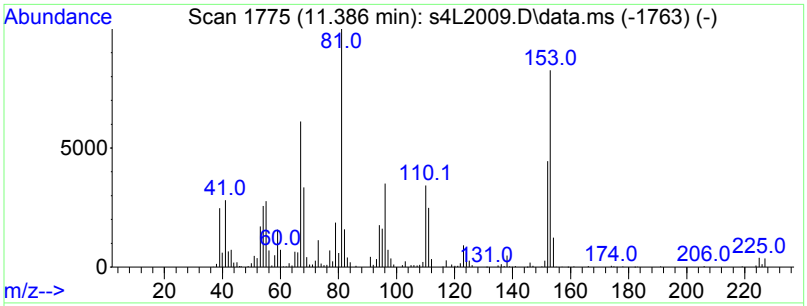
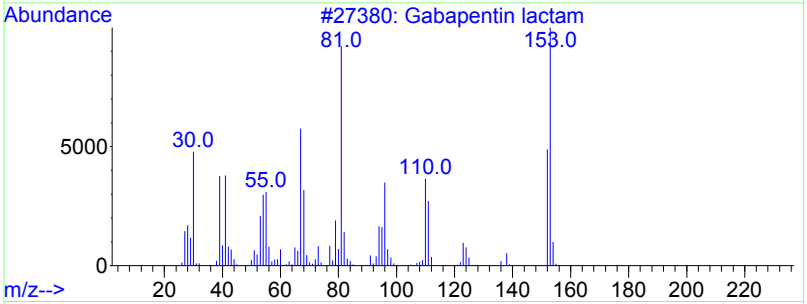
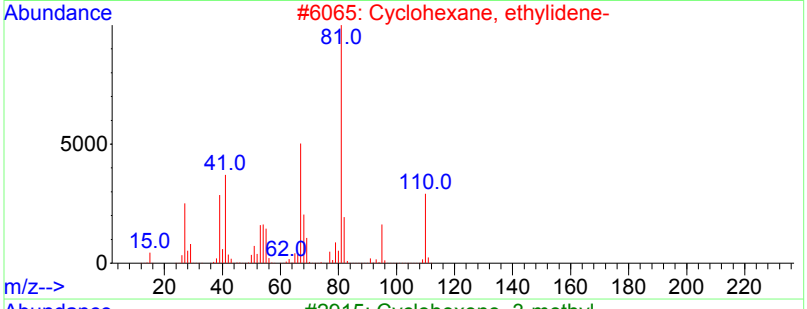
Peak Number 12 Gabapentin lactam Concentration Rank 5

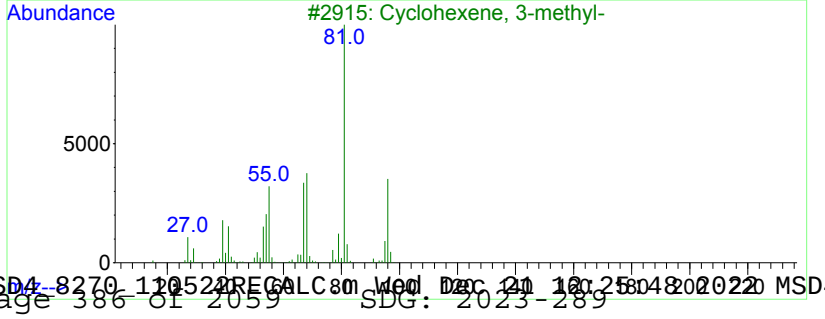
R.T.	EstConc	Area	Relative to ISTD	R.T.
11.386	12.96 ng/uL	512106	D Acenaphthene-d10	10.525

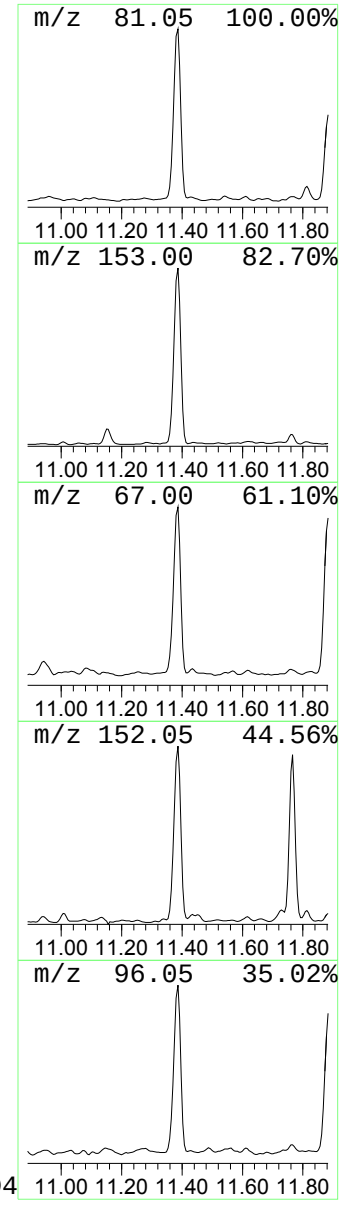
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Gabapentin lactam	153	C9H15NO	064744-50-9	98
2	Cyclohexane, ethylidene-	110	C8H14	001003-64-1	46
3	Cyclohexene, 3-methyl-	96	C7H12	000591-48-0	42
4	Cyclohexane, ethylidene-	110	C8H14	001003-64-1	41
5	Bicyclo[4.1.0]heptane	96	C7H12	000286-08-8	41











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Data File : s4L2009.D
Acq On : 20 Dec 2022 15:46
Operator : NM1
Sample : |604449006|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB02-23-265372|MIX[A,B,J,D,E]||
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

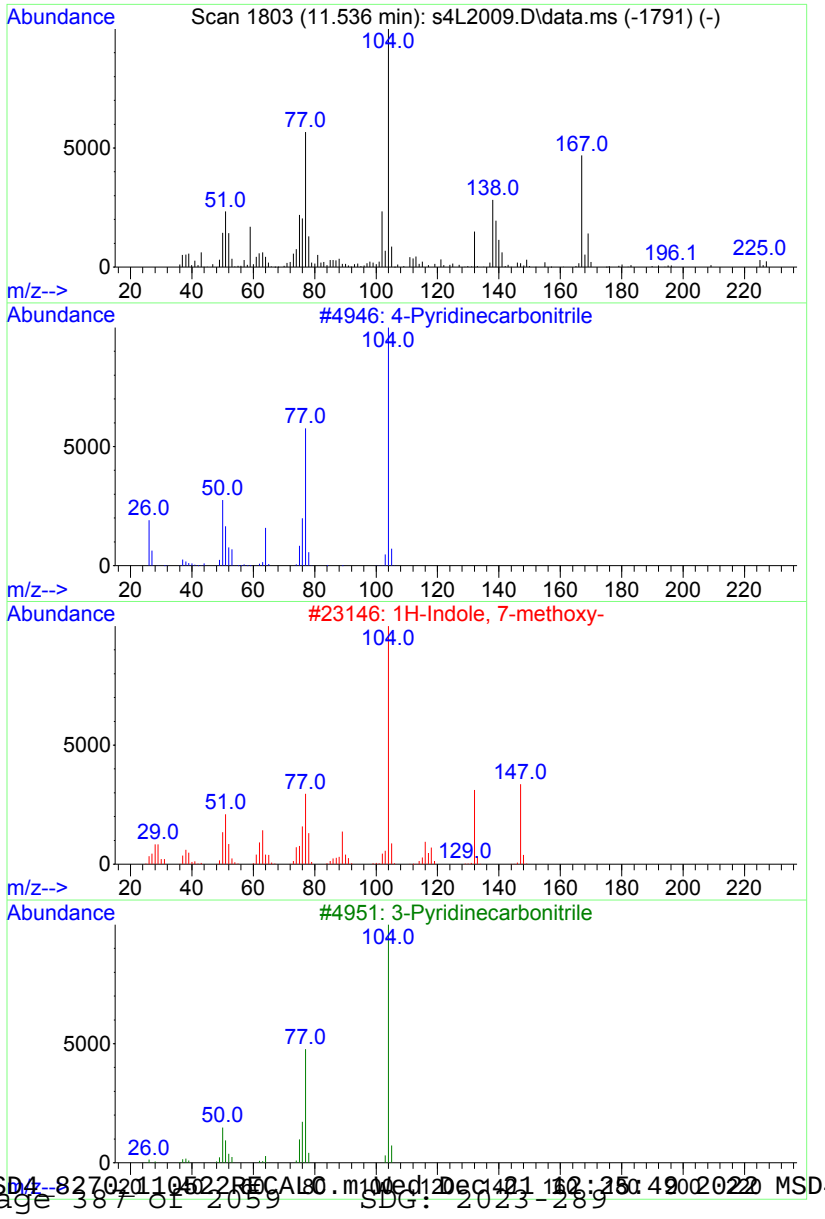
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

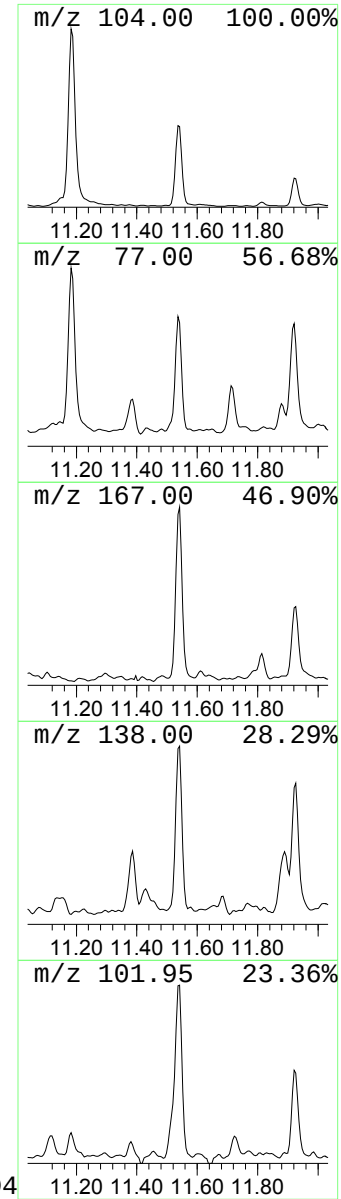
****

Peak Number 13 unknown Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.536	5.46 ng/uL	215680	D Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4-Pyridinecarbonitrile	104	C6H4N2	000100-48-1	45
2	1H-Indole, 7-methoxy-	147	C9H9NO	003189-22-8	43
3	3-Pyridinecarbonitrile	104	C6H4N2	000100-54-9	43
4	3-Pyridinecarbonitrile	104	C6H4N2	000100-54-9	43
5	1H-Benzotriazole, 4-methyl-	133	C7H7N3	029878-31-7	38





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2009.D
Acq On : 20 Dec 2022 15:46
Operator : NM1
Sample : |604449006|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB02-23-265372|MIX[A,B,J,D,E]||
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

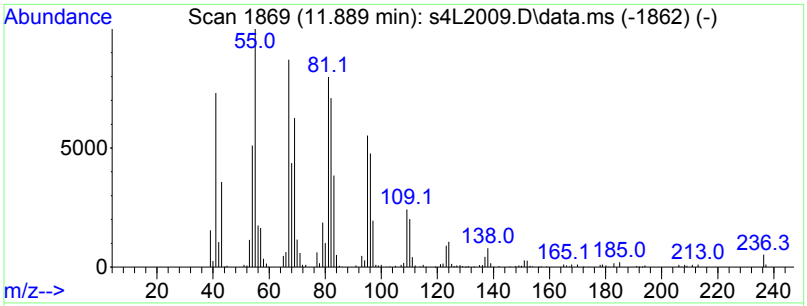
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

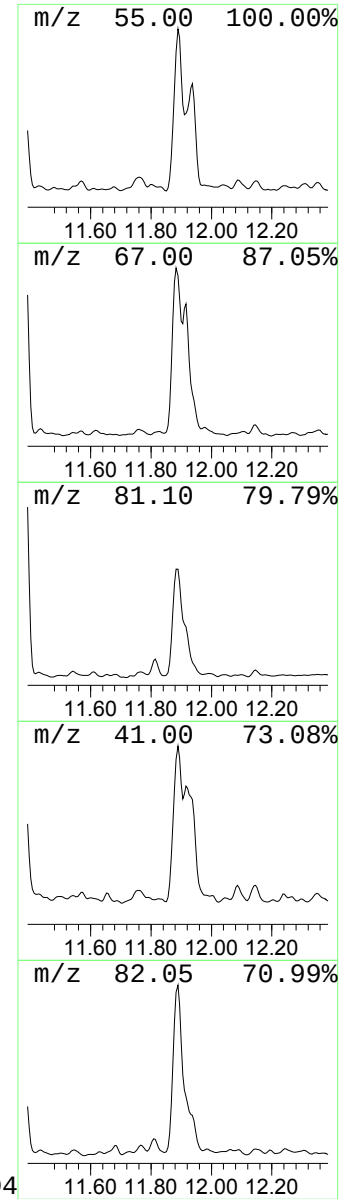
****

Peak Number 14 9-Tetradecen-1-ol, acetate,... Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.889	10.27 ng/uL	471034	A Phenanthrene-d10	12.948

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9-Tetradecen-1-ol, acetate, (E)-	254	C16H30O2	023192-82-7	90
2	8-Dodecen-1-ol, (Z)-	184	C12H24O	040642-40-8	87
3	cis-9-Tetradecen-1-ol	212	C14H28O	035153-15-2	87
4	cis-9-Tetradecen-1-ol	212	C14H28O	035153-15-2	83
5	1,13-Tetradecadiene	194	C14H26	021964-49-8	83





Library Search Compound Report

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Data File : s4L2009.D
Acq On : 20 Dec 2022 15:46
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Misc : |MSD1C70E_L|WATER|SMEB02-23-265372|MIX[A,B,J,D,E]||
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

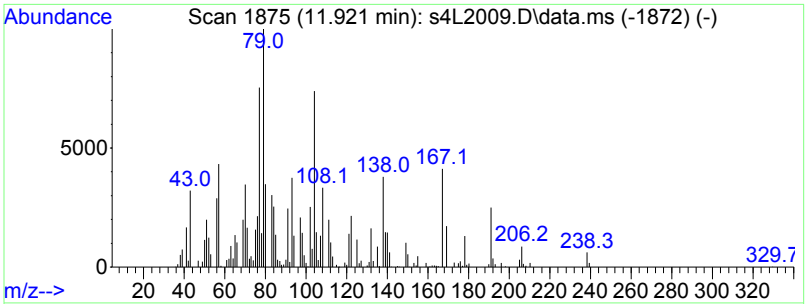
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

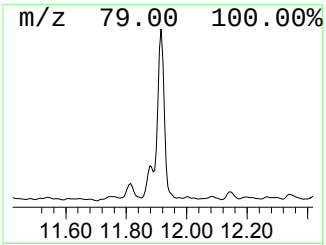
****

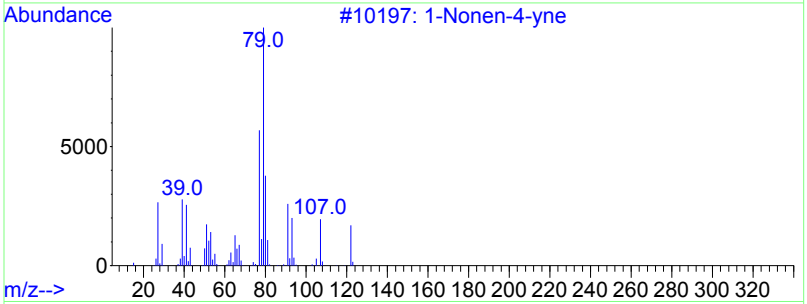
Peak Number 15 unknown Concentration Rank 7

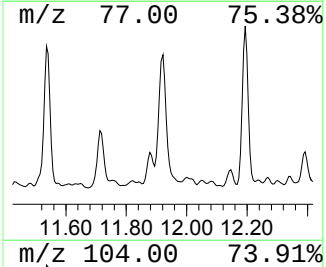
R.T.	EstConc	Area	Relative to ISTD	R.T.
11.921	12.55 ng/uL	575519	A Phenanthrene-d10	12.948

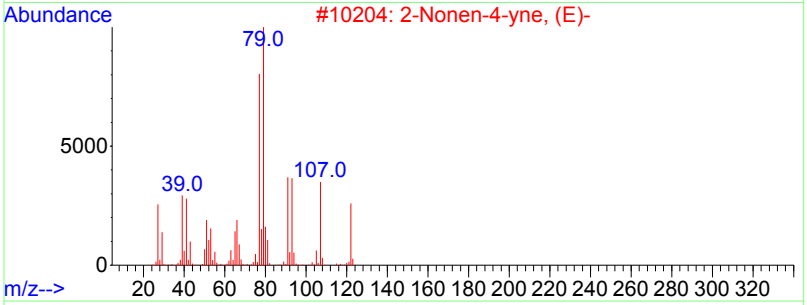
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Nonen-4-yne	122	C9H14	031508-12-0	46
2	2-Nonen-4-yne, (E)-	122	C9H14	056392-49-5	38
3	2-Pyridinecarbonitrile	104	C6H4N2	000100-70-9	27
4	2-Pyridinecarbonitrile	104	C6H4N2	000100-70-9	27
5	cis,cis-1,4-Dicyano-1,3-butadiene	104	C6H4N2	001557-59-1	27

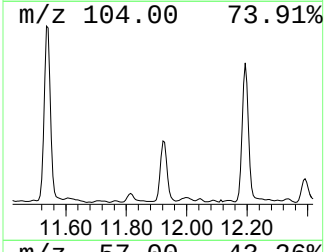


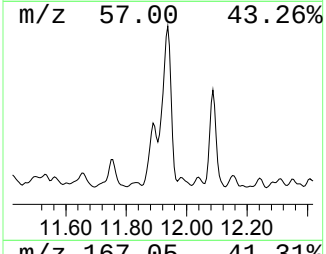


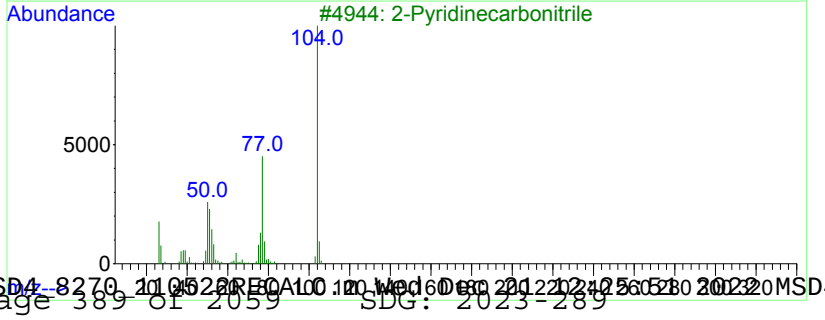


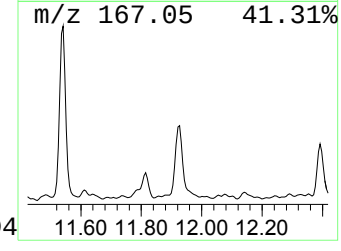












Library Search Compound Report

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Data File : s4L2009.D
Acq On : 20 Dec 2022 15:46
Operator : NM1
Sample : |604449006|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB02-23-265372|MIX[A,B,J,D,E]||
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

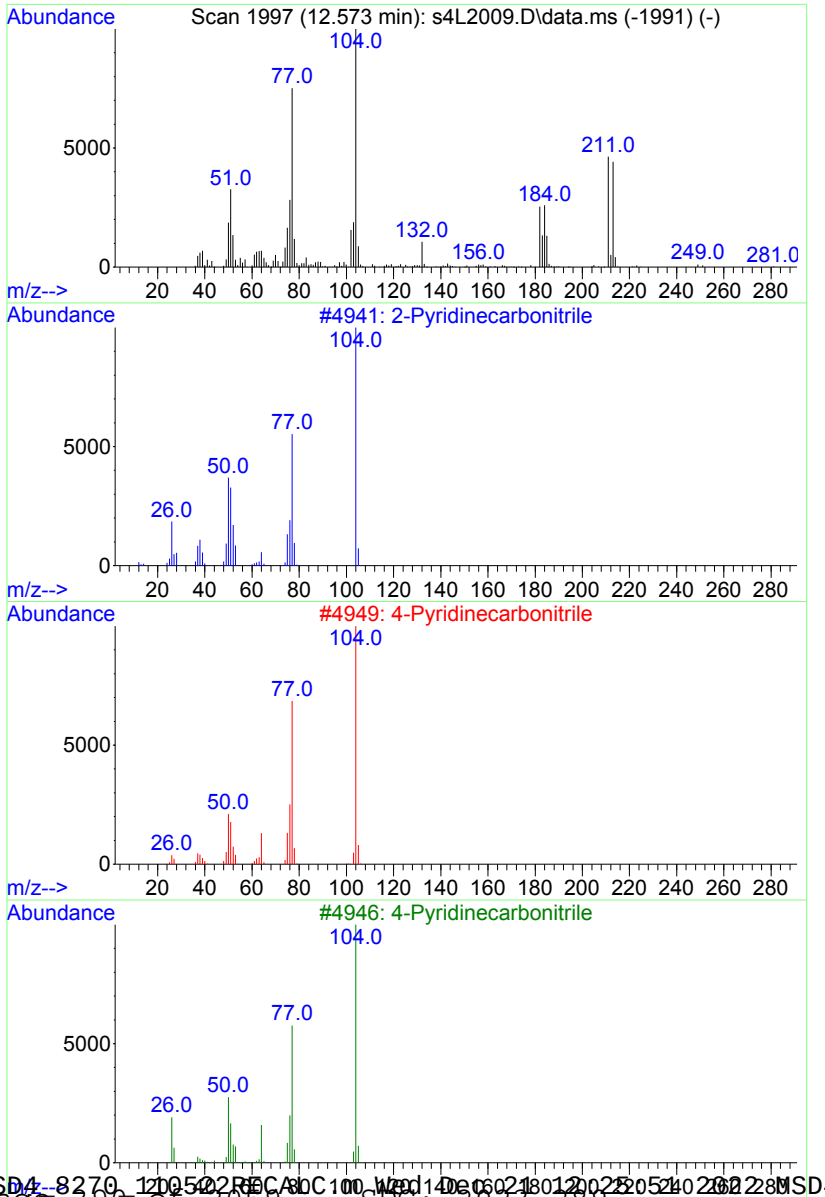
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

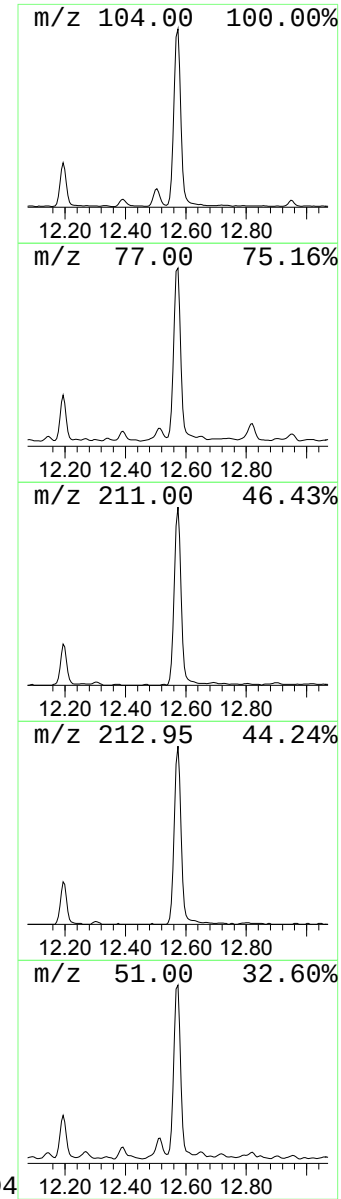
****

Peak Number 16 unknown Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.573	13.52 ng/uL	620389	A Phenanthrene-d10	12.948

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pyridinecarbonitrile	104	C6H4N2	000100-70-9	49
2	4-Pyridinecarbonitrile	104	C6H4N2	000100-48-1	46
3	4-Pyridinecarbonitrile	104	C6H4N2	000100-48-1	46
4	Sydnone, 3-phenyl-	162	C8H6N2O2	000120-06-9	38
5	Sydnone, 3-phenyl-	162	C8H6N2O2	000120-06-9	38





Library Search Compound Report

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Data File : s4L2009.D
Acq On : 20 Dec 2022 15:46
Operator : NM1
Sample : |604449006|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB02-23-265372|MIX[A,B,J,D,E]||
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

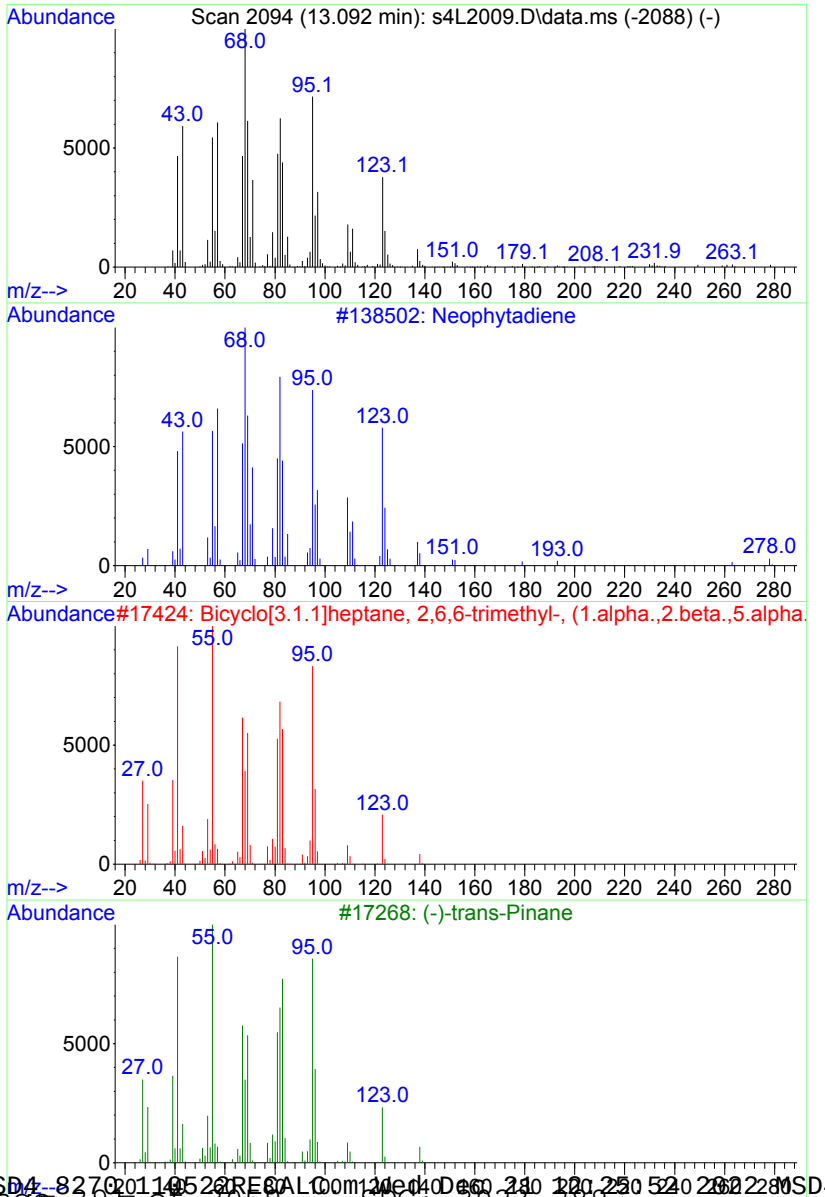
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

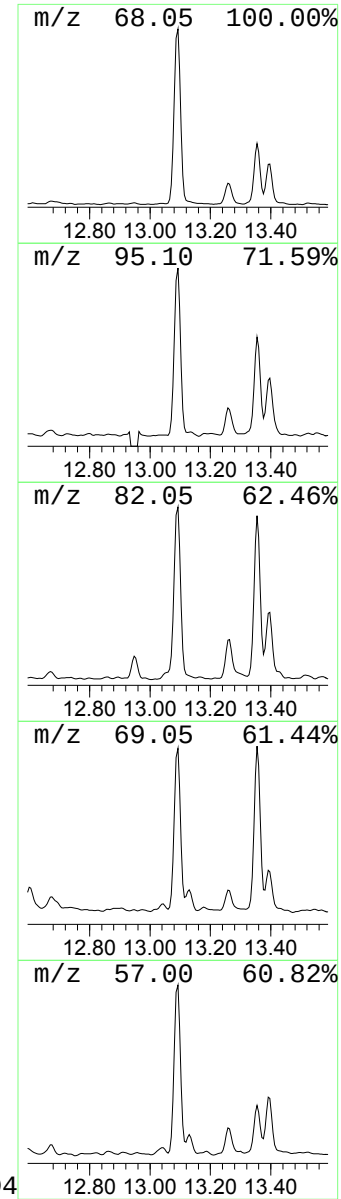
****

Peak Number 17 unknown Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.092	12.59 ng/uL	577714	D Phenanthrene-d10	12.948

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Neophytadiene	278	C20H38	000504-96-1	72
2	Bicyclo[3.1.1]heptane, 2,6,6-tri...	138	C10H18	006876-13-7	64
3	(-)-trans-Pinane	138	C10H18	033626-25-4	43
4	Bicyclo[3.1.1]heptane, 2,6,6-tri...	138	C10H18	000473-55-2	38
5	Cyclopentane, 1,2-dimethyl-3-(1-...	138	C10H18	006983-03-5	38





Library Search Compound Report

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Acq On : 20 Dec 2022 15:46
Operator : NM1
Sample : |604449006|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB02-23-265372|MIX[A,B,J,D,E]||
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

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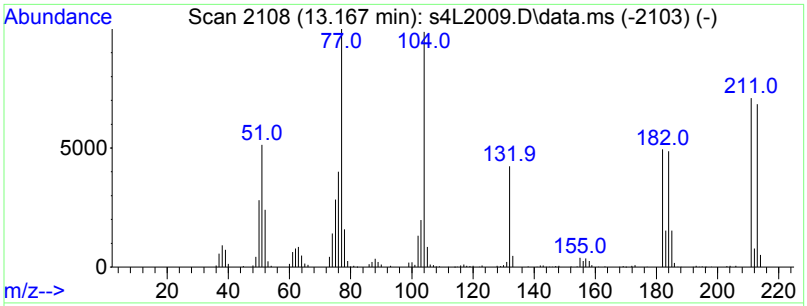
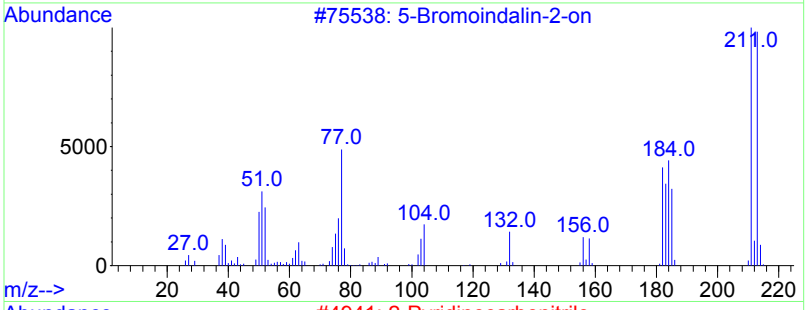
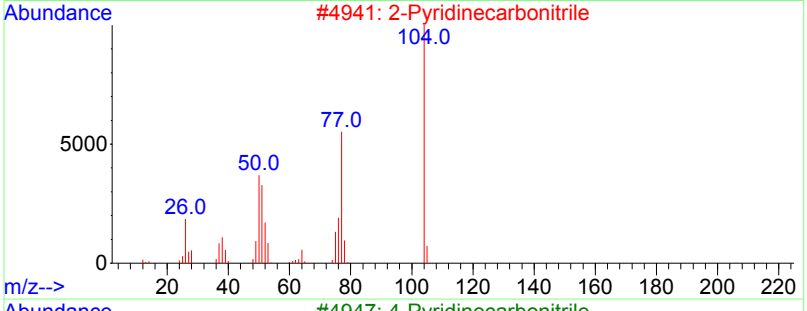
Peak Number 18 unknown Concentration Rank 16

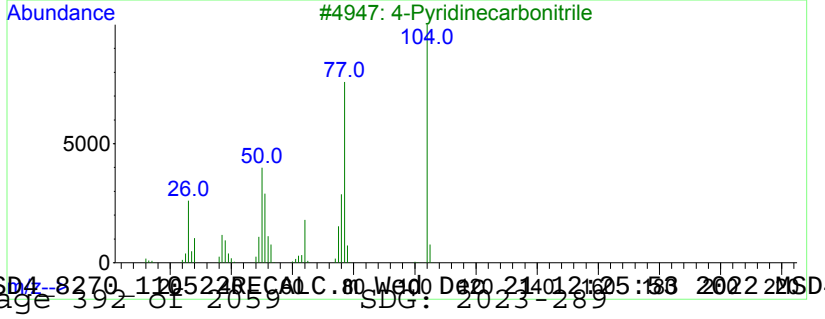
R.T.	EstConc	Area	Relative to ISTD	R.T.
13.167	7.35 ng/uL	336994	D Phenanthrene-d10	12.948

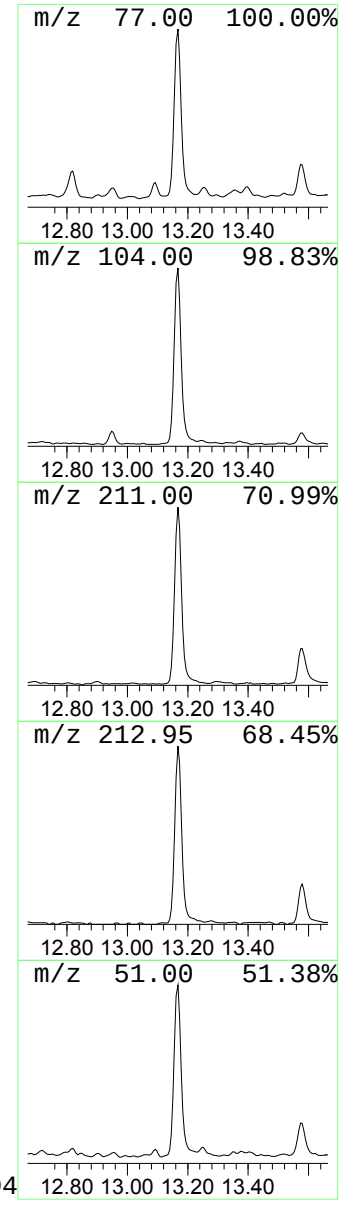
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	5-Bromoindalin-2-on	211	C8H6BrNO	020870-78-4	52
2	2-Pyridinecarbonitrile	104	C6H4N2	000100-70-9	49
3	4-Pyridinecarbonitrile	104	C6H4N2	000100-48-1	27
4	Benzenemethanimine	105	C7H7N	016118-22-2	27
5	Sydnone, 3-phenyl-	162	C8H6N2O2	000120-06-9	22











Library Search Compound Report

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Data File : s4L2009.D
Acq On : 20 Dec 2022 15:46
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Sample : |604449006|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB02-23-265372|MIX[A,B,J,D,E]||
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

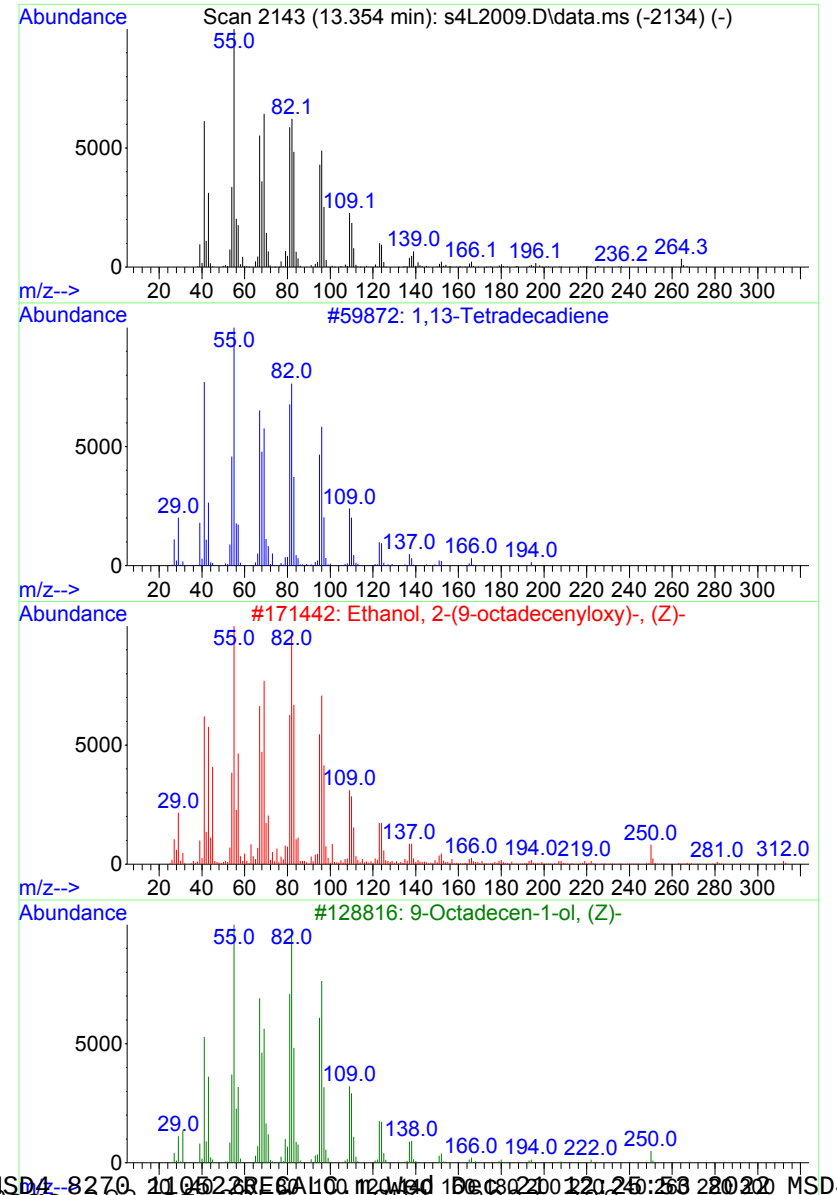
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

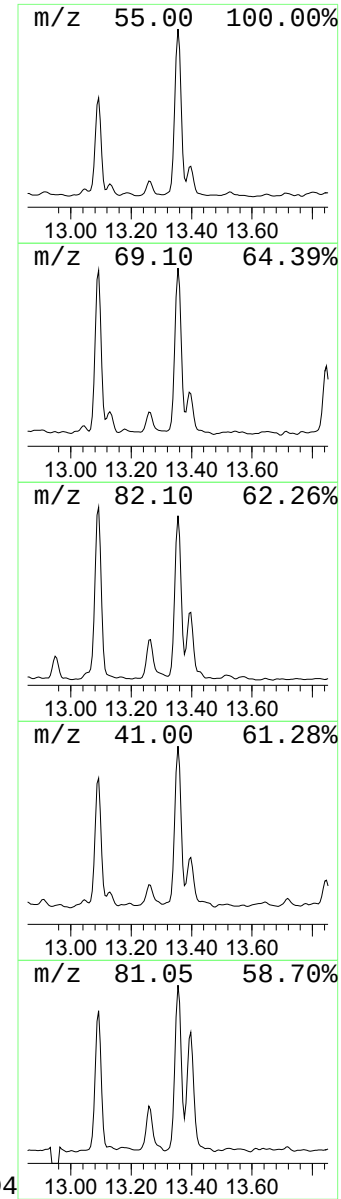
****

Peak Number 19 1,13-Tetradecadiene Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.354	11.42 ng/uL	523786	D Phenanthrene-d10	12.948

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,13-Tetradecadiene	194	C14H26	021964-49-8	98
2	Ethanol, 2-(9-octadecenyloxy)-, ...	312	C20H40O2	005353-25-3	91
3	9-Octadecen-1-ol, (Z)-	268	C18H36O	000143-28-2	87
4	Z,E-2,13-Octadecadien-1-ol	266	C18H34O	1000131-10-3	87
5	11-Hexadecen-1-ol, acetate, (Z)-	282	C18H34O2	034010-21-4	87





Library Search Compound Report

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Data File : s4L2009.D
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Misc : |MSD1C70E_L|WATER|SMEB02-23-265372|MIX[A,B,J,D,E]||
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

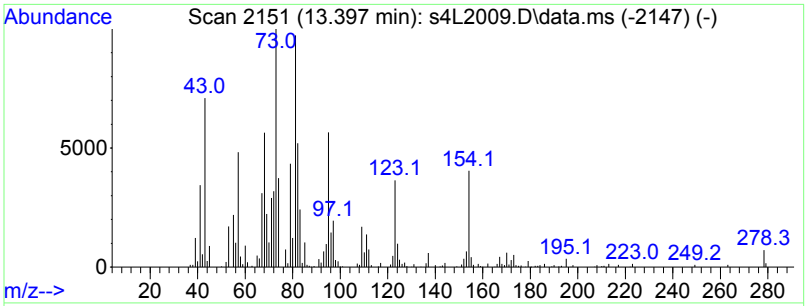
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

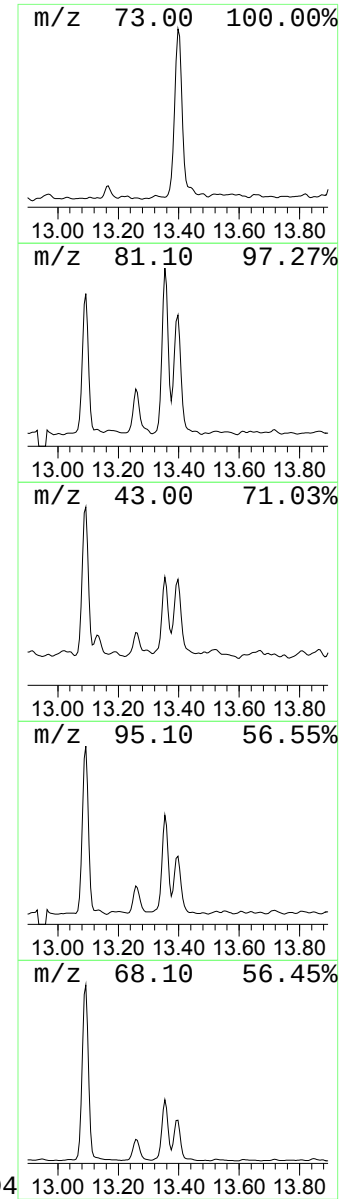
****

Peak Number 20 unknown Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.397	7.21 ng/uL	330638	D Phenanthrene-d10	12.948

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexene, 3-(2-methylpropyl)-	138	C10H18	004104-56-7	27
2	1-Decyne	138	C10H18	000764-93-2	27
3	1,4-Eicosadiene	278	C20H38	1000131-16-3	25
4	2-Furanmethanol, propanoate	154	C8H10O3	000623-19-8	22
5	Cyclohexene, 3-(1-methylethyl)-	124	C9H16	003983-08-2	18





Library Search Compound Report

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Sample : |604449006|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB02-23-265372|MIX[A,B,J,D,E]||
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

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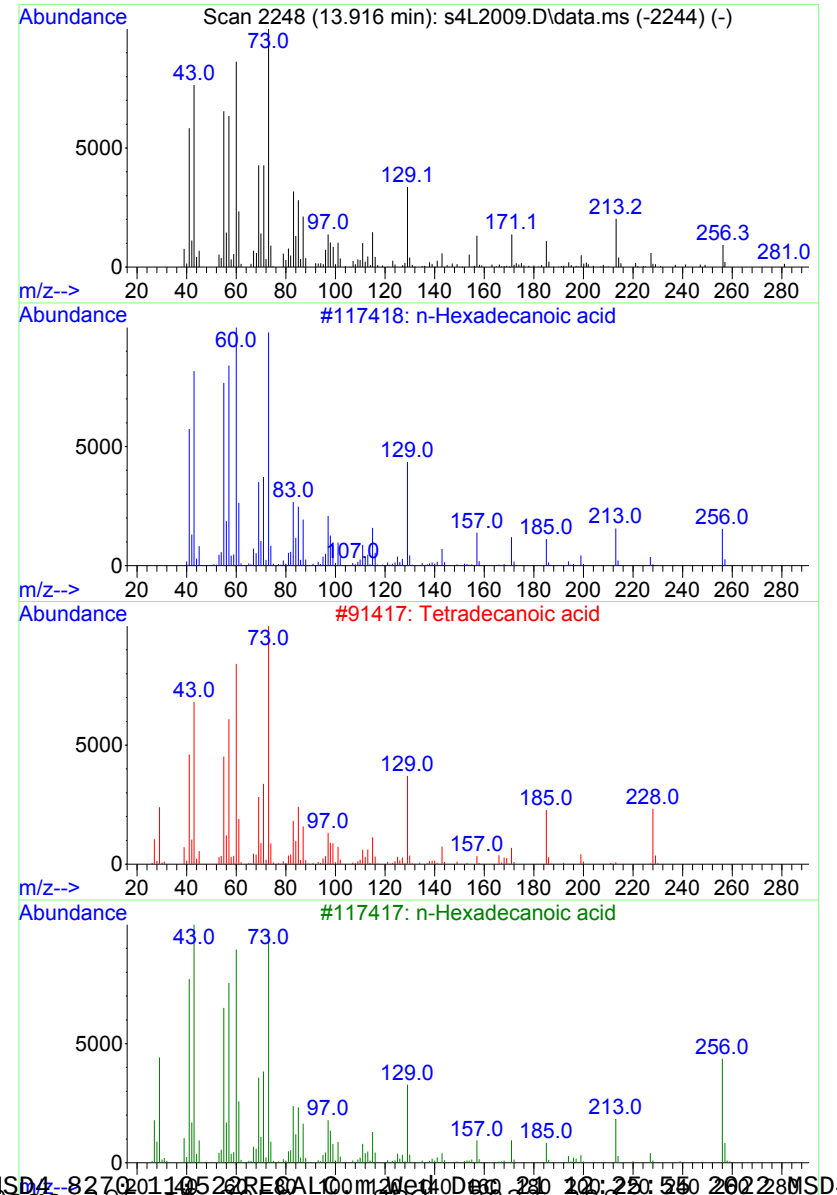
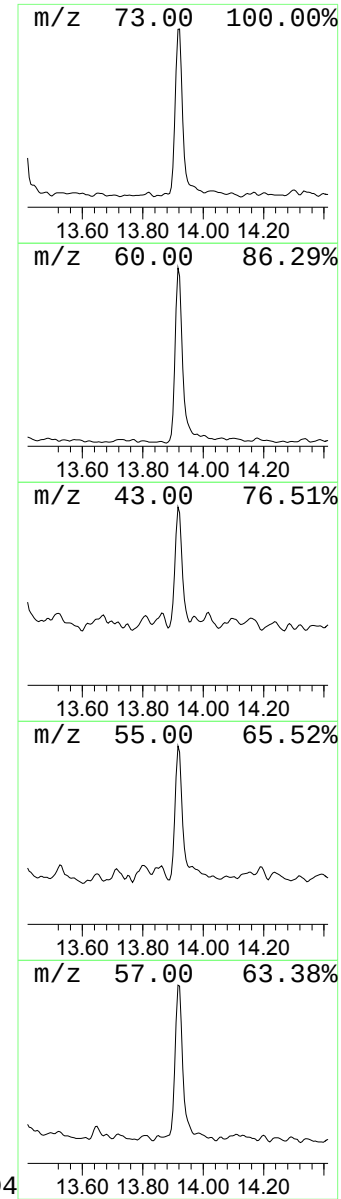
Peak Number 21 n-Hexadecanoic acid Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.916	5.28 ng/uL	242170	D Phenanthrene-d10	12.948

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	96
2	Tetradecanoic acid	228	C14H28O2	000544-63-8	95
3	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	94
4	Tridecanoic acid	214	C13H26O2	000638-53-9	91
5	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	89





Library Search Compound Report

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Data File : s4L2009.D
Acq On : 20 Dec 2022 15:46
Operator : NM1
Sample : |604449006|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB02-23-265372|MIX[A,B,J,D,E]||
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

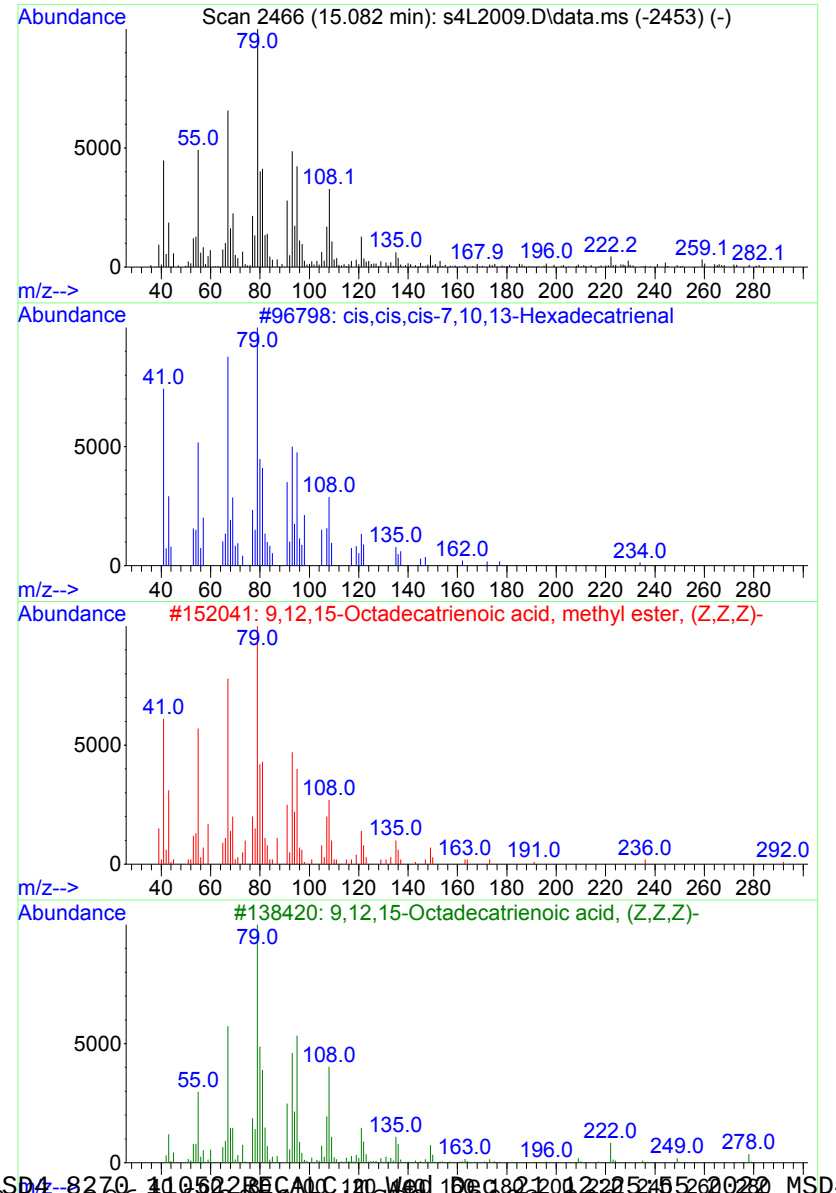
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

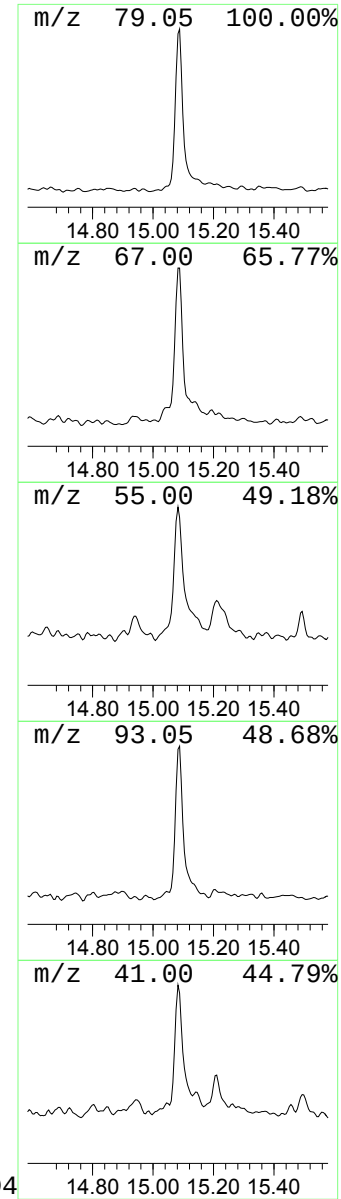
****

Peak Number 22 cis,cis,cis-7,10,13-Hexadec... Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.082	7.54 ng/uL	345761	D Phenanthrene-d10	12.948

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	cis,cis,cis-7,10,13-Hexadecatrienal	234	C16H26O	056797-43-4	91
2	9,12,15-Octadecatrienoic acid, m...	292	C19H32O2	000301-00-8	90
3	9,12,15-Octadecatrienoic acid, (...	278	C18H30O2	000463-40-1	87
4	11,14,17-Eicosatrienoic acid, me...	320	C21H36O2	055682-88-7	87
5	7,10,13-Hexadecatrienoic acid, m...	264	C17H28O2	056554-30-4	86





Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2009.D
Acq On : 20 Dec 2022 15:46
Operator : NM1
Sample : |604449006|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB02-23-265372|MIX[A,B,J,D,E]||
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

			(ng/uL)		Internal Standard			
TIC Top Hit name	CAS #	RT	EstConc	Response	#	RT	Resp	Conc
unknown	003404-73-7	2.973	26.1	568623	1	5.749	870954	40.0
unknown	1000404-44-4	3.331	23.3	506609	1	5.749	870954	40.0
Dimethyl sulfone	000067-71-0	4.443	6.5	142248	1	5.749	870954	40.0
unknown	1000404-37-0	5.952	9.2	200926	2	5.749	870954	40.0
2,4-Imidazolidinedione, 5,5...	000077-71-4	8.728	9.0	282411	7	7.690	1257260	40.0
2,4,7,9-Tetramethyl-5-decyn...	000126-86-3	9.680	6.6	262477	8	10.525	1580580	40.0
1H-Benzotriazole	000095-14-7	10.274	11.3	448283	8	10.525	1580580	40.0
Tetraglyme	000143-24-8	10.466	8.3	328847	8	10.525	1580580	40.0
Benzoic acid, 2,4-dichloro-	000050-84-0	10.643	17.9	708459	10	10.525	1580580	40.0
1H-Benzotriazole, 4-methyl-	029878-31-7	10.830	10.1	399577	10	10.525	1580580	40.0
1H-Benzotriazole, 5-methyl-	000136-85-6	11.183	5.0	198289	10	10.525	1580580	40.0
Gabapentin lactam	064744-50-9	11.386	13.0	512106	10	10.525	1580580	40.0
unknown	000100-48-1	11.536	5.5	215680	10	10.525	1580580	40.0
9-Tetradecen-1-ol, acetate,...	023192-82-7	11.889	10.3	471034	11	12.948	1834940	40.0
unknown	031508-12-0	11.921	12.5	575519	11	12.948	1834940	40.0
unknown	000100-70-9	12.573	13.5	620389	11	12.948	1834940	40.0
unknown	000504-96-1	13.092	12.6	577714	14	12.948	1834940	40.0
unknown	020870-78-4	13.167	7.3	336994	14	12.948	1834940	40.0
1,13-Tetradecadiene	021964-49-8	13.354	11.4	523786	14	12.948	1834940	40.0
unknown	004104-56-7	13.397	7.2	330638	14	12.948	1834940	40.0
n-Hexadecanoic acid	000057-10-3	13.916	5.3	242170	14	12.948	1834940	40.0
cis,cis,cis-7,10,13-Hexadec...	056797-43-4	15.082	7.5	345761	14	12.948	1834940	40.0

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:35**	**Matrix:**	**W**
Lab Sample ID:	**604449010**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB03-23-265373**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 17:13**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**1112.92 mL**	**Final Volume:**	**1 mL**
Data File:	**S122022\s4L2012.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
1610-18-0	Prometon	U	2.70	ug/L	2.70	8.99
126-33-0	Sulfolane	U	2.70	ug/L	2.70	8.99
PAH-tot-3a	Total PAHs 3a	U	0.000	ug/L		
62-75-9	N-Methyl-N-nitrosomethylamine	U	2.70	ug/L	2.70	8.99
108-95-2	Phenol	J	6.19	ug/L	2.70	8.99
111-44-4	bis(2-Chloroethyl) ether	U	2.70	ug/L	2.70	8.99
108-60-1	bis(2-Chloro-1-methylethyl)ether	U	2.70	ug/L	2.70	8.99
67-72-1	Hexachloroethane	U	2.70	ug/L	2.70	8.99
98-95-3	Nitrobenzene	U	2.70	ug/L	2.70	8.99
78-59-1	Isophorone	U	3.14	ug/L	3.14	8.99
120-83-2	2,4-Dichlorophenol	U	2.70	ug/L	2.70	8.99
87-68-3	Hexachlorobutadiene	U	2.70	ug/L	2.70	8.99
91-57-6	2-Methylnaphthalene	U	0.270	ug/L	0.270	0.899
91-20-3	Naphthalene	U	0.270	ug/L	0.270	0.899
90-12-0	1-Methylnaphthalene	U	0.270	ug/L	0.270	0.899
77-47-4	Hexachlorocyclopentadiene	U	2.70	ug/L	2.70	8.99
88-06-2	2,4,6-Trichlorophenol	U	2.70	ug/L	2.70	8.99
95-95-4	2,4,5-Trichlorophenol	U	2.70	ug/L	2.70	8.99
131-11-3	Dimethylphthalate	U	0.270	ug/L	0.270	0.899
606-20-2	2,6-Dinitrotoluene	U	2.70	ug/L	2.70	8.99
121-14-2	2,4-Dinitrotoluene	U	2.70	ug/L	2.70	8.99
51-28-5	2,4-Dinitrophenol	U	4.49	ug/L	4.49	18.0
84-66-2	Diethylphthalate	U	0.270	ug/L	0.270	0.899
86-73-7	Fluorene	U	0.270	ug/L	0.270	0.899
534-52-1	2-Methyl-4,6-dinitrophenol	U	2.70	ug/L	2.70	8.99
122-39-4	Diphenylamine	U	2.70	ug/L	2.70	8.99
103-33-3	Azobenzene	U	2.70	ug/L	2.70	8.99
122-66-7	*1,2-Diphenylhydrazine*					
118-74-1	Hexachlorobenzene	U	2.70	ug/L	2.70	8.99
87-86-5	Pentachlorophenol	U	2.70	ug/L	2.70	8.99
85-01-8	Phenanthrene	U	0.270	ug/L	0.270	0.899
120-12-7	Anthracene	U	0.270	ug/L	0.270	0.899
84-74-2	Di-n-butylphthalate	U	0.270	ug/L	0.270	0.899
206-44-0	Fluoranthene	U	0.270	ug/L	0.270	0.899
129-00-0	Pyrene	U	0.270	ug/L	0.270	0.899
117-81-7	bis(2-Ethylhexyl)phthalate	U	0.270	ug/L	0.270	0.899
205-99-2	Benzo(b)fluoranthene	U	0.270	ug/L	0.270	0.899
207-08-9	Benzo(k)fluoranthene	U	0.270	ug/L	0.270	0.899
50-32-8	Benzo(a)pyrene	U	0.270	ug/L	0.270	0.899

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:35**	**Matrix:**	**W**
Lab Sample ID:	**604449010**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB03-23-265373**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 17:13**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**1112.92 mL**	**Final Volume:**	**1 mL**
Data File:	**S122022\s4L2012.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
123-91-1	1,4-Dioxane	U	2.70	ug/L	2.70	8.99
55-18-5	N-Nitrosodiethylamine	U	2.70	ug/L	2.70	8.99
930-55-2	N-Nitrosopyrrolidine	U	2.70	ug/L	2.70	8.99
924-16-3	N-Nitrosodi-n-butylamine	U	2.70	ug/L	2.70	8.99
95-94-3	1,2,4,5-Tetrachlorobenzene	U	2.70	ug/L	2.70	8.99
608-93-5	Pentachlorobenzene	U	2.70	ug/L	2.70	8.99
1912-24-9	Atrazine	U	2.70	ug/L	2.70	8.99
92-87-5	Benzidine	U	3.50	ug/L	3.50	8.99
91-94-1	3,3'-Dichlorobenzidine	U	2.70	ug/L	2.70	8.99

Surrogate/Tracer recovery	Result	Nominal		Recovery%		Acceptable Limits
2,4,6-Tribromophenol	52.9	89.9	ug/L	59		(37%-132%)
2-Fluorobiphenyl	11.7	44.9	ug/L	26	*	(39%-112%)
2-Fluorophenol	55.6	89.9	ug/L	62		(11%-79%)
Nitrobenzene-d5	34.2	44.9	ug/L	76		(39%-112%)
Phenol-d5	55.3	89.9	ug/L	62		(15%-85%)
p-Terphenyl-d14	5.18	44.9	ug/L	12	*	(24%-129%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown	3.502	10.5	ug/L	83	J
000067-71-0	Dimethyl sulfone	4.454	24.8	ug/L	94	NJ
	unknown	5.481	12.4	ug/L	47	J
	unknown	6.166	8.72	ug/L	35	J
	unknown	6.331	9.96	ug/L	35	J
	unknown	7.588	8.23	ug/L	43	J
	unknown	7.808	8.4	ug/L	45	J
	unknown	8.171	9.82	ug/L	76	J
	unknown	8.278	10.9	ug/L	25	J
	unknown	8.348	8.49	ug/L	45	J
000099-94-5	Benzoic acid, 4-methyl-	8.433	14.9	ug/L	96	NJ
	unknown	8.803	8.81	ug/L	74	J
	unknown	8.835	13.2	ug/L	32	J
	unknown	8.926	13	ug/L	47	J
	unknown	9.081	9.08	ug/L	10	J
	unknown	9.273	9.67	ug/L	47	J
	unknown	10.097	8.13	ug/L	47	J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:35**	**Matrix:**	**W**
Lab Sample ID:	**604449010**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB03-23-265373**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 17:13**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**1112.92 mL**	**Final Volume:**	**1 mL**
Data File:	**S122022\s4L2012.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
000095-14-7	1H-Benzotriazole	10.322	10.1	ug/L	96	NJ
000050-84-0	Benzoic acid, 2,4-dichloro-	10.664	42.7	ug/L	99	NJ
000050-84-0	Benzoic acid, 2,4-dichloro-	10.691	33.9	ug/L	90	NJ
029878-31-7	1H-Benzotriazole, 4-methyl-	10.862	15.3	ug/L	98	NJ
015356-74-8	2(4H)-Benzofuranone, 5,6,7,7a-tetrahydro-4,4,7a-tr	10.947	21.2	ug/L	97	NJ
064744-50-9	Gabapentin lactam	11.445	39.9	ug/L	93	NJ
	unknown	11.766	8.98	ug/L	64	J
	unknown	12.162	11.8	ug/L	50	J
	unknown	12.547	8.66	ug/L	35	J
	unknown	12.589	11.6	ug/L	42	J
000504-96-1	Neophytadiene	13.092	12.4	ug/L	91	NJ
	unknown	13.467	9.61	ug/L	33	J
000057-10-3	n-Hexadecanoic acid	13.932	8.2	ug/L	98	NJ

Quantitation Report

12/22/2022

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2012.D
Acq On : 20 Dec 2022 17:13
Operator : NM1
Sample : |604449010|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 21 12:26:20 2022
Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	5.748	5.754	1.000	132035	40.00	ng/uL	0.00
22) A Naphthalene-d8	136	7.690	7.695	1.000	541152	40.00	ng/uL	0.00
39) A Acenaphthene-d10	164	10.525	10.525	1.000	313708	40.00	ng/uL	0.00
64) A Phenanthrene-d10	188	12.953	12.948	1.000	687110	40.00	ng/uL	0.00
80) A Chrysene-d12	240	17.291	17.296	1.000	779756	40.00	ng/uL	0.00
88) A Perylene-d12	264	20.313	20.307	1.000	771563	40.00	ng/uL	0.00
96) B 1,4-Dichlorobenzene-d4	152	5.748	5.754	1.000	132035	40.00	ng/uL	0.00
112) B Naphthalene-d8	136	7.690	7.695	1.000	541152	40.00	ng/uL	0.00
120) B Acenaphthene-d10	164	10.525	10.525	1.000	313708	40.00	ng/uL	0.00
129) B Phenanthrene-d10	188	12.953	12.948	1.000	687110	40.00	ng/uL	0.00
142) B Chrysene-d12	240	17.291	17.296	1.000	779756	40.00	ng/uL	0.00
148) B Perylene-d12	264	20.313	20.307	1.000	771563	40.00	ng/uL	0.00
151) J Naphthalene-d8	136	7.690	7.695	1.000	541152	40.00	ng/uL	0.00
153) J Phenanthrene-d10	188	12.953	12.948	1.000	687110	40.00	ng/uL	0.00
156) J Chrysene-d12	240	17.291	17.296	1.000	779756	40.00	ng/uL	0.00
159) D Naphthalene-d8	136	7.690	7.695	1.000	541152	40.00	ng/uL	0.00
161) D Acenaphthene-d10	164	10.525	10.525	1.000	313708	40.00	ng/uL	0.00
164) D Phenanthrene-d10	188	12.953	12.948	1.000	687110	40.00	ng/uL	0.00
171) D Chrysene-d12	240	17.291	17.296	1.000	779756	40.00	ng/uL	0.00
173) E Naphthalene-d8	136	7.690	7.695	1.000	541152	40.00	ng/uL	0.00
175) E Perylene-d12	264	20.313	20.307	1.000	771563	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	3.962	3.951	0.689	273002	61.93	ng/uL	0.01
8) Phenol-d5	99	5.214	5.203	0.907	343251	61.59	ng/uL	0.01
23) Nitrobenzene-d5	82	6.572	6.577	0.855	215374	38.09	ng/uL	0.00
44) 2-Fluorobiphenyl	172	9.439	9.439	0.897	151758	13.02	ng/uL	0.00
63) 2,4,6-Tribromophenol	330	11.819	11.814	1.123	157677	58.87	ng/uL	0.00
79) p-Terphenyl-d14	244	15.579	15.579	1.203	104653	5.77	ng/uL	0.00

Compound	Amount	Range	Recovery
5) 2-Fluorophenol	100.000	11 - 79	62%
8) Phenol-d5	100.000	15 - 85	62%
23) Nitrobenzene-d5	50.000	39 - 112	76%
44) 2-Fluorobiphenyl	50.000	39 - 112	26%#
63) 2,4,6-Tribromophenol	100.000	37 - 132	59%
79) p-Terphenyl-d14	50.000	24 - 129	12%#

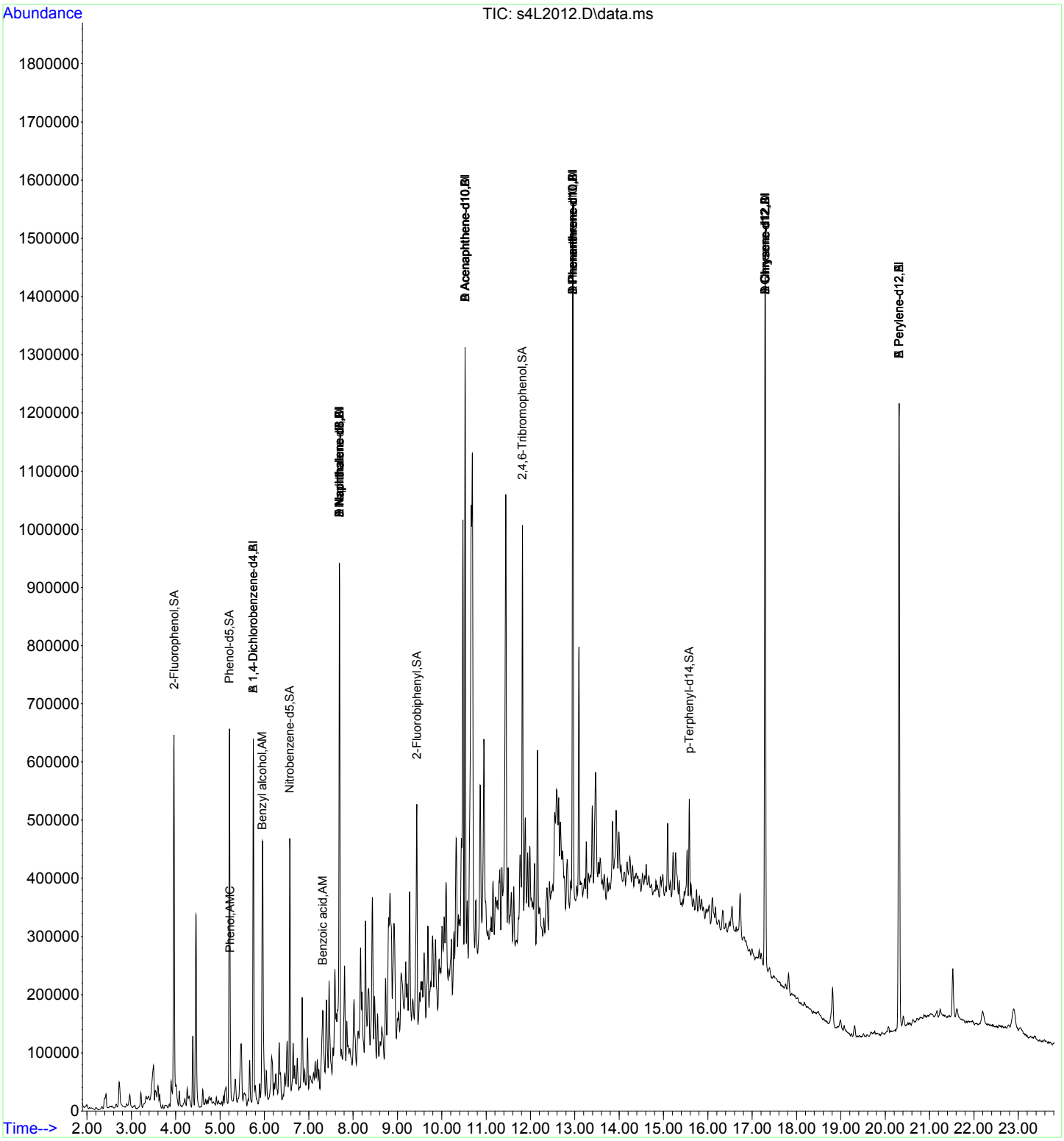
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
9) Phenol	94	5.230	5.224	0.910	41804	6.89	ng/uL	70
17) Benzyl alcohol	108	5.952	5.946	1.035	46258	14.72	ng/uL#	53
30) Benzoic acid	105	7.316	7.310	0.951	58757	21.41	ng/uL	96

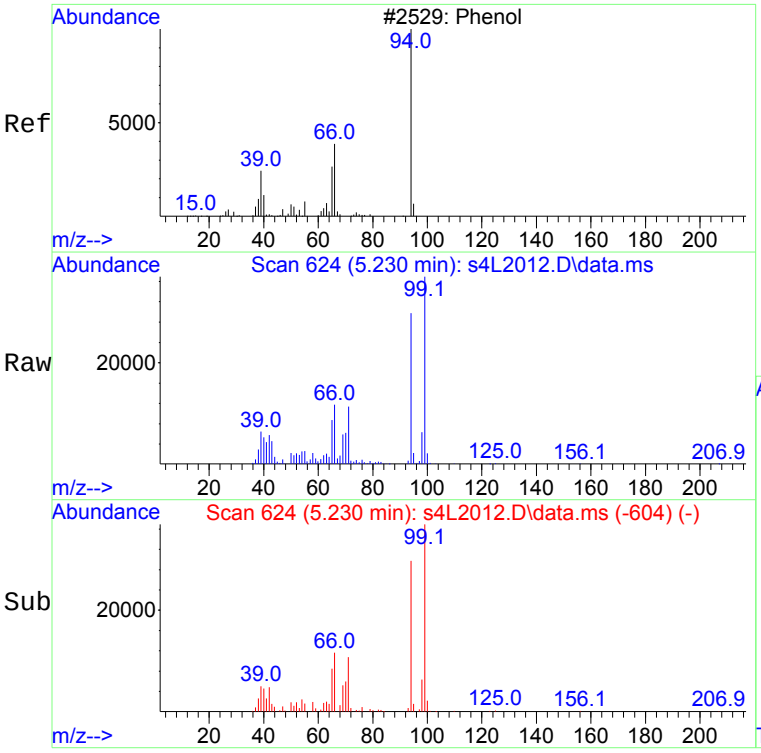
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2012.D
Acq On : 20 Dec 2022 17:13
Operator : NM1
Sample : |604449010|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 21 12:26:20 2022
Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration





Ref

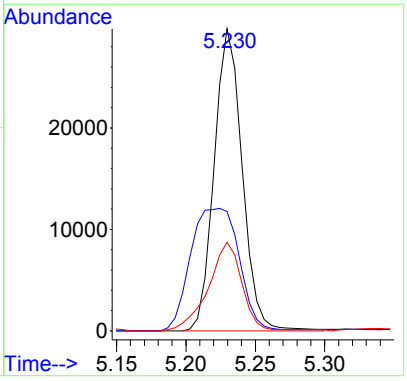
Raw

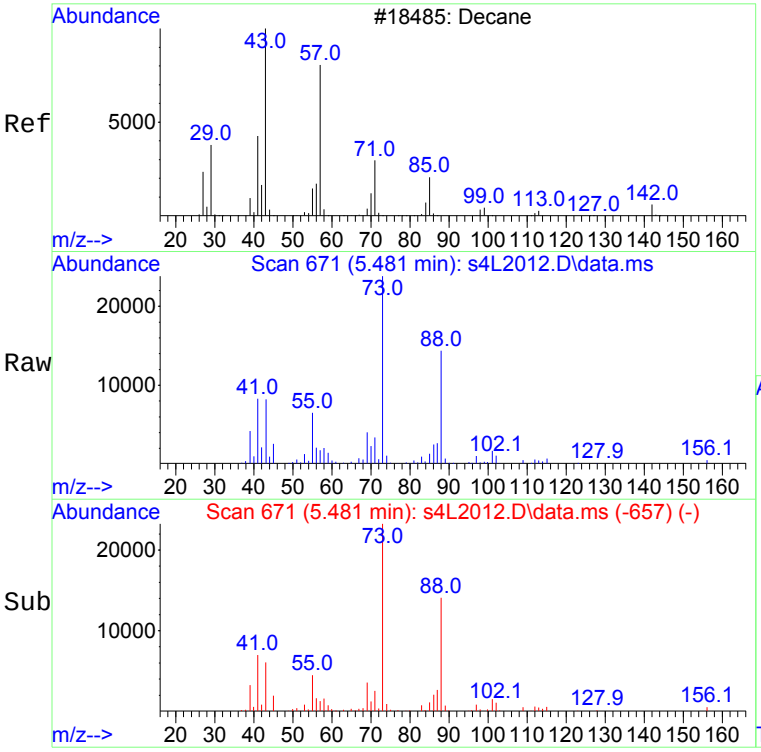
Sub

#9
Phenol
Concen: 6.89 ng/uL
RT: 5.230 min Scan# 624
Delta R.T. 0.005 min
Lab File: s4L2012.D
Acq: 20 Dec 2022 17:13

Tgt Ion: 94 Resp: 41804

Ion	Ratio	Lower	Upper
94	100		
66	69.9	11.1	71.1
65	34.9	0.0	60.0





Ref

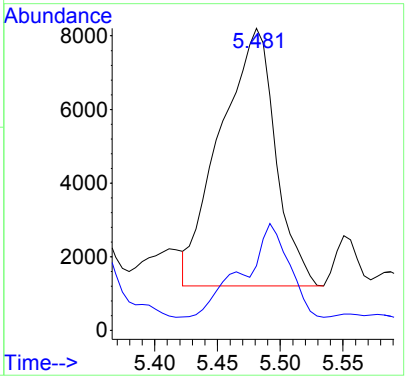
Raw

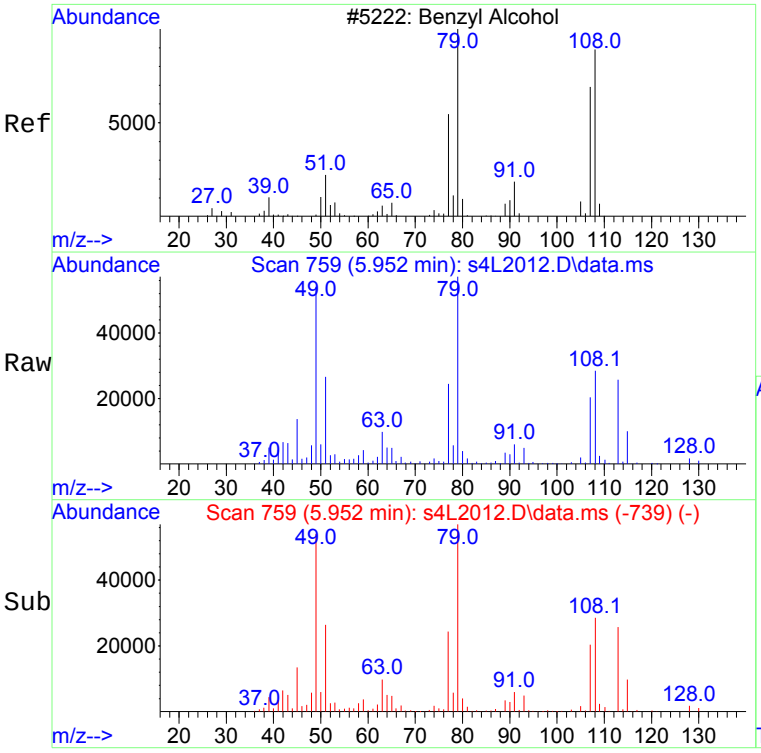
Sub

#12 BEFORE analyst DELETION
n-Decane
Concen: 4.27 ng/uL
RT: 5.481 min Scan# 671
Delta R.T. -0.027 min
Lab File: s4L2012.D
Acq: 20 Dec 2022 17:13

Tgt Ion: 43 Resp: 21354

Ion	Ratio	Lower	Upper
43	100		
57	19.9	78.7	138.7#

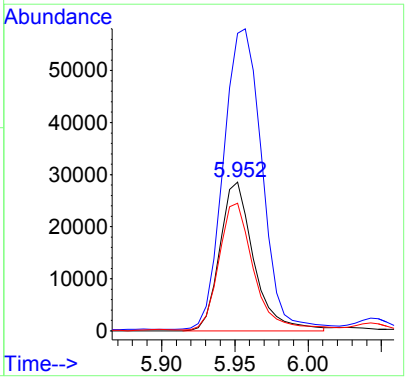


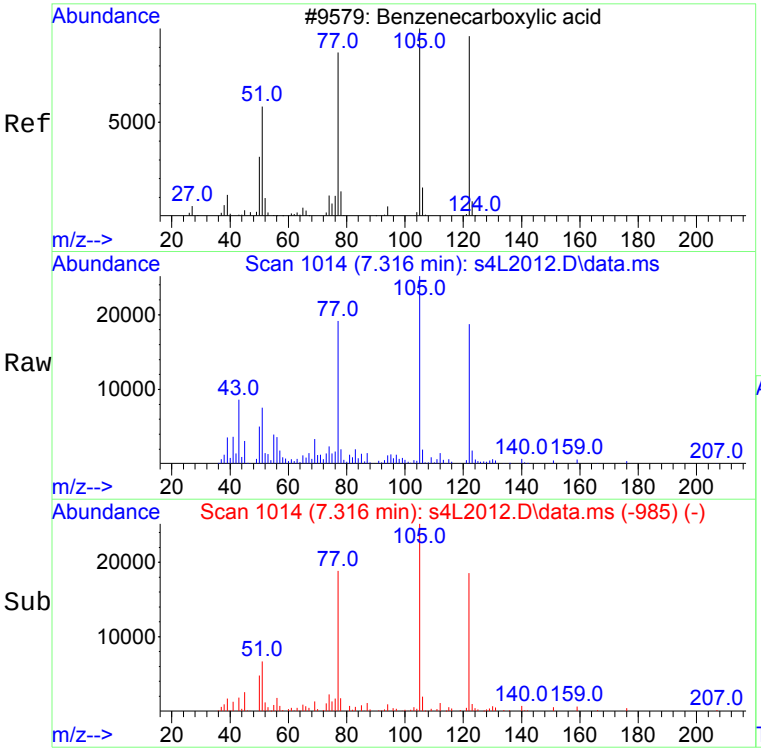


#17
Benzyl alcohol
Concen: 14.72 ng/uL
RT: 5.952 min Scan# 759
Delta R.T. 0.005 min
Lab File: s4L2012.D
Acq: 20 Dec 2022 17:13

Tgt Ion:108 Resp: 46258

Ion	Ratio	Lower	Upper
108	100		
79	228.5	106.7	166.7#
77	86.7	59.8	119.8

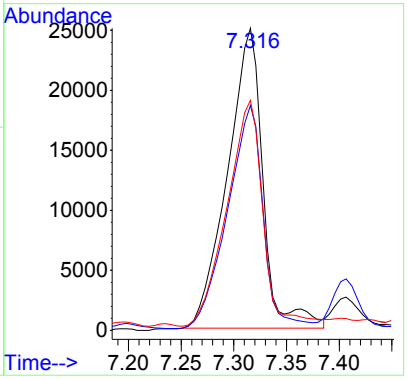


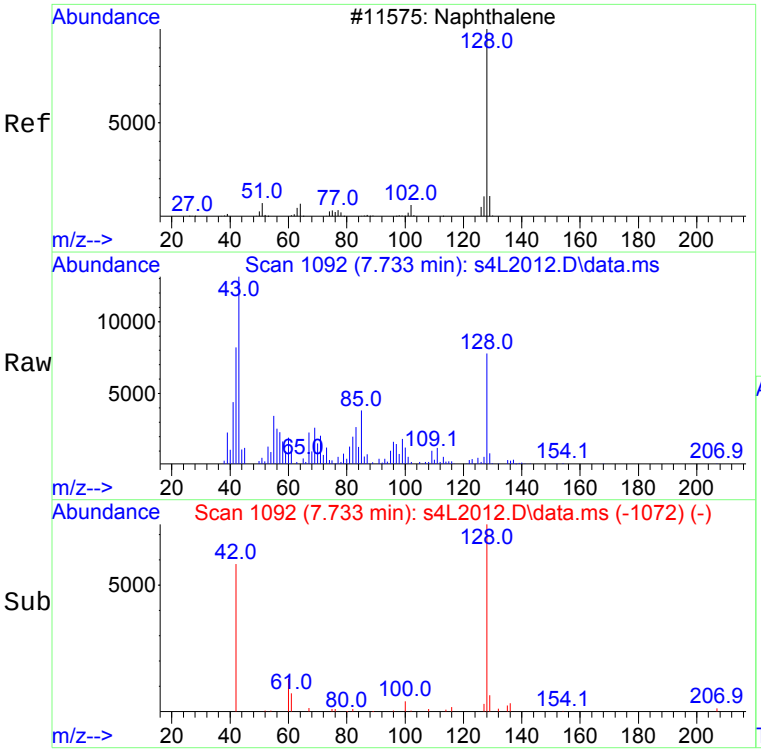


#30
Benzoic acid
Concen: 21.41 ng/uL
RT: 7.316 min Scan# 1014
Delta R.T. 0.005 min
Lab File: s4L2012.D
Acq: 20 Dec 2022 17:13

Tgt Ion:105 Resp: 58757

Ion	Ratio	Lower	Upper
105	100		
122	74.4	50.8	110.8
77	79.0	49.7	109.7

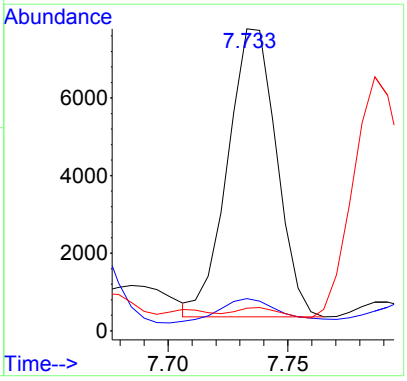


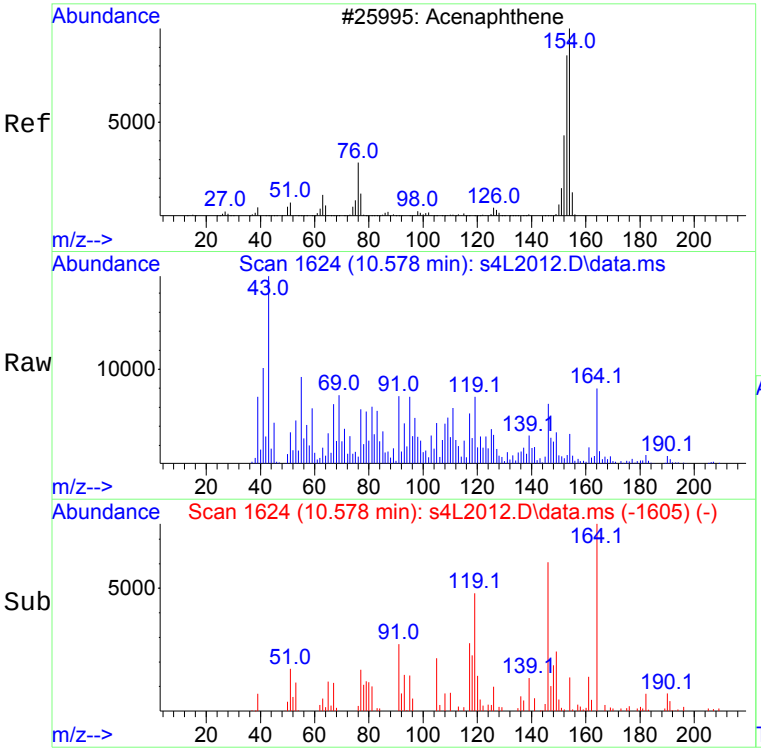


#33 BEFORE analyst DELETION
Naphthalene
Concen: 0.75 ng/uL
RT: 7.733 min Scan# 1092
Delta R.T. 0.005 min
Lab File: s4L2012.D
Acq: 20 Dec 2022 17:13

Tgt Ion:128 Resp: 10477

Ion	Ratio	Lower	Upper
128	100		
129	10.8	0.0	41.1
127	86.9	0.0	43.4#

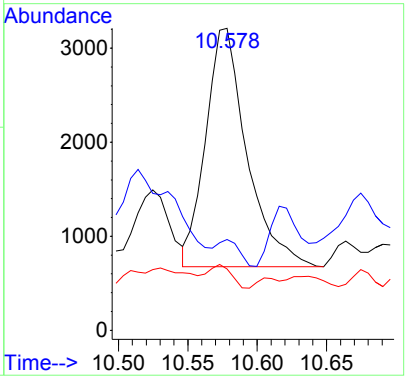


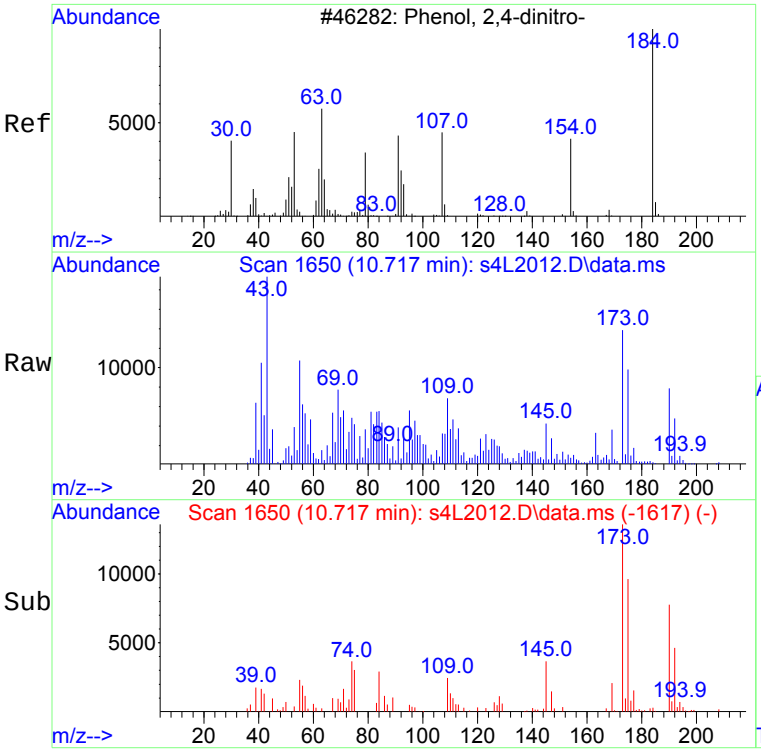


#54 BEFORE analyst DELETION
Acenaphthene
Concen: 0.57 ng/uL
RT: 10.578 min Scan# 1624
Delta R.T. 0.000 min
Lab File: s4L2012.D
Acq: 20 Dec 2022 17:13

Tgt Ion:154 Resp: 5237

Ion	Ratio	Lower	Upper
154	100		
153	0.0	83.8	143.8#
152	0.0	23.0	83.0#

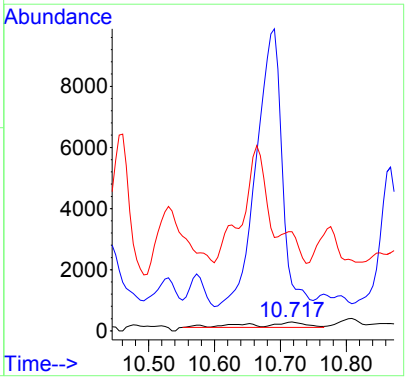


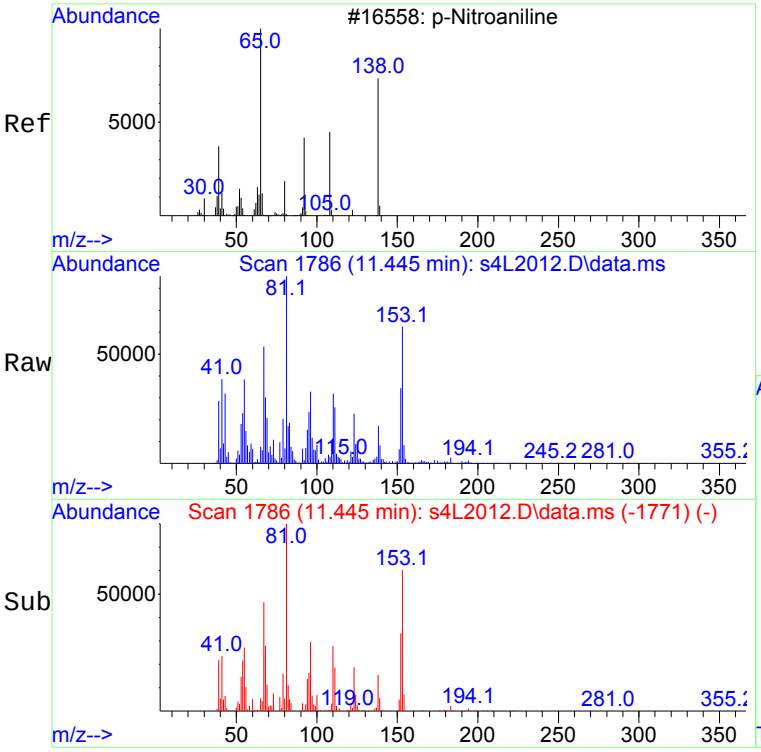


#55 BEFORE analyst DELETION
2,4-Dinitrophenol
Concen: 8.04 ng/uL
RT: 10.717 min Scan# 1650
Delta R.T. 0.075 min
Lab File: s4L2012.D
Acq: 20 Dec 2022 17:13

Tgt Ion:184 Resp: 1002

Ion	Ratio	Lower	Upper
184	100		
63	2444.2	41.2	101.2#
107	901.3	14.7	74.7#

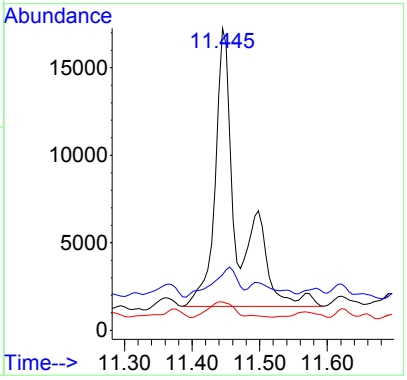


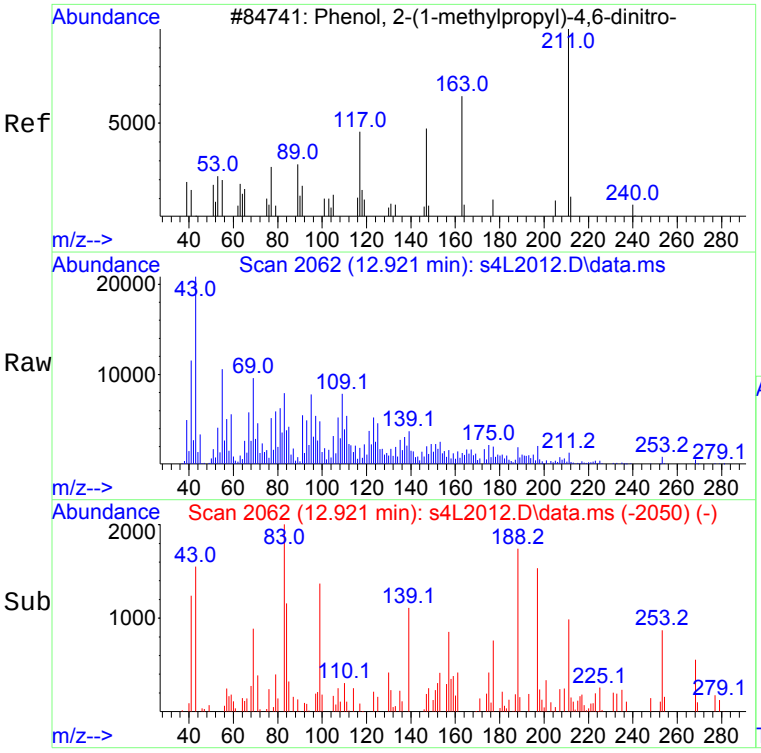


#62 BEFORE analyst DELETION
p-Nitroaniline
Concen: 13.50 ng/uL
RT: 11.445 min Scan# 1786
Delta R.T. -0.021 min
Lab File: s4L2012.D
Acq: 20 Dec 2022 17:13

Tgt Ion:138 Resp: 37537

Ion	Ratio	Lower	Upper
138	100		
108	17.6	47.9	107.9#
92	6.7	24.3	84.3#

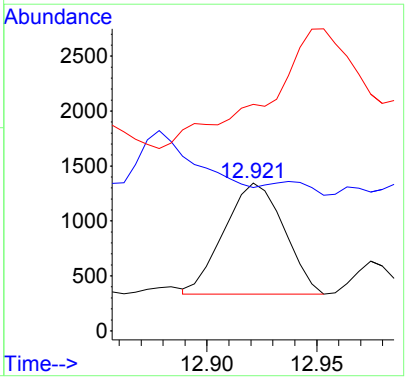


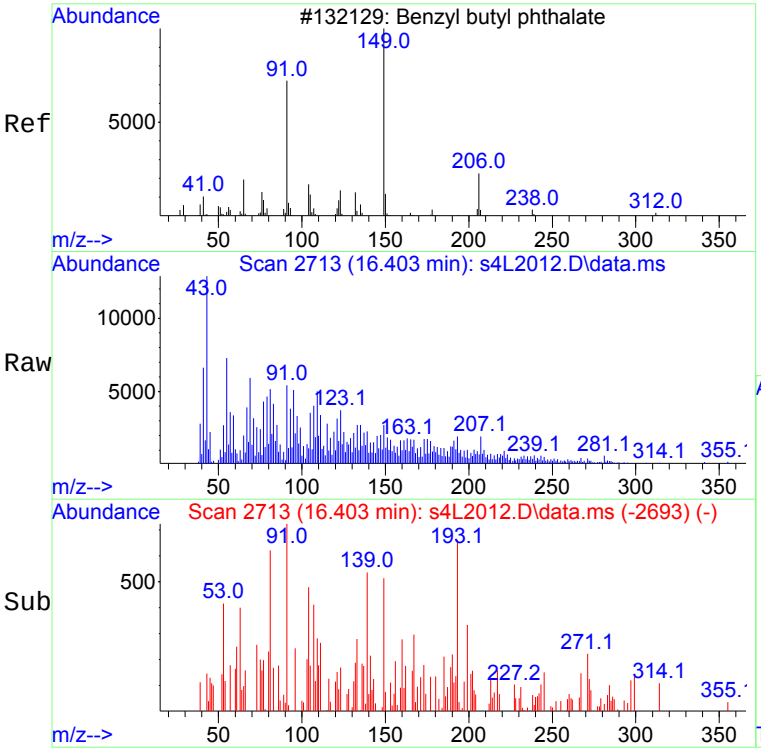


#72 BEFORE analyst DELETION
Dinoseb
Concen: 4.90 ng/uL
RT: 12.921 min Scan# 2062
Delta R.T. -0.037 min
Lab File: s4L2012.D
Acq: 20 Dec 2022 17:13

Tgt Ion:211 Resp: 1914

Ion	Ratio	Lower	Upper
211	100		
163	0.0	13.3	73.3#
147	62.8	0.0	59.2#

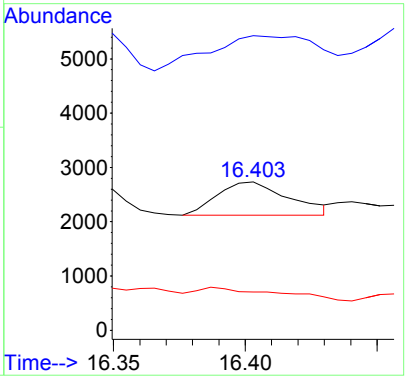


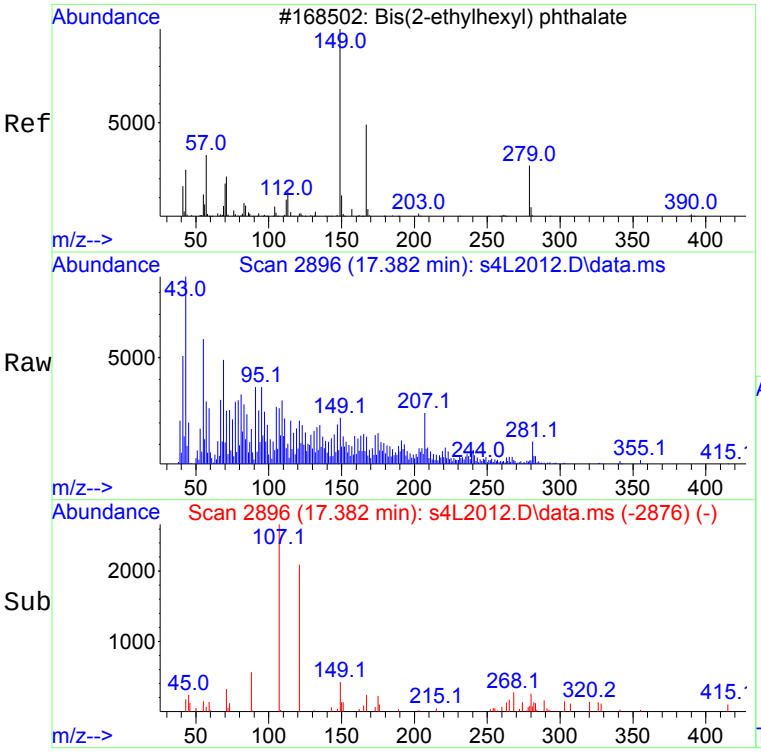


#81 BEFORE analyst DELETION
Butylbenzylphthalate
Concen: 0.76 ng/uL
RT: 16.403 min Scan# 2713
Delta R.T. 0.005 min
Lab File: s4L2012.D
Acq: 20 Dec 2022 17:13

Tgt Ion:149 Resp: 1148

Ion	Ratio	Lower	Upper
149	100		
91	111.2	49.8	109.8#
206	18.4	0.0	52.5

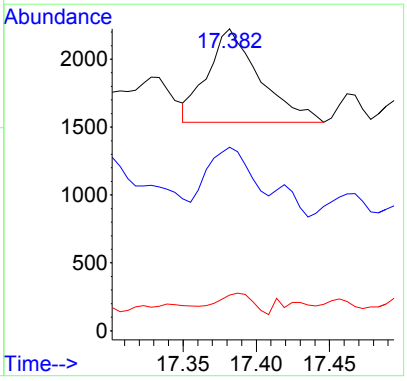


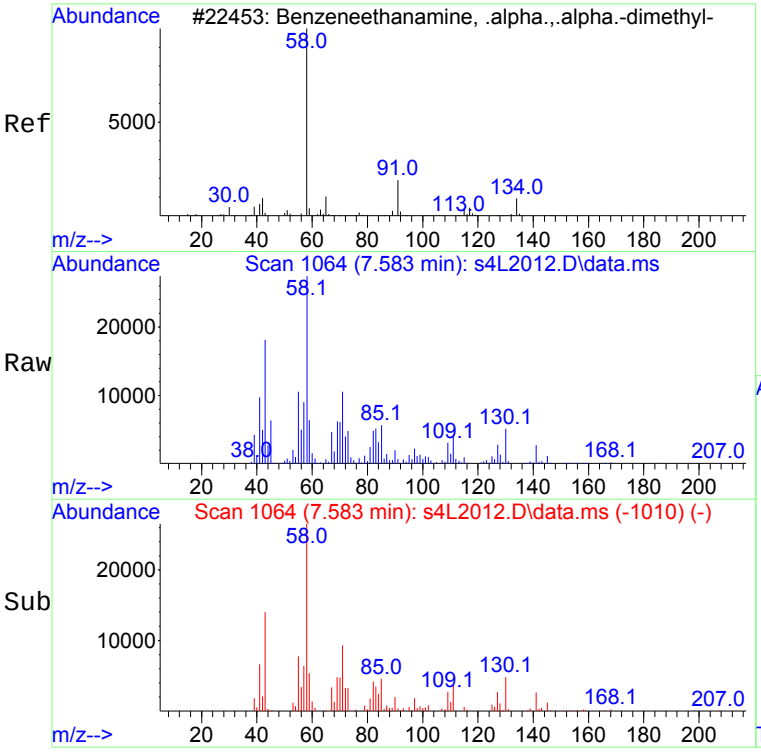


#82 BEFORE analyst DELETION
bis(2-Ethylhexyl)phthalate
Concen: 0.53 ng/uL
RT: 17.382 min Scan# 2896
Delta R.T. 0.005 min
Lab File: s4L2012.D
Acq: 20 Dec 2022 17:13

Tgt Ion:149 Resp: 1706

Ion	Ratio	Lower	Upper
149	100		
167	51.2	0.0	57.6
279	15.8	0.0	35.2

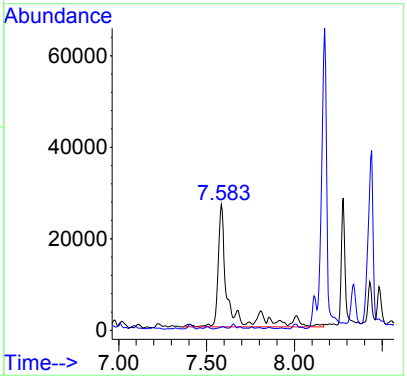


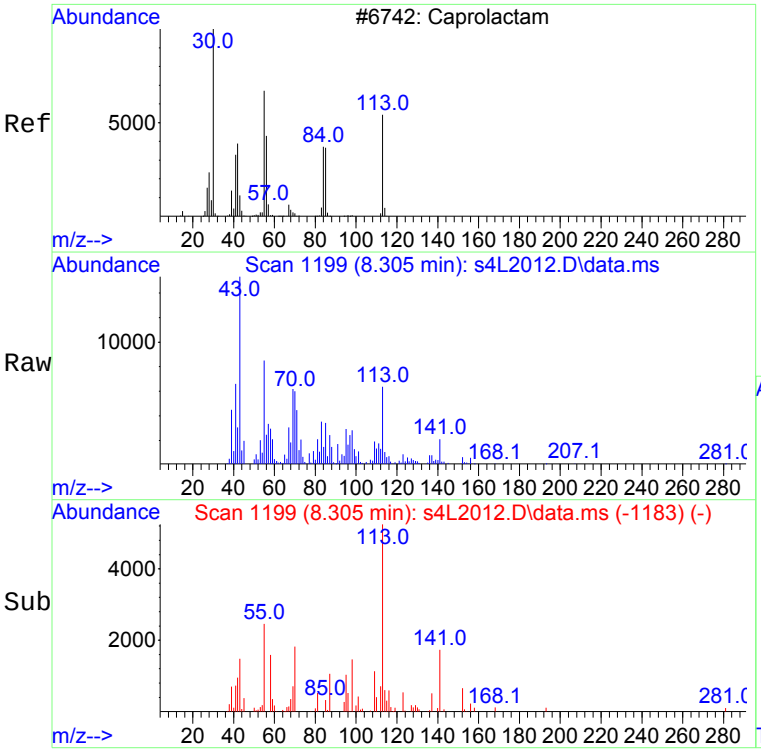


#114 BEFORE analyst DELETION
a,a-Dimethylphenethylamine
Concen: 9.17 ng/uL
RT: 7.583 min Scan# 1064
Delta R.T. 0.091 min
Lab File: s4L2012.D
Acq: 20 Dec 2022 17:13

Tgt Ion: 58 Resp: 109964

Ion	Ratio	Lower	Upper
58	100		
91	1.2	0.0	43.0

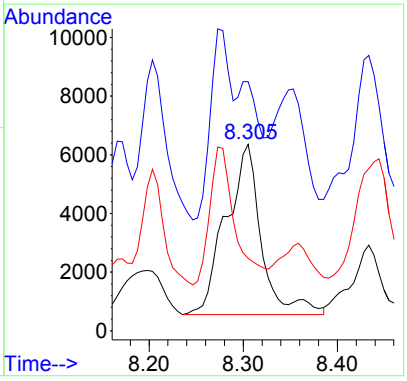


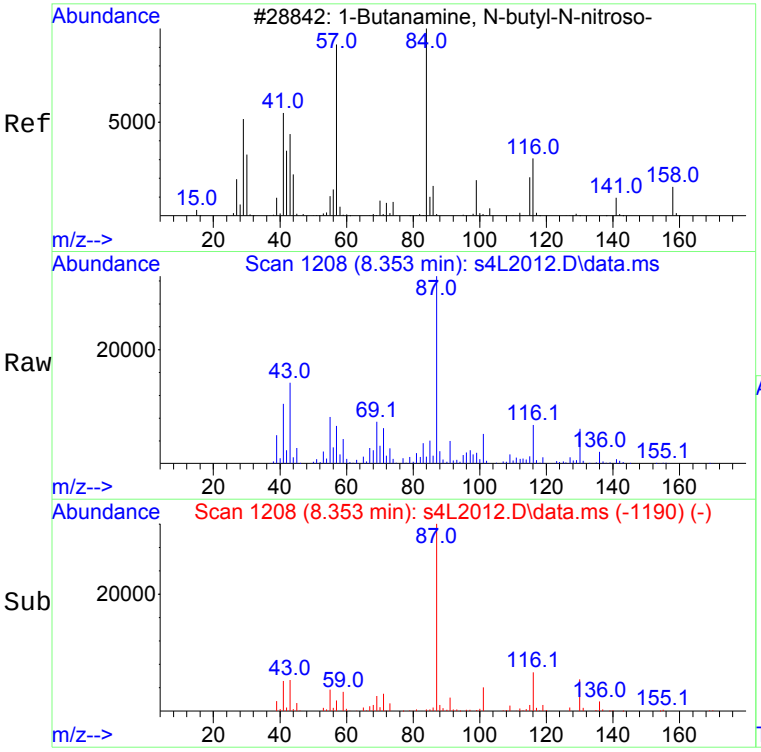


#117 BEFORE analyst DELETION
Caprolactam
Concen: 11.69 ng/uL
RT: 8.305 min Scan# 1199
Delta R.T. -0.016 min
Lab File: s4L2012.D
Acq: 20 Dec 2022 17:13

Tgt Ion:113 Resp: 15186

Ion	Ratio	Lower	Upper
113	100		
55	186.8	166.3	226.3
56	79.6	101.7	161.7#

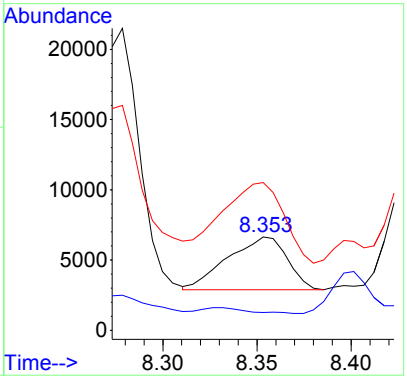


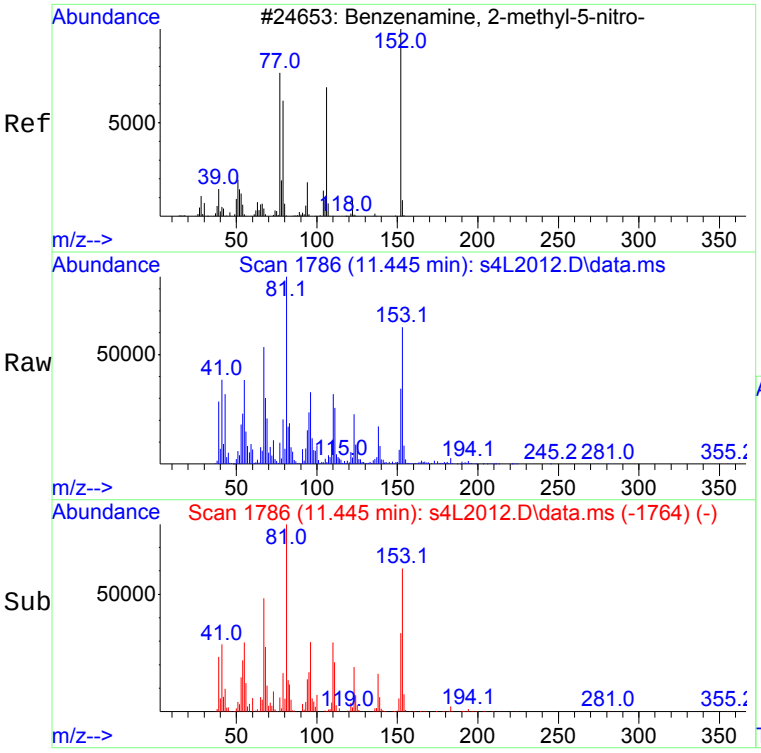


#118 BEFORE analyst DELETION
N-Nitrosodi-n-butylamine
Concen: 3.17 ng/uL
RT: 8.353 min Scan# 1208
Delta R.T. -0.006 min
Lab File: s4L2012.D
Acq: 20 Dec 2022 17:13

Tgt Ion: 57 Resp: 8246

Ion	Ratio	Lower	Upper
57	100		
84	0.0	123.5	183.5#
41	164.9	65.2	125.2#

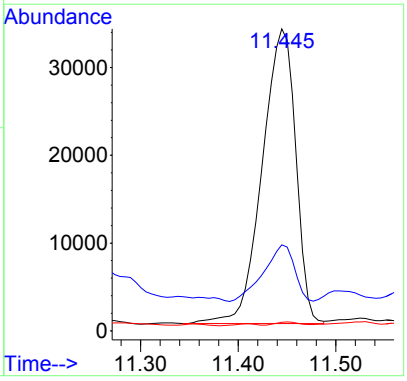


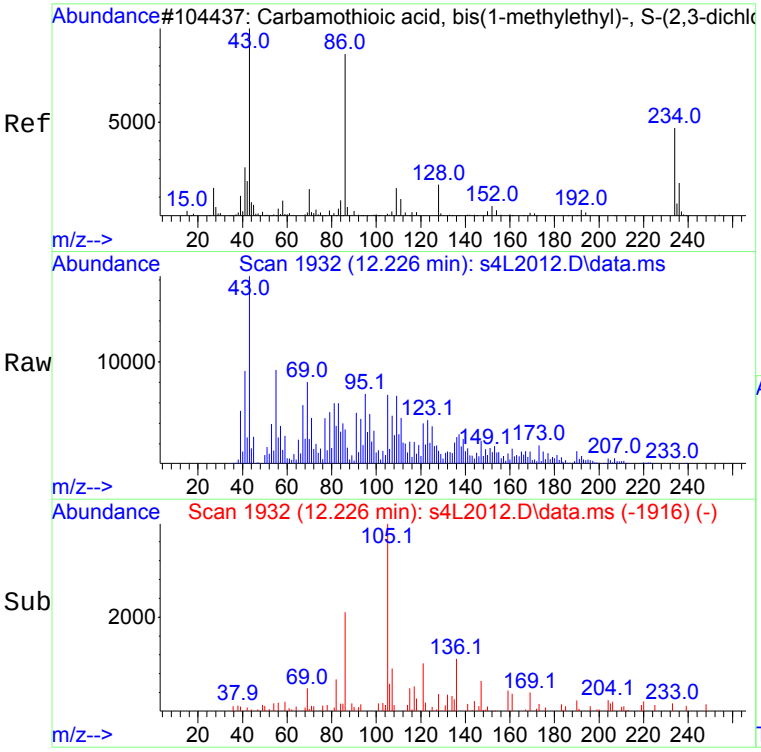


#128 BEFORE analyst DELETION
5-Nitro-o-toluidine
Concen: 28.42 ng/uL
RT: 11.445 min Scan# 1786
Delta R.T. 0.016 min
Lab File: s4L2012.D
Acq: 20 Dec 2022 17:13

Tgt Ion:152 Resp: 80102

Ion	Ratio	Lower	Upper
152	100		
77	17.6	76.7	136.7#
106	0.0	52.6	112.6#

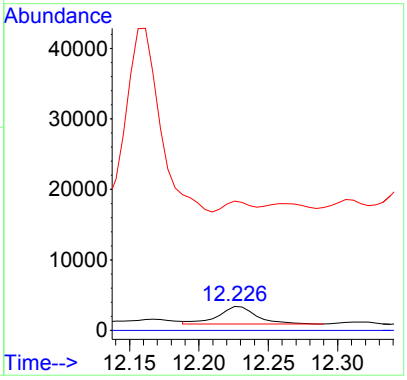


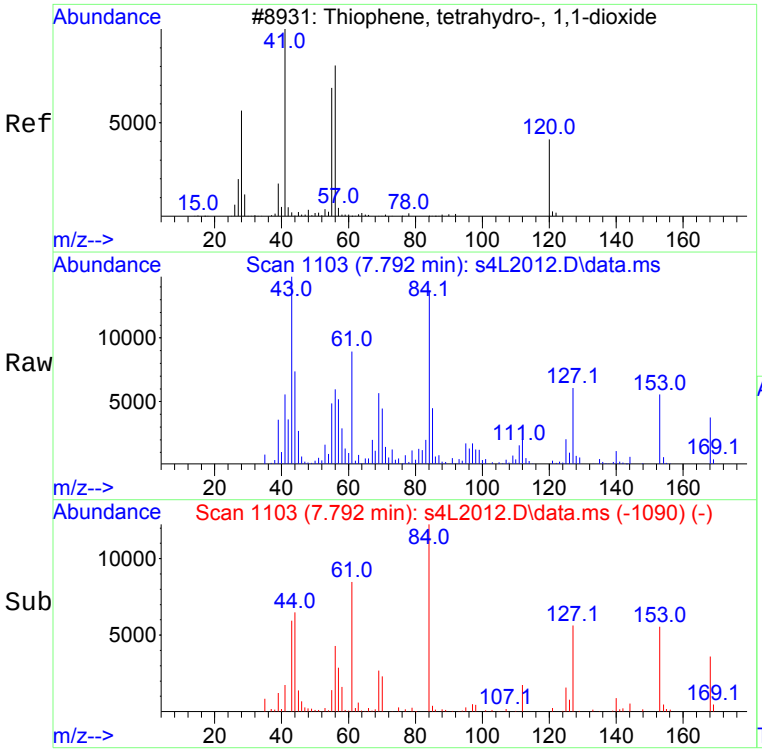


#134 BEFORE analyst DELETION
Trans Diallate
Concen: 0.53 ng/uL
RT: 12.226 min Scan# 1932
Delta R.T. -0.016 min
Lab File: s4L2012.D
Acq: 20 Dec 2022 17:13

Tgt Ion: 86 Resp: 4729

Ion	Ratio	Lower	Upper
86	100		
234	0.0	17.2	77.2#
43	41.6	75.7	135.7#

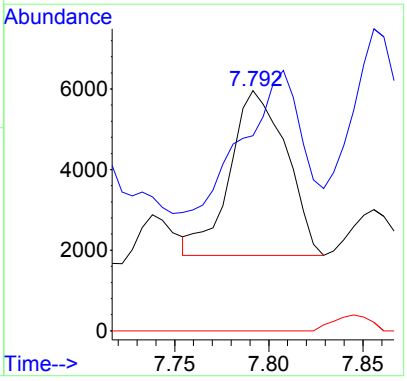




#152 BEFORE analyst DELETION
Sulfolane
Concen: 4.76 ng/uL
RT: 7.792 min Scan# 1103
Delta R.T. -0.032 min
Lab File: s4L2012.D
Acq: 20 Dec 2022 17:13

Tgt Ion: 56 Resp: 8550

Ion	Ratio	Lower	Upper
56	100		
55	85.7	72.6	108.8
120	0.0	29.8	44.6#



Library Search Compound Report

12/22/2022

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2012.D
Acq On : 20 Dec 2022 17:13
Operator : NM1
Sample : |604449010|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

12/22/2022

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

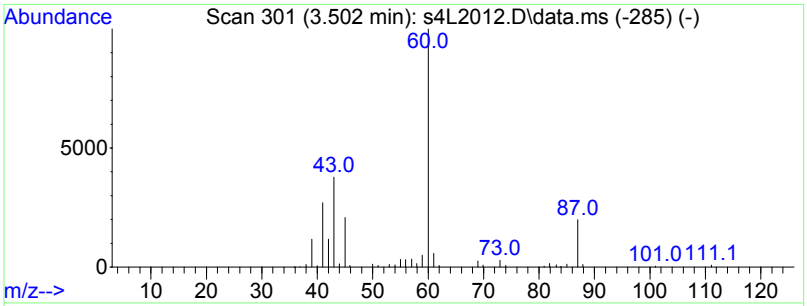
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

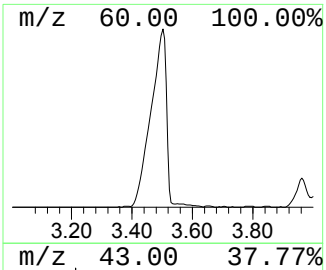
****

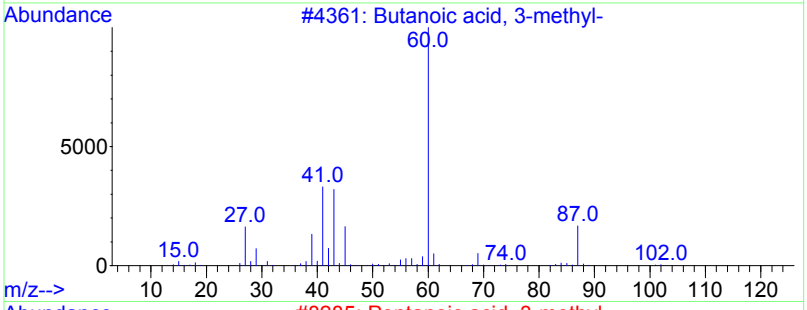
Peak Number 1 unknown Concentration Rank 15

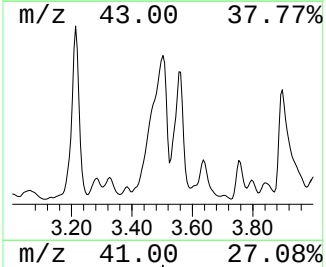
R.T.	EstConc	Area	Relative to ISTD	R.T.
3.502	11.74 ng/uL	256728	A 1,4-Dichlorobenzene-d4	5.748

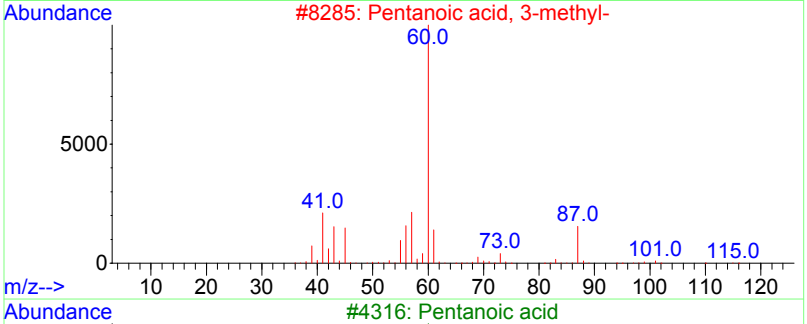
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butanoic acid, 3-methyl-	102	C5H10O2	000503-74-2	83
2	Pentanoic acid, 3-methyl-	116	C6H12O2	000105-43-1	50
3	Pentanoic acid	102	C5H10O2	000109-52-4	38
4	Butanoic acid, 3-methyl-	102	C5H10O2	000503-74-2	37
5	Urea, N-methyl-N-nitroso-	103	C2H5N3O2	000684-93-5	33

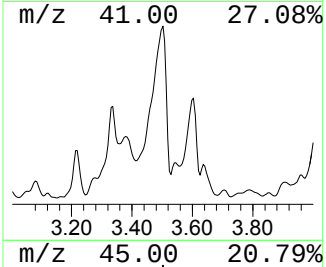


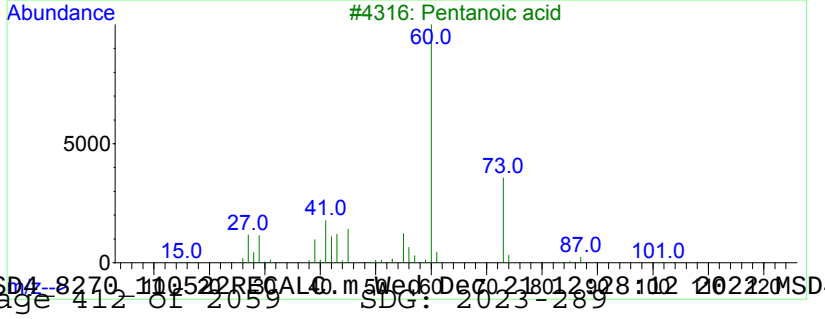


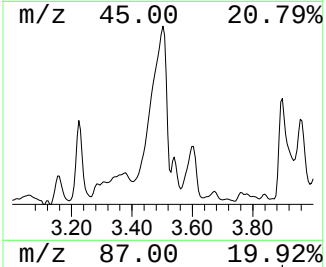


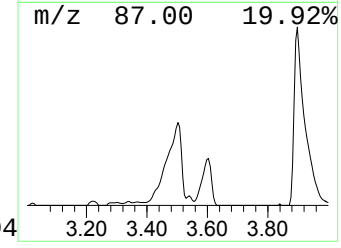












Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2012.D
Acq On : 20 Dec 2022 17:13
Operator : NM1
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Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

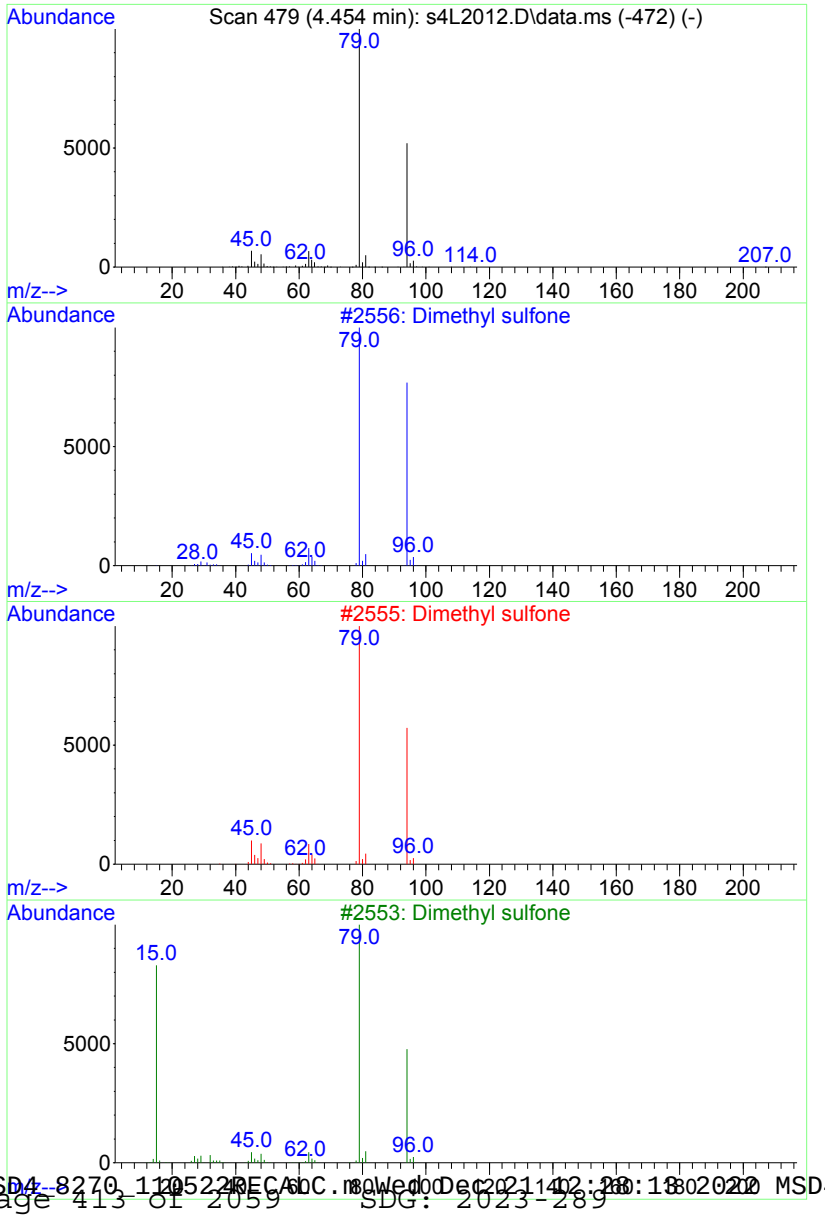
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

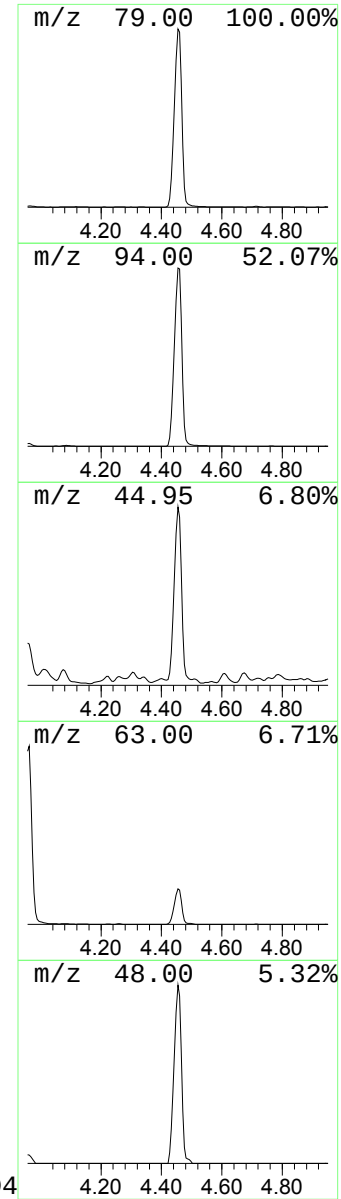
****

Peak Number 2 Dimethyl sulfone Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.454	27.57 ng/uL	602707	A 1,4-Dichlorobenzene-d4	5.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dimethyl sulfone	94	C2H6O2S	000067-71-0	94
2	Dimethyl sulfone	94	C2H6O2S	000067-71-0	94
3	Dimethyl sulfone	94	C2H6O2S	000067-71-0	91
4	Methanesulfonylacetic acid	138	C3H6O4S	002516-97-4	47
5	Dimethyl sulfone	94	C2H6O2S	000067-71-0	43





Library Search Compound Report

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Data File : s4L2012.D
Acq On : 20 Dec 2022 17:13
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Sample : |604449010|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

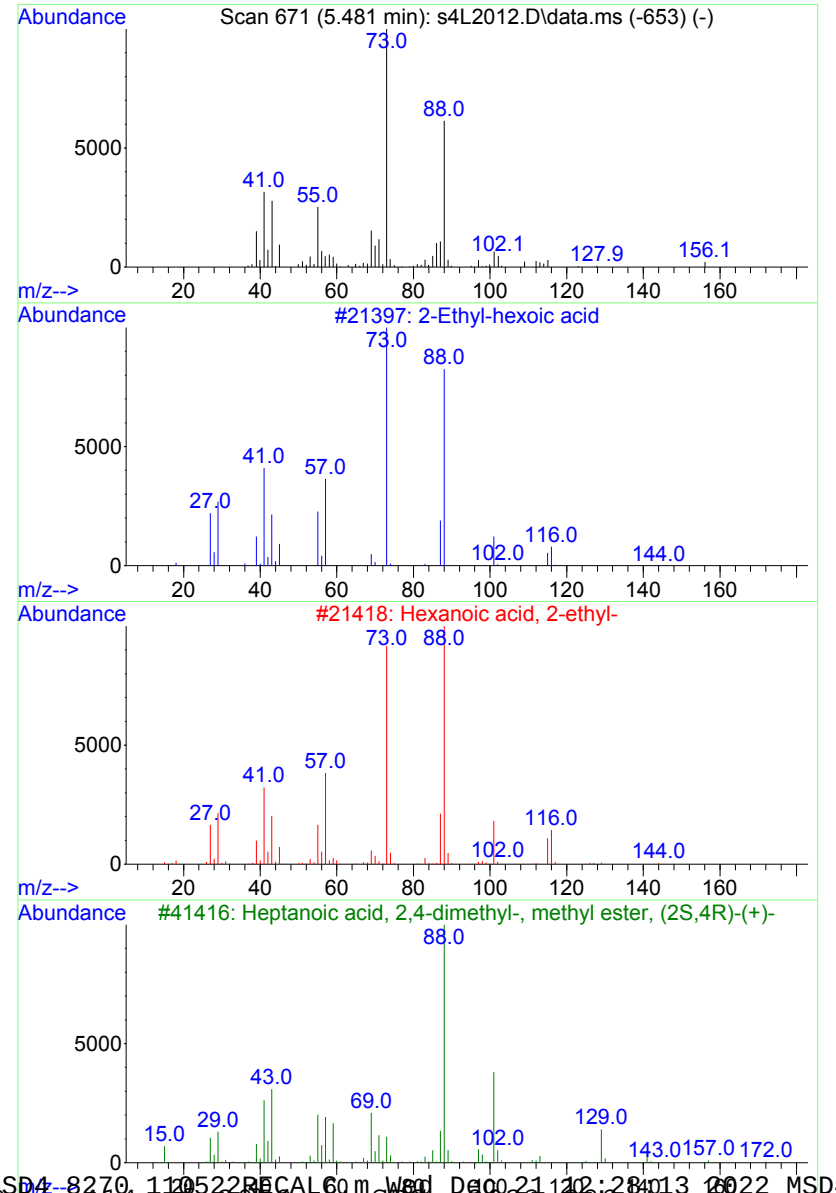
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

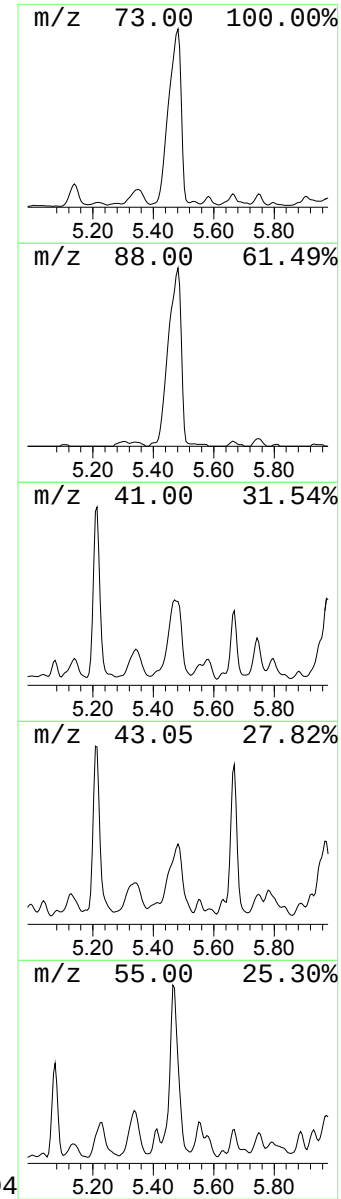
****

Peak Number 3 unknown Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.481	13.85 ng/uL	302723	A 1,4-Dichlorobenzene-d4	5.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Ethyl-hexoic acid	144	C8H16O2	1000411-45-0	47
2	Hexanoic acid, 2-ethyl-	144	C8H16O2	000149-57-5	47
3	Heptanoic acid, 2,4-dimethyl-, m...	172	C10H20O2	018450-78-7	42
4	Heptanoic acid, 2-ethyl-	158	C9H18O2	003274-29-1	42
5	Heptanoic acid, 2,4-dimethyl-, m...	172	C10H20O2	018524-86-2	40





Library Search Compound Report

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Data File : s4L2012.D
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Operator : NM1
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Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

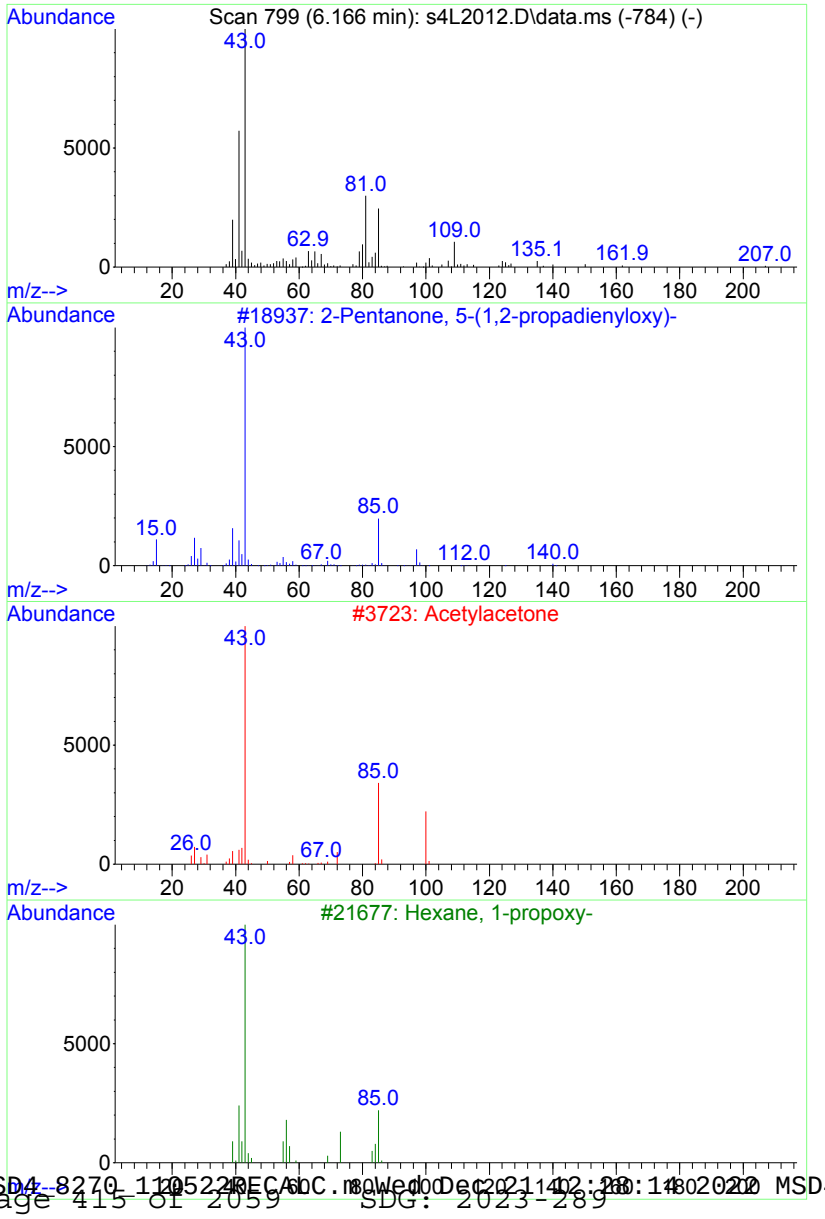
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

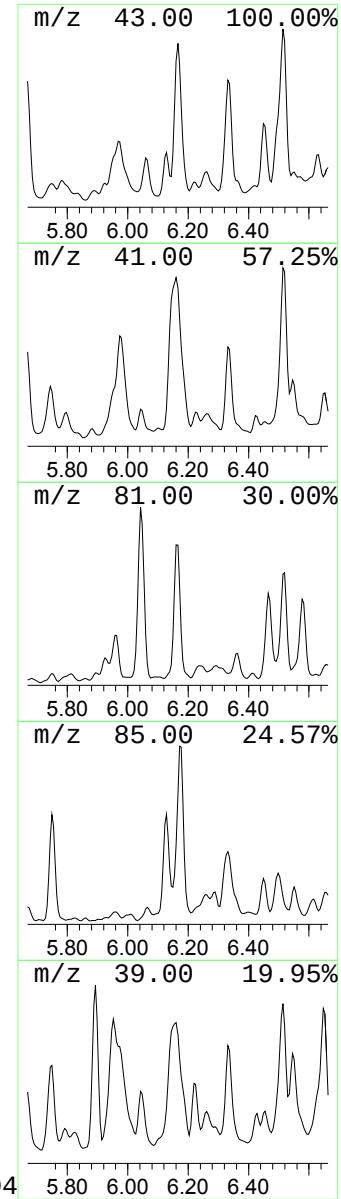
****

Peak Number 4 unknown Concentration Rank 24

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.166	9.71 ng/uL	212189	B 1,4-Dichlorobenzene-d4	5.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 5-(1,2-propadienylo...	140	C8H12O2	055702-69-7	35
2	Acetylacetone	100	C5H8O2	000123-54-6	35
3	Hexane, 1-propoxy-	144	C9H20O	053685-78-2	25
4	Sulfurous acid, hexyl 2-propyl e...	208	C9H20O3S	1000309-11-7	17
5	Acetylacetone	100	C5H8O2	000123-54-6	17





Library Search Compound Report

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Data File : s4L2012.D
Acq On : 20 Dec 2022 17:13
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Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

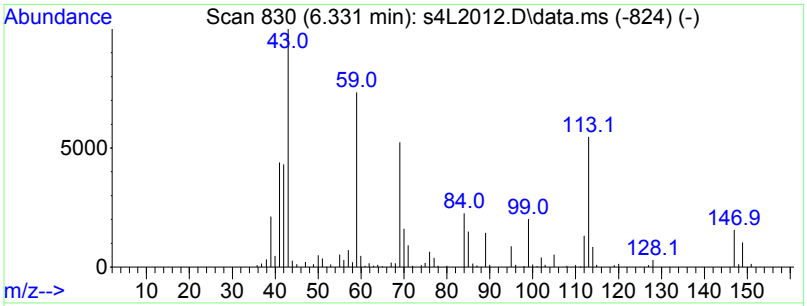
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

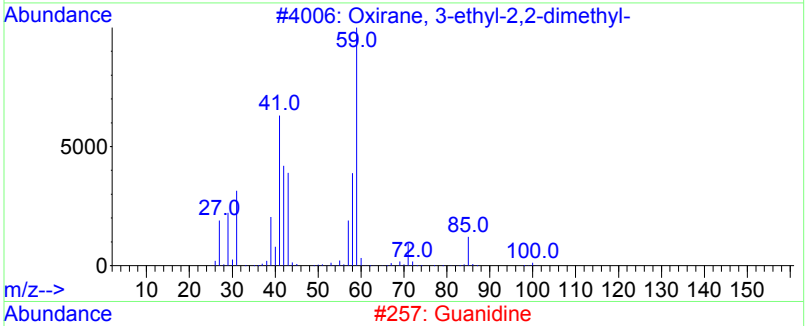
****

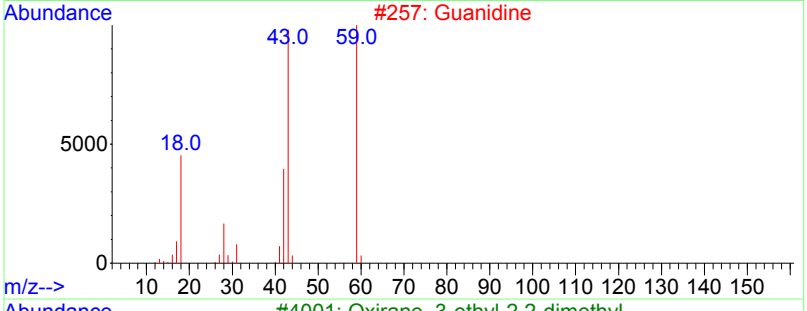
Peak Number 5 unknown Concentration Rank 17

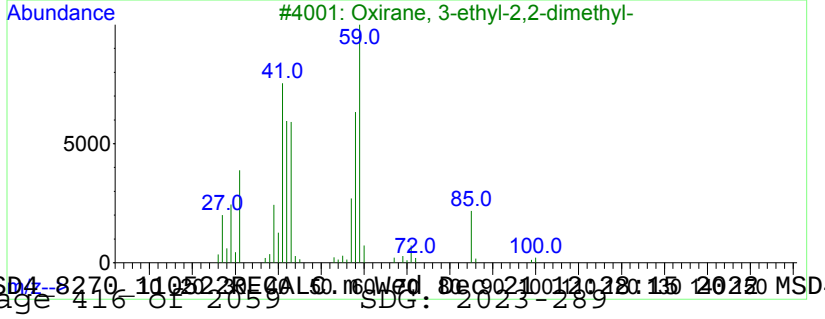
R.T.	EstConc	Area	Relative to ISTD	R.T.
6.331	11.08 ng/uL	242322	B 1,4-Dichlorobenzene-d4	5.748

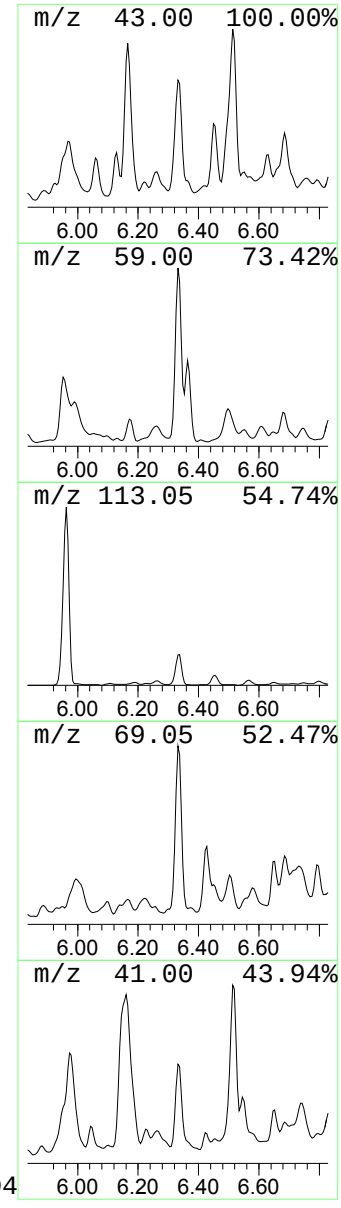
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Oxirane, 3-ethyl-2,2-dimethyl-	100	C6H12O	001192-22-9	35
2	Guanidine	59	CH5N3	000113-00-8	35
3	Oxirane, 3-ethyl-2,2-dimethyl-	100	C6H12O	001192-22-9	35
4	Acetone, dipentyl acetal	216	C13H28O2	010076-57-0	32
5	Oxetane, 2,2,3-trimethyl-	100	C6H12O	023120-43-6	25











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Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

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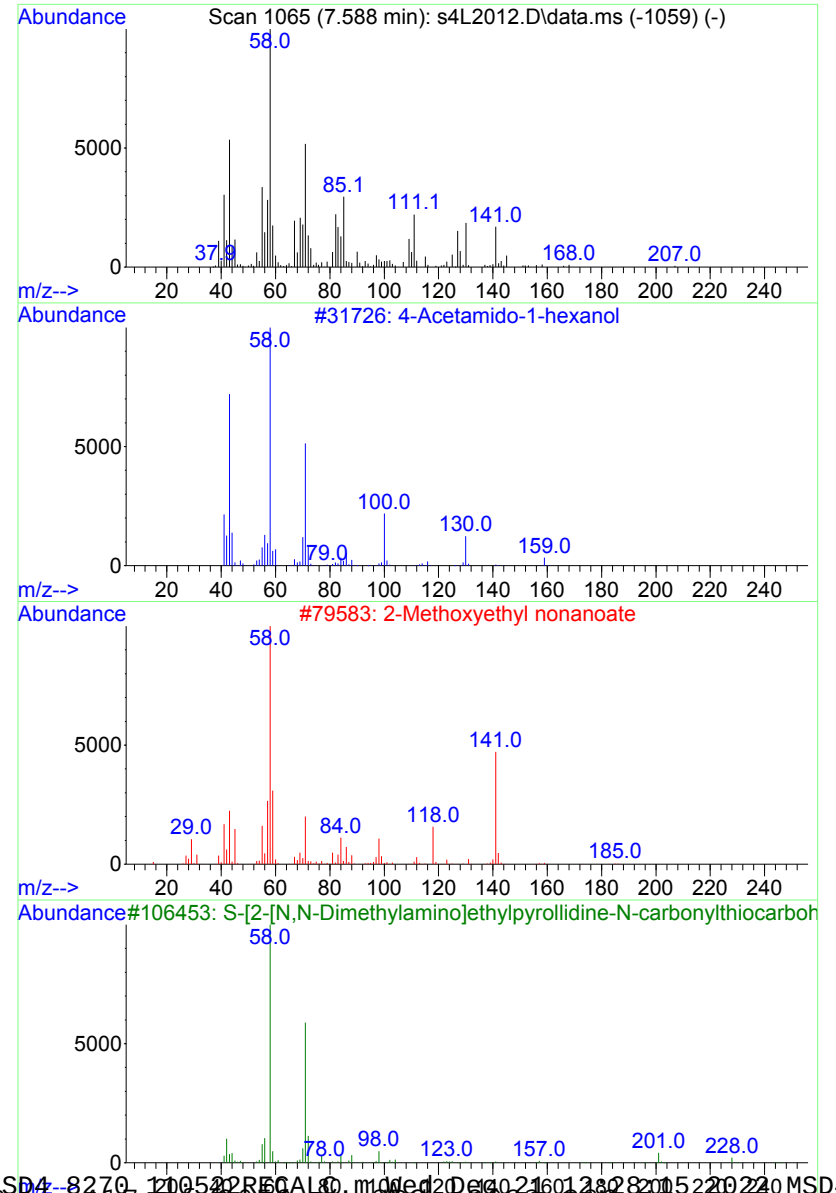
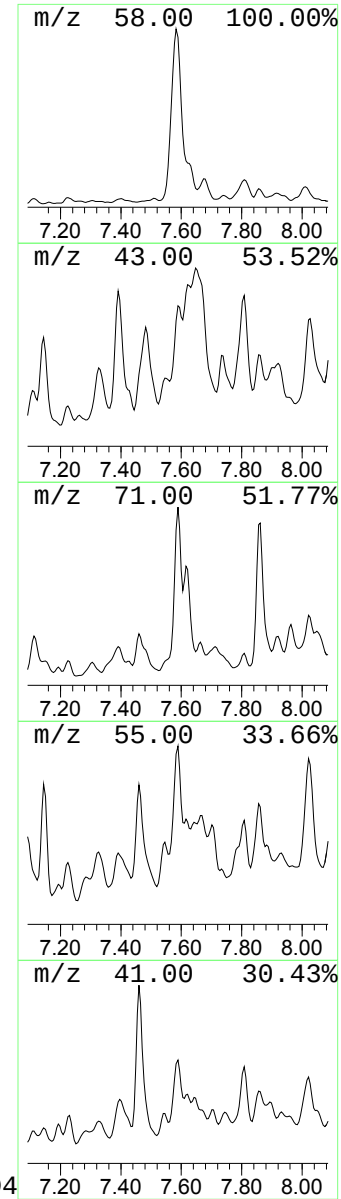
Peak Number 6 unknown Concentration Rank 28

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.588	9.16 ng/uL	341969	A Naphthalene-d8	7.690

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4-Acetamido-1-hexanol	159	C8H17NO2	1000213-28-5	43
2	2-Methoxyethyl nonanoate	216	C12H24O3	1000378-25-1	38
3	S-[2-[N,N-Dimethylamino]ethylpyr...	245	C10H19N3O2S	1000212-14-2	38
4	3-Octen-2-ol, 2-methyl-, (Z)-	142	C9H18O	018521-07-8	35
5	Acetic acid, 2-(dimethylamino)et...	131	C6H13NO2	001421-89-2	30





Library Search Compound Report

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Sample : |604449010|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

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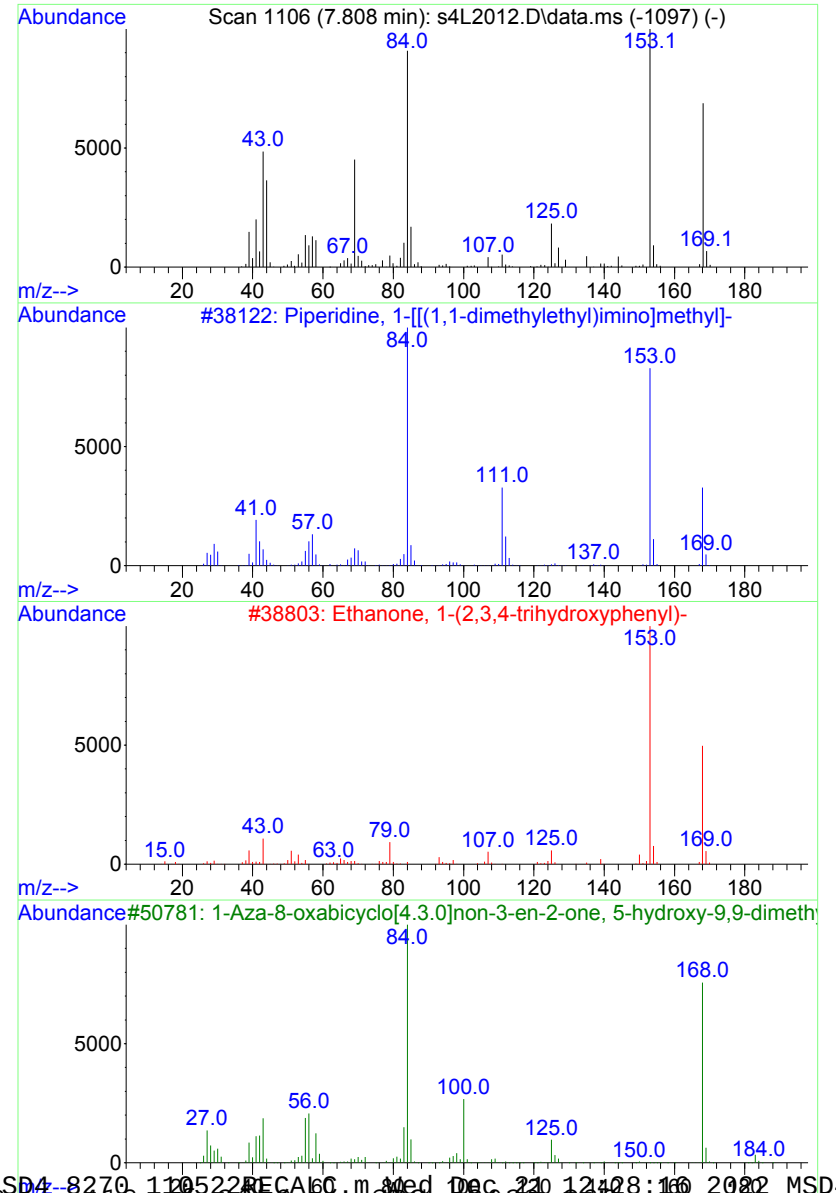
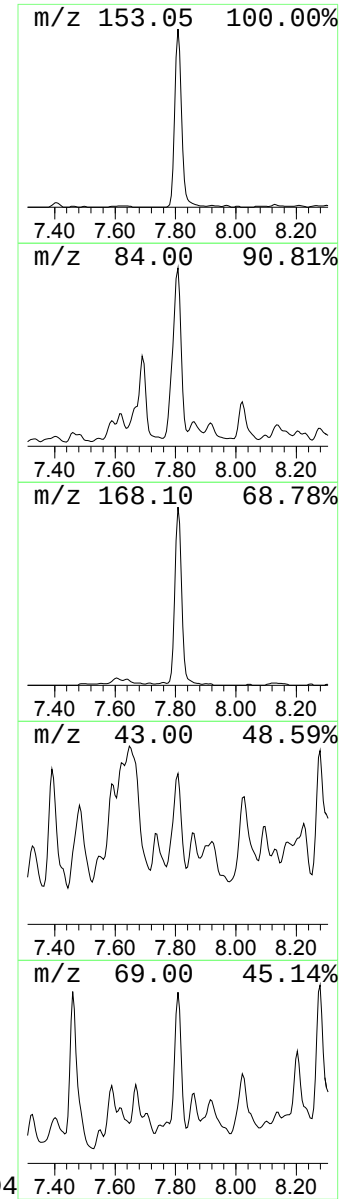
Peak Number 7 unknown Concentration Rank 27

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.808	9.35 ng/uL	349287	E Naphthalene-d8	7.690

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Piperidine, 1-[[(1,1-dimethyleth...	168	C10H20N2	085152-52-9	45
2	Ethanone, 1-(2,3,4-trihydroxyphe...	168	C8H8O4	000528-21-2	38
3	1-Aza-8-oxabicyclo[4.3.0]non-3-e...	183	C9H13NO3	1000163-35-1	37
4	5-Acetyl-2-methyl-3-thiophenecar...	168	C8H8O2S	090345-55-4	32
5	3-Hydroxy-4-methoxybenzoic acid	168	C8H8O4	000645-08-9	27





Library Search Compound Report

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Data File : s4L2012.D
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Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

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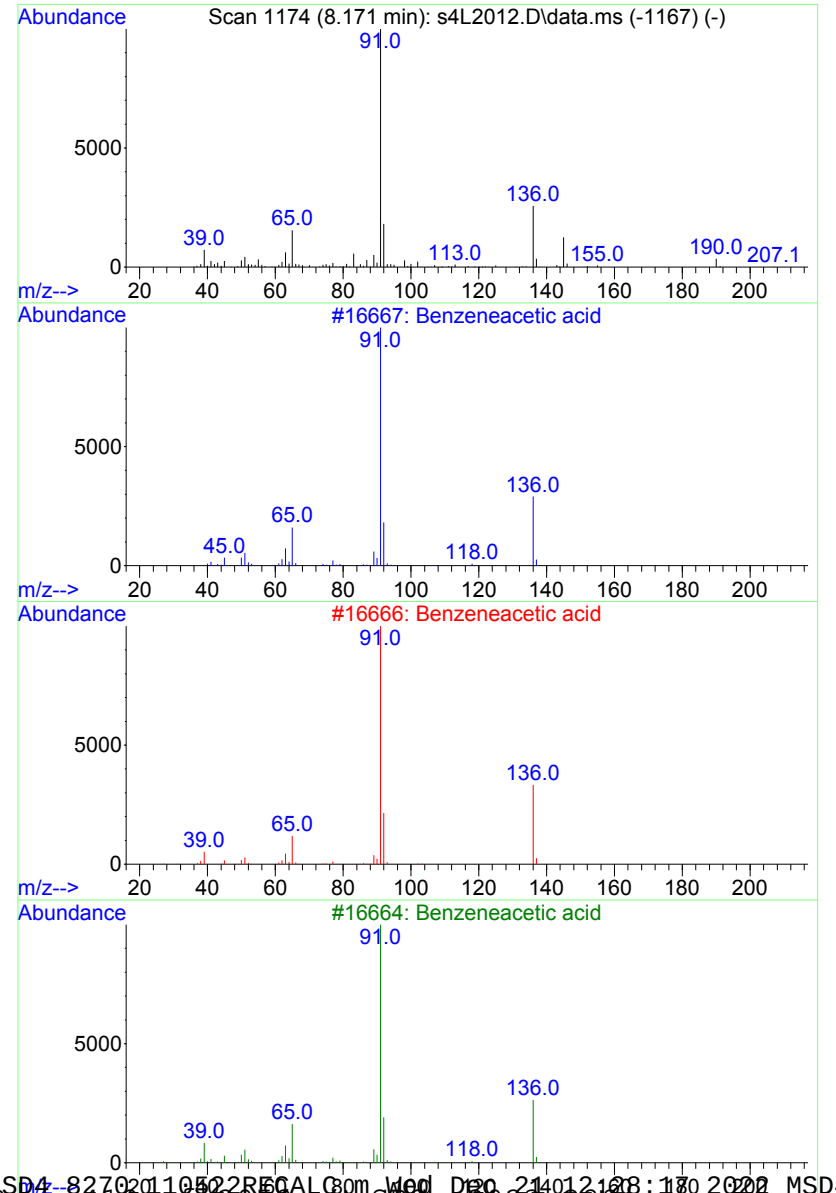
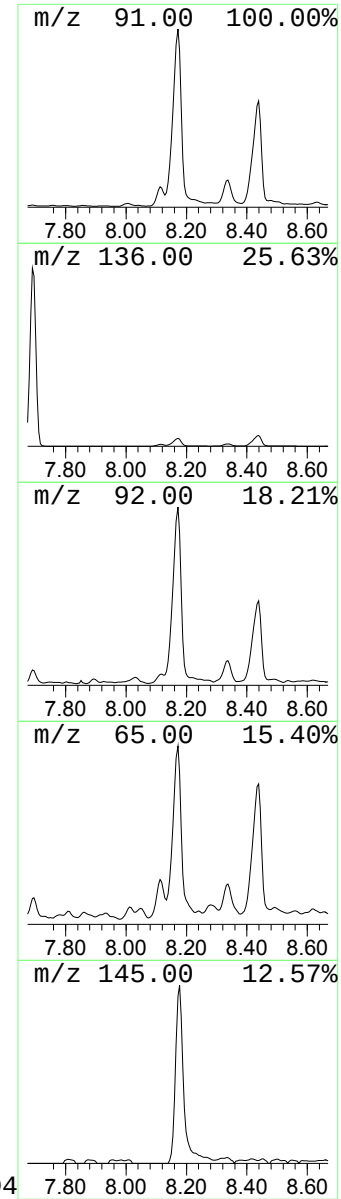
Peak Number 8 unknown Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.171	10.93 ng/uL	408041	E Naphthalene-d8	7.690

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzeneacetic acid	136	C8H8O2	000103-82-2	76
2	Benzeneacetic acid	136	C8H8O2	000103-82-2	76
3	Benzeneacetic acid	136	C8H8O2	000103-82-2	76
4	Benzeneacetic acid	136	C8H8O2	000103-82-2	58
5	Benzeneacetic acid	136	C8H8O2	000103-82-2	50





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Data File : s4L2012.D
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Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

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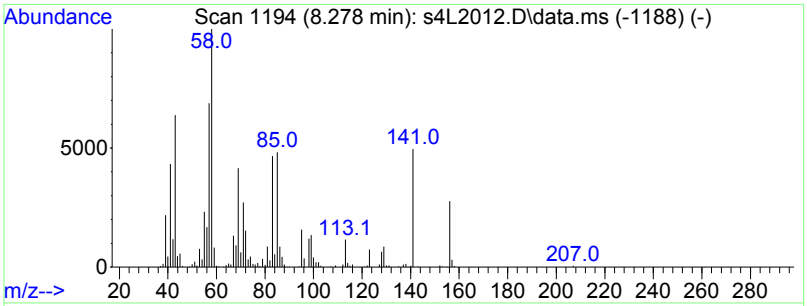
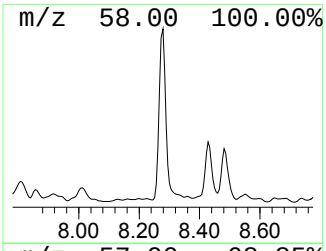
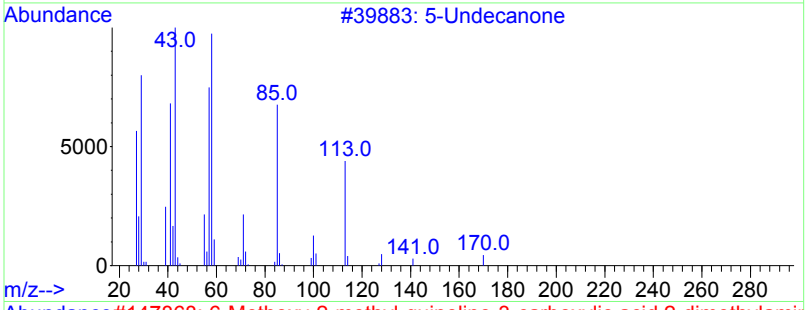
Peak Number 9 unknown Concentration Rank 14

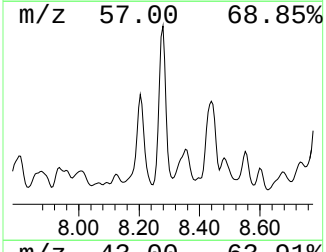
R.T.	EstConc	Area	Relative to ISTD	R.T.
8.278	12.17 ng/uL	454387	E Naphthalene-d8	7.690

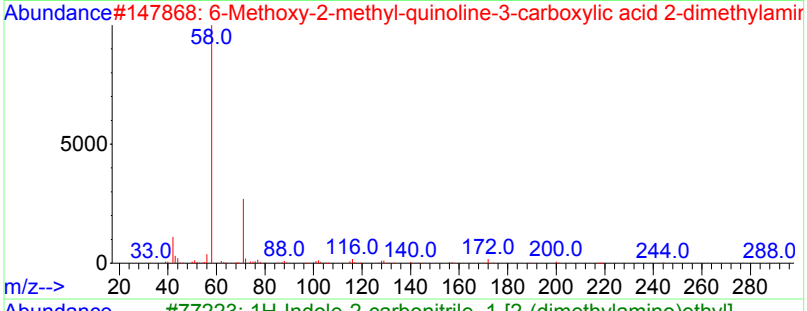
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	5-Undecanone	170	C11H22O	033083-83-9	25
2	6-Methoxy-2-methyl-quinoline-3-c...	288	C16H20N2O3	1000301-37-0	14
3	1H-Indole-2-carbonitrile, 1-[2-(...	213	C13H15N3	1000337-90-0	14
4	Pentanal, 2-methyl-	100	C6H12O	000123-15-9	14
5	Pentanal, 2-methyl-	100	C6H12O	000123-15-9	14

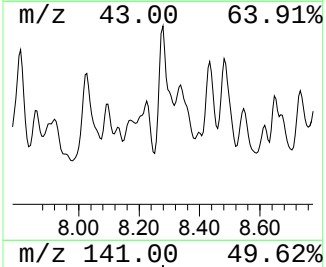


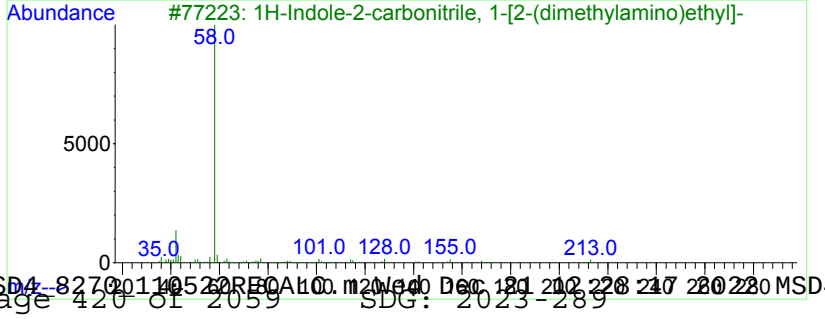


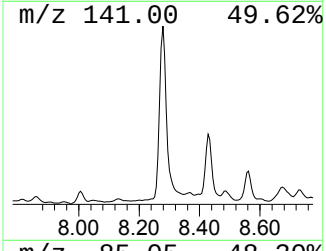


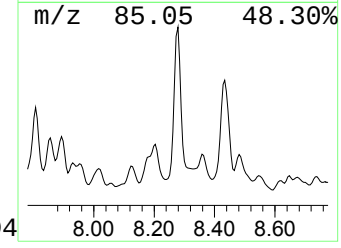












Library Search Compound Report

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Data File : s4L2012.D
Acq On : 20 Dec 2022 17:13
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Sample : |604449010|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

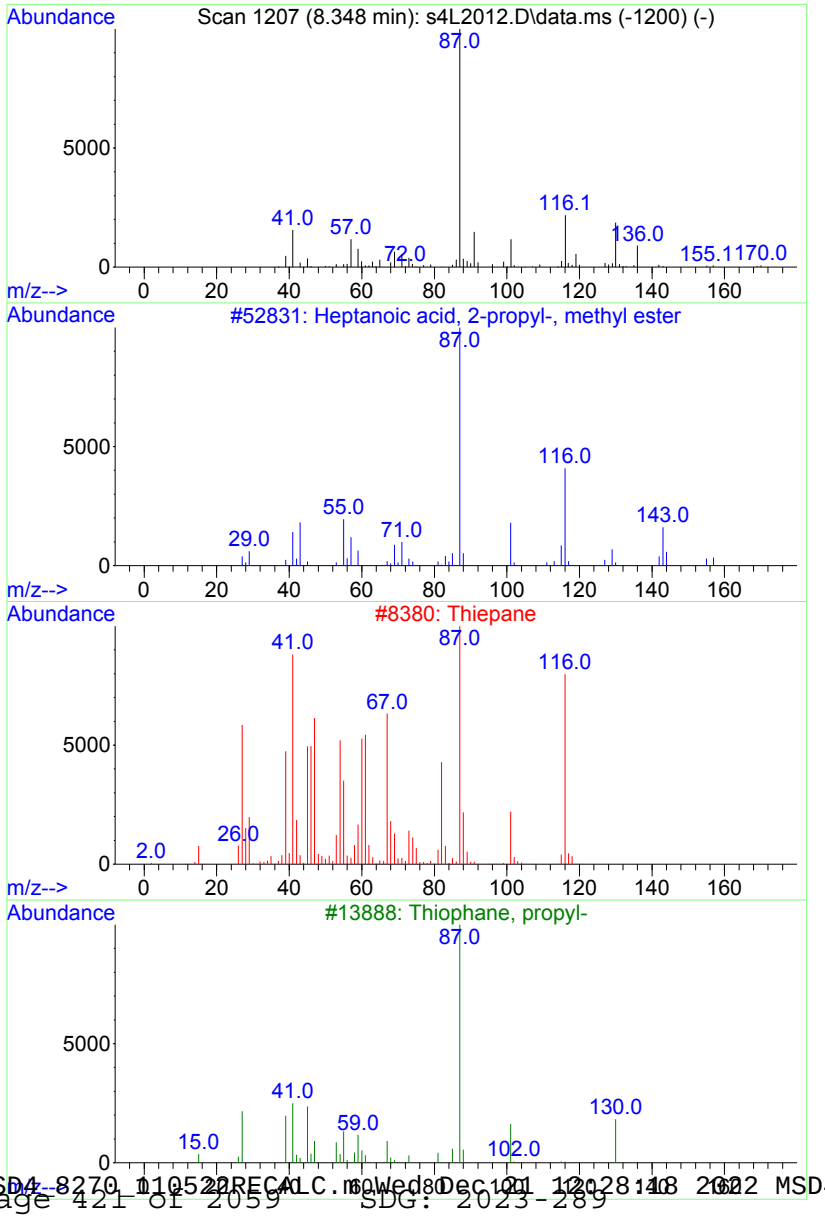
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

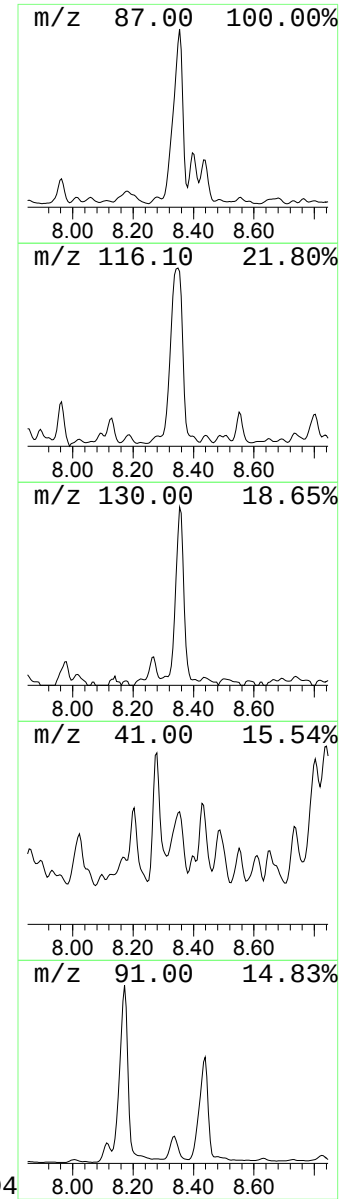
****

Peak Number 10 unknown Concentration Rank 26

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.348	9.45 ng/uL	352789	E Naphthalene-d8	7.690

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptanoic acid, 2-propyl-, methy...	186	C11H22O2	056247-53-1	45
2	Thiepane	116	C6H12S	004753-80-4	43
3	Thiophane, propyl-	130	C7H14S	001551-34-4	40
4	1,3-Dioxolane, 2-methyl-2-(pheny...	178	C11H14O2	004362-18-9	38
5	Thiophene, 2-ethyltetrahydro-	116	C6H12S	001551-32-2	37





Library Search Compound Report

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Data File : s4L2012.D
Acq On : 20 Dec 2022 17:13
Operator : NM1
Sample : |604449010|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

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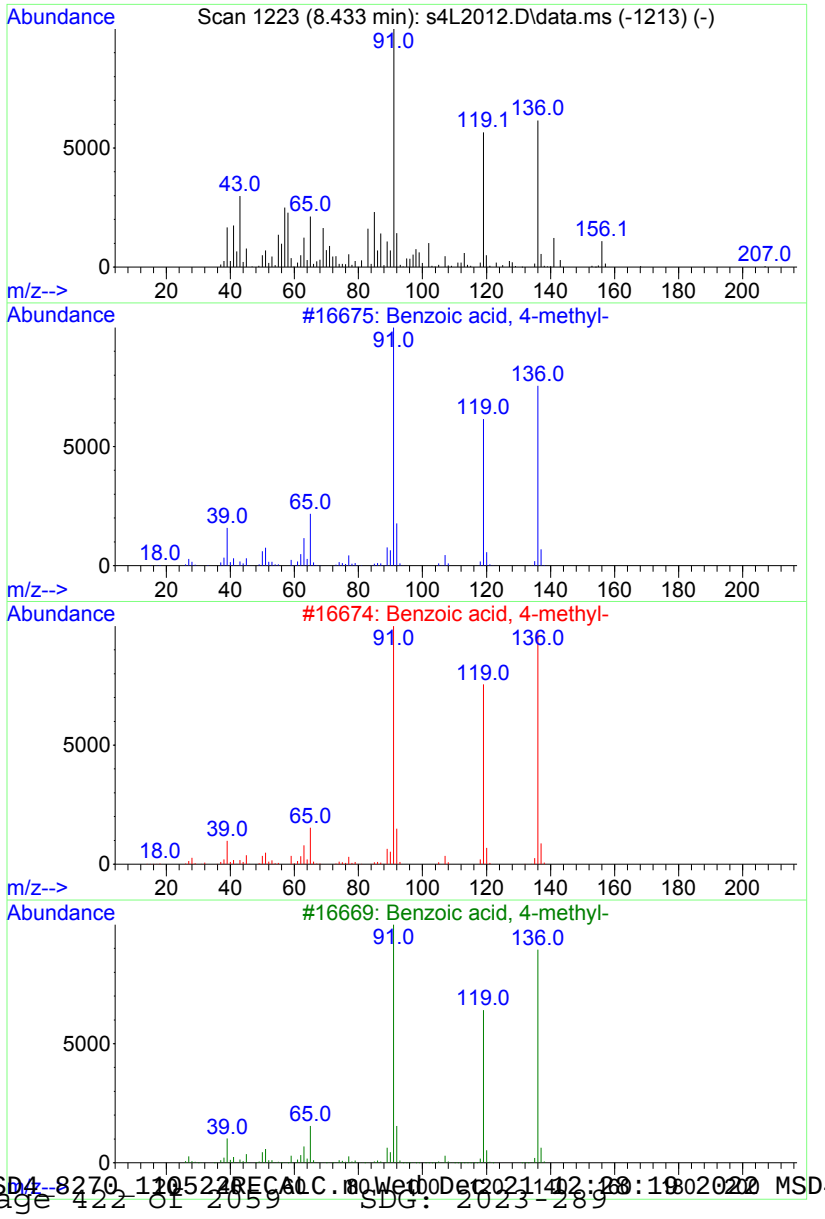
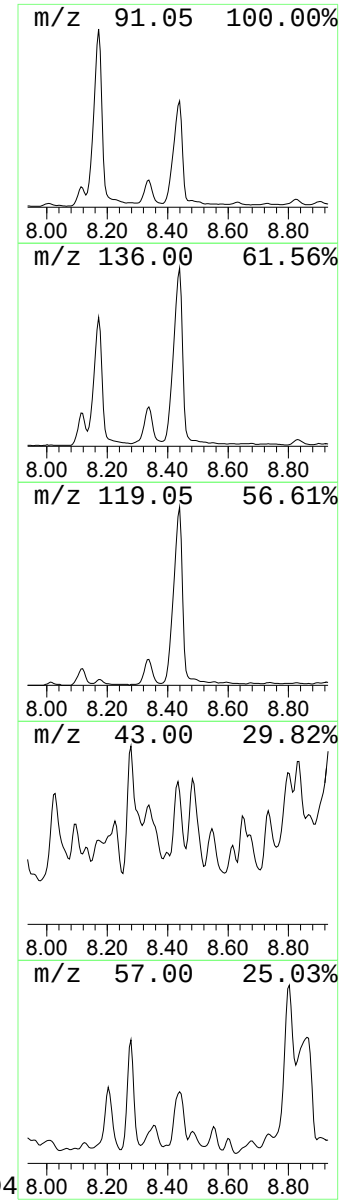
Peak Number 11 Benzoic acid, 4-methyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.433	16.62 ng/uL	620735	E Naphthalene-d8	7.690

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzoic acid, 4-methyl-	136	C8H8O2	000099-94-5	96
2	Benzoic acid, 4-methyl-	136	C8H8O2	000099-94-5	91
3	Benzoic acid, 4-methyl-	136	C8H8O2	000099-94-5	91
4	Benzoic acid, 4-methyl-	136	C8H8O2	000099-94-5	91
5	Benzoic acid, 4-methyl-	136	C8H8O2	000099-94-5	91





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2012.D
Acq On : 20 Dec 2022 17:13
Operator : NM1
Sample : |604449010|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

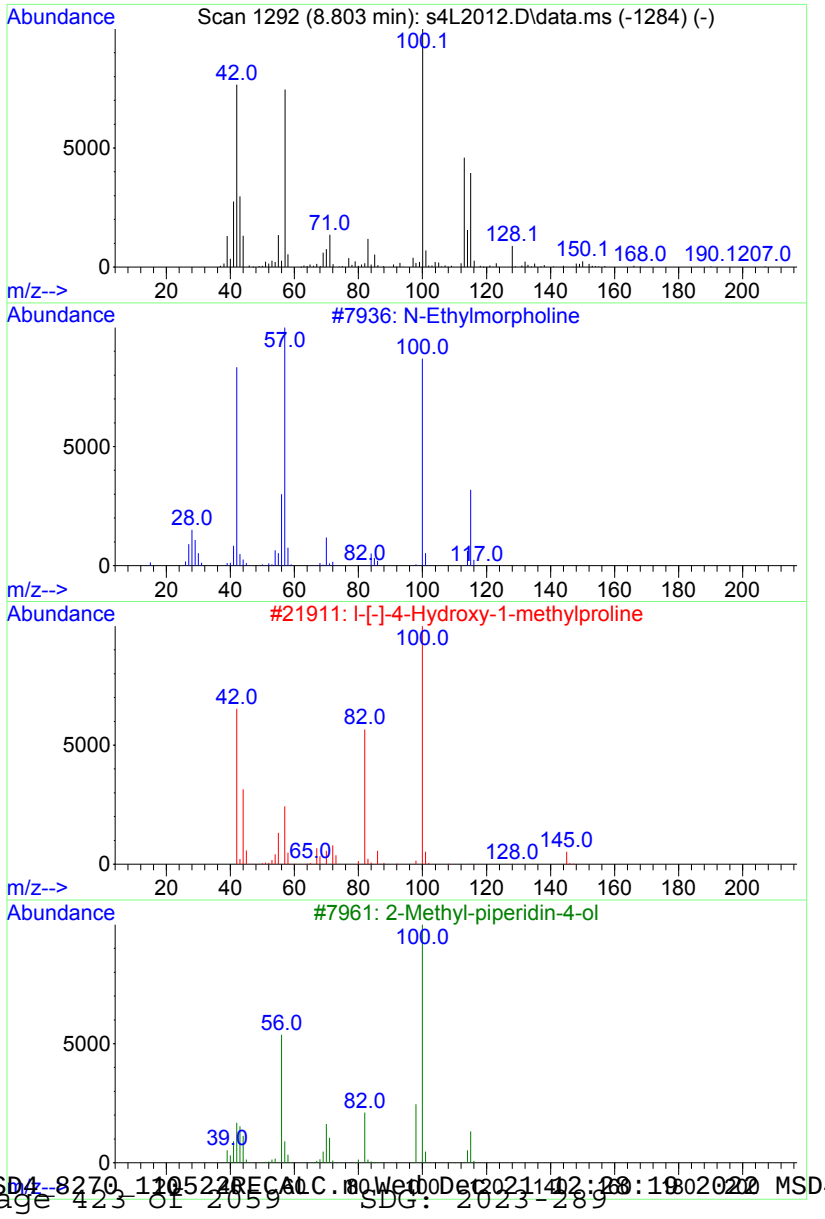
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

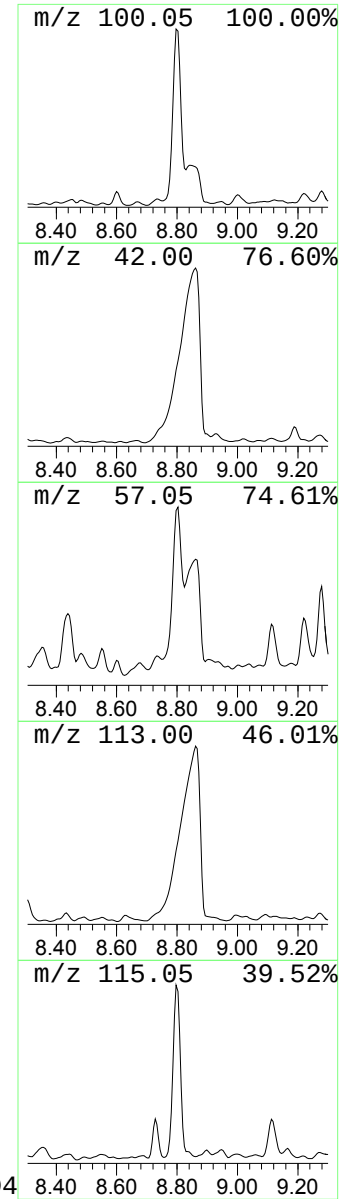
****

Peak Number 12 unknown Concentration Rank 23

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.803	9.80 ng/uL	365831	E Naphthalene-d8	7.690

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	N-Ethylmorpholine	115	C6H13NO	000100-74-3	74
2	l-[-]-4-Hydroxy-1-methylproline	145	C6H11NO3	1000251-00-7	38
3	2-Methyl-piperidin-4-ol	115	C6H13NO	1000300-70-1	38
4	Methyl-diisopropylacetamide	157	C9H19NO	102450-54-4	38
5	4H-Pyran-4-one, tetrahydro-	100	C5H8O2	029943-42-8	38





Library Search Compound Report

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Data File : s4L2012.D
Acq On : 20 Dec 2022 17:13
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Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

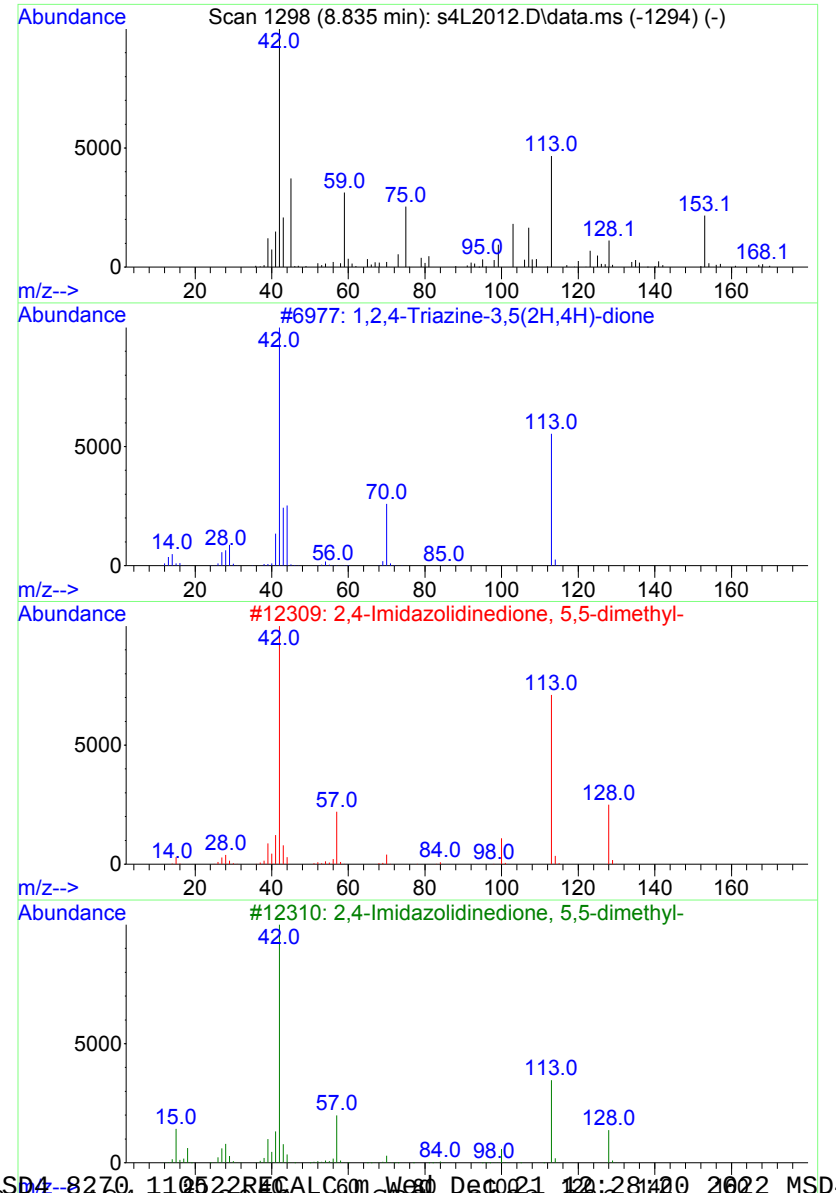
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

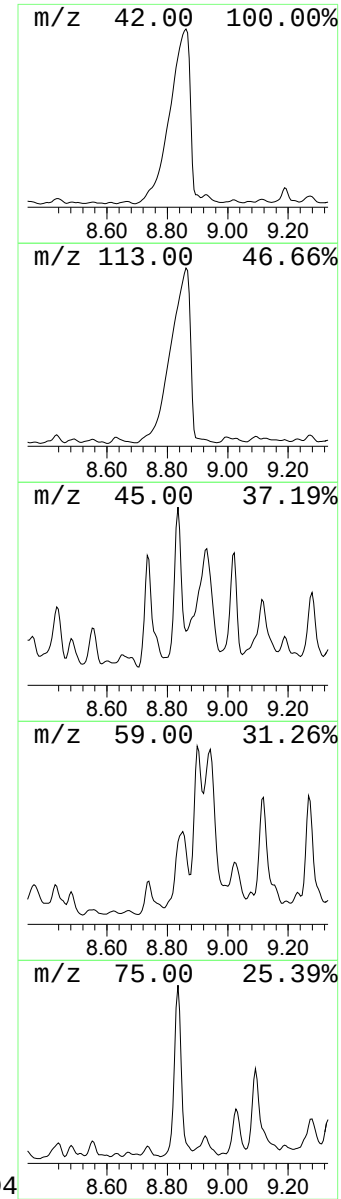
****

Peak Number 13 unknown Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.835	14.70 ng/uL	549086	E Naphthalene-d8	7.690

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,2,4-Triazine-3,5(2H,4H)-dione	113	C3H3N3O2	000461-89-2	32
2	2,4-Imidazolidinedione, 5,5-dime...	128	C5H8N2O2	000077-71-4	12
3	2,4-Imidazolidinedione, 5,5-dime...	128	C5H8N2O2	000077-71-4	9
4	1,2,4-Triazine-3,5(2H,4H)-dione	113	C3H3N3O2	000461-89-2	9
5	Boroxin, dimethylpropyl-	154	C5H13B3O3	1000162-61-0	9





Library Search Compound Report

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Data File : s4L2012.D
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Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

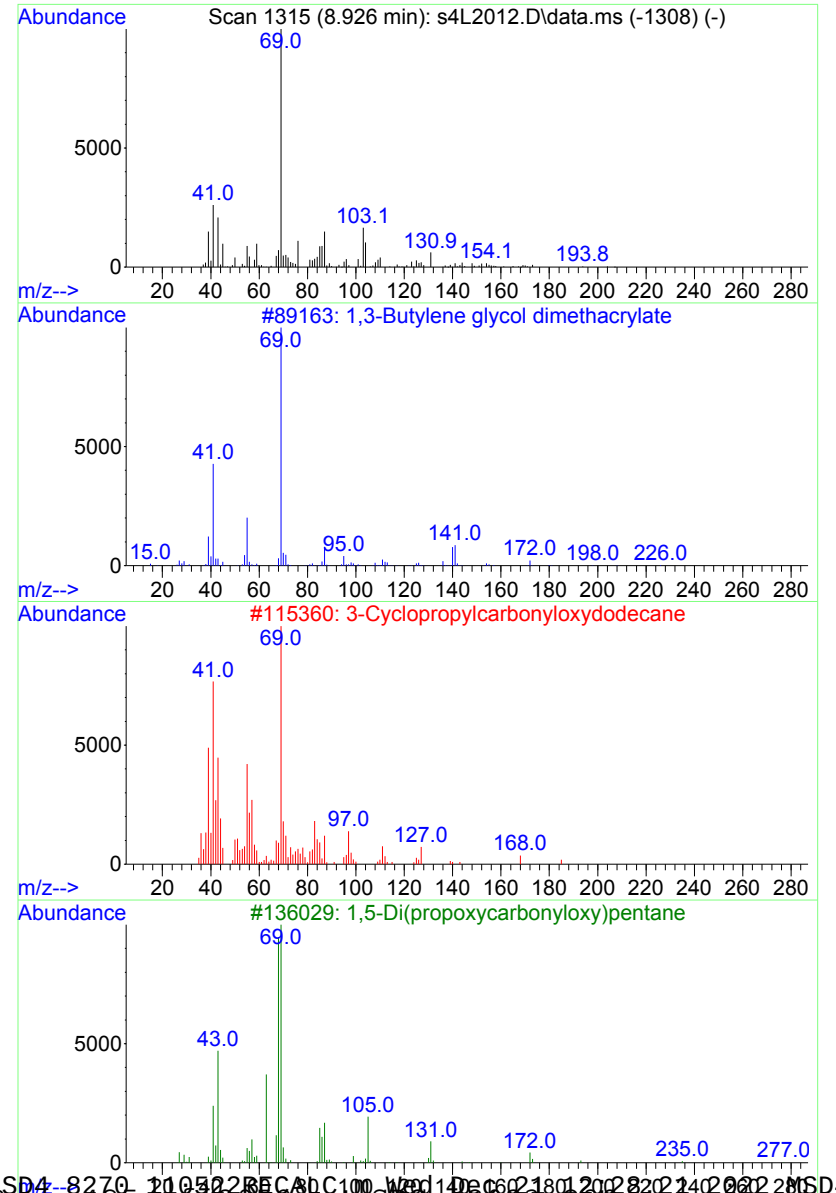
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

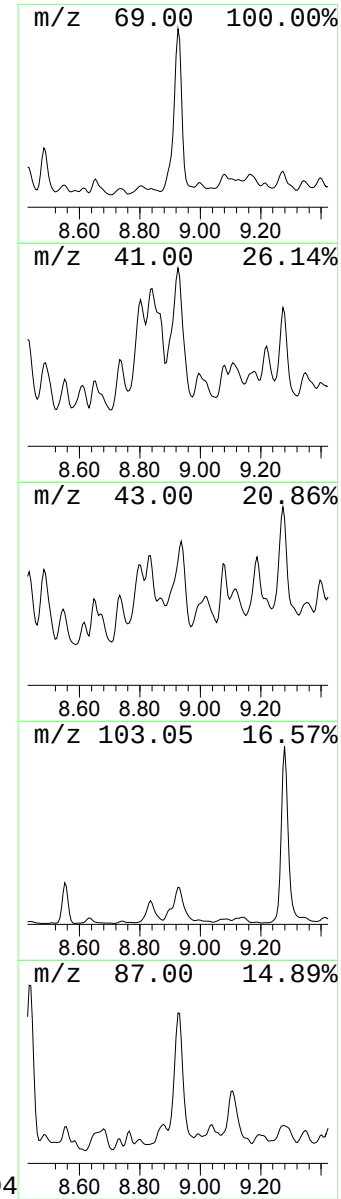
****

Peak Number 14 unknown Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.926	14.46 ng/uL	540102	E Naphthalene-d8	7.690

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,3-Butylene glycol dimethacrylate	226	C12H18O4	001189-08-8	47
2	3-Cyclopropylcarbonyloxydodecane	254	C16H30O2	1000245-58-1	42
3	1,5-Di(propoxycarbonyloxy)pentane	276	C13H24O6	1000331-39-5	40
4	2-Butenoic acid, 2-propenylidene...	210	C11H14O4	055030-70-1	38
5	Dichloroacetic acid, cyclopentyl...	196	C7H10Cl2O2	089728-58-5	38





Library Search Compound Report

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Data File : s4L2012.D
Acq On : 20 Dec 2022 17:13
Operator : NM1
Sample : |604449010|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

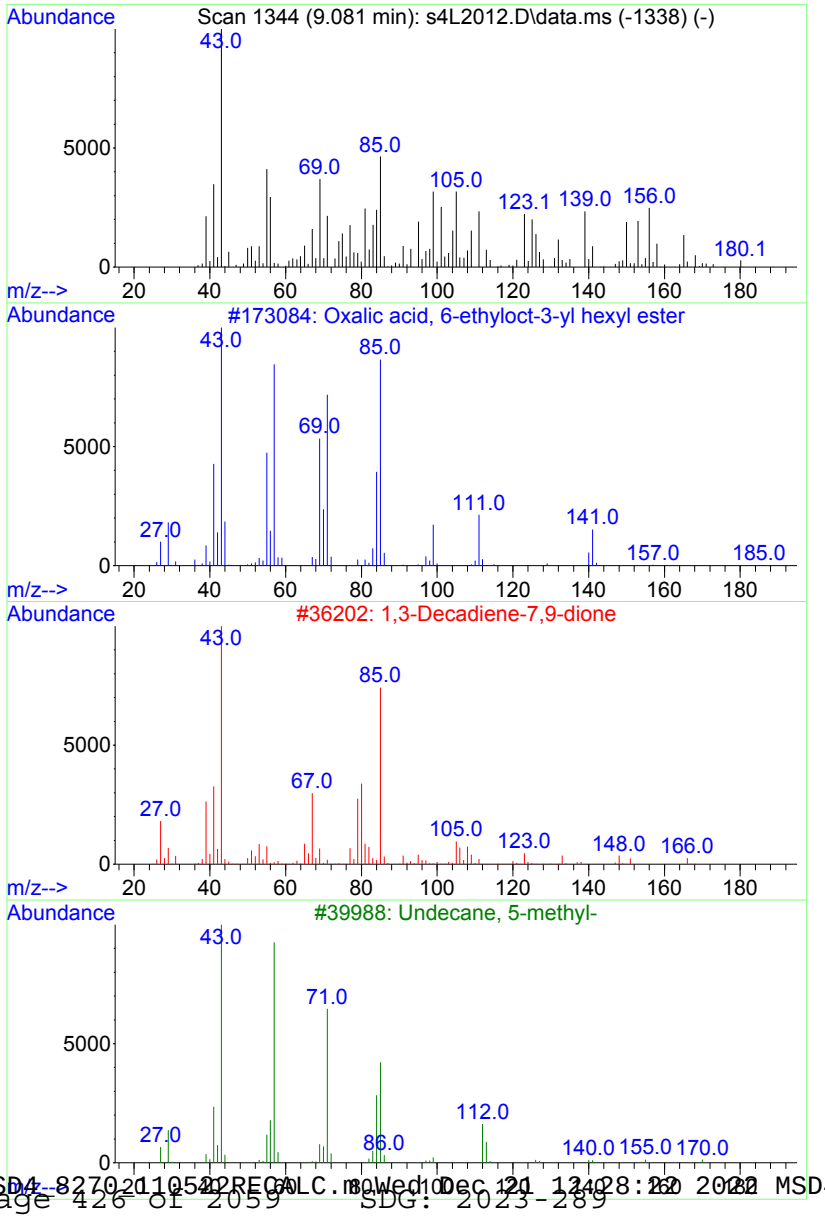
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

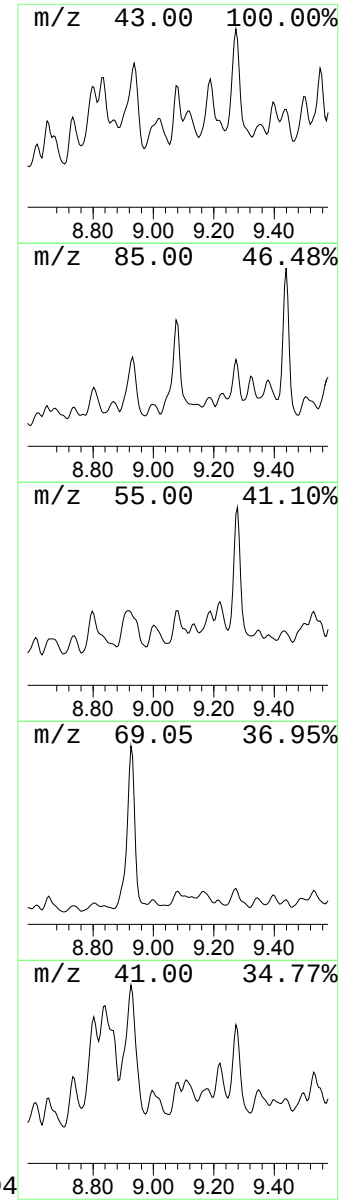
****

Peak Number 15 unknown Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.081	10.11 ng/uL	377615	E Naphthalene-d8	7.690

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Oxalic acid, 6-ethyloct-3-yl hex...	314	C18H34O4	1000309-34-4	10
2	1,3-Decadiene-7,9-dione	166	C10H14O2	1000160-87-3	10
3	Undecane, 5-methyl-	170	C12H26	001632-70-8	10
4	Hexane, 2,4-dimethyl-	114	C8H18	000589-43-5	10
5	3-Decen-2-one, 3-methyl-	168	C11H20O	054411-03-9	10





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2012.D
Acq On : 20 Dec 2022 17:13
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Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

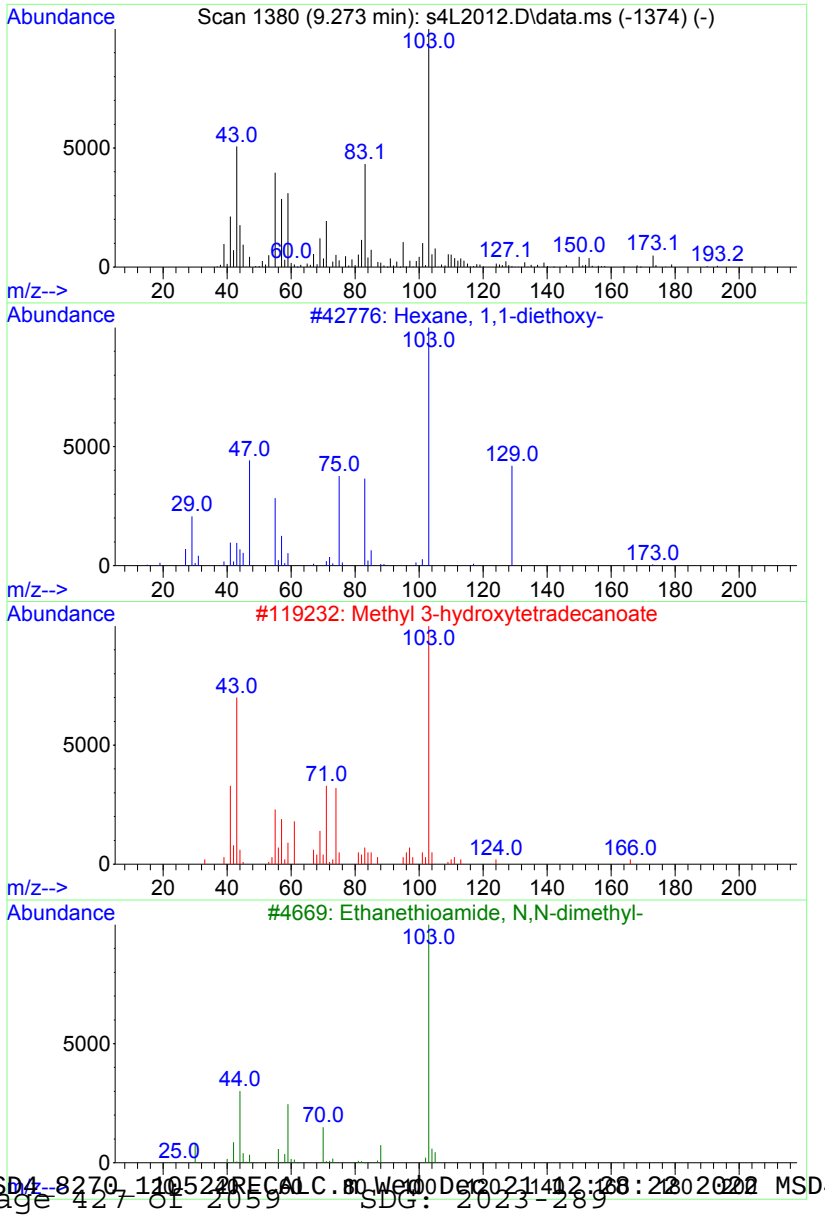
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

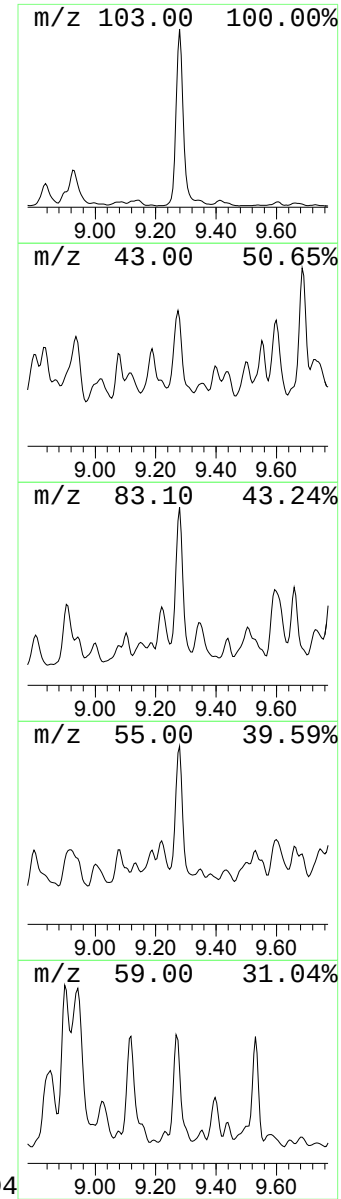
****

Peak Number 16 unknown Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.273	10.76 ng/uL	396469	A Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexane, 1,1-diethoxy-	174	C10H22O2	003658-93-3	47
2	Methyl 3-hydroxytetradecanoate	258	C15H30O3	055682-83-2	43
3	Ethanethioamide, N,N-dimethyl-	103	C4H9NS	000631-67-4	38
4	1-((1-Butoxypropan-2-yl)oxy)prop...	290	C15H30O5	1000378-30-6	38
5	Octadecanoic acid, 3-hydroxy-, m...	314	C19H38O3	002420-36-2	37





Library Search Compound Report

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Data Path : C:\msdchem\1\data\S122022\
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Sample    : |604449010|2358006|1|SVM|1|TNSL|||
Misc      : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial  : 12   Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title  : BNA01

TIC Library    : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

*********************************************************************
Peak Number 17  unknown                          Concentration Rank 30

  R.T.     EstConc          Area       Relative to ISTD         R.T.
---------------------------------------------------------------------
 10.097    9.05 ng/uL      333506   A Acenaphthene-d10         10.525

 Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
---------------------------------------------------------------------
 1 Cyclopentanecarboxamide, N-butyl...  267 C17H33NO       1000415-62-9 47
 2 2-Butenoic acid, 2-methyl-           100 C5H8O2         013201-46-2 43
 3 2,4-Imidazolidinedione, 5-(2-met...  156 C7H12N2O2      040856-75-5 37
 4 Morpholin-4-yl-acetic acid (2-hy...  263 C13H17N3O3     061220-99-3 37
 5 1,4-Bis(morpholinoacetyl)piperazine  340 C16H28N4O4     022764-36-9 32
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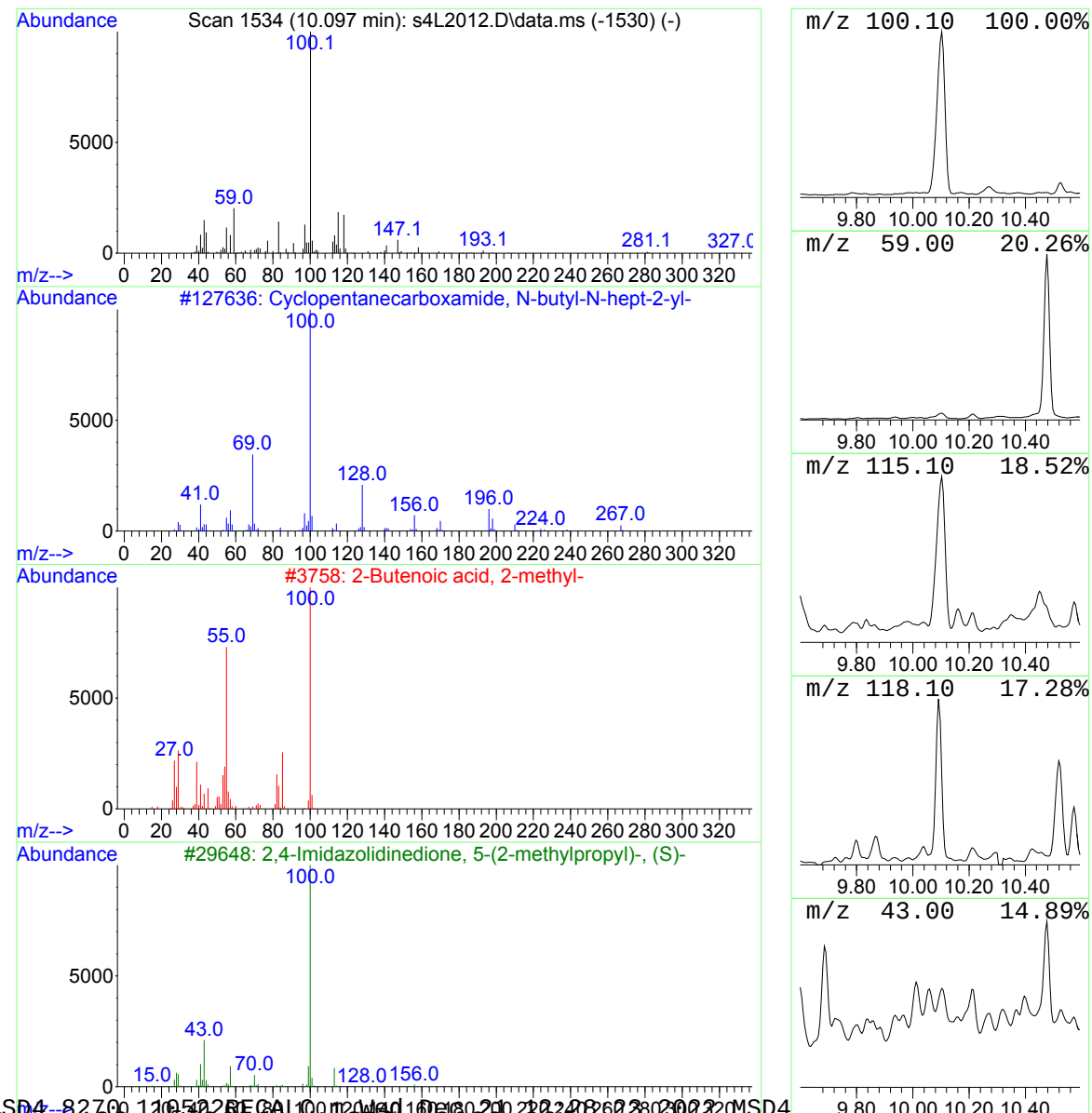

Library Search Compound Report

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Data File : s4L2012.D
Acq On : 20 Dec 2022 17:13
Operator : NM1
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Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

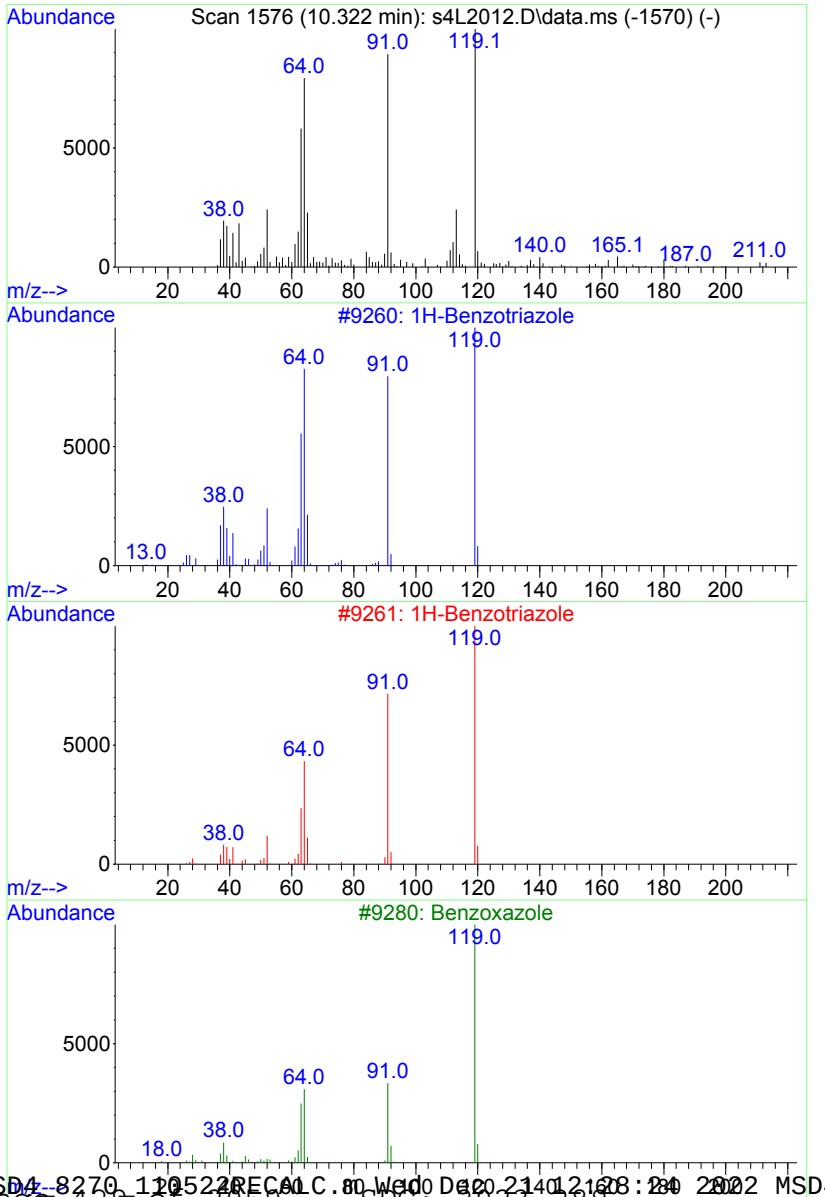
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

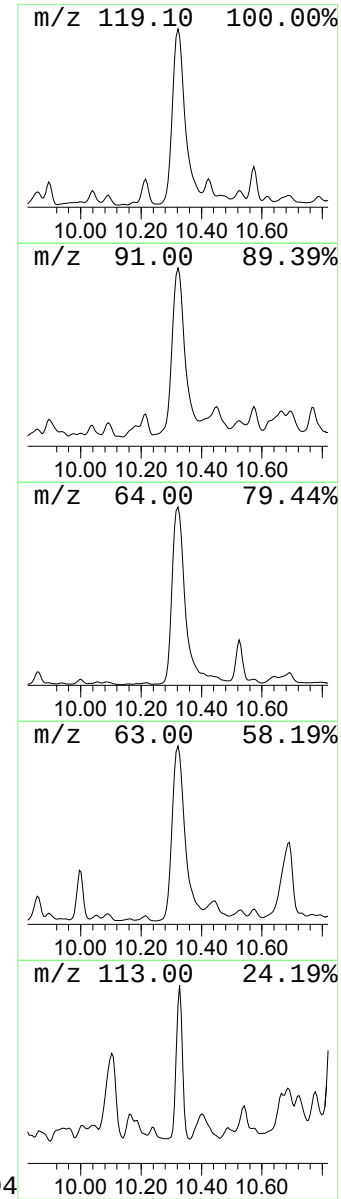
****

Peak Number 18 1H-Benzotriazole Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.322	11.29 ng/uL	416150	A Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Benzotriazole	119	C6H5N3	000095-14-7	96
2	1H-Benzotriazole	119	C6H5N3	000095-14-7	95
3	Benzoxazole	119	C7H5NO	000273-53-0	87
4	Ethane-1,2-diol, 1,2-bis(1-benzo...	296	C14H12N6O2	111507-88-1	80
5	2,1-Benzisoxazole	119	C7H5NO	000271-58-9	74





Library Search Compound Report

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Data File : s4L2012.D
Acq On : 20 Dec 2022 17:13
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Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

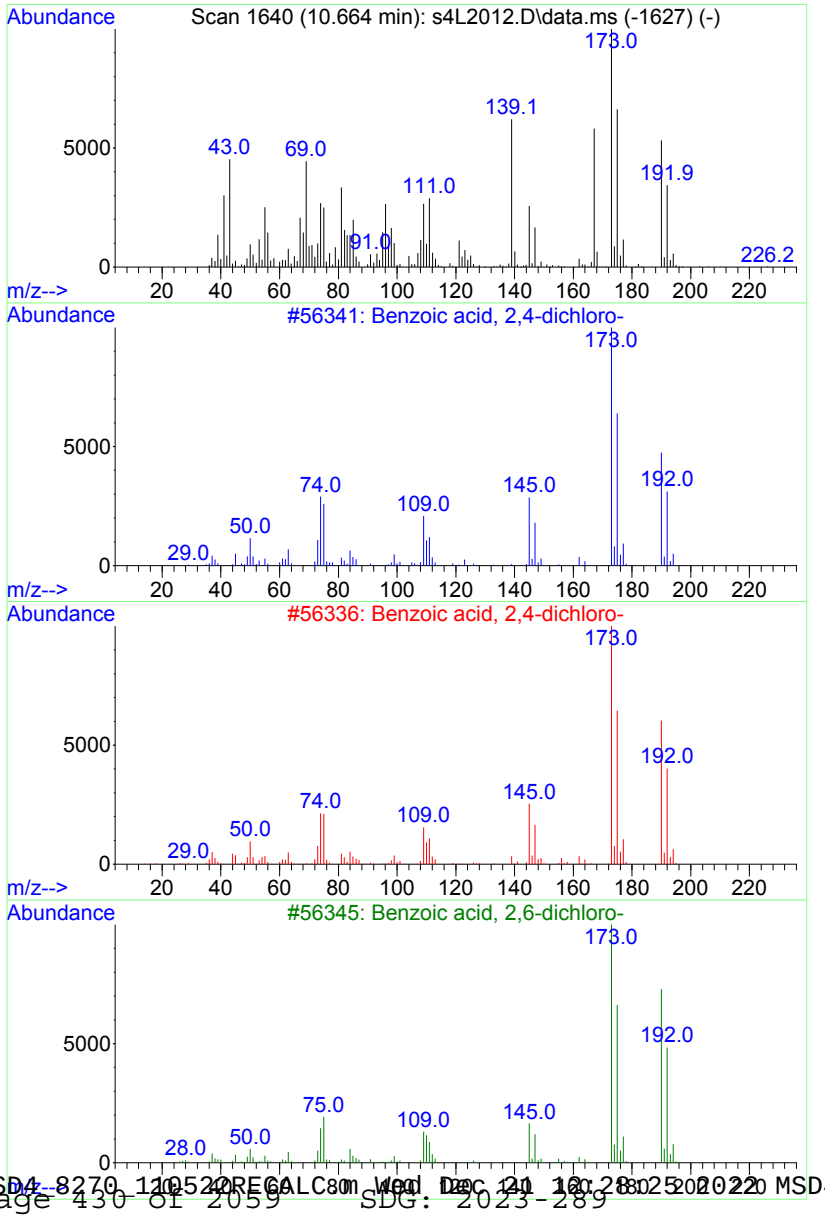
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

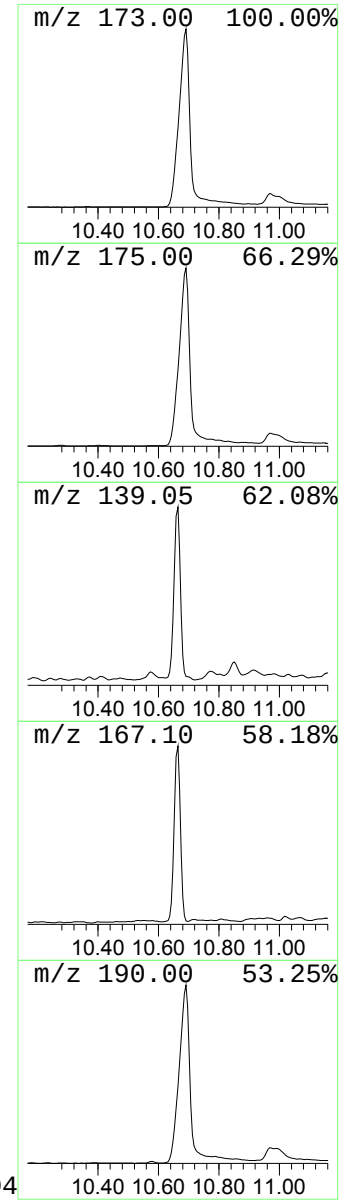
****

Peak Number 19 Benzoic acid, 2,4-dichloro- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.664	47.47 ng/uL	1749600	D Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzoic acid, 2,4-dichloro-	190	C7H4Cl2O2	000050-84-0	99
2	Benzoic acid, 2,4-dichloro-	190	C7H4Cl2O2	000050-84-0	98
3	Benzoic acid, 2,6-dichloro-	190	C7H4Cl2O2	000050-30-6	95
4	Benzoic acid, 2,6-dichloro-	190	C7H4Cl2O2	000050-30-6	93
5	Benzoic acid, 2,6-dichloro-	190	C7H4Cl2O2	000050-30-6	91





Library Search Compound Report

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Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

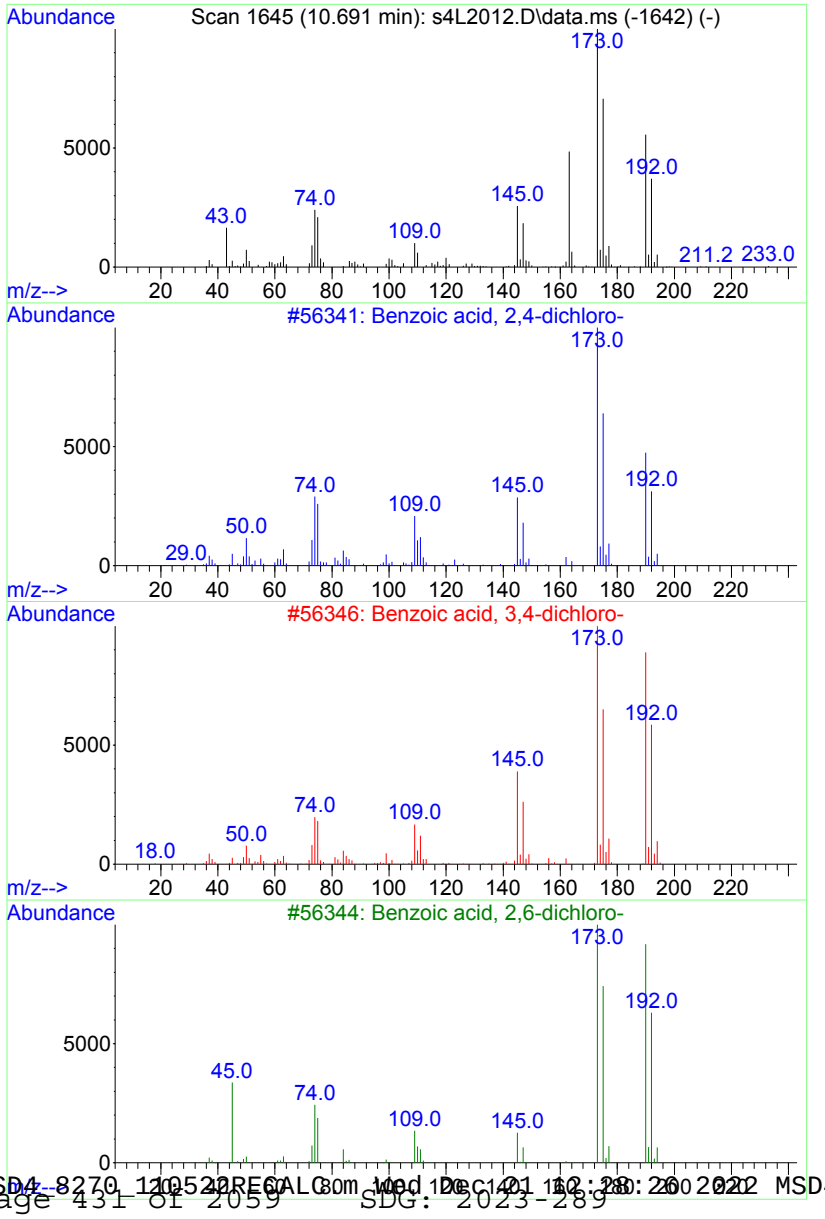
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

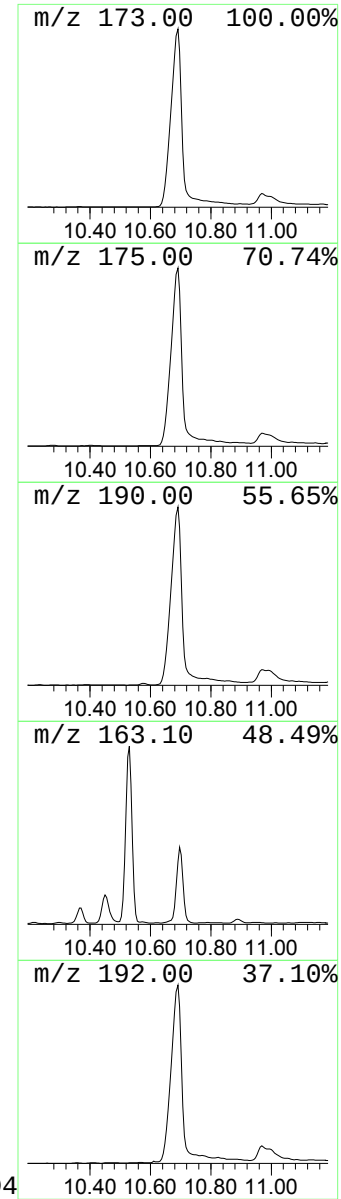
****

Peak Number 20 Benzoic acid, 2,4-dichloro- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.691	37.74 ng/uL	1391000	D Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzoic acid, 2,4-dichloro-	190	C7H4Cl2O2	000050-84-0	90
2	Benzoic acid, 3,4-dichloro-	190	C7H4Cl2O2	000051-44-5	87
3	Benzoic acid, 2,6-dichloro-	190	C7H4Cl2O2	000050-30-6	68
4	Benzoic acid, 2,6-dichloro-	190	C7H4Cl2O2	000050-30-6	64
5	Benzoic acid, 2,4-dichloro-	190	C7H4Cl2O2	000050-84-0	64





Library Search Compound Report

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Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

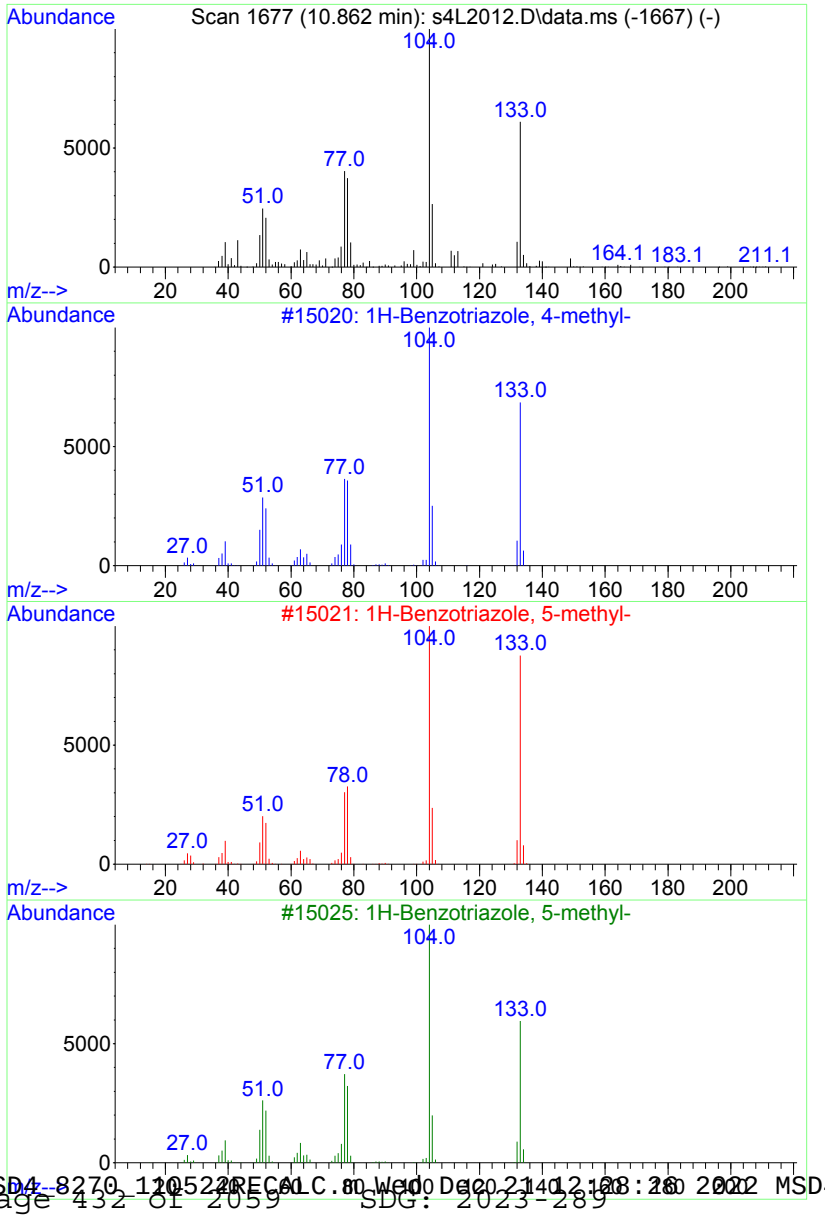
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

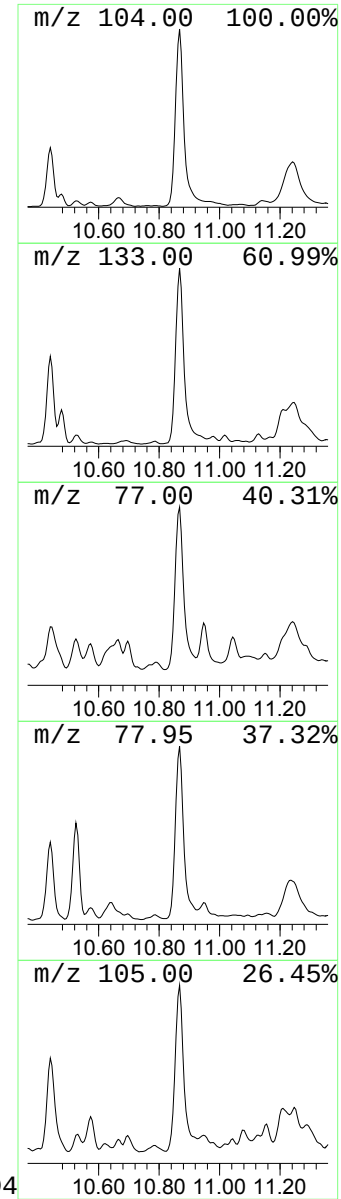
****

Peak Number 21 1H-Benzotriazole, 4-methyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.862	17.08 ng/uL	629335	D Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Benzotriazole, 4-methyl-	133	C7H7N3	029878-31-7	98
2	1H-Benzotriazole, 5-methyl-	133	C7H7N3	000136-85-6	96
3	1H-Benzotriazole, 5-methyl-	133	C7H7N3	000136-85-6	94
4	1H-Benzotriazole, 4-methyl-	133	C7H7N3	029878-31-7	93
5	1H-Benzotriazole, 5-methyl-	133	C7H7N3	000136-85-6	91





Library Search Compound Report

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Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

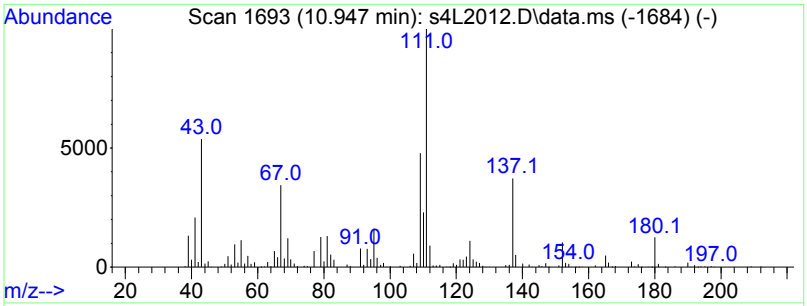
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

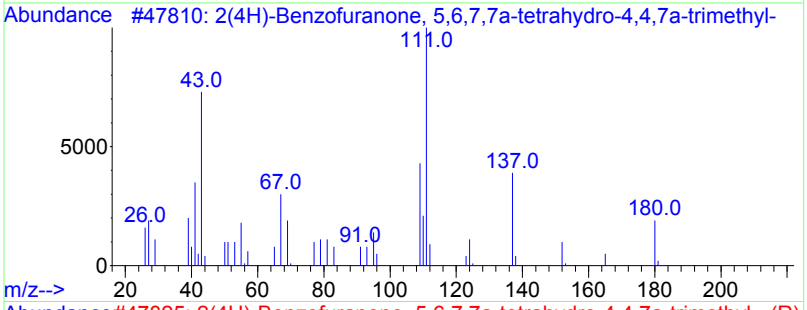
****

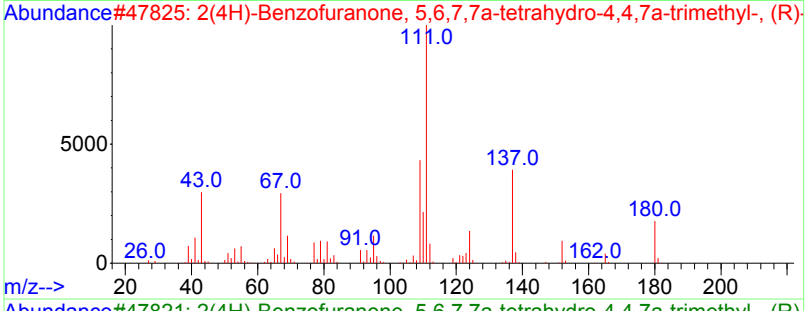
Peak Number 22 2(4H)-Benzofuranone, 5,6,7,... Concentration Rank 5

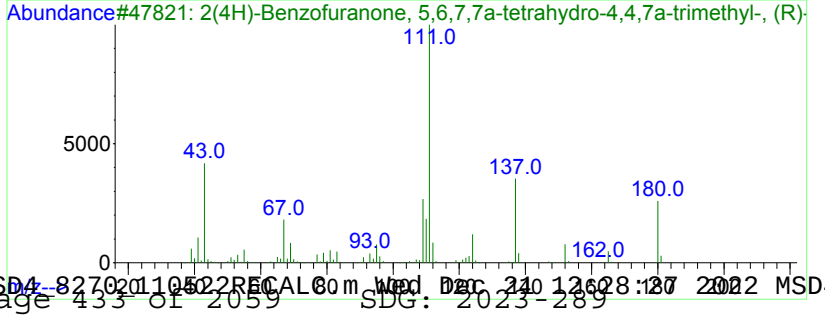
R.T.	EstConc	Area	Relative to ISTD	R.T.
10.947	23.63 ng/uL	871077	D Acenaphthene-d10	10.525

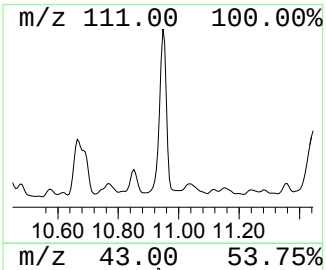
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2(4H)-Benzofuranone, 5,6,7,7a-te...	180	C11H16O2	015356-74-8	97
2	2(4H)-Benzofuranone, 5,6,7,7a-te...	180	C11H16O2	017092-92-1	97
3	2(4H)-Benzofuranone, 5,6,7,7a-te...	180	C11H16O2	017092-92-1	81
4	2(4H)-Benzofuranone, 5,6,7,7a-te...	180	C11H16O2	017092-92-1	76
5	2(4H)-Benzofuranone, 5,6,7,7a-te...	180	C11H16O2	017092-92-1	46

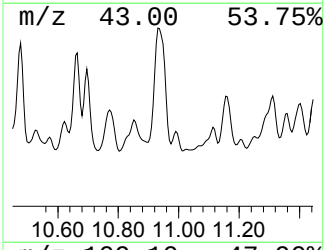


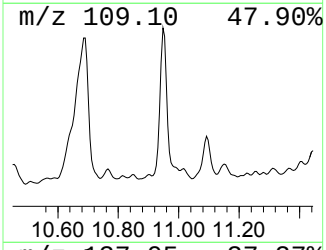


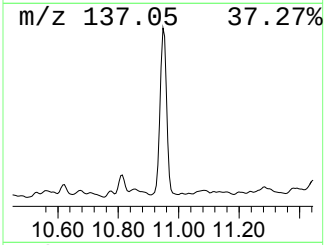


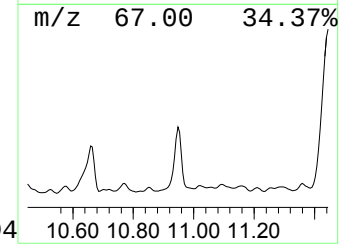












Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2012.D
Acq On : 20 Dec 2022 17:13
Operator : NM1
Sample : |604449010|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

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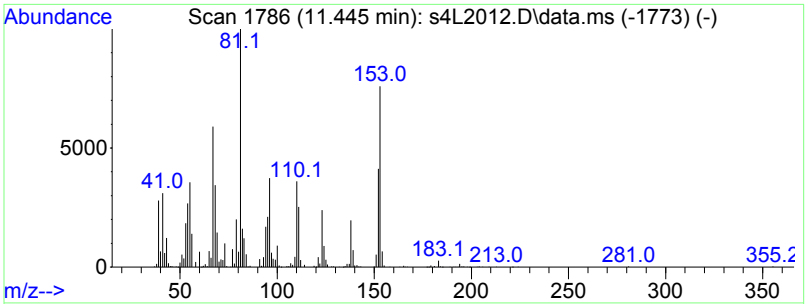
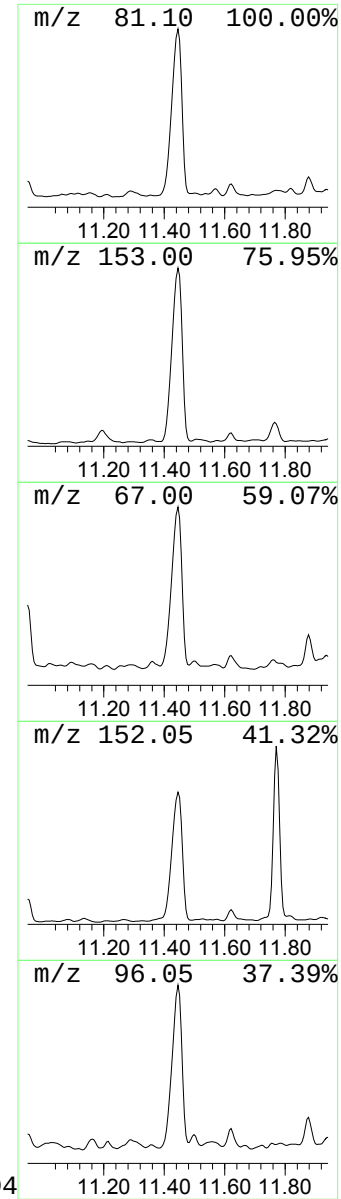
Peak Number 23 Gabapentin lactam Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.445	44.43 ng/uL	1637670	D Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Gabapentin lactam	153	C9H15NO	064744-50-9	93
2	Cyclopentane, 1,3-dimethyl-2-(1-...	138	C10H18	061142-31-2	49
3	Spiro[3.5]nonan-1-one	138	C9H14O	029800-45-1	45
4	Cyclohexene, 3-pentyl-	152	C11H20	015232-92-5	43
5	Cyclohexene, 1-methyl-	96	C7H12	000591-49-1	42





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2012.D
Acq On : 20 Dec 2022 17:13
Operator : NM1
Sample : |604449010|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

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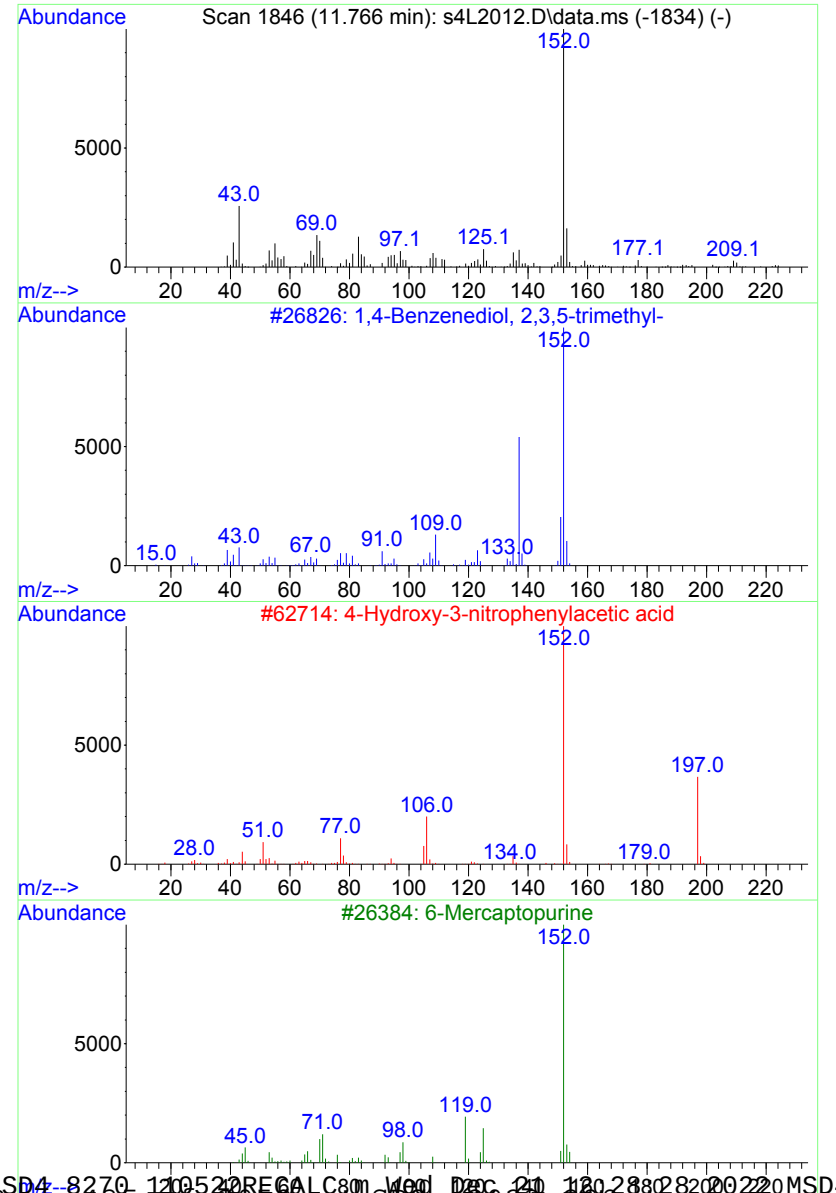
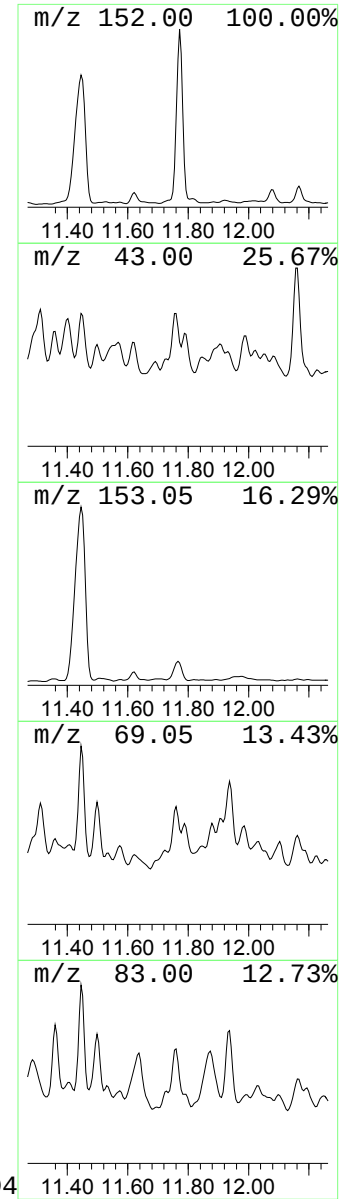
Peak Number 24 unknown Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.766	9.99 ng/uL	431978	A Phenanthrene-d10	12.953

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,4-Benzenediol, 2,3,5-trimethyl-	152	C9H12O2	000700-13-0	64
2	4-Hydroxy-3-nitrophenylacetic acid	197	C8H7NO5	010463-20-4	59
3	6-Mercaptopurine	152	C5H4N4S	000050-44-2	59
4	Bicyclo(3.3.1)nonane-2,6-dione	152	C9H12O2	016473-11-3	59
5	2-Phenoxybutyric acid, (octahydr...	331	C20H29NO3	1000310-93-0	59





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2012.D
Acq On : 20 Dec 2022 17:13
Operator : NM1
Sample : |604449010|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

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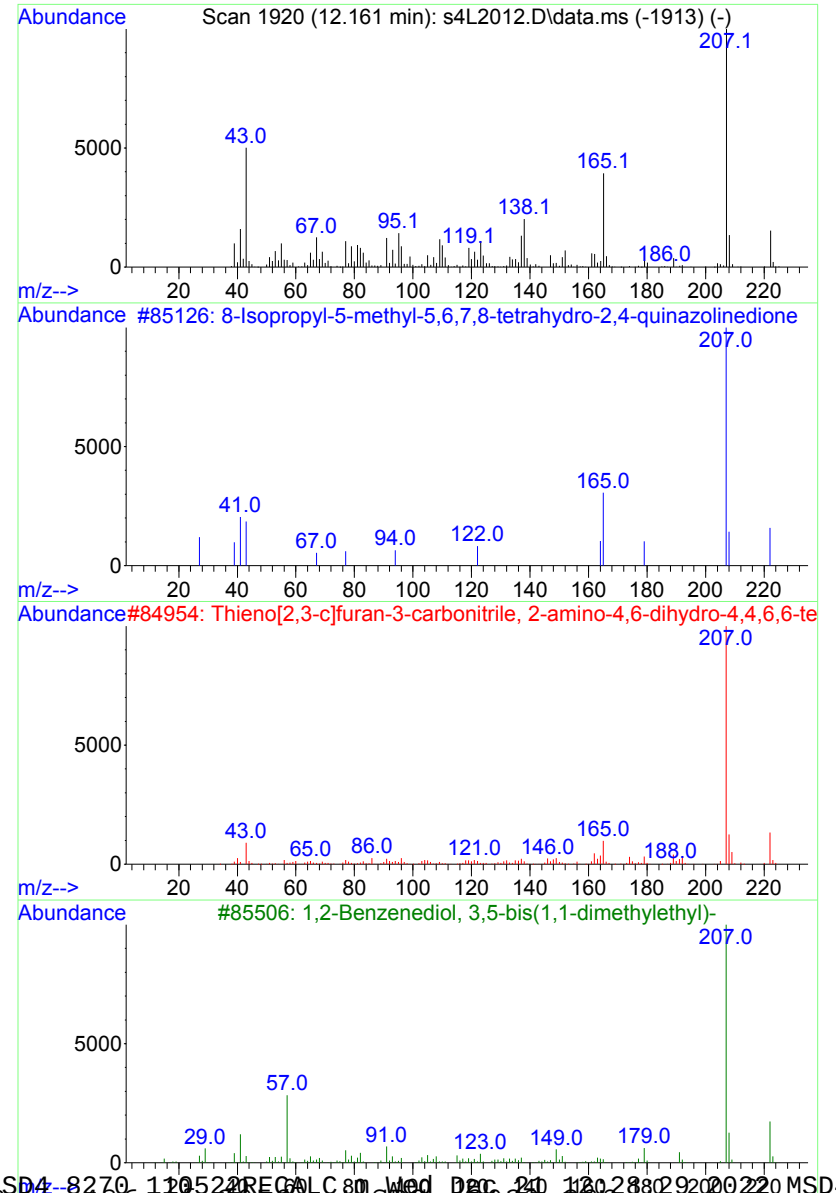
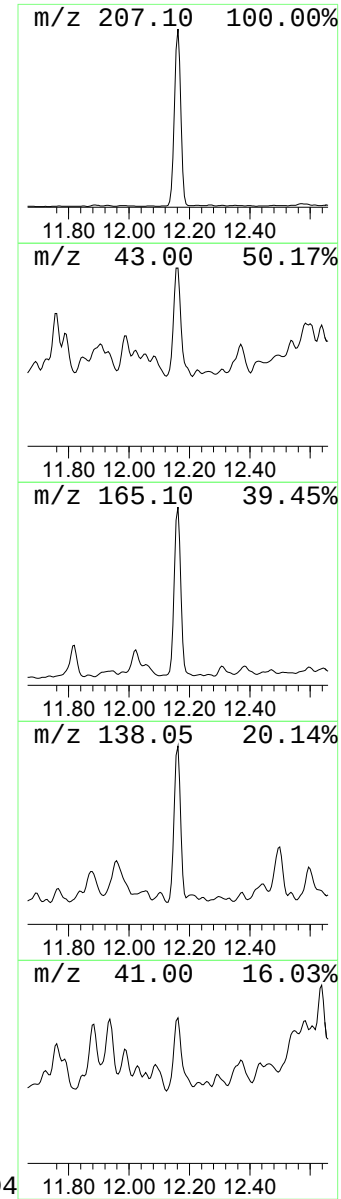
Peak Number 25 unknown Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.162	13.10 ng/uL	566420	A Phenanthrene-d10	12.953

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	8-Isopropyl-5-methyl-5,6,7,8-tet...	222	C12H18N2O2	063498-93-1	50
2	Thieno[2,3-c]furan-3-carbonitril...	222	C11H14N2OS	447412-24-0	49
3	1,2-Benzenediol, 3,5-bis(1,1-dim...	222	C14H22O2	001020-31-1	43
4	Thieno[2,3-c]furan-3-carbonitril...	222	C11H14N2OS	447412-24-0	43
5	1,3-Benzenedicarboxylic acid, 5-...	222	C12H14O4	002359-09-3	38





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2012.D
Acq On : 20 Dec 2022 17:13
Operator : NM1
Sample : |604449010|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

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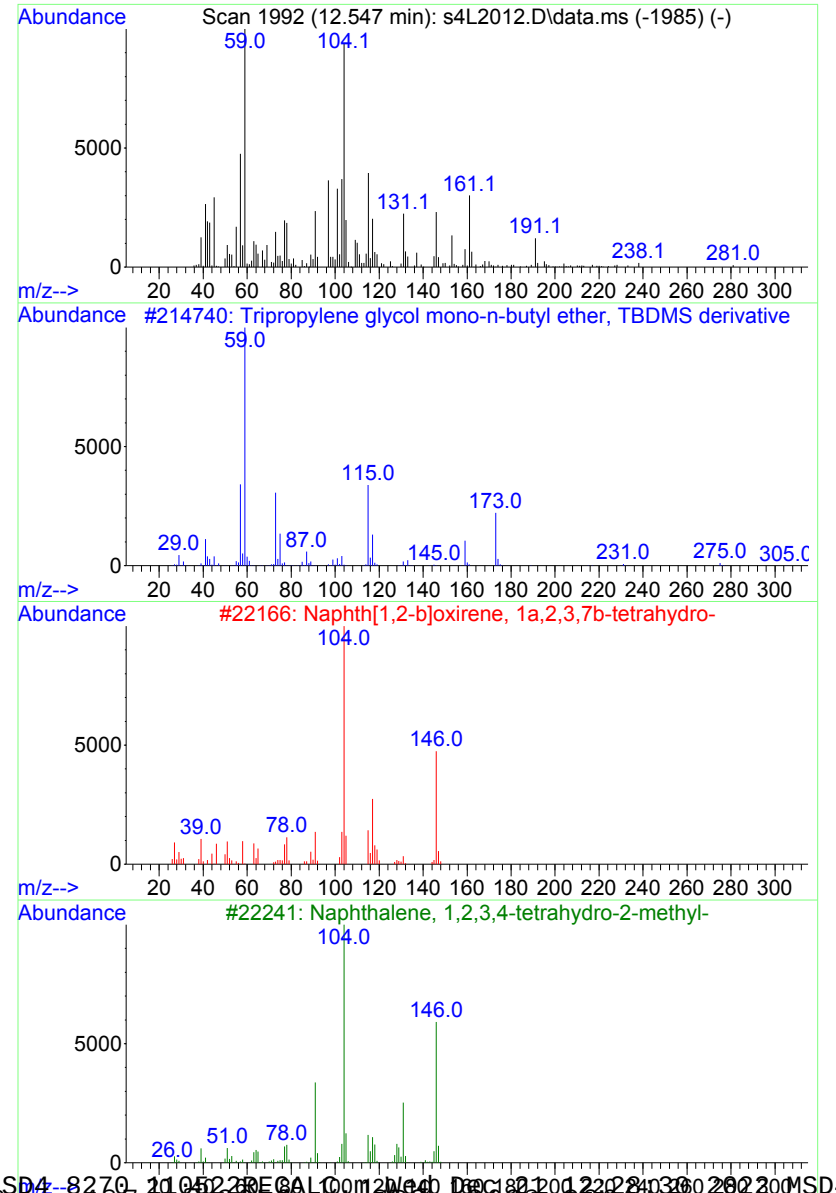
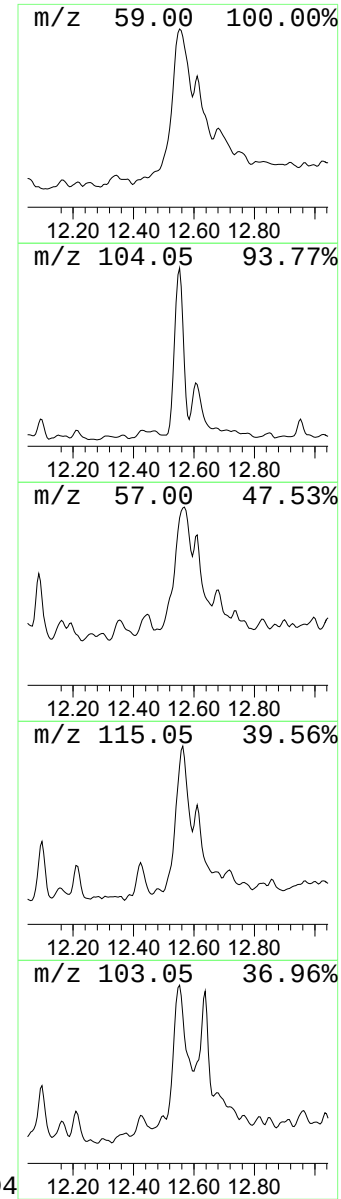
Peak Number 26 unknown Concentration Rank 25

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.547	9.64 ng/uL	417014	A Phenanthrene-d10	12.953

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tripropylene glycol mono-n-butyl...	362	C19H42O4Si	1000367-06-8	35
2	Naphth[1,2-b]oxirene, 1a,2,3,7b-...	146	C10H10O	002461-34-9	30
3	Naphthalene, 1,2,3,4-tetrahydro-...	146	C11H14	003877-19-8	27
4	2(1H)-Naphthalenone, 3,4-dihydro-	146	C10H10O	000530-93-8	27
5	2(1H)-Naphthalenone, 3,4-dihydro-	146	C10H10O	000530-93-8	27





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2012.D
Acq On : 20 Dec 2022 17:13
Operator : NM1
Sample : |604449010|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

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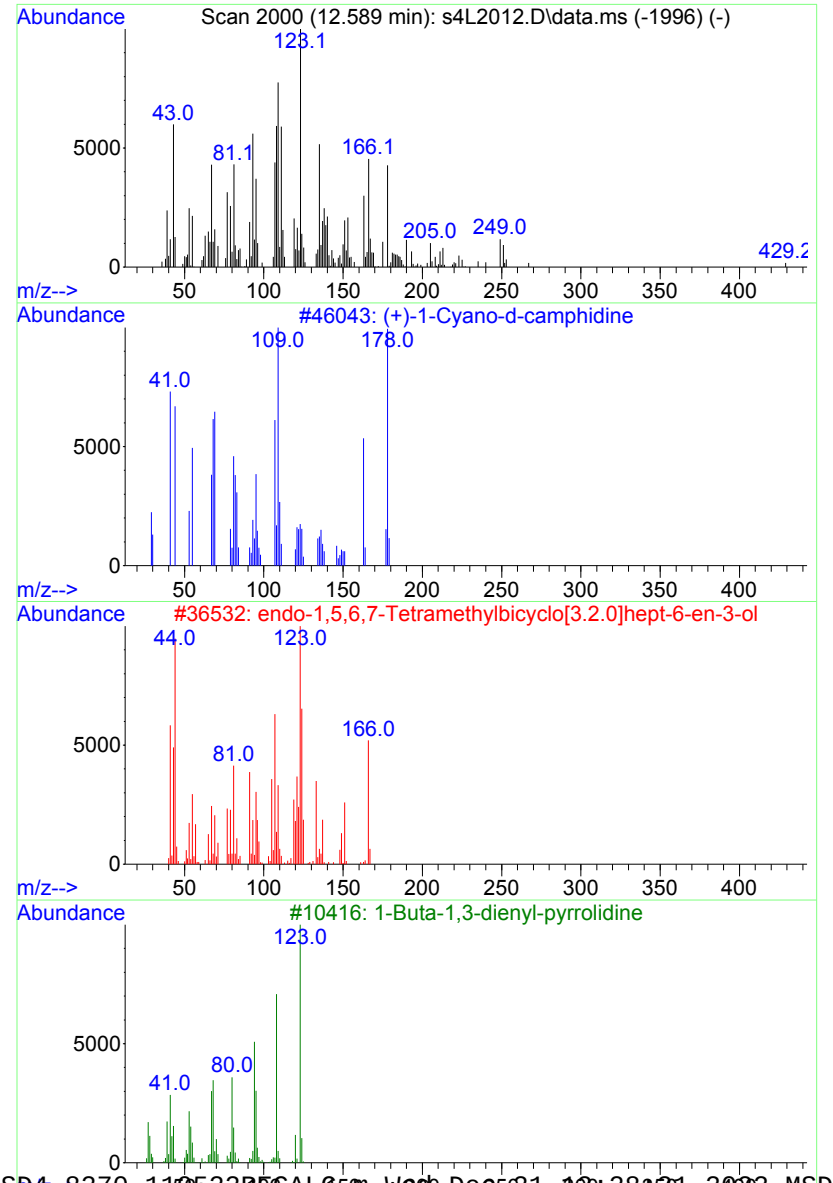
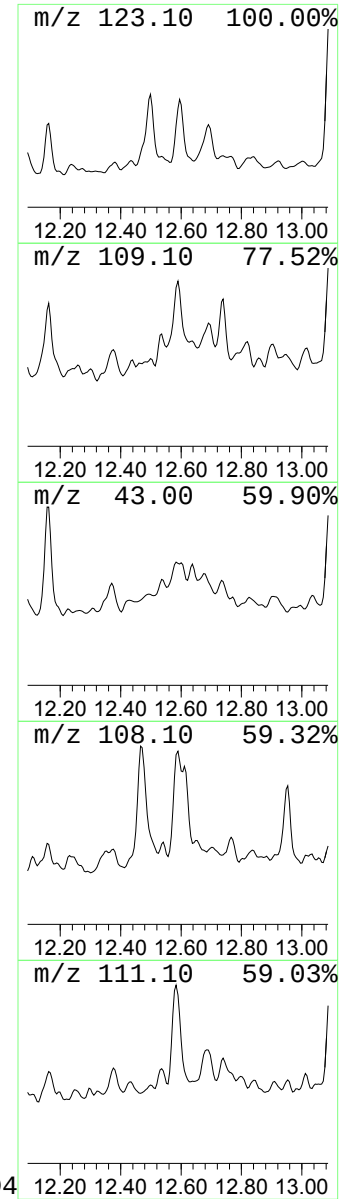
Peak Number 27 unknown Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.589	12.96 ng/uL	560475	A Phenanthrene-d10	12.953

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	(+)-1-Cyano-d-camphidine	178	C11H18N2	1000145-51-5	42
2	endo-1,5,6,7-Tetramethylbicyclo[...	166	C11H18O	134329-43-4	30
3	1-Buta-1,3-dienyl-pyrrolidine	123	C8H13N	1000192-47-6	18
4	Butanamide, N-(4-methoxyphenyl)-	193	C11H15NO2	1000306-91-5	18
5	Bicyclo[2.1.1]hexane-5-carboxyli...	182	C10H14O3	1000217-20-4	18





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2012.D
Acq On : 20 Dec 2022 17:13
Operator : NM1
Sample : |604449010|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

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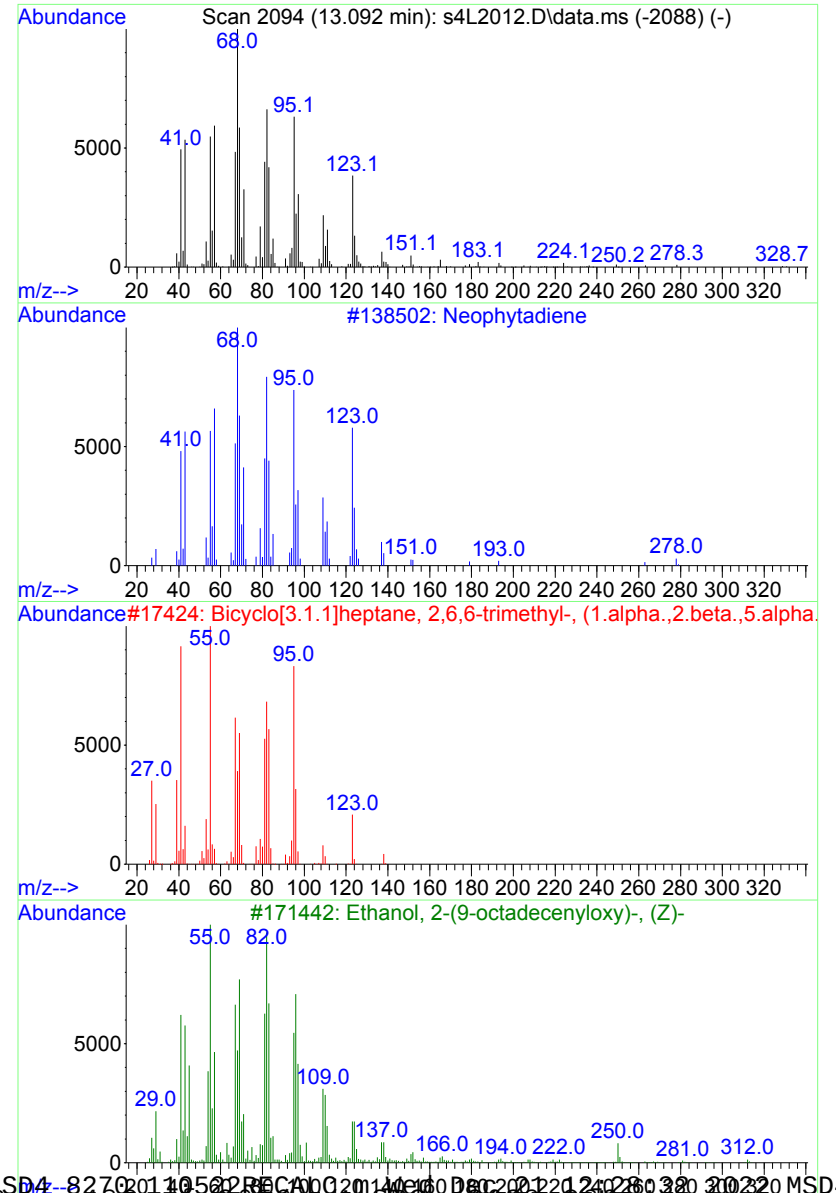
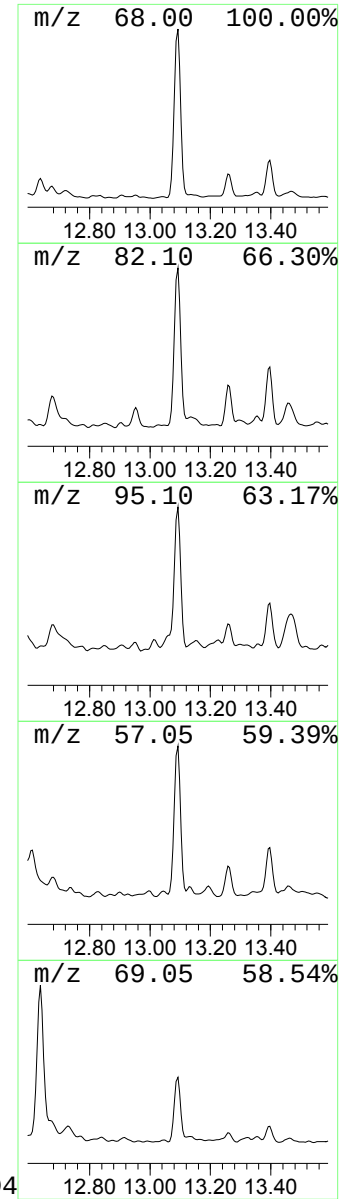
Peak Number 28 Neophytadiene Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.092	13.81 ng/uL	597269	D Phenanthrene-d10	12.953

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Neophytadiene	278	C20H38	000504-96-1	91
2	Bicyclo[3.1.1]heptane, 2,6,6-tri...	138	C10H18	006876-13-7	60
3	Ethanol, 2-(9-octadecenyloxy)-, ...	312	C20H40O2	005353-25-3	47
4	Bicyclo[3.1.1]heptane, 2,6,6-tri...	138	C10H18	000473-55-2	35
5	(-)-trans-Pinane	138	C10H18	033626-25-4	35





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2012.D
Acq On : 20 Dec 2022 17:13
Operator : NM1
Sample : |604449010|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

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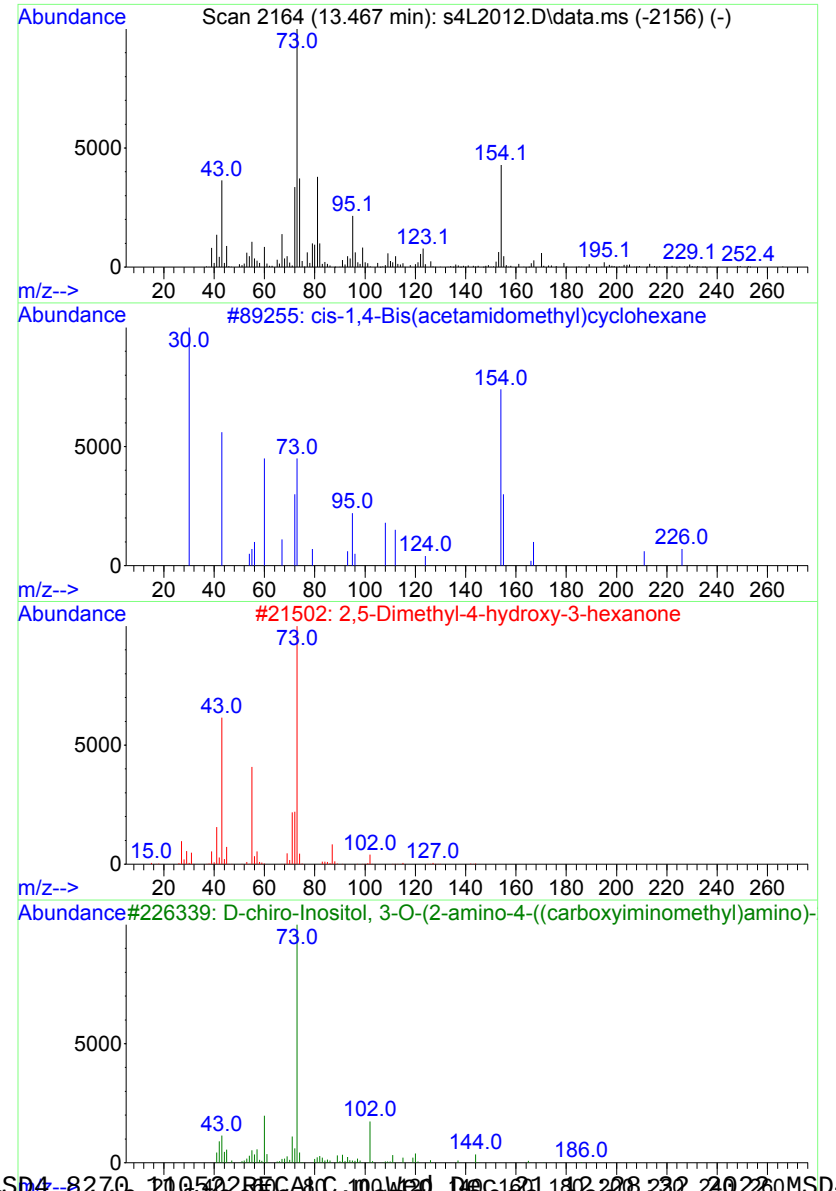
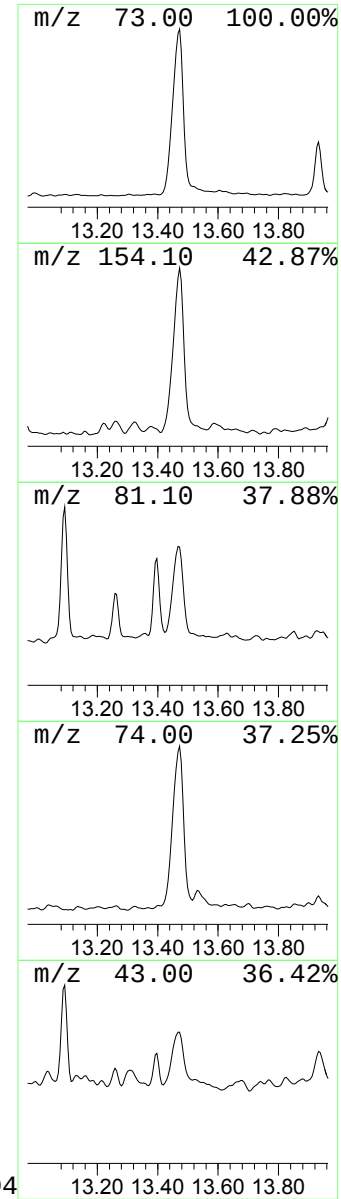
Peak Number 29 unknown Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.467	10.69 ng/uL	462210	D Phenanthrene-d10	12.953

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	cis-1,4-Bis(acetamidomethyl)cycl...	226	C12H22N2O2	070924-83-3	33
2	2,5-Dimethyl-4-hydroxy-3-hexanone	144	C8H16O2	000815-77-0	9
3	D-chiro-Inositol, 3-O-(2-amino-4...	379	C14H25N3O9	006980-18-3	9
4	d,l-trans-4-Methyl-5-methoxy-1-(...	198	C12H22O2	124547-59-7	9
5	trans-1,4-Bis(acetamidomethyl)cy...	226	C12H22N2O2	070924-84-4	9





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2012.D
Acq On : 20 Dec 2022 17:13
Operator : NM1
Sample : |604449010|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

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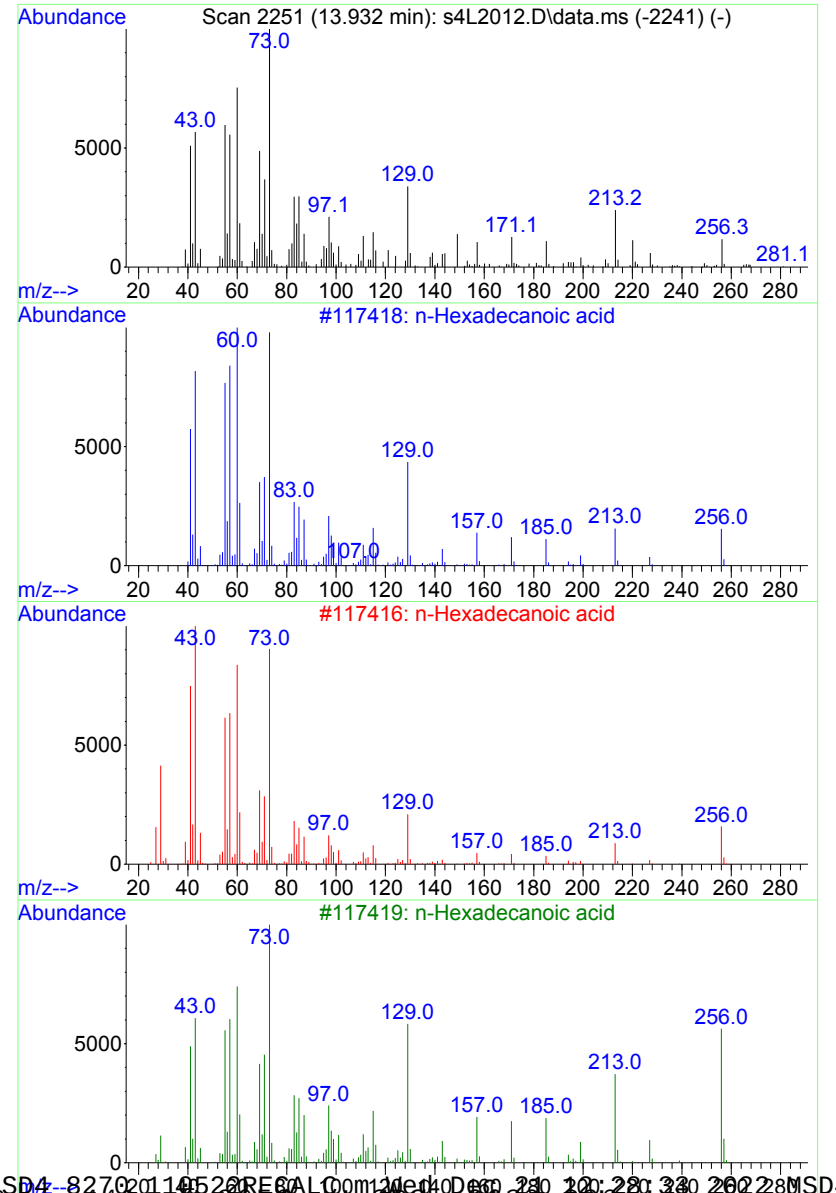
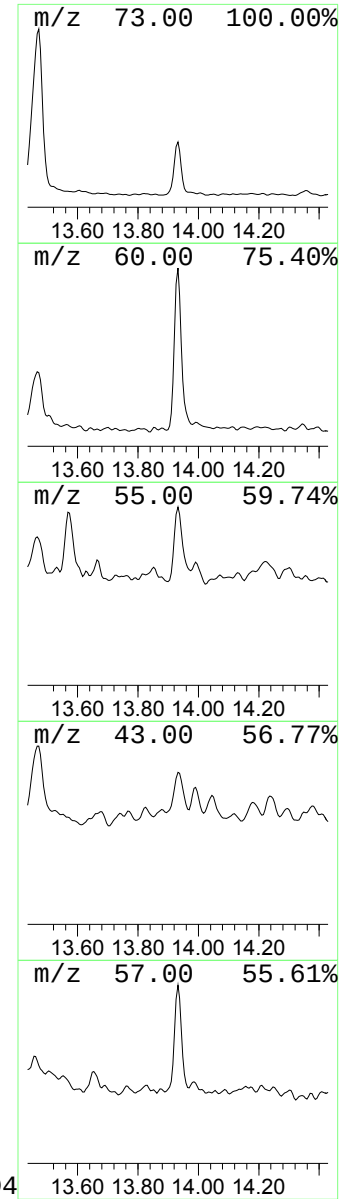
Peak Number 30 n-Hexadecanoic acid Concentration Rank 29

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.932	9.13 ng/uL	394917	D Phenanthrene-d10	12.953

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	98
2	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	96
3	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	80
4	Tetradecanoic acid	228	C14H28O2	000544-63-8	70
5	Tridecanoic acid	214	C13H26O2	000638-53-9	64





Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2012.D
Acq On : 20 Dec 2022 17:13
Operator : NM1
Sample : |604449010|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB03-23-265373|MIX[A,B,J,D,E]||
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

			(ng/uL)		Internal Standard		
TIC Top Hit name	CAS #	RT	EstConc	Response	#	RT	Resp	Conc
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Dimethyl sulfone	000067-71-0	4.454	27.6	602707	1	5.748	874548	40.0
unknown	1000411-45-0	5.481	13.8	302723	1	5.748	874548	40.0
unknown	055702-69-7	6.166	9.7	212189	2	5.748	874548	40.0
unknown	001192-22-9	6.331	11.1	242322	2	5.748	874548	40.0
unknown	1000213-28-5	7.588	9.2	341969	3	7.690	1493720	40.0
unknown	085152-52-9	7.808	9.4	349287	7	7.690	1493720	40.0
unknown	000103-82-2	8.171	10.9	408041	7	7.690	1493720	40.0
unknown	033083-83-9	8.278	12.2	454387	7	7.690	1493720	40.0
unknown	056247-53-1	8.348	9.4	352789	7	7.690	1493720	40.0
Benzoic acid, 4-methyl-	000099-94-5	8.433	16.6	620735	7	7.690	1493720	40.0
unknown	000100-74-3	8.803	9.8	365831	7	7.690	1493720	40.0
unknown	000461-89-2	8.835	14.7	549086	7	7.690	1493720	40.0
unknown	001189-08-8	8.926	14.5	540102	7	7.690	1493720	40.0
unknown	1000309-34-4	9.081	10.1	377615	7	7.690	1493720	40.0
unknown	003658-93-3	9.273	10.8	396469	8	10.525	1474270	40.0
unknown	1000415-62-9	10.097	9.0	333506	8	10.525	1474270	40.0
1H-Benzotriazole	000095-14-7	10.322	11.3	416150	8	10.525	1474270	40.0
Benzoic acid, 2,4-dichloro-	000050-84-0	10.664	47.5	1749600	10	10.525	1474270	40.0
Benzoic acid, 2,4-dichloro-	000050-84-0	10.691	37.7	1391000	10	10.525	1474270	40.0
1H-Benzotriazole, 4-methyl-	029878-31-7	10.862	17.1	629335	10	10.525	1474270	40.0
2(4H)-Benzofuranone, 5,6,7,...	015356-74-8	10.947	23.6	871077	10	10.525	1474270	40.0
Gabapentin lactam	064744-50-9	11.445	44.4	1637670	10	10.525	1474270	40.0
unknown	000700-13-0	11.766	10.0	431978	11	12.953	1729980	40.0
unknown	063498-93-1	12.162	13.1	566420	11	12.953	1729980	40.0
unknown	1000367-06-8	12.547	9.6	417014	11	12.953	1729980	40.0
unknown	1000145-51-5	12.589	13.0	560475	11	12.953	1729980	40.0
Neophytadiene	000504-96-1	13.092	13.8	597269	14	12.953	1729980	40.0
unknown	070924-83-3	13.467	10.7	462210	14	12.953	1729980	40.0
n-Hexadecanoic acid	000057-10-3	13.932	9.1	394917	14	12.953	1729980	40.0

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:01**	**Matrix:**	**W**
Lab Sample ID:	**604449014**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB04-23-265374**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 17:42**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**1057.42 mL**	**Final Volume:**	**1 mL**
Data File:	**S122022\s4L2013.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
1610-18-0	Prometon	U	2.84	ug/L	2.84	9.46
126-33-0	Sulfolane	U	2.84	ug/L	2.84	9.46
PAH-tot-3a	Total PAHs 3a	U	0.000	ug/L		
62-75-9	N-Methyl-N-nitrosomethylamine	U	2.84	ug/L	2.84	9.46
108-95-2	Phenol	U	2.84	ug/L	2.84	9.46
111-44-4	bis(2-Chloroethyl) ether	U	2.84	ug/L	2.84	9.46
108-60-1	bis(2-Chloro-1-methylethyl)ether	U	2.84	ug/L	2.84	9.46
67-72-1	Hexachloroethane	U	2.84	ug/L	2.84	9.46
98-95-3	Nitrobenzene	U	2.84	ug/L	2.84	9.46
78-59-1	Isophorone	U	3.31	ug/L	3.31	9.46
120-83-2	2,4-Dichlorophenol	U	2.84	ug/L	2.84	9.46
87-68-3	Hexachlorobutadiene	U	2.84	ug/L	2.84	9.46
91-57-6	2-Methylnaphthalene	U	0.284	ug/L	0.284	0.946
91-20-3	Naphthalene	U	0.284	ug/L	0.284	0.946
90-12-0	1-Methylnaphthalene	U	0.284	ug/L	0.284	0.946
77-47-4	Hexachlorocyclopentadiene	U	2.84	ug/L	2.84	9.46
88-06-2	2,4,6-Trichlorophenol	U	2.84	ug/L	2.84	9.46
95-95-4	2,4,5-Trichlorophenol	U	2.84	ug/L	2.84	9.46
131-11-3	Dimethylphthalate	U	0.284	ug/L	0.284	0.946
606-20-2	2,6-Dinitrotoluene	U	2.84	ug/L	2.84	9.46
121-14-2	2,4-Dinitrotoluene	U	2.84	ug/L	2.84	9.46
51-28-5	2,4-Dinitrophenol	U	4.73	ug/L	4.73	18.9
84-66-2	Diethylphthalate	U	0.284	ug/L	0.284	0.946
86-73-7	Fluorene	U	0.284	ug/L	0.284	0.946
534-52-1	2-Methyl-4,6-dinitrophenol	U	2.84	ug/L	2.84	9.46
122-39-4	Diphenylamine	U	2.84	ug/L	2.84	9.46
103-33-3	Azobenzene	U	2.84	ug/L	2.84	9.46
122-66-7	*1,2-Diphenylhydrazine*					
118-74-1	Hexachlorobenzene	U	2.84	ug/L	2.84	9.46
87-86-5	Pentachlorophenol	U	2.84	ug/L	2.84	9.46
85-01-8	Phenanthrene	U	0.284	ug/L	0.284	0.946
120-12-7	Anthracene	U	0.284	ug/L	0.284	0.946
84-74-2	Di-n-butylphthalate	U	0.284	ug/L	0.284	0.946
206-44-0	Fluoranthene	U	0.284	ug/L	0.284	0.946
129-00-0	Pyrene	U	0.284	ug/L	0.284	0.946
117-81-7	bis(2-Ethylhexyl)phthalate	J	0.463	ug/L	0.284	0.946
205-99-2	Benzo(b)fluoranthene	U	0.284	ug/L	0.284	0.946
207-08-9	Benzo(k)fluoranthene	U	0.284	ug/L	0.284	0.946
50-32-8	Benzo(a)pyrene	U	0.284	ug/L	0.284	0.946

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:01**	**Matrix:**	**W**
Lab Sample ID:	**604449014**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB04-23-265374**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 17:42**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**1057.42 mL**	**Final Volume:**	**1 mL**
Data File:	**S122022\s4L2013.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
123-91-1	1,4-Dioxane	U	2.84	ug/L	2.84	9.46
55-18-5	N-Nitrosodiethylamine	U	2.84	ug/L	2.84	9.46
930-55-2	N-Nitrosopyrrolidine	U	2.84	ug/L	2.84	9.46
924-16-3	N-Nitrosodi-n-butylamine	U	2.84	ug/L	2.84	9.46
95-94-3	1,2,4,5-Tetrachlorobenzene	U	2.84	ug/L	2.84	9.46
608-93-5	Pentachlorobenzene	U	2.84	ug/L	2.84	9.46
1912-24-9	Atrazine	U	2.84	ug/L	2.84	9.46
92-87-5	Benzidine	U	3.69	ug/L	3.69	9.46
91-94-1	3,3'-Dichlorobenzidine	U	2.84	ug/L	2.84	9.46

Surrogate/Tracer recovery	Result	Nominal		Recovery%		Acceptable Limits
2,4,6-Tribromophenol	77.6	94.6	ug/L	82		(37%-132%)
2-Fluorobiphenyl	23.6	47.3	ug/L	50		(39%-112%)
2-Fluorophenol	48.5	94.6	ug/L	51		(11%-79%)
Nitrobenzene-d5	34.1	47.3	ug/L	72		(39%-112%)
Phenol-d5	43.7	94.6	ug/L	46		(15%-85%)
p-Terphenyl-d14	7.49	47.3	ug/L	16	*	(24%-129%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
000067-71-0	Dimethyl sulfone	4.449	11.9	ug/L	94	NJ
	unknown	5.952	8.33	ug/L	39	J
	unknown	7.562	4.2	ug/L	64	J
	unknown	8.332	7.44	ug/L	64	J
	unknown	8.765	18.5	ug/L	64	J
	unknown	9.076	4.71	ug/L	50	J
000126-86-3	2,4,7,9-Tetramethyl-5-decyn-4,7-diol	9.68	9.34	ug/L	91	NJ
	unknown	10.06	4.77	ug/L	49	J
000095-14-7	1H-Benzotriazole	10.284	5.97	ug/L	96	NJ
000143-24-8	Tetraglyme	10.466	12.3	ug/L	90	NJ
000050-84-0	Benzoic acid, 2,4-dichloro-	10.664	23.3	ug/L	99	NJ
029878-31-7	1H-Benzotriazole, 4-methyl-	10.841	12.9	ug/L	98	NJ
067130-04-5	4-Chloro-3H-1,2,3-benzotriazole	11.162	4.09	ug/L	93	NJ
064744-50-9	Gabapentin lactam	11.392	18.7	ug/L	98	NJ
	unknown	11.932	4.68	ug/L	43	J
	unknown	12.579	5.3	ug/L	55	J

Quantitation Report

12/22/2022

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2013.D
Acq On : 20 Dec 2022 17:42
Operator : NM1
Sample : |604449014|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB04-23-265374|MIX[A,B,J,D,E]||
ALS Vial : 13 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 21 12:28:37 2022
Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	5.749	5.754	1.000	122909	40.00	ng/uL	0.00
22) A Naphthalene-d8	136	7.690	7.695	1.000	520973	40.00	ng/uL	0.00
39) A Acenaphthene-d10	164	10.525	10.525	1.000	310517	40.00	ng/uL	0.00
64) A Phenanthrene-d10	188	12.948	12.948	1.000	685600	40.00	ng/uL	0.00
80) A Chrysene-d12	240	17.291	17.296	1.000	826186	40.00	ng/uL	0.00
88) A Perylene-d12	264	20.308	20.307	1.000	892628	40.00	ng/uL	0.00
96) B 1,4-Dichlorobenzene-d4	152	5.749	5.754	1.000	122909	40.00	ng/uL	0.00
112) B Naphthalene-d8	136	7.690	7.695	1.000	520973	40.00	ng/uL	0.00
120) B Acenaphthene-d10	164	10.525	10.525	1.000	310517	40.00	ng/uL	0.00
129) B Phenanthrene-d10	188	12.948	12.948	1.000	685600	40.00	ng/uL	0.00
142) B Chrysene-d12	240	17.291	17.296	1.000	826186	40.00	ng/uL	0.00
148) B Perylene-d12	264	20.308	20.307	1.000	892628	40.00	ng/uL	0.00
151) J Naphthalene-d8	136	7.690	7.695	1.000	520973	40.00	ng/uL	0.00
153) J Phenanthrene-d10	188	12.948	12.948	1.000	685600	40.00	ng/uL	0.00
156) J Chrysene-d12	240	17.291	17.296	1.000	826186	40.00	ng/uL	0.00
159) D Naphthalene-d8	136	7.690	7.695	1.000	520973	40.00	ng/uL	0.00
161) D Acenaphthene-d10	164	10.525	10.525	1.000	310517	40.00	ng/uL	0.00
164) D Phenanthrene-d10	188	12.948	12.948	1.000	685600	40.00	ng/uL	0.00
171) D Chrysene-d12	240	17.291	17.296	1.000	826186	40.00	ng/uL	0.00
173) E Naphthalene-d8	136	7.690	7.695	1.000	520973	40.00	ng/uL	0.00
175) E Perylene-d12	264	20.308	20.307	1.000	892628	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	3.957	3.951	0.688	210431	51.28	ng/uL	0.00
8) Phenol-d5	99	5.208	5.203	0.906	239738	46.21	ng/uL	0.00
23) Nitrobenzene-d5	82	6.572	6.577	0.855	196290	36.06	ng/uL	0.00
44) 2-Fluorobiphenyl	172	9.439	9.439	0.897	288058	24.97	ng/uL	0.00
63) 2,4,6-Tribromophenol	330	11.819	11.814	1.123	217673	82.10	ng/uL	0.00
79) p-Terphenyl-d14	244	15.579	15.579	1.203	143451	7.92	ng/uL	0.00

Compound	Amount	Range	Recovery
5) 2-Fluorophenol	100.000	11 - 79	51%
8) Phenol-d5	100.000	15 - 85	46%
23) Nitrobenzene-d5	50.000	39 - 112	72%
44) 2-Fluorobiphenyl	50.000	39 - 112	50%
63) 2,4,6-Tribromophenol	100.000	37 - 132	82%
79) p-Terphenyl-d14	50.000	24 - 129	16%#

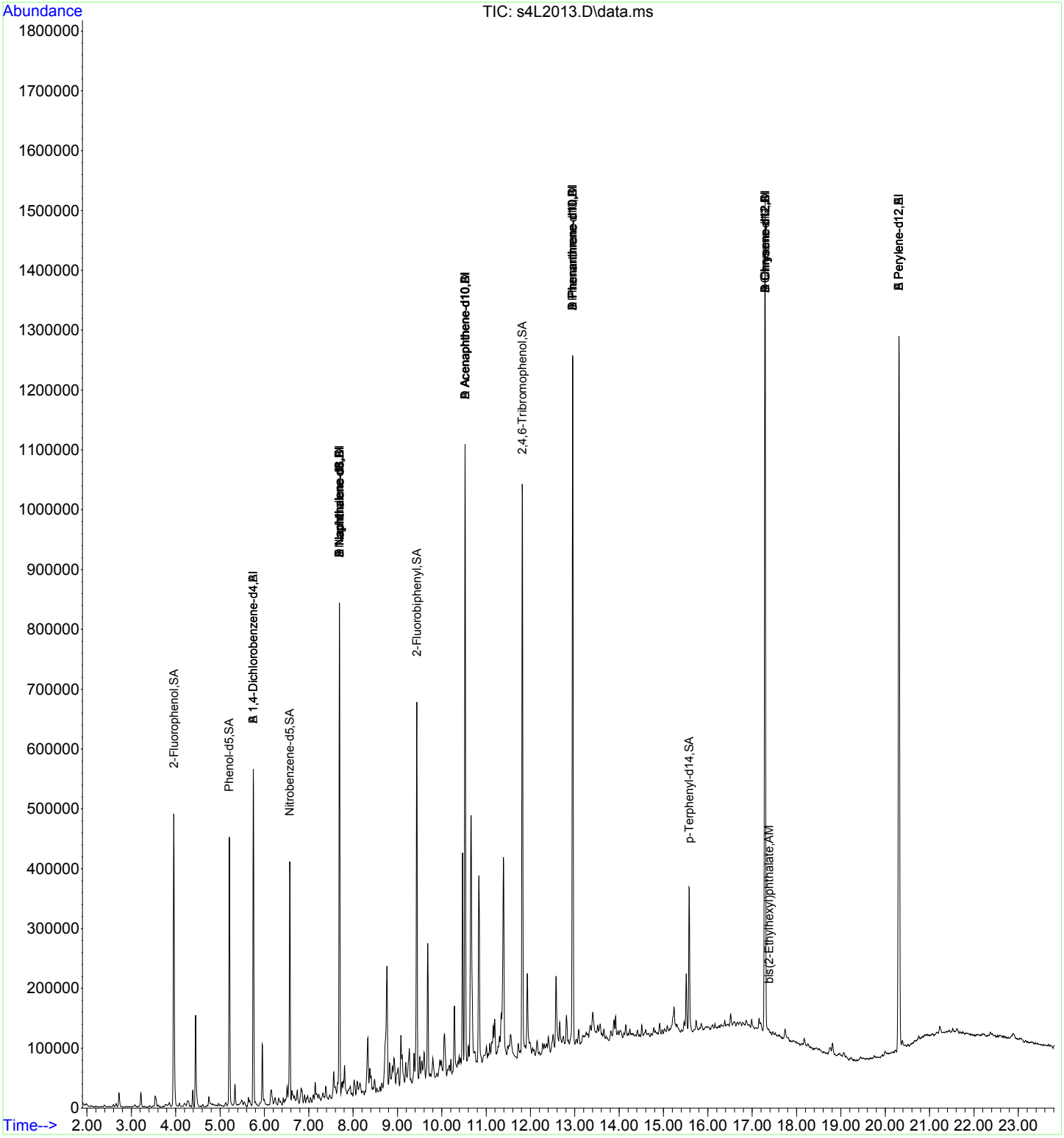
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
82) bis(2-Ethylhexyl)phtha...	149	17.377	17.376	1.005	1300	0.49	ng/uL	73

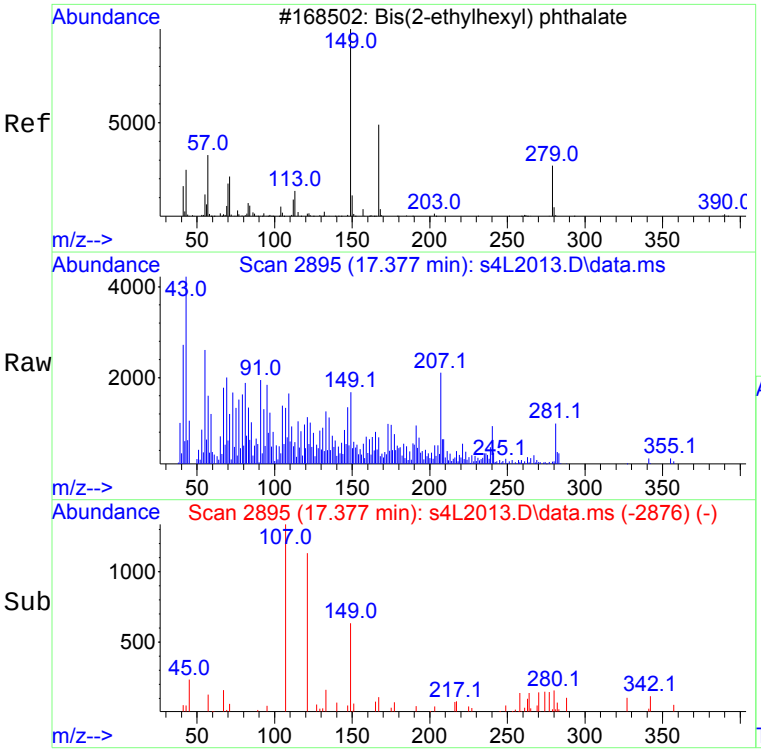
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2013.D
Acq On : 20 Dec 2022 17:42
Operator : NM1
Sample : |604449014|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB04-23-265374|MIX[A,B,J,D,E]||
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 21 12:28:37 2022
Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

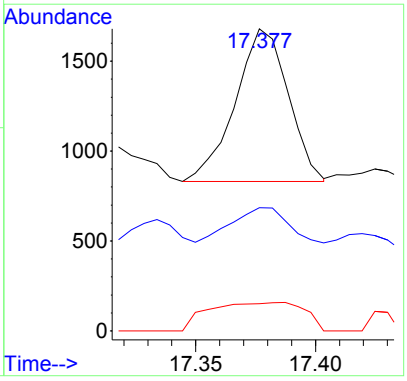


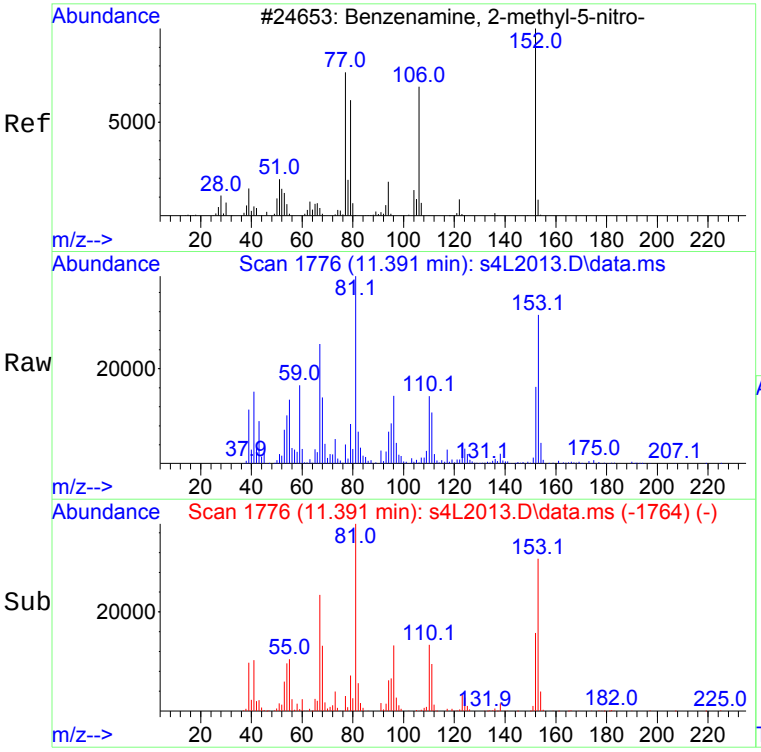


#82
bis(2-Ethylhexyl)phthalate
Concen: 0.49 ng/uL
RT: 17.377 min Scan# 2895
Delta R.T. 0.000 min
Lab File: s4L2013.D
Acq: 20 Dec 2022 17:42

Tgt Ion:149 Resp: 1300

Ion	Ratio	Lower	Upper
149	100		
167	36.1	0.0	57.6
279	33.5	0.0	35.2

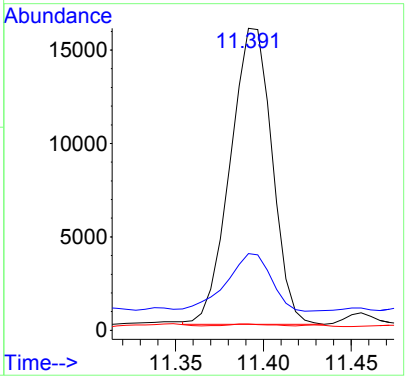




#128 BEFORE analyst DELETION
5-Nitro-o-toluidine
Concen: 9.44 ng/uL
RT: 11.391 min Scan# 1776
Delta R.T. -0.037 min
Lab File: s4L2013.D
Acq: 20 Dec 2022 17:42

Tgt Ion:152 Resp: 26324

Ion	Ratio	Lower	Upper
152	100		
77	20.8	76.7	136.7#
106	0.0	52.6	112.6#



Library Search Compound Report

12/22/2022

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2013.D
Acq On : 20 Dec 2022 17:42
Operator : NM1
Sample : |604449014|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB04-23-265374|MIX[A,B,J,D,E]||
ALS Vial : 13 Sample Multiplier: 1

12/22/2022

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

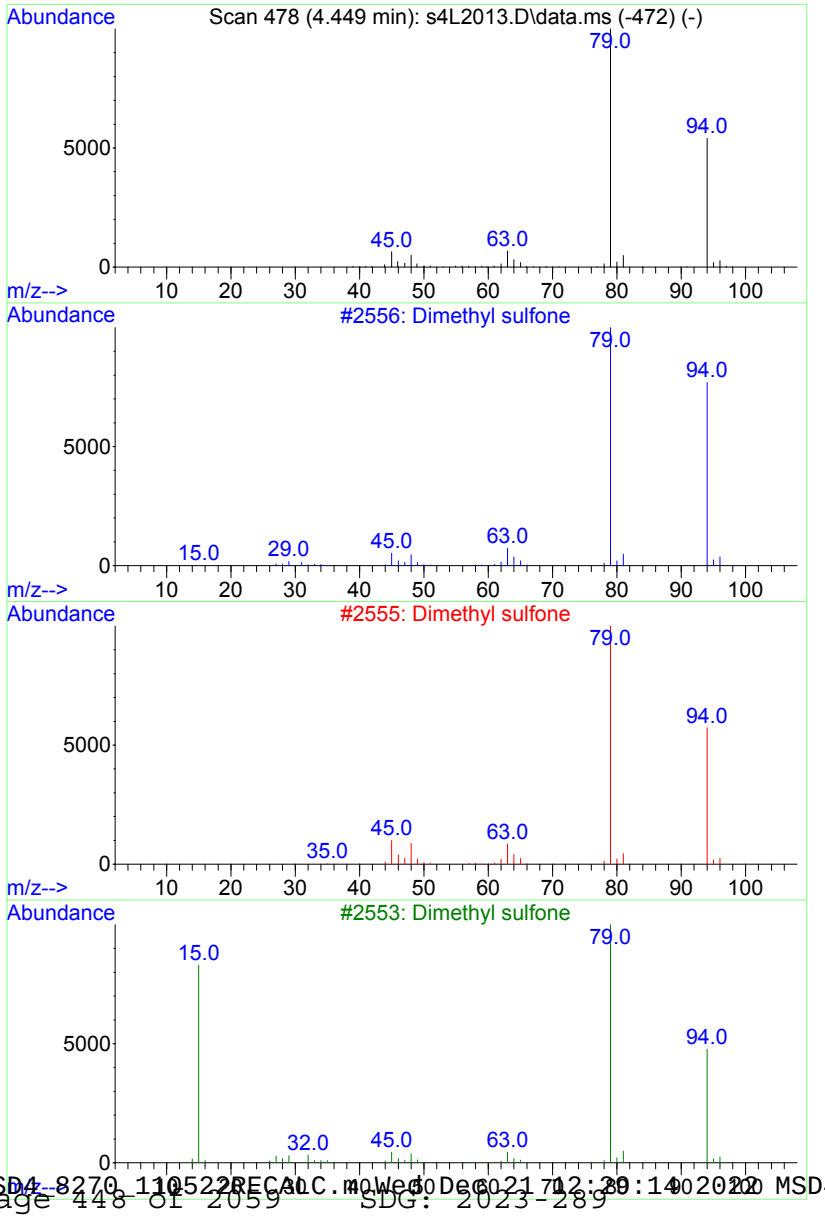
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

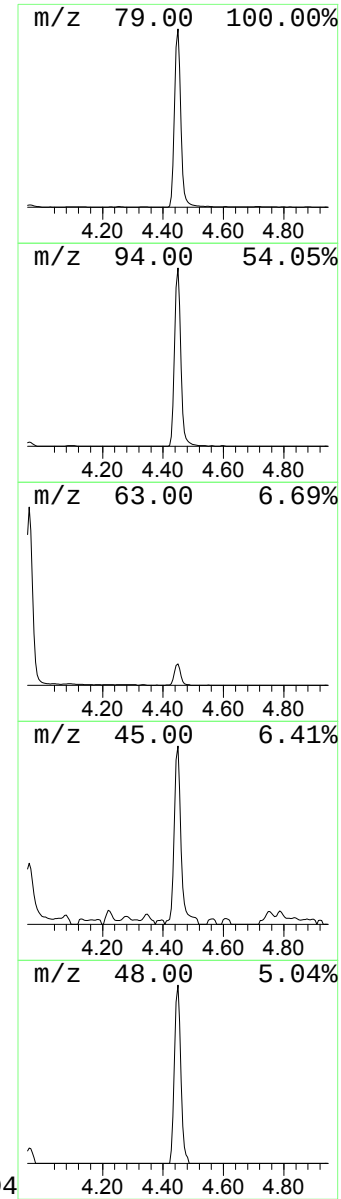
****

Peak Number 1 Dimethyl sulfone Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.449	12.60 ng/uL	244109	A 1,4-Dichlorobenzene-d4	5.749

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dimethyl sulfone	94	C2H6O2S	000067-71-0	94
2	Dimethyl sulfone	94	C2H6O2S	000067-71-0	94
3	Dimethyl sulfone	94	C2H6O2S	000067-71-0	91
4	Dimethyl sulfone	94	C2H6O2S	000067-71-0	43
5	Methanesulfonylacetonitrile	119	C3H5NO2S	002274-42-2	28





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2013.D
Acq On : 20 Dec 2022 17:42
Operator : NM1
Sample : |604449014|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB04-23-265374|MIX[A,B,J,D,E]||
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

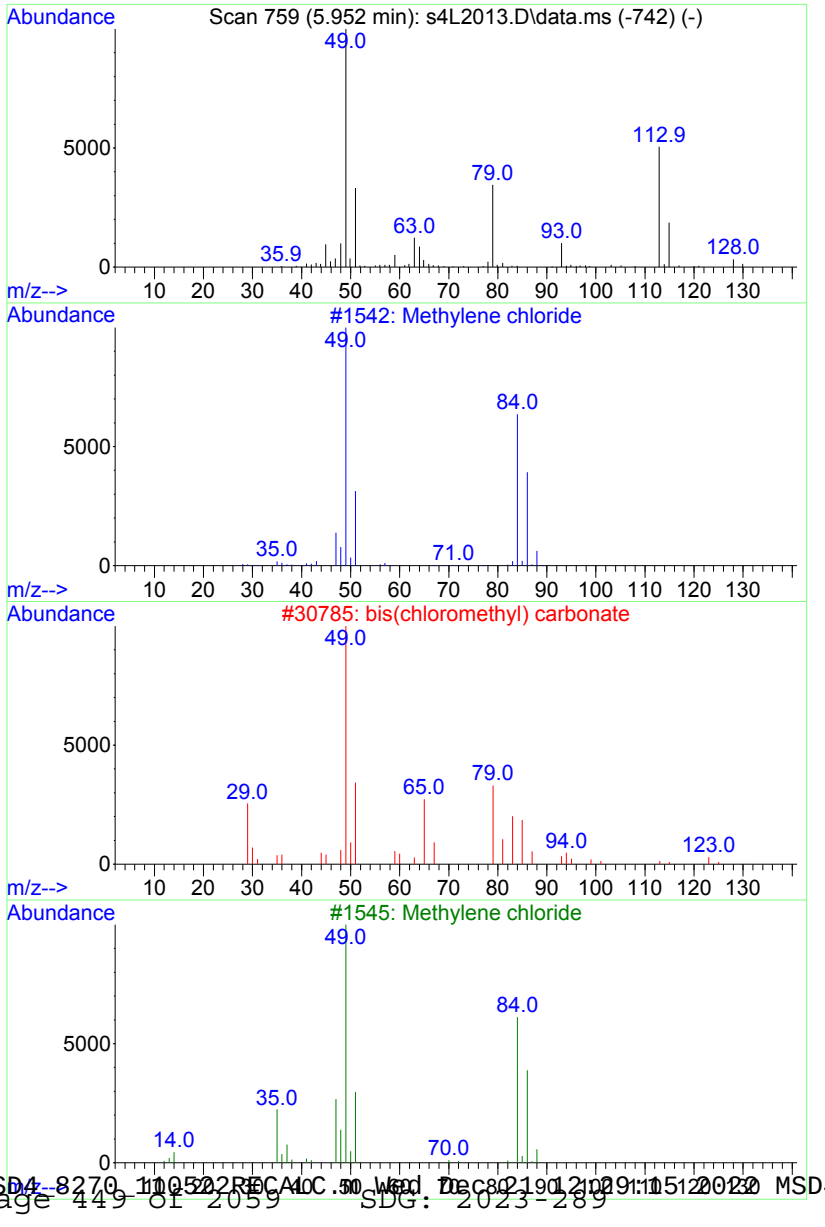
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

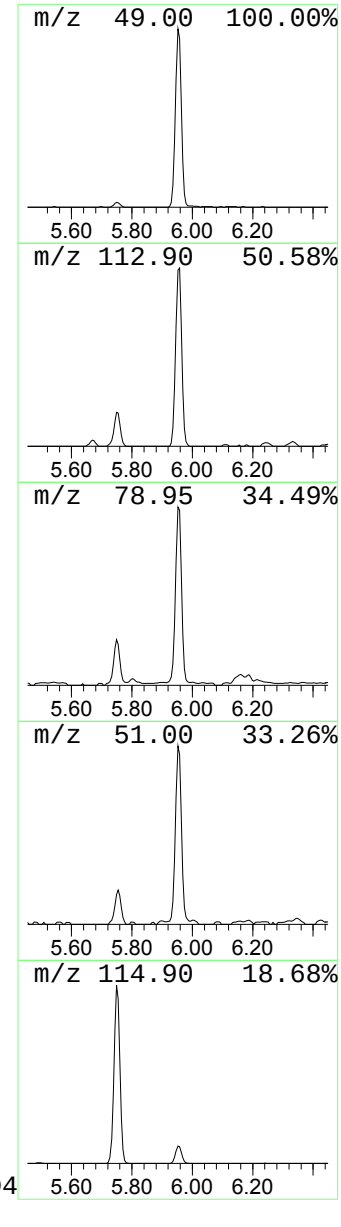
****

Peak Number 2 unknown Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.952	8.81 ng/uL	170614	B 1,4-Dichlorobenzene-d4	5.749

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Methylene chloride	84	CH2Cl2	000075-09-2	39
2	bis(chloromethyl) carbonate	158	C3H4Cl2O3	1000404-37-0	39
3	Methylene chloride	84	CH2Cl2	000075-09-2	9
4	4,5-Dichloro-1,3-dioxolan-2-one	156	C3H2Cl2O3	003967-55-3	9
5	Chloromethanesulfonyl chloride	148	CH2Cl2O2S	003518-65-8	9





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2013.D
Acq On : 20 Dec 2022 17:42
Operator : NM1
Sample : |604449014|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB04-23-265374|MIX[A,B,J,D,E]||
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

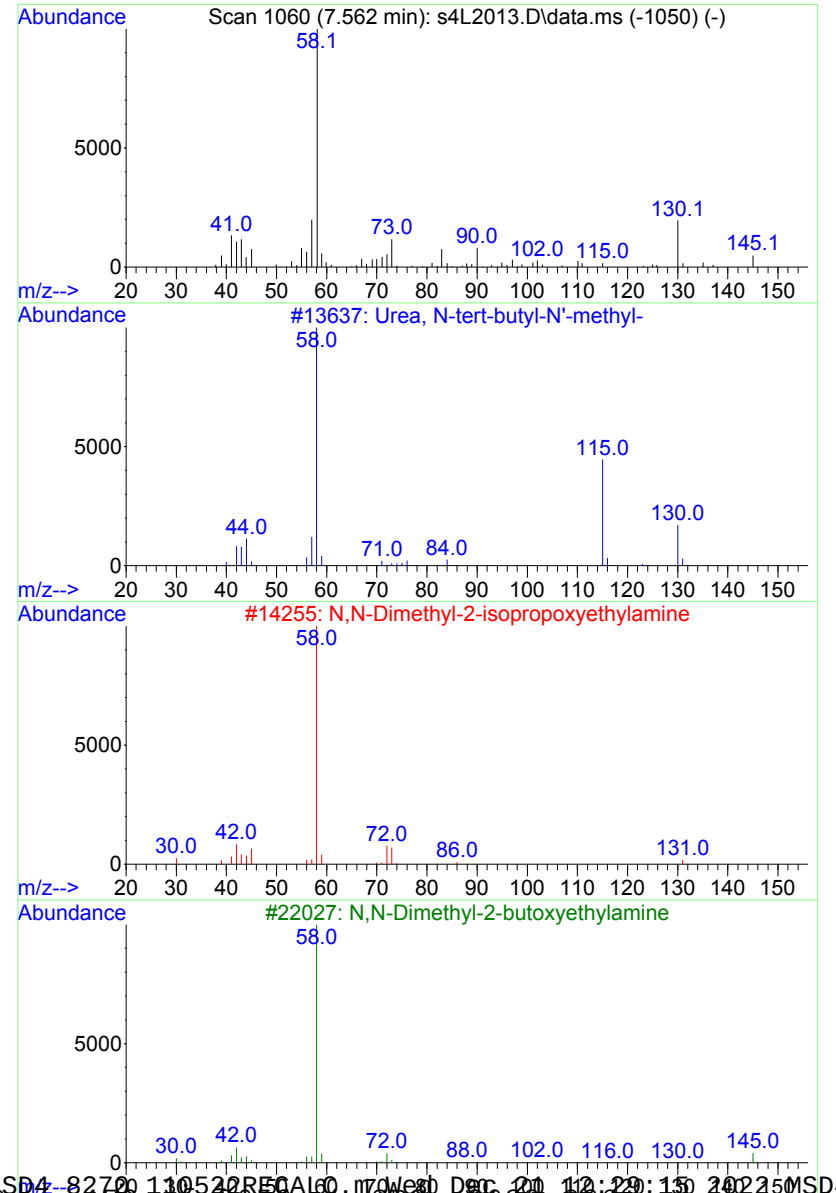
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

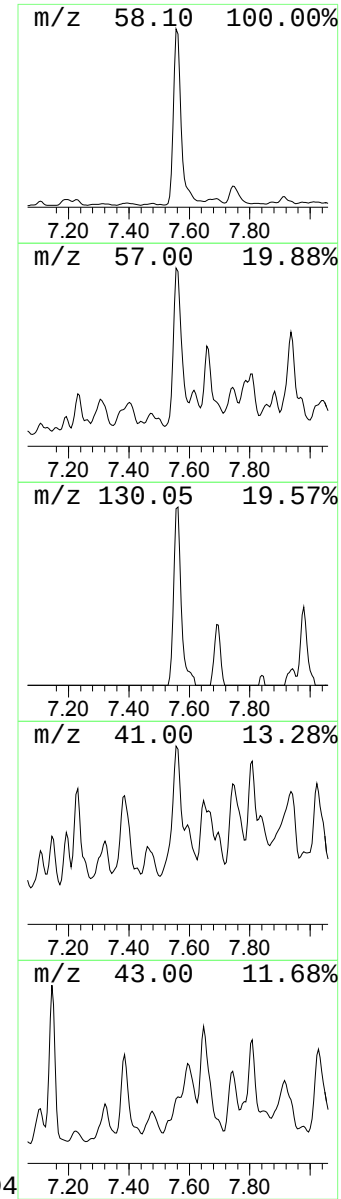
****

Peak Number 3 unknown Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.562	4.44 ng/uL	126272	A Naphthalene-d8	7.690

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Urea, N-tert-butyl-N'-methyl-	130	C6H14N2O	1000360-40-0	64
2	N,N-Dimethyl-2-isopropoxyethylamine	131	C7H17NO	071126-59-5	59
3	N,N-Dimethyl-2-butoxyethylamine	145	C8H19NO	071126-58-4	59
4	2-Propanamine, N-methyl-	73	C4H11N	004747-21-1	58
5	ethanesulfonamide, 2-(dimethylam...	404	C22H48N2O2S	1000398-99-6	53





Library Search Compound Report

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Acq On : 20 Dec 2022 17:42
Operator : NM1
Sample : |604449014|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB04-23-265374|MIX[A,B,J,D,E]||
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

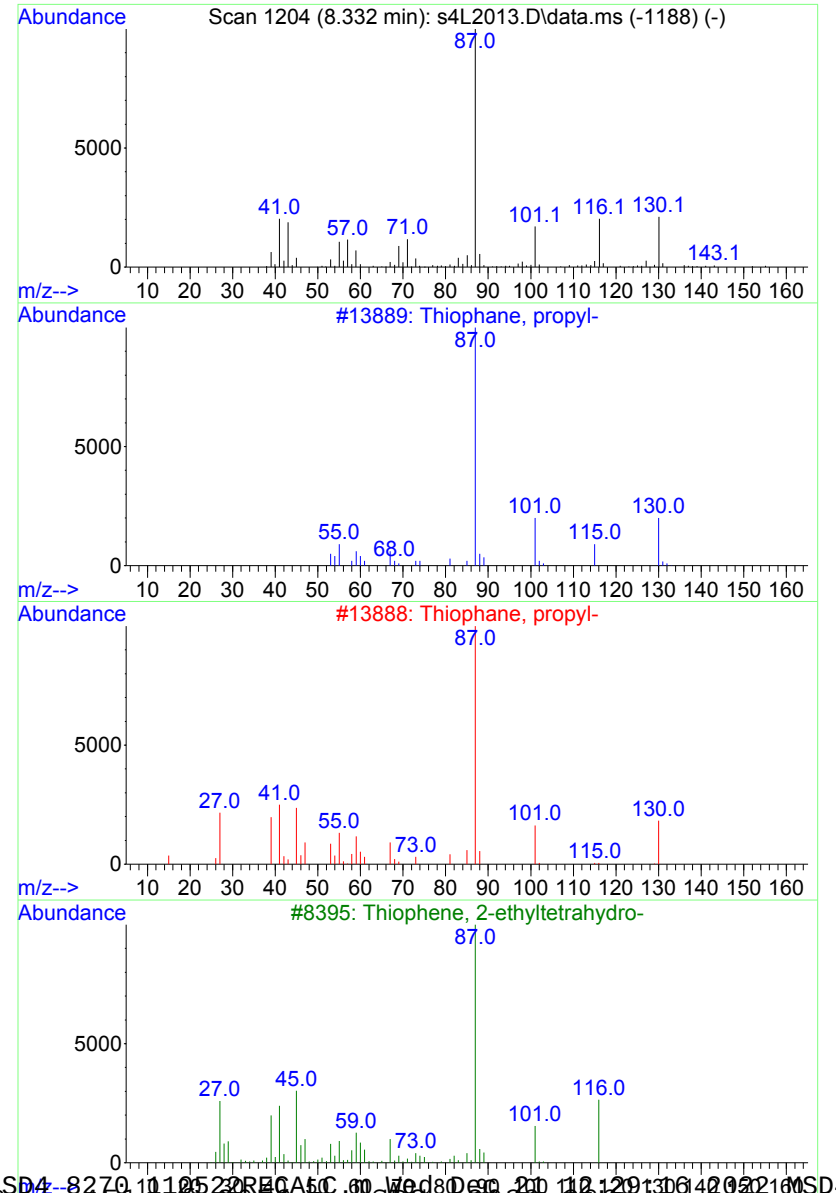
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

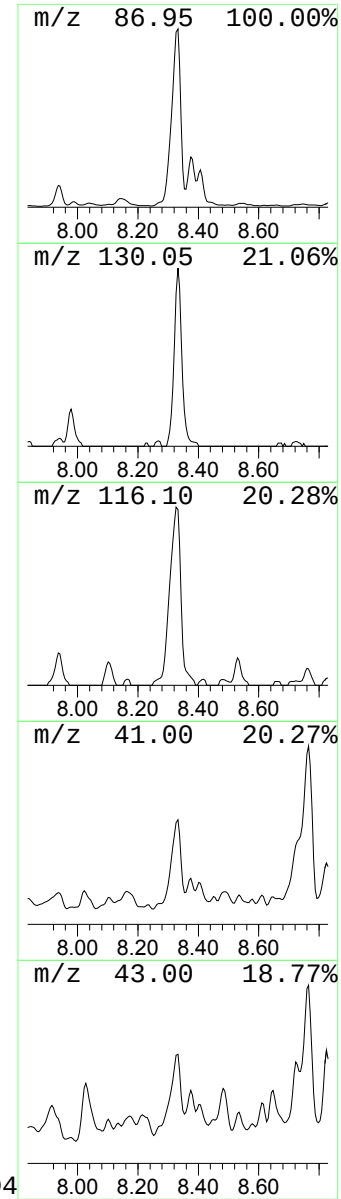
****

Peak Number 4 unknown Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.332	7.87 ng/uL	223674	E Naphthalene-d8	7.690

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Thiophane, propyl-	130	C7H14S	001551-34-4	64
2	Thiophane, propyl-	130	C7H14S	001551-34-4	59
3	Thiophene, 2-ethyltetrahydro-	116	C6H12S	001551-32-2	59
4	Heptanoic acid, 2-propyl-, methy...	186	C11H22O2	056247-53-1	56
5	Heptanoic acid, 2-propyl-, methy...	186	C11H22O2	056247-53-1	50





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Misc : |MSD1C70E_L|WATER|SMEB04-23-265374|MIX[A,B,J,D,E]||
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

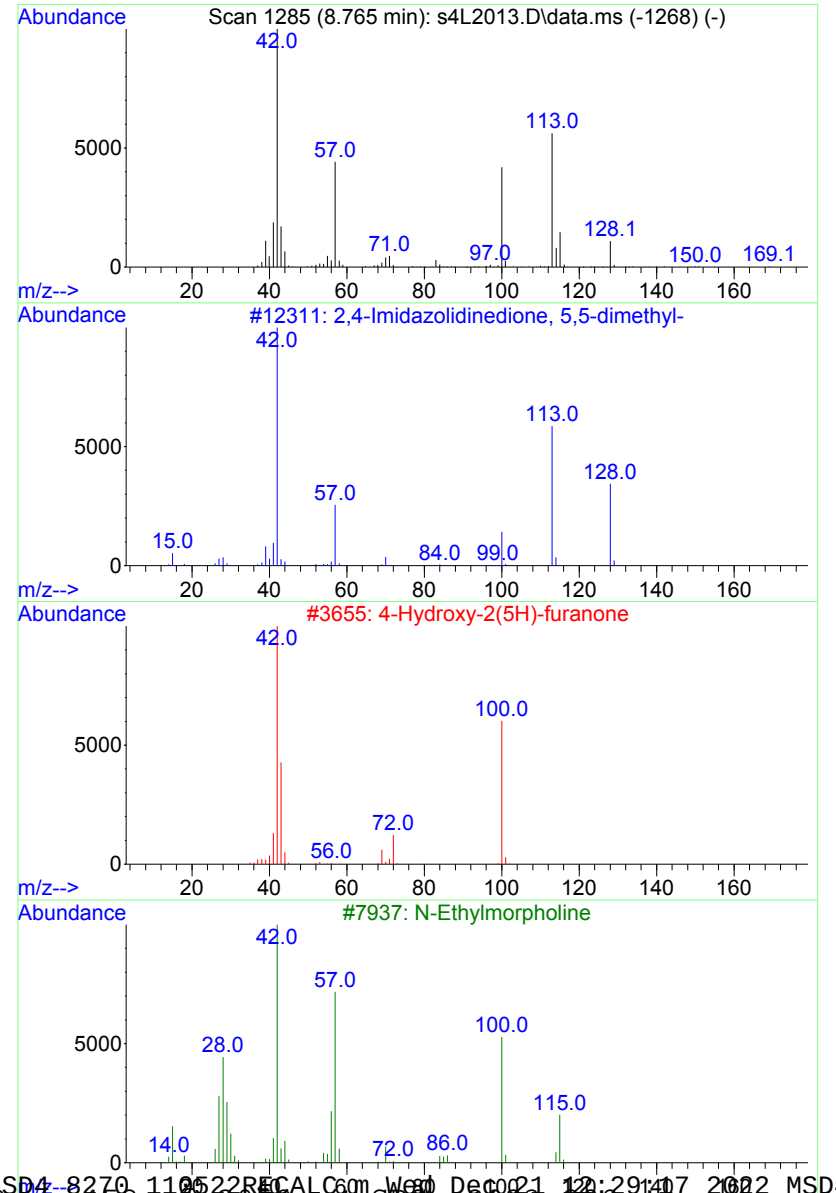
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

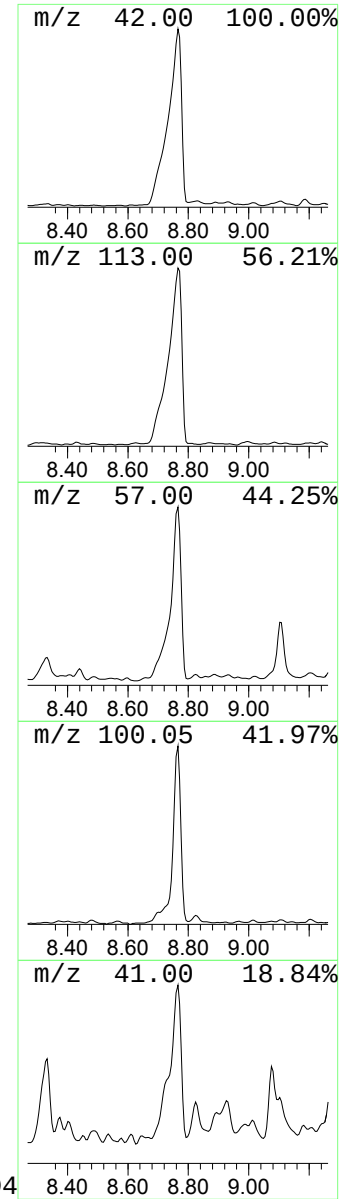
****

Peak Number 5 unknown Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.765	19.57 ng/uL	556495	E Naphthalene-d8	7.690

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,4-Imidazolidinedione, 5,5-dime...	128	C5H8N2O2	000077-71-4	64
2	4-Hydroxy-2(5H)-furanone	100	C4H4O3	000541-57-1	38
3	N-Ethylmorpholine	115	C6H13NO	000100-74-3	38
4	1,2,4-Triazine-3,5(2H,4H)-dione	113	C3H3N3O2	000461-89-2	38
5	2,4-Imidazolidinedione, 5,5-dime...	128	C5H8N2O2	000077-71-4	33





Library Search Compound Report

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Operator : NM1
Sample : |604449014|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB04-23-265374|MIX[A,B,J,D,E]||
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

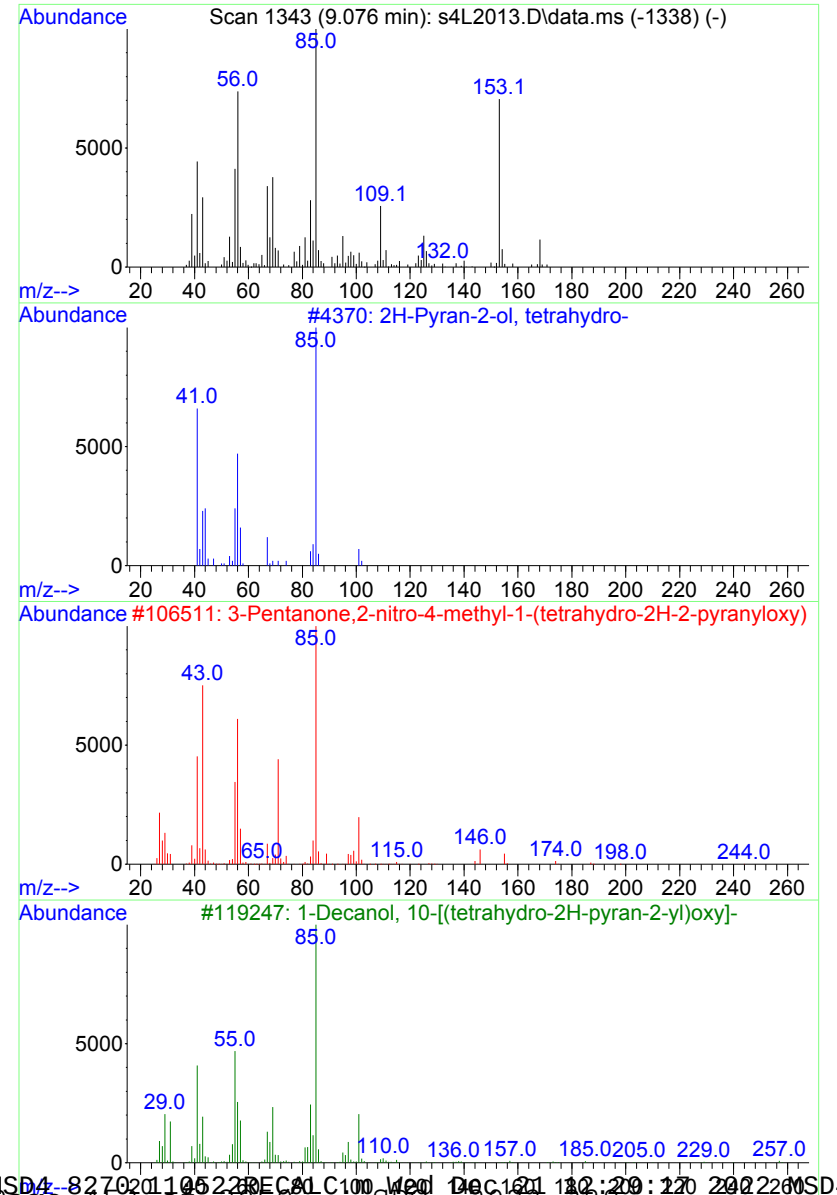
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

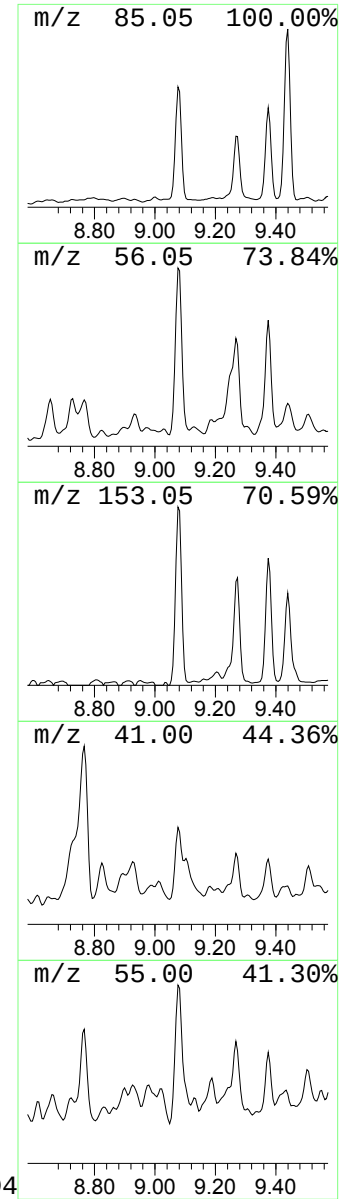
****

Peak Number 6 unknown Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.076	4.98 ng/uL	141464	E Naphthalene-d8	7.690

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2H-Pyran-2-ol, tetrahydro-	102	C5H10O2	000694-54-2	50
2	3-Pentanone,2-nitro-4-methyl-1-(...	245	C11H19NO5	1000196-84-1	43
3	1-Decanol, 10-[(tetrahydro-2H-py...	258	C15H30O3	043047-93-4	35
4	Decane, 4-methylene-	154	C11H22	024949-41-5	35
5	4-Methyl-6-(tetrahydropyran-2-yl...	212	C12H20O3	064218-01-5	27





Library Search Compound Report

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Data File : s4L2013.D
Acq On : 20 Dec 2022 17:42
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Sample : |604449014|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB04-23-265374|MIX[A,B,J,D,E]||
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

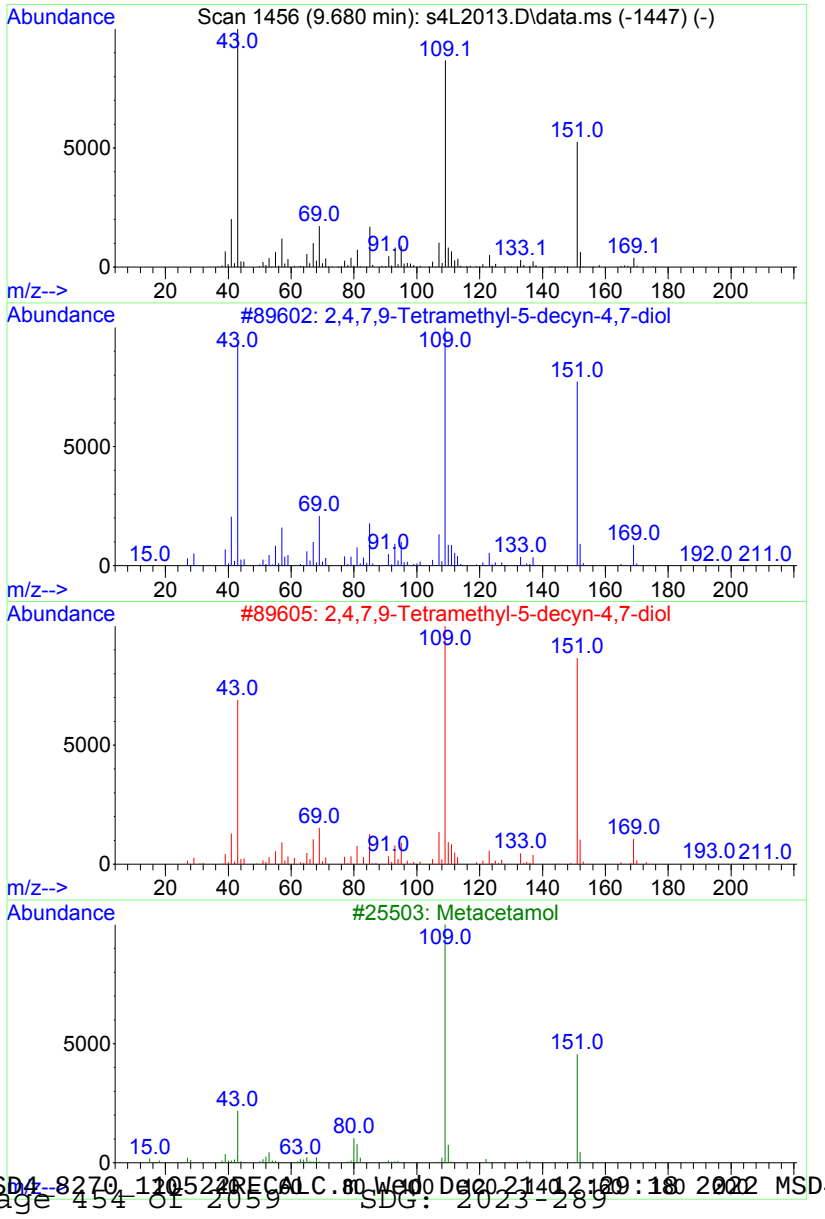
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

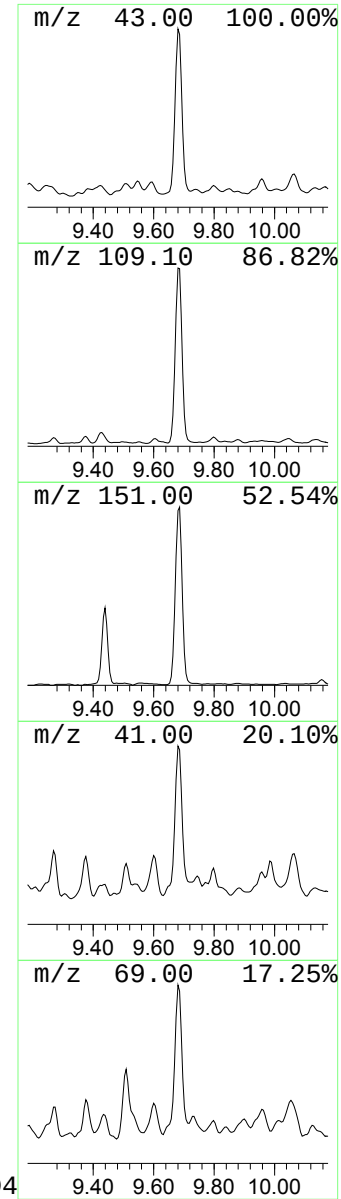
****

Peak Number 7 2,4,7,9-Tetramethyl-5-decyn... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.680	9.88 ng/uL	356372	A Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,4,7,9-Tetramethyl-5-decyn-4,7-...	226	C14H26O2	000126-86-3	91
2	2,4,7,9-Tetramethyl-5-decyn-4,7-...	226	C14H26O2	000126-86-3	91
3	Metacetamol	151	C8H9NO2	000621-42-1	58
4	Pyridine, 2-butyl-, 1-oxide	151	C9H13NO	031396-32-4	53
5	3-Pyridinol, 4-methyl-, acetate ...	151	C8H9NO2	001006-96-8	53





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ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

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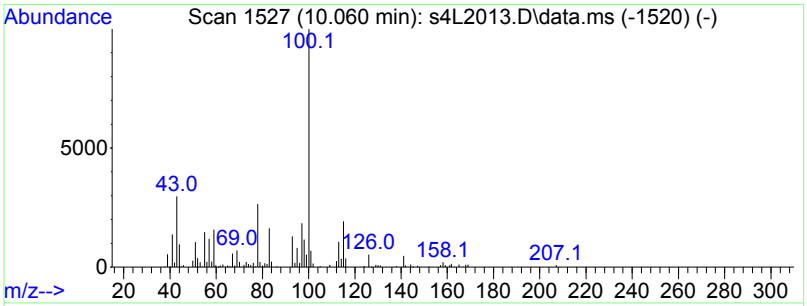
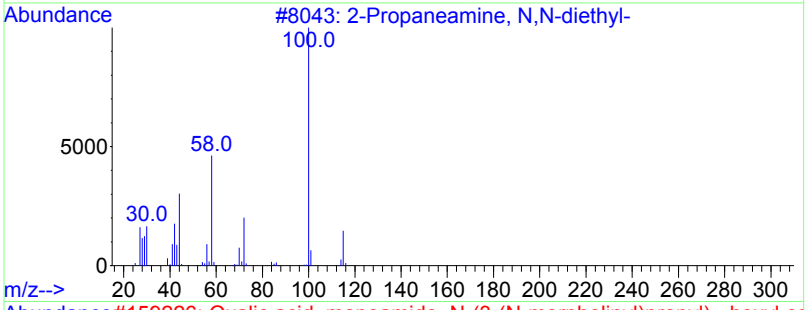
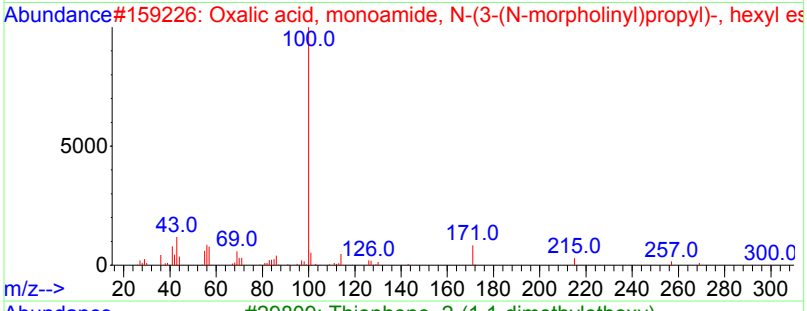
Peak Number 8 unknown Concentration Rank 12

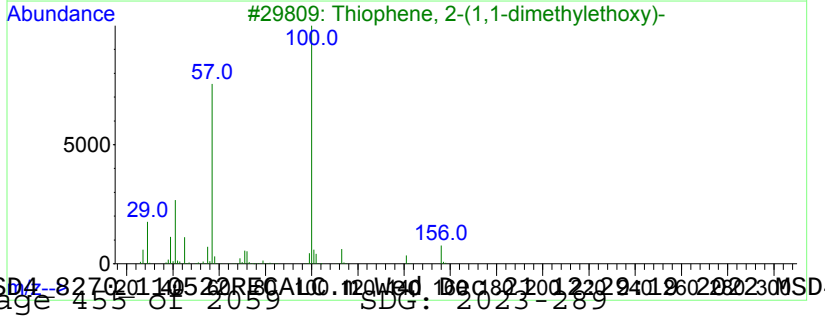
R.T.	EstConc	Area	Relative to ISTD	R.T.
10.060	5.04 ng/uL	181819	A Acenaphthene-d10	10.525

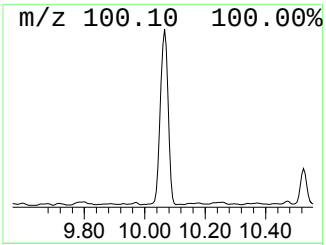
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Propaneamine, N,N-diethyl-	115	C7H17N	006006-15-1	49
2	Oxalic acid, monoamide, N-(3-(N-...	300	C15H28N2O4	1000309-63-8	38
3	Thiophene, 2-(1,1-dimethylethoxy)-	156	C8H12OS	023290-55-3	37
4	5-Isoxazolecarboxamide, 3-(4-met...	385	C21H27N3O4	1000362-31-3	35
5	2-Butenoic acid, 2-methyl-, (Z)-	100	C5H8O2	000565-63-9	35

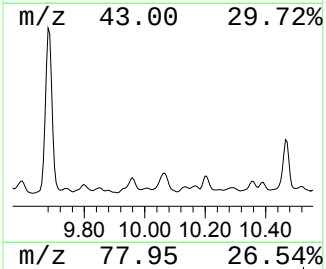


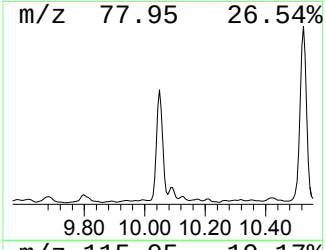


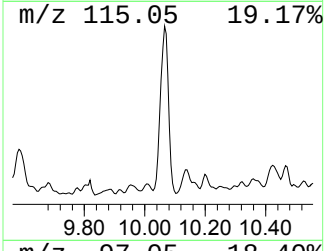


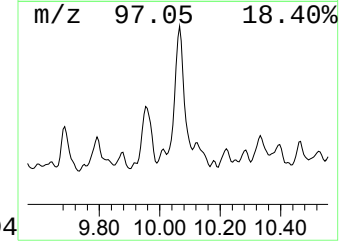












Library Search Compound Report

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Misc : |MSD1C70E_L|WATER|SMEB04-23-265374|MIX[A,B,J,D,E]||
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

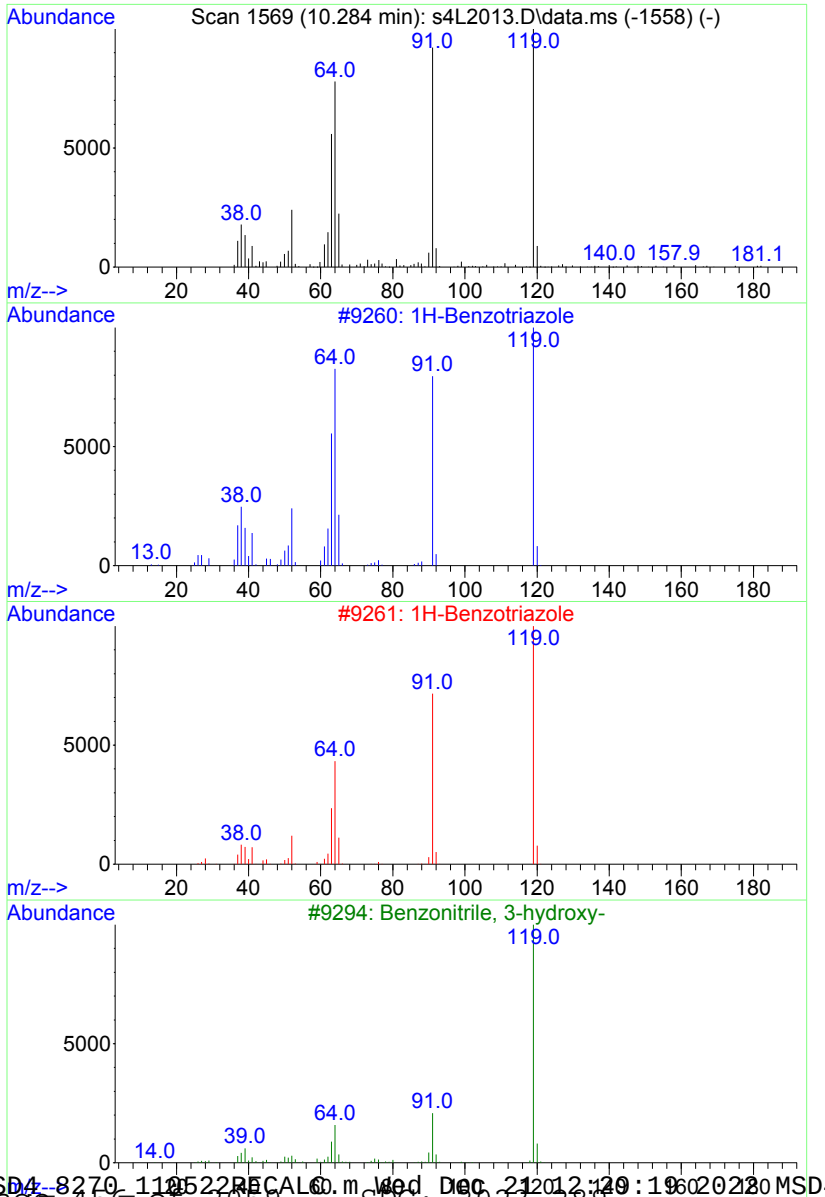
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

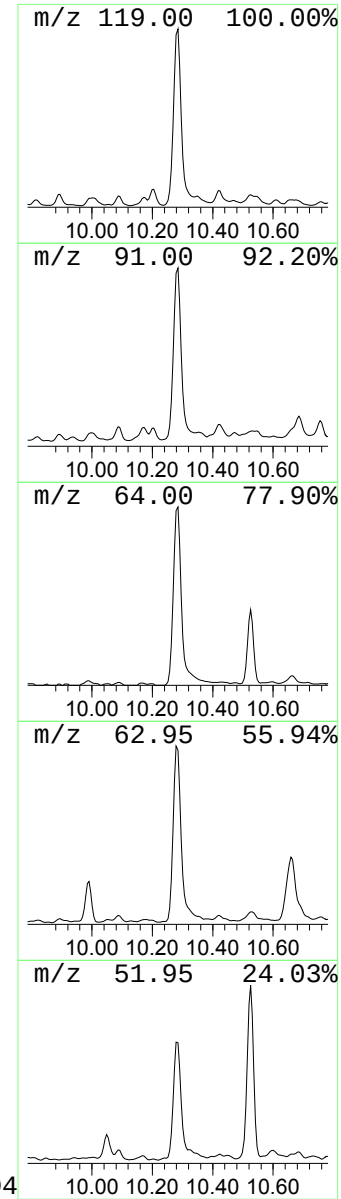
****

Peak Number 9 1H-Benzotriazole Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.284	6.31 ng/uL	227497	A Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Benzotriazole	119	C6H5N3	000095-14-7	96
2	1H-Benzotriazole	119	C6H5N3	000095-14-7	94
3	Benzonitrile, 3-hydroxy-	119	C7H5NO	000873-62-1	93
4	2,1-Benzisoxazole	119	C7H5NO	000271-58-9	90
5	Benzonitrile, 2-hydroxy-	119	C7H5NO	000611-20-1	87





Library Search Compound Report

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Misc : |MSD1C70E_L|WATER|SMEB04-23-265374|MIX[A,B,J,D,E]||
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

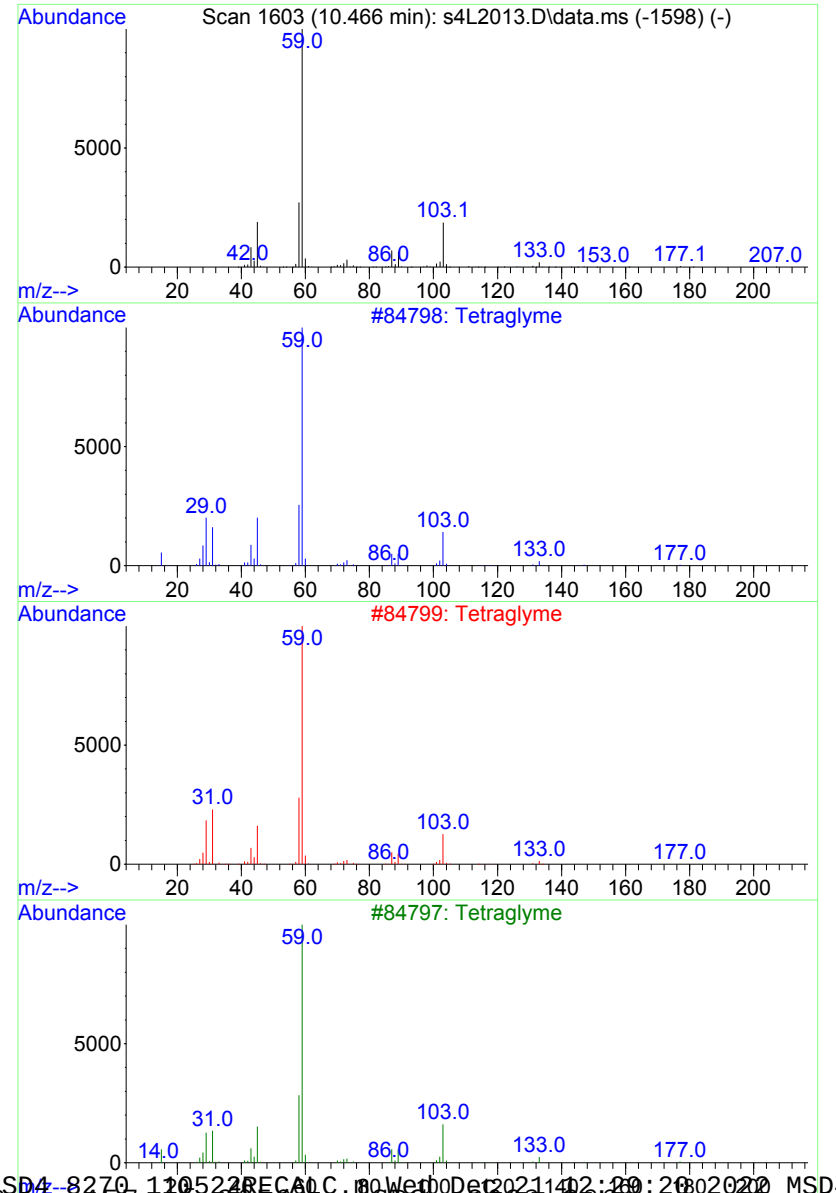
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

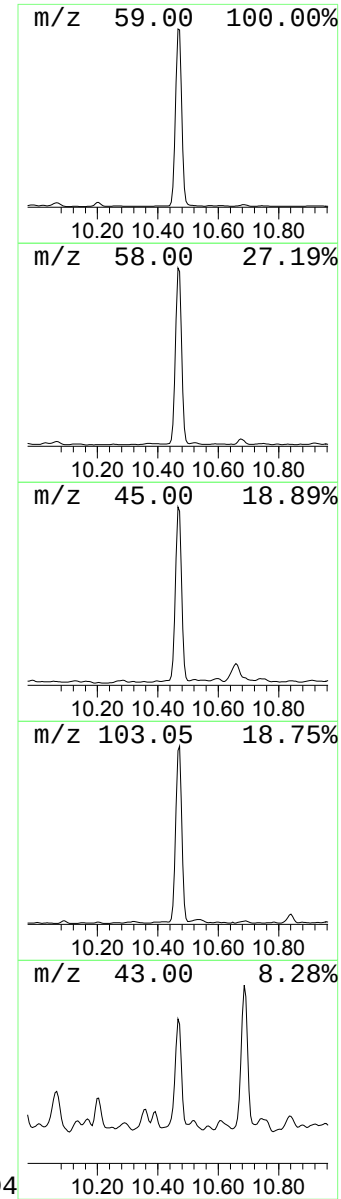
****

Peak Number 10 Tetraglyme Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.466	13.02 ng/uL	469331	A Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tetraglyme	222	C10H22O5	000143-24-8	90
2	Tetraglyme	222	C10H22O5	000143-24-8	90
3	Tetraglyme	222	C10H22O5	000143-24-8	90
4	2,5,8,11-Tetraoxadodecane	178	C8H18O4	000112-49-2	83
5	2,5,8,11-Tetraoxadodecane	178	C8H18O4	000112-49-2	78





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Misc : |MSD1C70E_L|WATER|SMEB04-23-265374|MIX[A,B,J,D,E]||
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

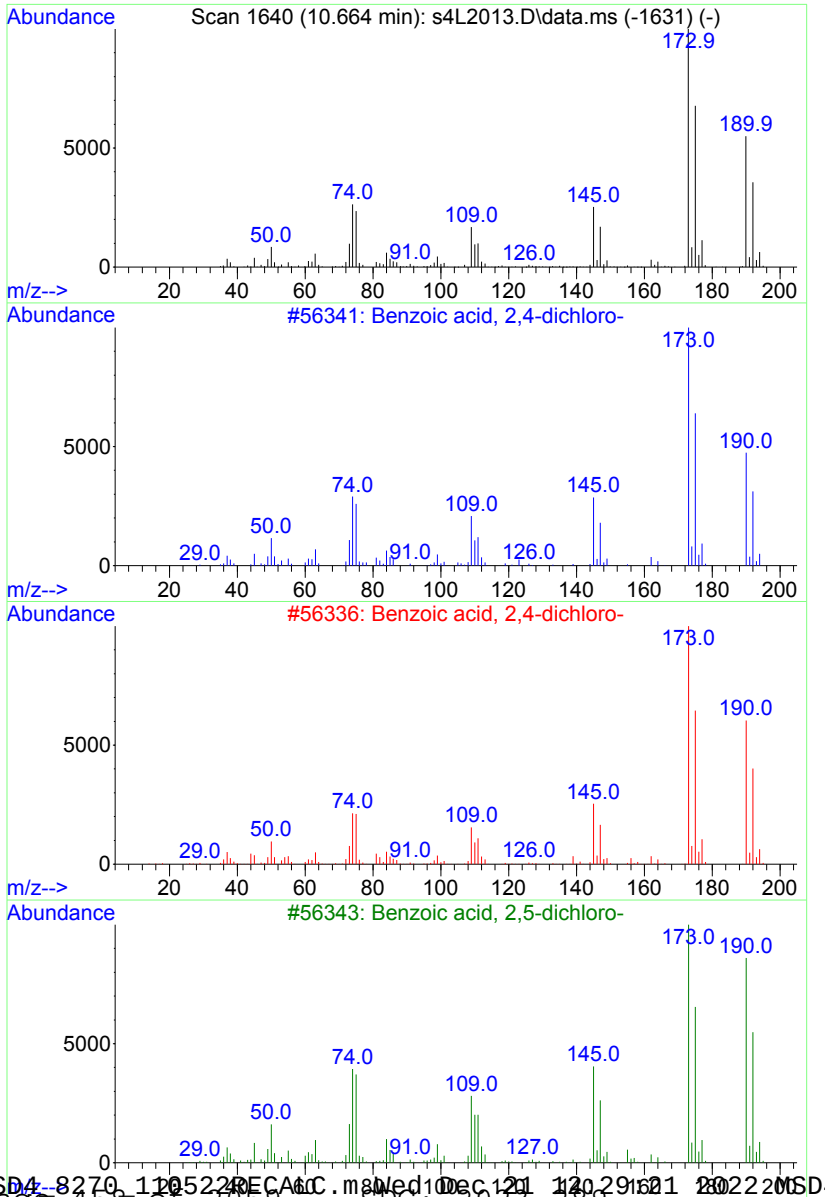
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

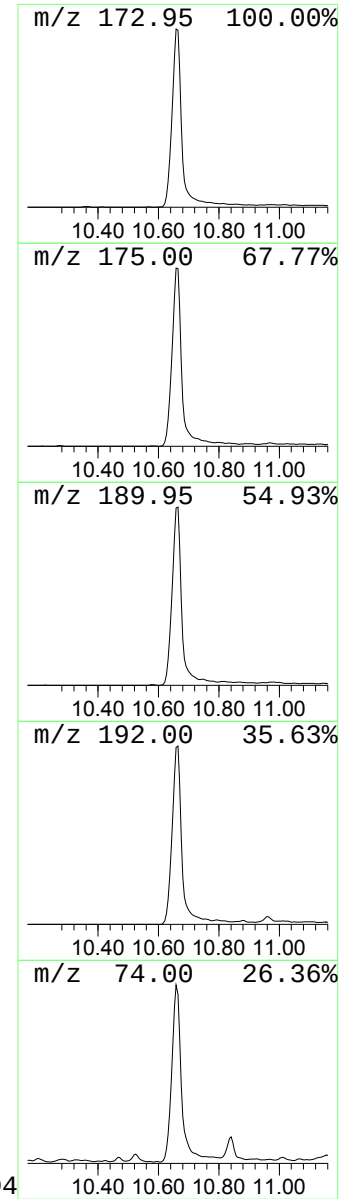
****

Peak Number 11 Benzoic acid, 2,4-dichloro- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.664	24.69 ng/uL	890299	D Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzoic acid, 2,4-dichloro-	190	C7H4Cl2O2	000050-84-0	99
2	Benzoic acid, 2,4-dichloro-	190	C7H4Cl2O2	000050-84-0	99
3	Benzoic acid, 2,5-dichloro-	190	C7H4Cl2O2	000050-79-3	96
4	Benzoic acid, 3,4-dichloro-	190	C7H4Cl2O2	000051-44-5	95
5	Benzoic acid, 3,4-dichloro-	190	C7H4Cl2O2	000051-44-5	95





Library Search Compound Report

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Data File : s4L2013.D
Acq On : 20 Dec 2022 17:42
Operator : NM1
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Misc : |MSD1C70E_L|WATER|SMEB04-23-265374|MIX[A,B,J,D,E]||
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

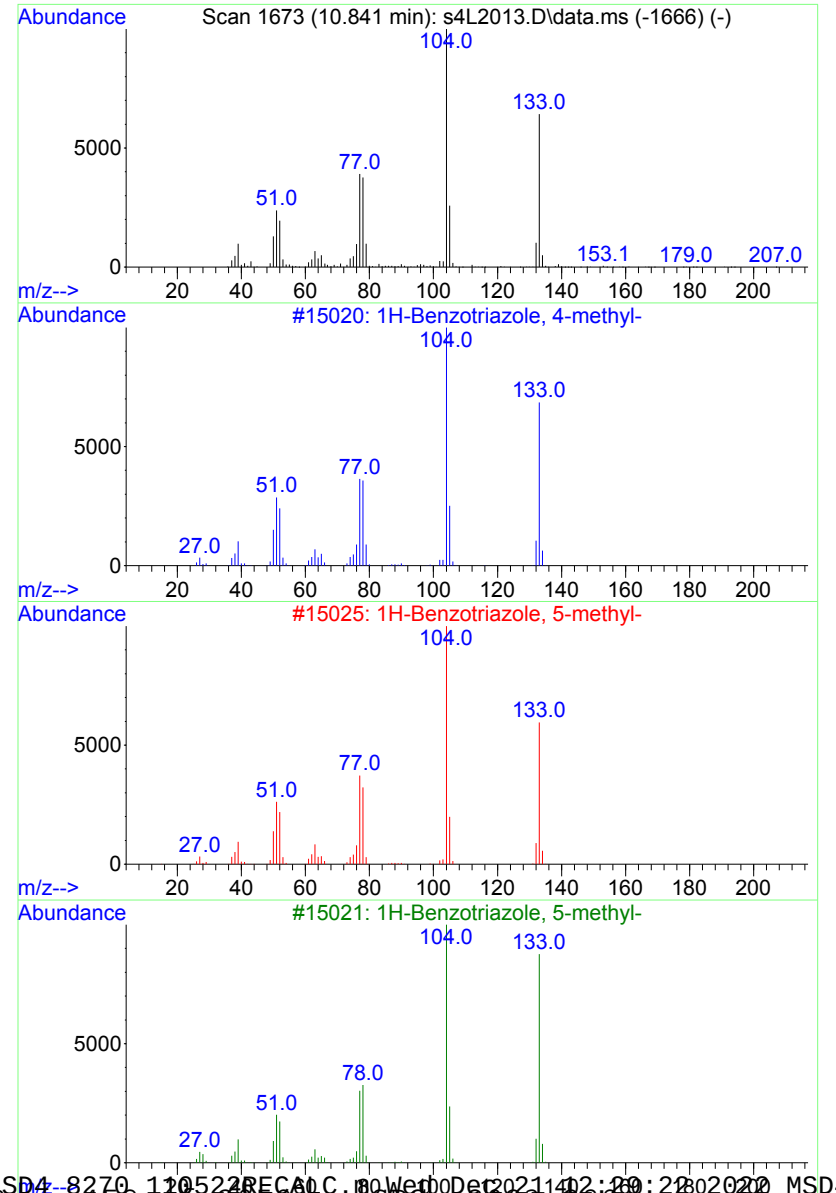
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

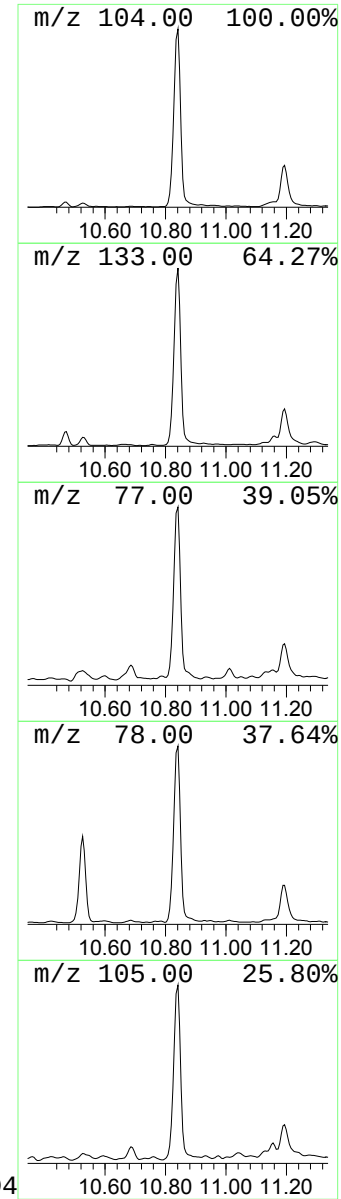
****

Peak Number 12 1H-Benzotriazole, 4-methyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.841	13.64 ng/uL	491863	D Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Benzotriazole, 4-methyl-	133	C7H7N3	029878-31-7	98
2	1H-Benzotriazole, 5-methyl-	133	C7H7N3	000136-85-6	97
3	1H-Benzotriazole, 5-methyl-	133	C7H7N3	000136-85-6	95
4	1H-Benzotriazole, 5-methyl-	133	C7H7N3	000136-85-6	95
5	1H-Benzotriazole, 4-methyl-	133	C7H7N3	029878-31-7	94





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2013.D
Acq On : 20 Dec 2022 17:42
Operator : NM1
Sample : |604449014|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB04-23-265374|MIX[A,B,J,D,E]||
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

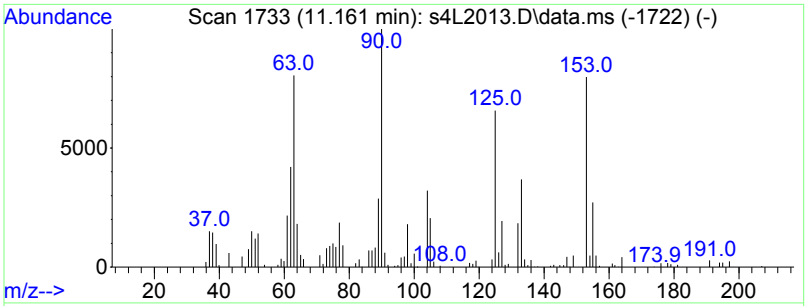
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

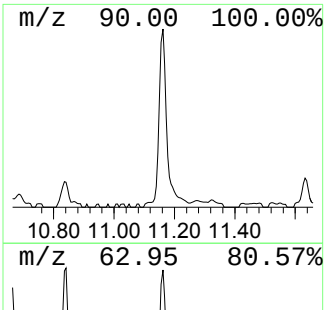
****

Peak Number 13 4-Chloro-3H-1,2,3-benzotria... Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.162	4.32 ng/uL	155722	D Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4-Chloro-3H-1,2,3-benzotriazole	153	C6H4ClN3	067130-04-5	93
2	2-Chloro-4-hydroxybenzonitrile	153	C7H4ClNO	003336-16-1	93
3	Benzene, 1-chloro-2-isocyanato-	153	C7H4ClNO	003320-83-0	86
4	Benzene, 1-chloro-3-isocyanato-	153	C7H4ClNO	002909-38-8	80
5	Benzonitrile, 2-amino-5-nitro-	163	C7H5N3O2	017420-30-3	59





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2013.D
Acq On : 20 Dec 2022 17:42
Operator : NM1
Sample : |604449014|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB04-23-265374|MIX[A,B,J,D,E]||
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

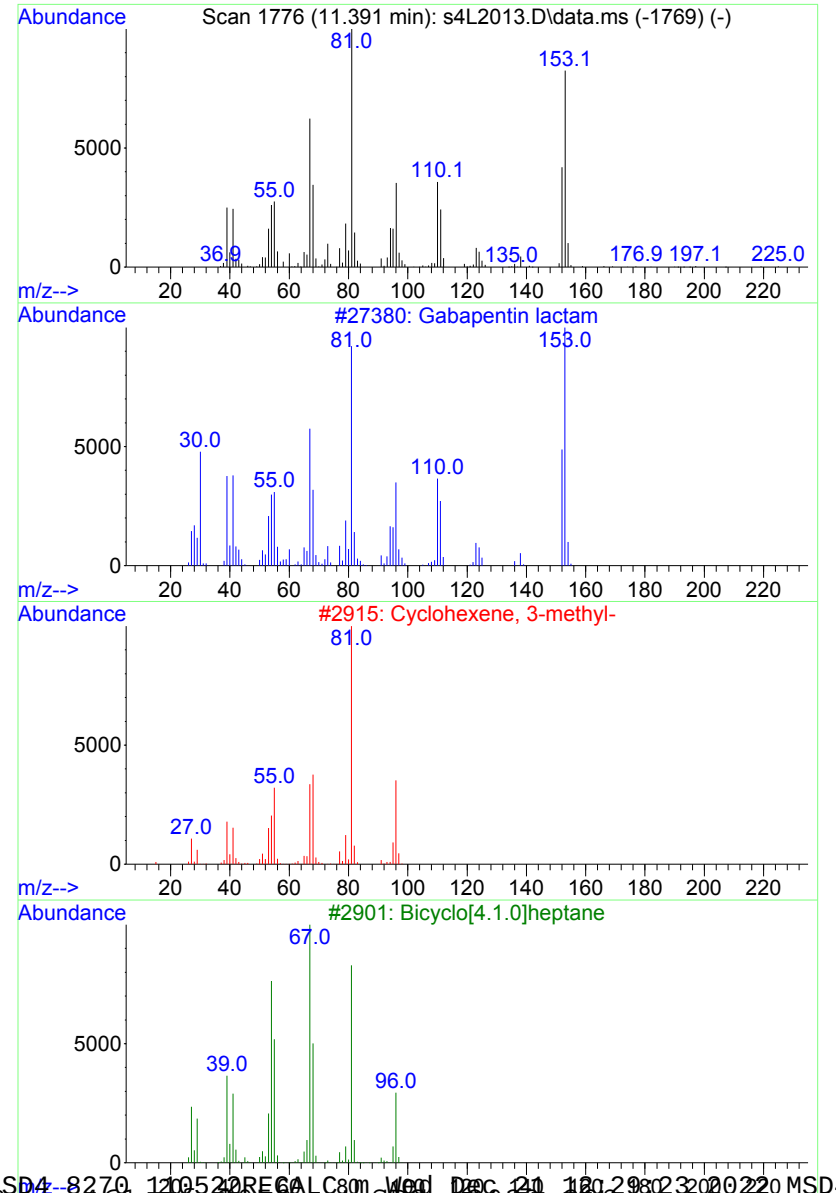
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

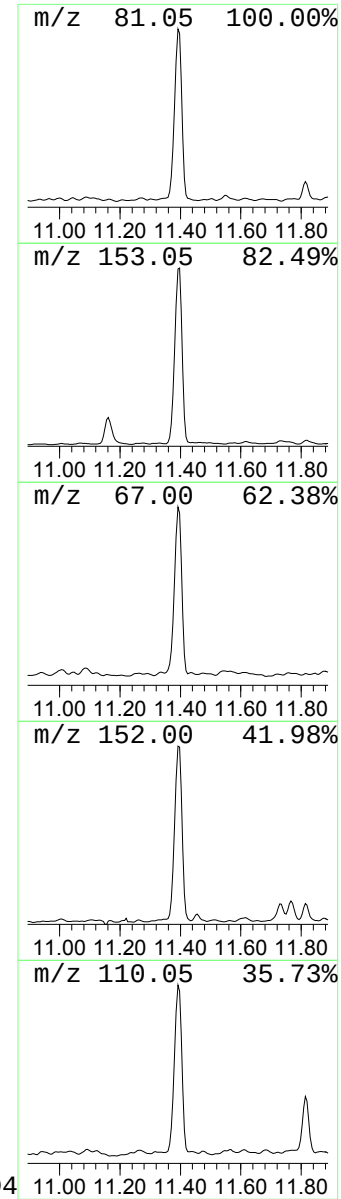
****

Peak Number 14 Gabapentin lactam Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.392	19.79 ng/uL	713591	D Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Gabapentin lactam	153	C9H15NO	064744-50-9	98
2	Cyclohexene, 3-methyl-	96	C7H12	000591-48-0	42
3	Bicyclo[4.1.0]heptane	96	C7H12	000286-08-8	41
4	Cyclohexane, ethylidene-	110	C8H14	001003-64-1	41
5	Cyclohexane, ethylidene-	110	C8H14	001003-64-1	38





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2013.D
Acq On : 20 Dec 2022 17:42
Operator : NM1
Sample : |604449014|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB04-23-265374|MIX[A,B,J,D,E]||
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

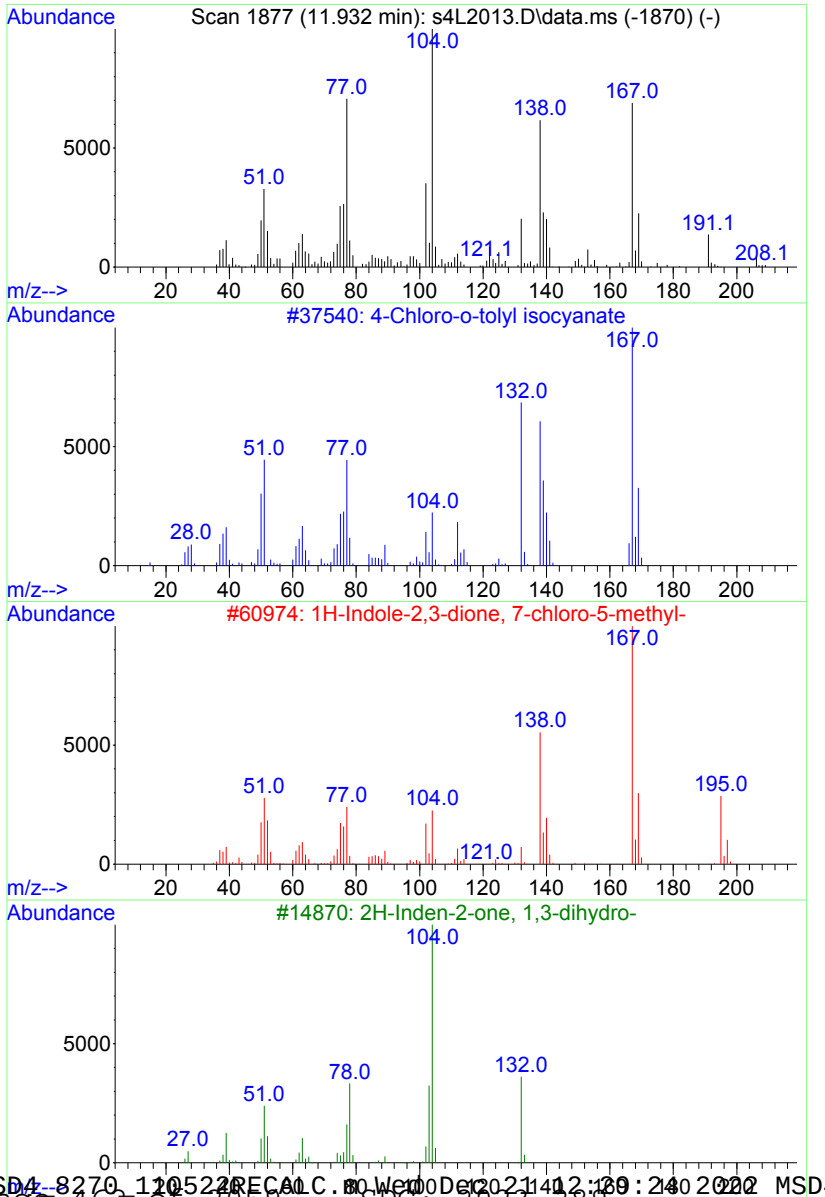
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

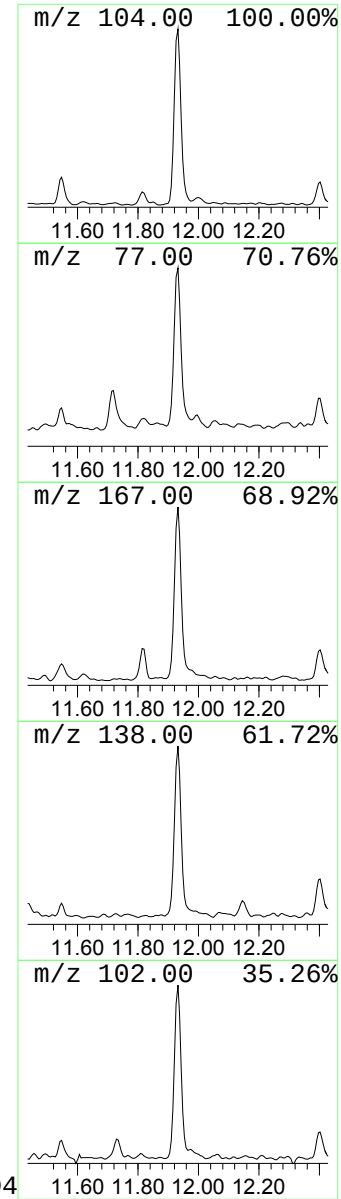
****

Peak Number 15 unknown Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.932	4.95 ng/uL	215328	A Phenanthrene-d10	12.948

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4-Chloro-o-tolyl isocyanate	167	C8H6ClNO	037408-18-7	43
2	1H-Indole-2,3-dione, 7-chloro-5-...	195	C9H6ClNO2	155184-80-8	43
3	2H-Inden-2-one, 1,3-dihydro-	132	C9H8O	000615-13-4	35
4	2-Pyridinecarbonitrile	104	C6H4N2	000100-70-9	30
5	2-Pyridinecarbonitrile	104	C6H4N2	000100-70-9	30





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2013.D
Acq On : 20 Dec 2022 17:42
Operator : NM1
Sample : |604449014|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB04-23-265374|MIX[A,B,J,D,E]||
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

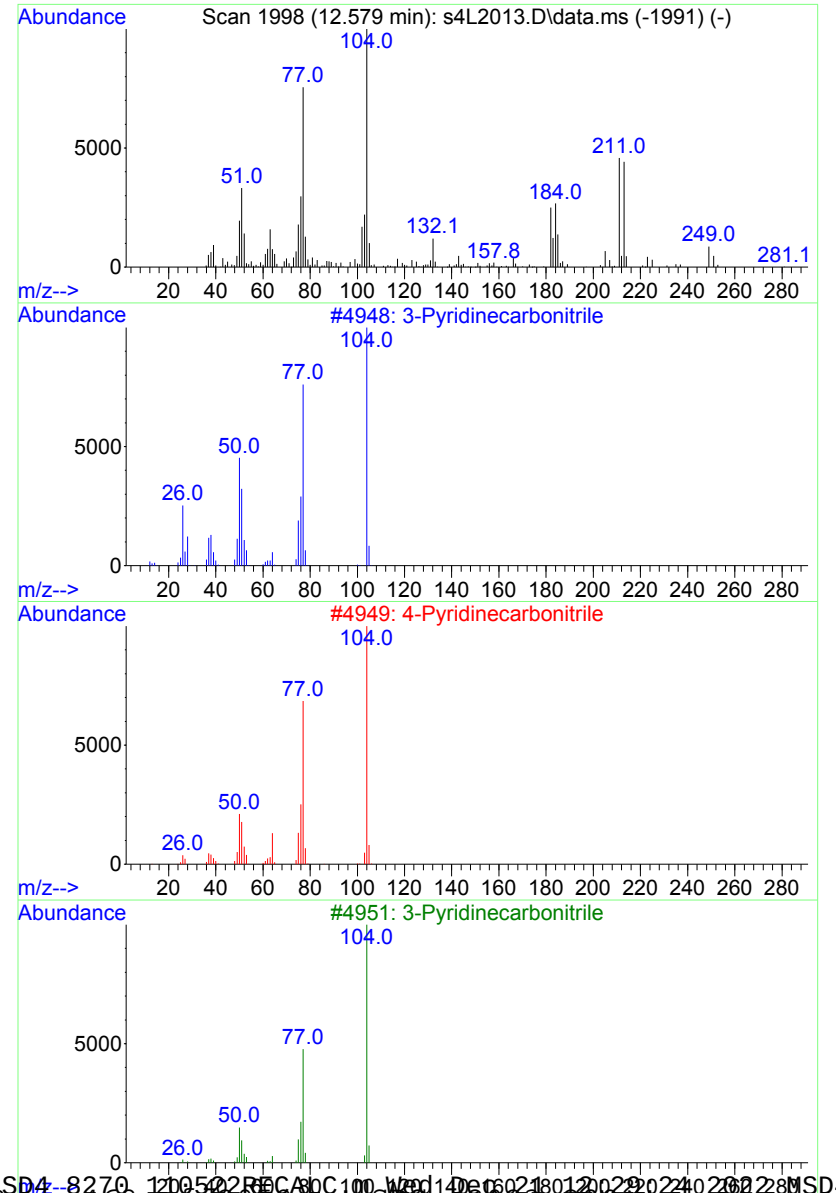
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

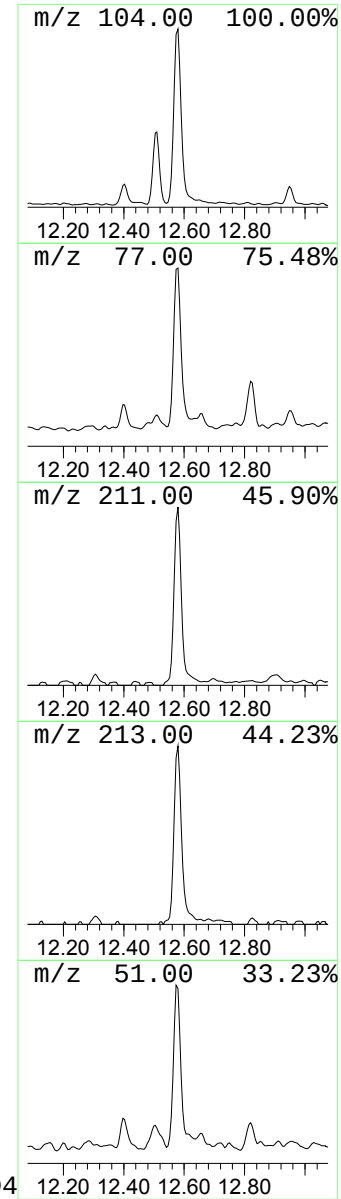
****

Peak Number 16 unknown Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.579	5.60 ng/uL	243555	A Phenanthrene-d10	12.948

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Pyridinecarbonitrile	104	C6H4N2	000100-54-9	55
2	4-Pyridinecarbonitrile	104	C6H4N2	000100-48-1	49
3	3-Pyridinecarbonitrile	104	C6H4N2	000100-54-9	49
4	4-Pyridinecarbonitrile	104	C6H4N2	000100-48-1	46
5	4-Pyridinecarbonitrile	104	C6H4N2	000100-48-1	46





Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2013.D
Acq On : 20 Dec 2022 17:42
Operator : NM1
Sample : |604449014|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB04-23-265374|MIX[A,B,J,D,E]||
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

			(ng/uL)		Internal Standard		
TIC Top Hit name	CAS #	RT	EstConc	Response	#	RT	Resp	Conc
Dimethyl sulfone	000067-71-0	4.449	12.6	244109	1	5.749	774813	40.0
unknown	000075-09-2	5.952	8.8	170614	2	5.749	774813	40.0
unknown	1000360-40-0	7.562	4.4	126272	3	7.690	1137290	40.0
unknown	001551-34-4	8.332	7.9	223674	7	7.690	1137290	40.0
unknown	000077-71-4	8.765	19.6	556495	7	7.690	1137290	40.0
unknown	000694-54-2	9.076	5.0	141464	7	7.690	1137290	40.0
2,4,7,9-Tetramethyl-5-decyn...	000126-86-3	9.680	9.9	356372	8	10.525	1442400	40.0
unknown	006006-15-1	10.060	5.0	181819	8	10.525	1442400	40.0
1H-Benzotriazole	000095-14-7	10.284	6.3	227497	8	10.525	1442400	40.0
Tetraglyme	000143-24-8	10.466	13.0	469331	8	10.525	1442400	40.0
Benzoic acid, 2,4-dichloro-	000050-84-0	10.664	24.7	890299	10	10.525	1442400	40.0
1H-Benzotriazole, 4-methyl-	029878-31-7	10.841	13.6	491863	10	10.525	1442400	40.0
4-Chloro-3H-1,2,3-benzotria...	067130-04-5	11.162	4.3	155722	10	10.525	1442400	40.0
Gabapentin lactam	064744-50-9	11.392	19.8	713591	10	10.525	1442400	40.0
unknown	037408-18-7	11.932	4.9	215328	11	12.948	1740150	40.0
unknown	000100-54-9	12.579	5.6	243555	11	12.948	1740150	40.0

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:12**	**Matrix:**	**W**
Lab Sample ID:	**604449018**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB05-23-265375**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 18:11**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**952.03 mL**	**Final Volume:**	**1 mL**
Data File:	**S122022\s4L2014.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
1610-18-0	Prometon	U	3.15	ug/L	3.15	10.5
126-33-0	Sulfolane	U	3.15	ug/L	3.15	10.5
PAH-tot-3a	Total PAHs 3a	U	0.000	ug/L		
62-75-9	N-Methyl-N-nitrosomethylamine	U	3.15	ug/L	3.15	10.5
108-95-2	Phenol	U	3.15	ug/L	3.15	10.5
111-44-4	bis(2-Chloroethyl) ether	U	3.15	ug/L	3.15	10.5
108-60-1	bis(2-Chloro-1-methylethyl)ether	U	3.15	ug/L	3.15	10.5
67-72-1	Hexachloroethane	U	3.15	ug/L	3.15	10.5
98-95-3	Nitrobenzene	U	3.15	ug/L	3.15	10.5
78-59-1	Isophorone	U	3.68	ug/L	3.68	10.5
120-83-2	2,4-Dichlorophenol	U	3.15	ug/L	3.15	10.5
87-68-3	Hexachlorobutadiene	U	3.15	ug/L	3.15	10.5
91-57-6	2-Methylnaphthalene	U	0.315	ug/L	0.315	1.05
91-20-3	Naphthalene	U	0.315	ug/L	0.315	1.05
90-12-0	1-Methylnaphthalene	U	0.315	ug/L	0.315	1.05
77-47-4	Hexachlorocyclopentadiene	U	3.15	ug/L	3.15	10.5
88-06-2	2,4,6-Trichlorophenol	U	3.15	ug/L	3.15	10.5
95-95-4	2,4,5-Trichlorophenol	U	3.15	ug/L	3.15	10.5
131-11-3	Dimethylphthalate	U	0.315	ug/L	0.315	1.05
606-20-2	2,6-Dinitrotoluene	U	3.15	ug/L	3.15	10.5
121-14-2	2,4-Dinitrotoluene	U	3.15	ug/L	3.15	10.5
51-28-5	2,4-Dinitrophenol	U	5.25	ug/L	5.25	21.0
84-66-2	Diethylphthalate	U	0.315	ug/L	0.315	1.05
86-73-7	Fluorene	U	0.315	ug/L	0.315	1.05
534-52-1	2-Methyl-4,6-dinitrophenol	U	3.15	ug/L	3.15	10.5
122-39-4	Diphenylamine	U	3.15	ug/L	3.15	10.5
103-33-3	Azobenzene	U	3.15	ug/L	3.15	10.5
122-66-7	*1,2-Diphenylhydrazine*					
118-74-1	Hexachlorobenzene	U	3.15	ug/L	3.15	10.5
87-86-5	Pentachlorophenol	U	3.15	ug/L	3.15	10.5
85-01-8	Phenanthrene	U	0.315	ug/L	0.315	1.05
120-12-7	Anthracene	U	0.315	ug/L	0.315	1.05
84-74-2	Di-n-butylphthalate	U	0.315	ug/L	0.315	1.05
206-44-0	Fluoranthene	U	0.315	ug/L	0.315	1.05
129-00-0	Pyrene	U	0.315	ug/L	0.315	1.05
117-81-7	bis(2-Ethylhexyl)phthalate	U	0.315	ug/L	0.315	1.05
205-99-2	Benzo(b)fluoranthene	U	0.315	ug/L	0.315	1.05
207-08-9	Benzo(k)fluoranthene	U	0.315	ug/L	0.315	1.05
50-32-8	Benzo(a)pyrene	U	0.315	ug/L	0.315	1.05

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:12**	**Matrix:**	**W**
Lab Sample ID:	**604449018**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB05-23-265375**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 18:11**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**952.03 mL**	**Final Volume:**	**1 mL**
Data File:	**S122022\s4L2014.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
123-91-1	1,4-Dioxane	U	3.15	ug/L	3.15	10.5
55-18-5	N-Nitrosodiethylamine	U	3.15	ug/L	3.15	10.5
930-55-2	N-Nitrosopyrrolidine	U	3.15	ug/L	3.15	10.5
924-16-3	N-Nitrosodi-n-butylamine	U	3.15	ug/L	3.15	10.5
95-94-3	1,2,4,5-Tetrachlorobenzene	U	3.15	ug/L	3.15	10.5
608-93-5	Pentachlorobenzene	U	3.15	ug/L	3.15	10.5
1912-24-9	Atrazine	U	3.15	ug/L	3.15	10.5
92-87-5	Benzidine	U	4.10	ug/L	4.10	10.5
91-94-1	3,3'-Dichlorobenzidine	U	3.15	ug/L	3.15	10.5

Surrogate/Tracer recovery	Result	Nominal		Recovery%		Acceptable Limits
2,4,6-Tribromophenol	63.3	105	ug/L	60		(37%-132%)
2-Fluorobiphenyl	20.7	52.5	ug/L	39		(39%-112%)
2-Fluorophenol	41.9	105	ug/L	40		(11%-79%)
Nitrobenzene-d5	30.5	52.5	ug/L	58		(39%-112%)
Phenol-d5	36.0	105	ug/L	34		(15%-85%)
p-Terphenyl-d14	6.94	52.5	ug/L	13	*	(24%-129%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	Estimated RT		Units	Fit	Qual
	unknown	5.465	4.71	ug/L	49	J
	unknown	5.957	9.82	ug/L	45	J
000112-36-7	Diethyl carbitol	6.364	13.3	ug/L	90	NJ
	unknown	8.723	6.84	ug/L	52	J
000126-86-3	2,4,7,9-Tetramethyl-5-decyn-4,7-diol	9.68	13.4	ug/L	91	NJ
000095-14-7	1H-Benzotriazole	10.279	7.31	ug/L	96	NJ
000143-24-8	Tetraglyme	10.466	4.67	ug/L	90	NJ
000050-84-0	Benzoic acid, 2,4-dichloro-	10.648	5.13	ug/L	99	NJ
029878-31-7	1H-Benzotriazole, 4-methyl-	10.825	6.59	ug/L	98	NJ
013798-23-7	Hexathiane	10.98	14.4	ug/L	96	NJ
000136-85-6	1H-Benzotriazole, 5-methyl-	11.188	4.74	ug/L	97	NJ
064744-50-9	Gabapentin lactam	11.381	7.49	ug/L	98	NJ
010544-50-0	Cyclic octaatomic sulfur	15.045	9.65	ug/L	93	NJ

Quantitation Report

12/22/2022

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2014.D
Acq On : 20 Dec 2022 18:11
Operator : NM1
Sample : |604449018|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB05-23-265375|MIX[A,B,J,D,E]||
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 21 12:29:28 2022
Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	5.754	5.754	1.000	134203	40.00	ng/uL	0.00
22) A Naphthalene-d8	136	7.690	7.695	1.000	568552	40.00	ng/uL	0.00
39) A Acenaphthene-d10	164	10.525	10.525	1.000	331149	40.00	ng/uL	0.00
64) A Phenanthrene-d10	188	12.948	12.948	1.000	733285	40.00	ng/uL	0.00
80) A Chrysene-d12	240	17.291	17.296	1.000	864833	40.00	ng/uL	0.00
88) A Perylene-d12	264	20.308	20.307	1.000	897718	40.00	ng/uL	0.00
96) B 1,4-Dichlorobenzene-d4	152	5.754	5.754	1.000	134203	40.00	ng/uL	0.00
112) B Naphthalene-d8	136	7.690	7.695	1.000	568552	40.00	ng/uL	0.00
120) B Acenaphthene-d10	164	10.525	10.525	1.000	331149	40.00	ng/uL	0.00
129) B Phenanthrene-d10	188	12.948	12.948	1.000	733285	40.00	ng/uL	0.00
142) B Chrysene-d12	240	17.291	17.296	1.000	864833	40.00	ng/uL	0.00
148) B Perylene-d12	264	20.308	20.307	1.000	897718	40.00	ng/uL	0.00
151) J Naphthalene-d8	136	7.690	7.695	1.000	568552	40.00	ng/uL	0.00
153) J Phenanthrene-d10	188	12.948	12.948	1.000	733285	40.00	ng/uL	0.00
156) J Chrysene-d12	240	17.291	17.296	1.000	864833	40.00	ng/uL	0.00
159) D Naphthalene-d8	136	7.690	7.695	1.000	568552	40.00	ng/uL	0.00
161) D Acenaphthene-d10	164	10.525	10.525	1.000	331149	40.00	ng/uL	0.00
164) D Phenanthrene-d10	188	12.948	12.948	1.000	733285	40.00	ng/uL	0.00
171) D Chrysene-d12	240	17.291	17.296	1.000	864833	40.00	ng/uL	0.00
173) E Naphthalene-d8	136	7.690	7.695	1.000	568552	40.00	ng/uL	0.00
175) E Perylene-d12	264	20.308	20.307	1.000	897718	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	3.957	3.951	0.688	178727	39.89	ng/uL	0.00
8) Phenol-d5	99	5.214	5.203	0.906	194160	34.28	ng/uL	0.01
23) Nitrobenzene-d5	82	6.572	6.577	0.855	172391	29.02	ng/uL	0.00
44) 2-Fluorobiphenyl	172	9.439	9.439	0.897	241911	19.67	ng/uL	0.00
63) 2,4,6-Tribromophenol	330	11.814	11.814	1.122	170338	60.25	ng/uL	0.00
79) p-Terphenyl-d14	244	15.579	15.579	1.203	128021	6.61	ng/uL	0.00

Compound	Amount	Range	Recovery
5) 2-Fluorophenol	100.000	11 - 79	40%
8) Phenol-d5	100.000	15 - 85	34%
23) Nitrobenzene-d5	50.000	39 - 112	58%
44) 2-Fluorobiphenyl	50.000	39 - 112	39%
63) 2,4,6-Tribromophenol	100.000	37 - 132	60%
79) p-Terphenyl-d14	50.000	24 - 129	13%#

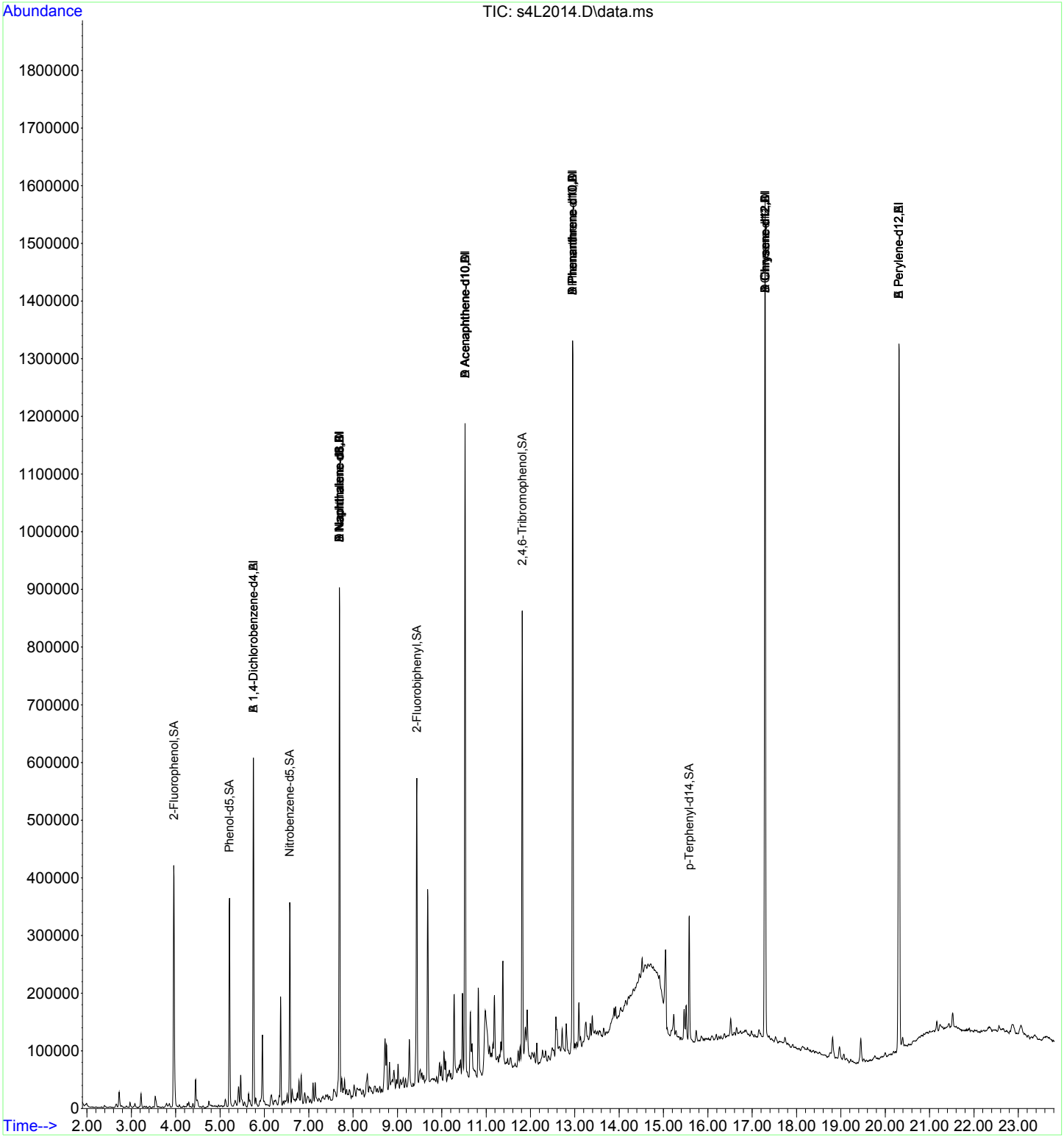
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue

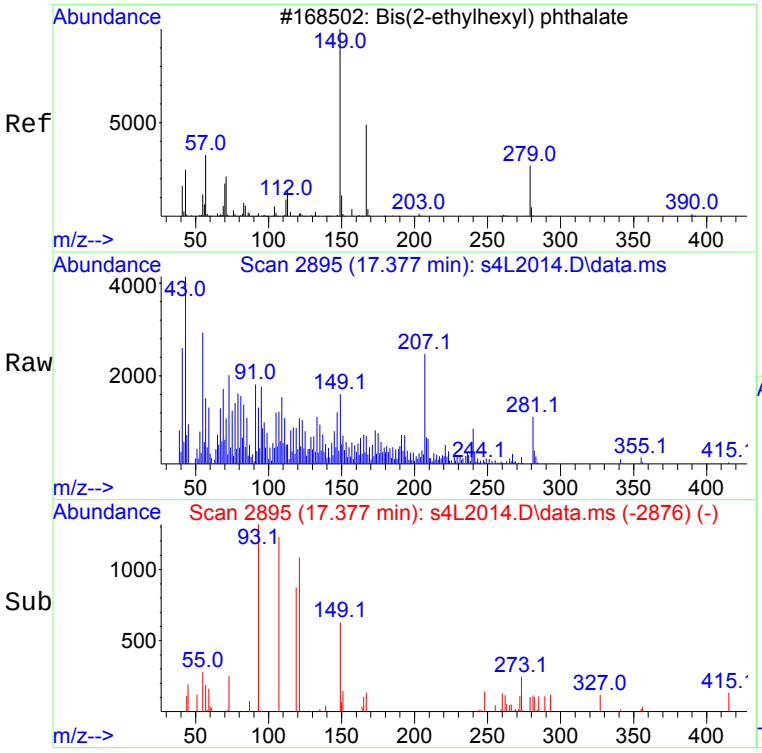
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2014.D
Acq On : 20 Dec 2022 18:11
Operator : NM1
Sample : |604449018|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB05-23-265375|MIX[A,B,J,D,E]||
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 21 12:29:28 2022
Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

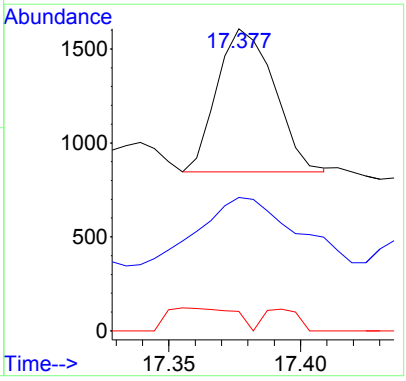




#82 BEFORE analyst DELETION
bis(2-Ethylhexyl)phthalate
Concen: 0.48 ng/uL
RT: 17.377 min Scan# 2895
Delta R.T. 0.000 min
Lab File: s4L2014.D
Acq: 20 Dec 2022 18:11

Tgt Ion:149 Resp: 1148

Ion	Ratio	Lower	Upper
149	100		
167	80.0	0.0	57.6#
279	9.1	0.0	35.2



Library Search Compound Report

12/22/2022

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2014.D
Acq On : 20 Dec 2022 18:11
Operator : NM1
Sample : |604449018|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB05-23-265375|MIX[A,B,J,D,E]||
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

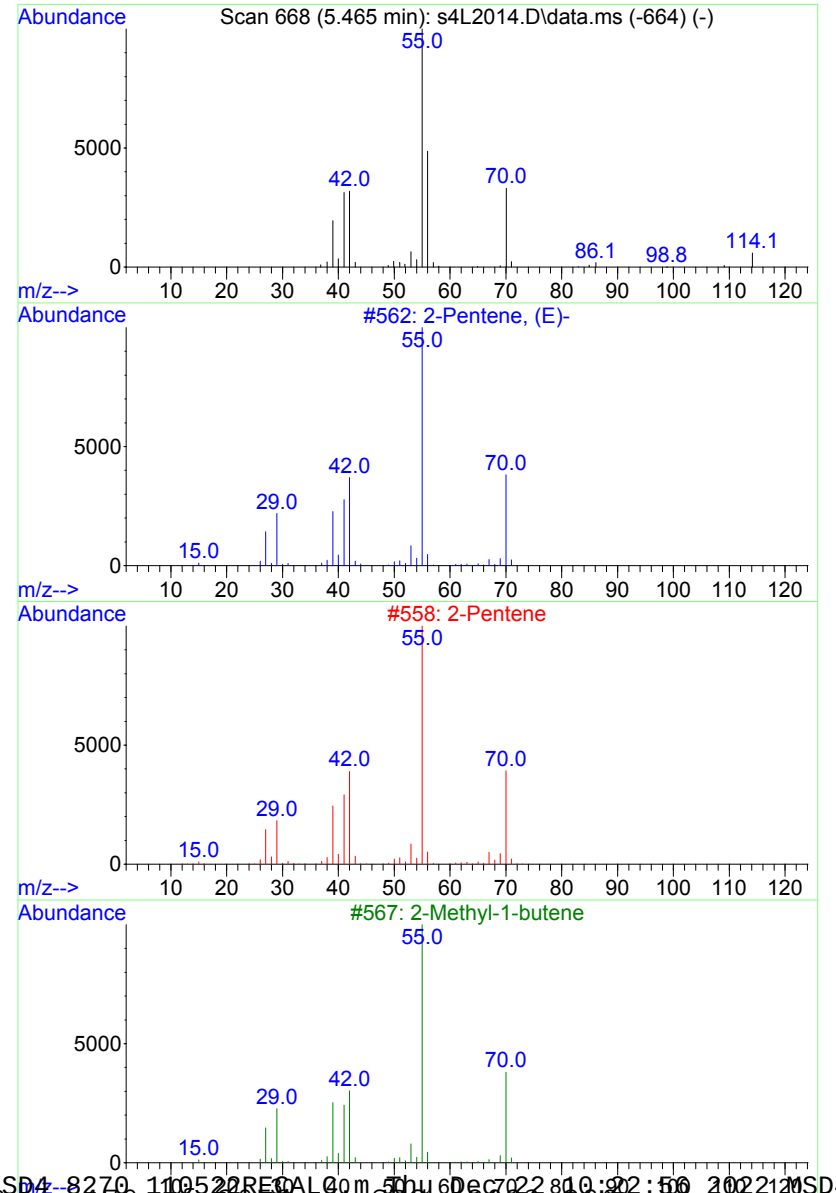
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

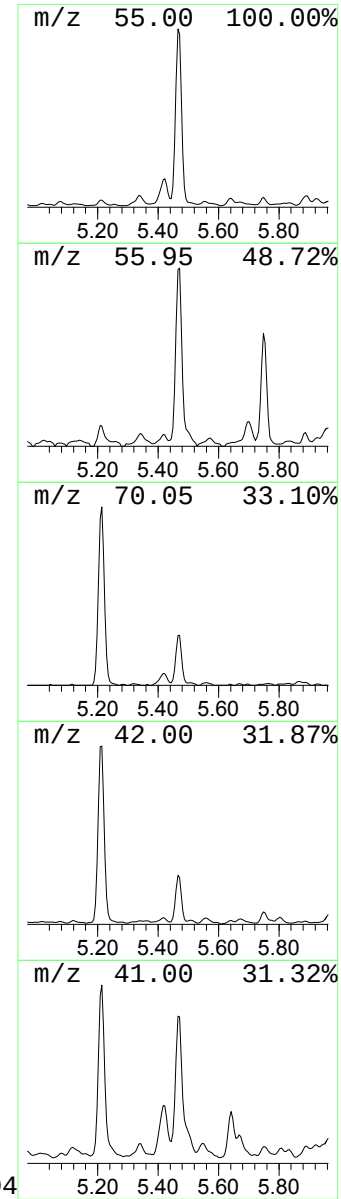
****

Peak Number 1 unknown Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.465	4.48 ng/uL	94855	A 1,4-Dichlorobenzene-d4	5.754

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentene, (E)-	70	C5H10	000646-04-8	49
2	2-Pentene	70	C5H10	000109-68-2	49
3	2-Methyl-1-butene	70	C5H10	000563-46-2	49
4	2-Pentene, (Z)-	70	C5H10	000627-20-3	46
5	2-Pentene	70	C5H10	000109-68-2	46





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2014.D
Acq On : 20 Dec 2022 18:11
Operator : NM1
Sample : |604449018|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB05-23-265375|MIX[A,B,J,D,E]||
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

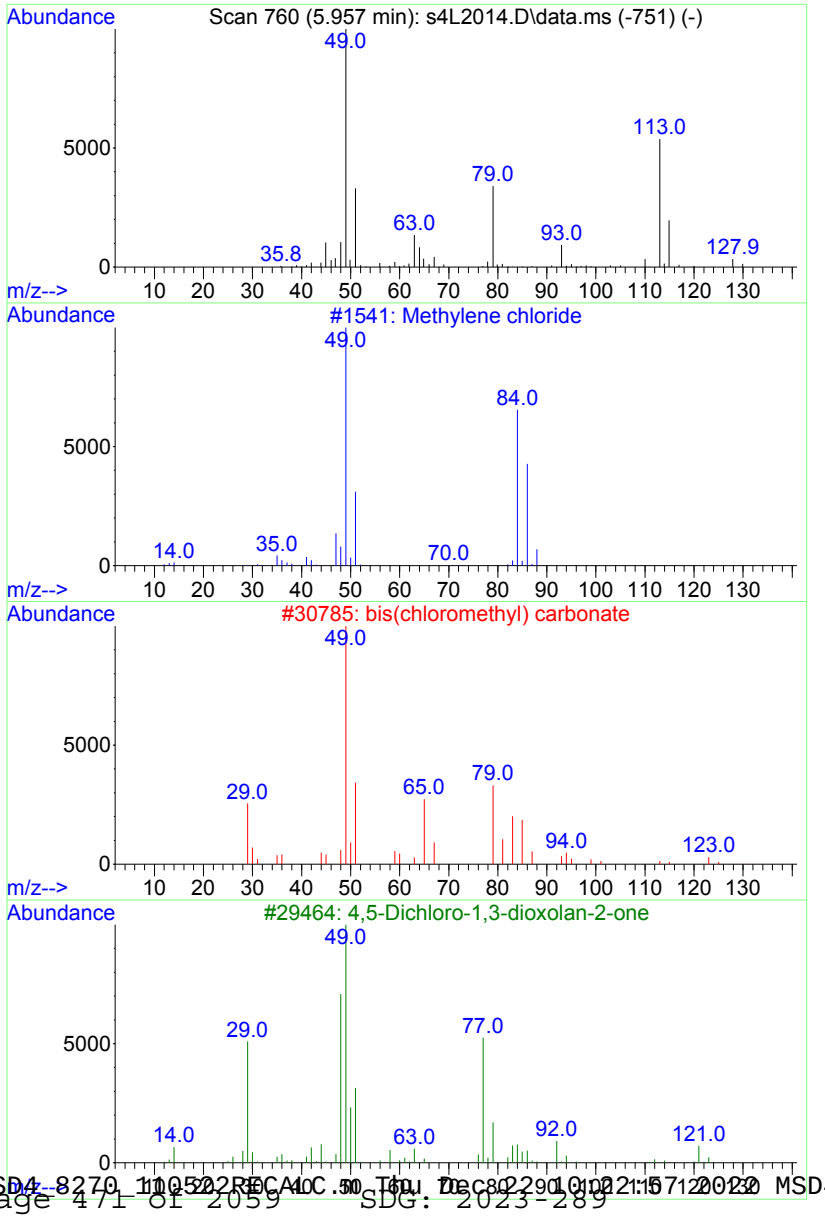
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

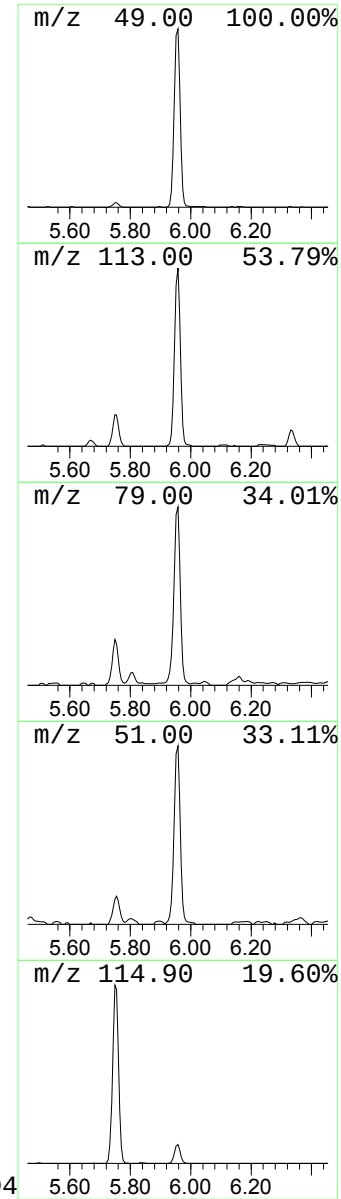
****

Peak Number 2 unknown Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.957	9.35 ng/uL	197964	B 1,4-Dichlorobenzene-d4	5.754

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Methylene chloride	84	CH2Cl2	000075-09-2	45
2	bis(chloromethyl) carbonate	158	C3H4Cl2O3	1000404-37-0	39
3	4,5-Dichloro-1,3-dioxolan-2-one	156	C3H2Cl2O3	003967-55-3	9
4	4,5-Dichloro-1,3-dioxolan-2-one	156	C3H2Cl2O3	003967-55-3	4
5	Acetic acid, chloro-, ethyl ester	122	C4H7ClO2	000105-39-5	4





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2014.D
Acq On : 20 Dec 2022 18:11
Operator : NM1
Sample : |604449018|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB05-23-265375|MIX[A,B,J,D,E]||
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

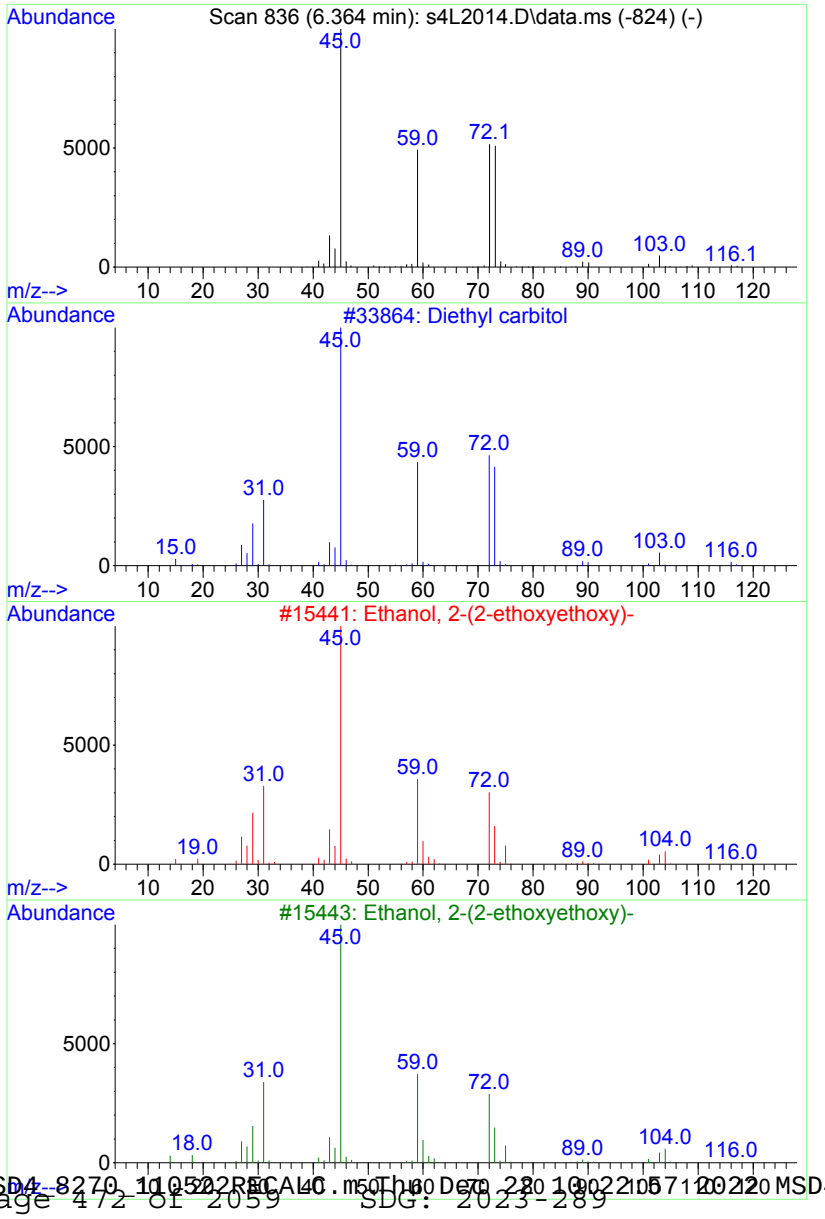
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

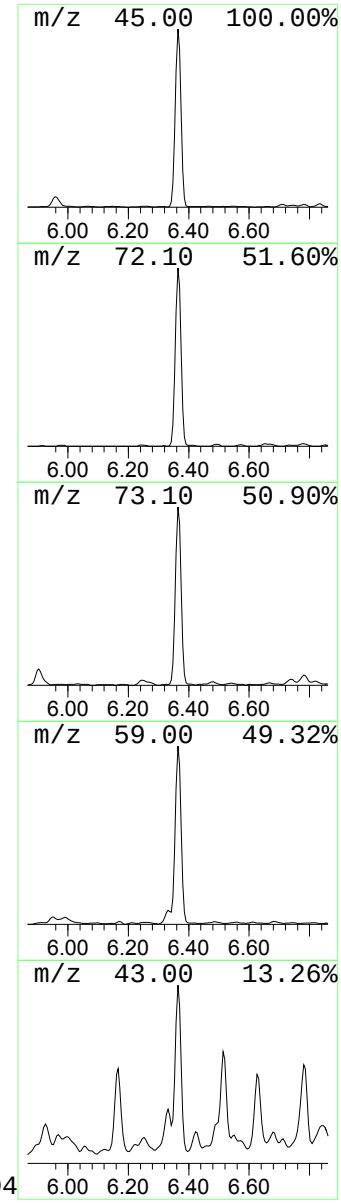
****

Peak Number 3 Diethyl carbitol Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.364	12.68 ng/uL	268525	B 1,4-Dichlorobenzene-d4	5.754

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Diethyl carbitol	162	C8H18O3	000112-36-7	90
2	Ethanol, 2-(2-ethoxyethoxy)-	134	C6H14O3	000111-90-0	83
3	Ethanol, 2-(2-ethoxyethoxy)-	134	C6H14O3	000111-90-0	83
4	Ethanol, 2-(2-ethoxyethoxy)-	134	C6H14O3	000111-90-0	74
5	Diethyl carbitol	162	C8H18O3	000112-36-7	74





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2014.D
Acq On : 20 Dec 2022 18:11
Operator : NM1
Sample : |604449018|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB05-23-265375|MIX[A,B,J,D,E]||
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

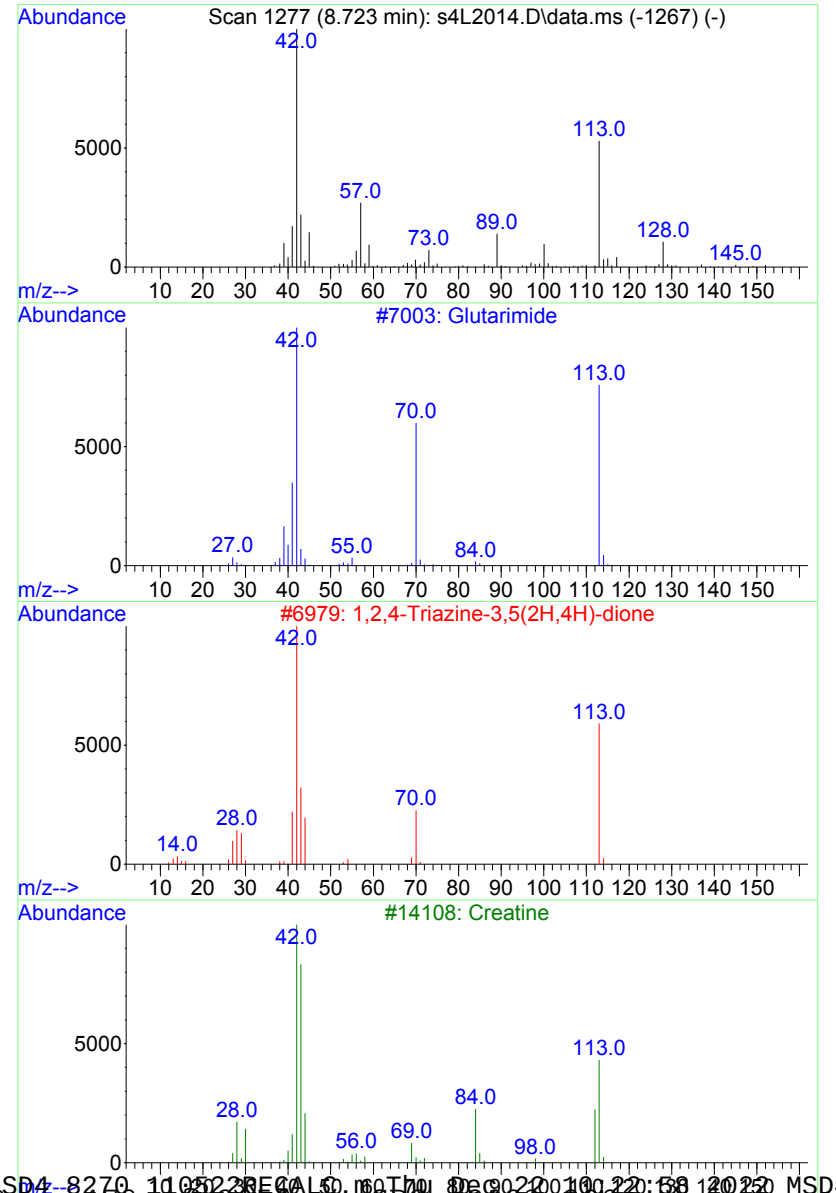
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

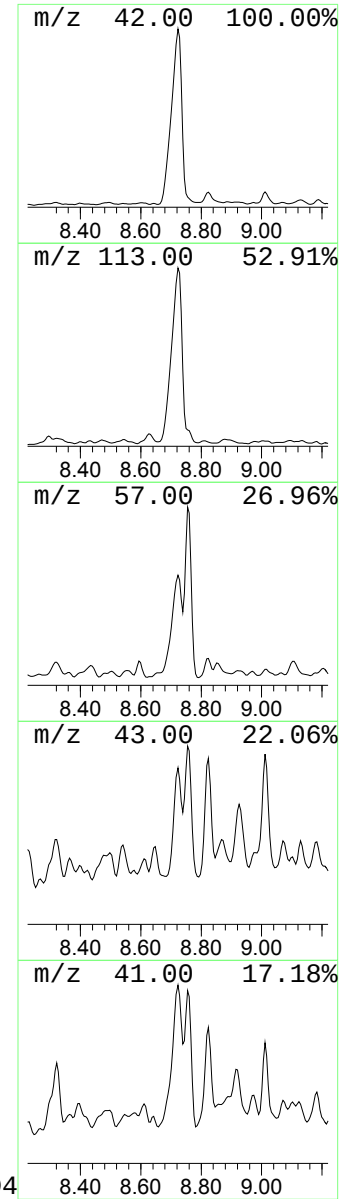
****

Peak Number 4 unknown Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.723	6.51 ng/uL	205747	E Naphthalene-d8	7.690

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Glutarimide	113	C5H7NO2	001121-89-7	52
2	1,2,4-Triazine-3,5(2H,4H)-dione	113	C3H3N3O2	000461-89-2	50
3	Creatine	131	C4H9N3O2	000057-00-1	40
4	Creatinine	113	C4H7N3O	000060-27-5	40
5	1,2,4-Triazine-3,5(2H,4H)-dione	113	C3H3N3O2	000461-89-2	40





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2014.D
Acq On : 20 Dec 2022 18:11
Operator : NM1
Sample : |604449018|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB05-23-265375|MIX[A,B,J,D,E]||
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

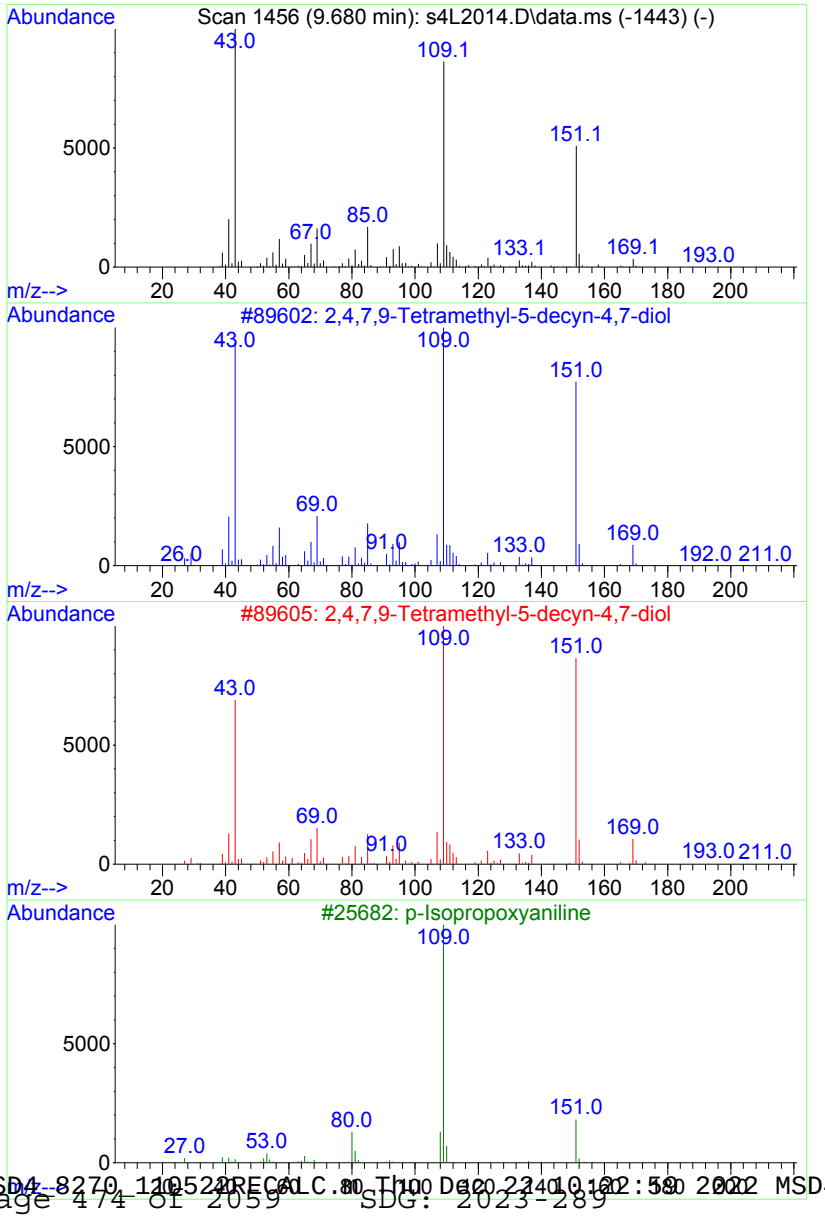
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

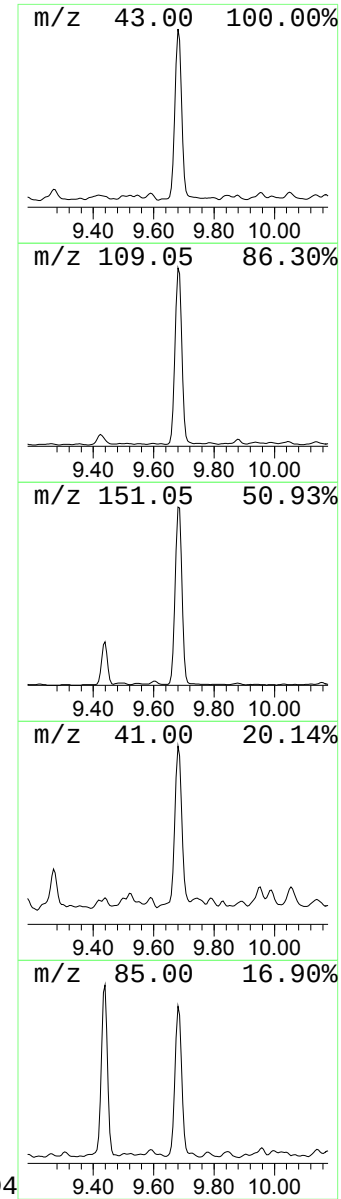
****

Peak Number 5 2,4,7,9-Tetramethyl-5-decyn... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.680	12.72 ng/uL	519960	A Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,4,7,9-Tetramethyl-5-decyn-4,7-...	226	C14H26O2	000126-86-3	91
2	2,4,7,9-Tetramethyl-5-decyn-4,7-...	226	C14H26O2	000126-86-3	83
3	p-Isopropoxyaniline	151	C9H13NO	007664-66-6	64
4	Metacetamol	151	C8H9NO2	000621-42-1	59
5	Pyridine, 2-butyl-, 1-oxide	151	C9H13NO	031396-32-4	59





Library Search Compound Report

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Data File : s4L2014.D
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Operator : NM1
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Misc : |MSD1C70E_L|WATER|SMEB05-23-265375|MIX[A,B,J,D,E]||
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

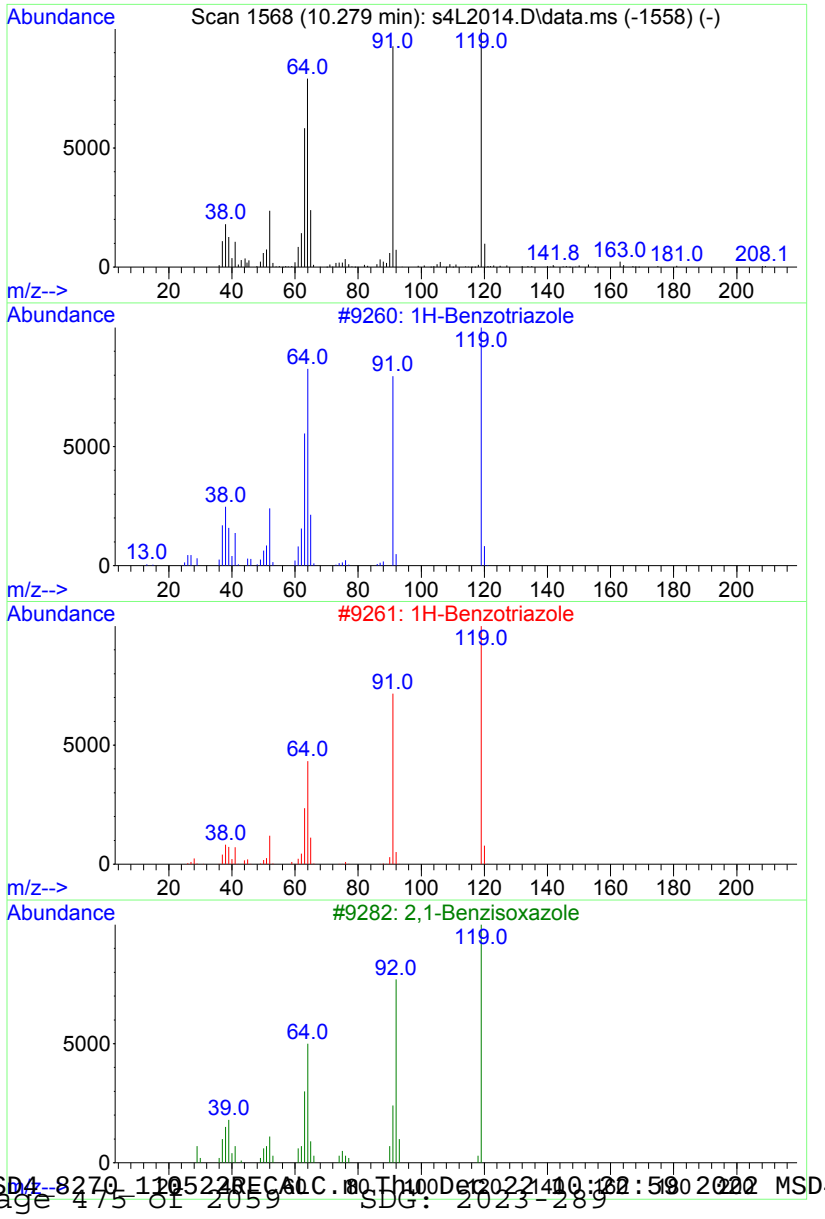
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

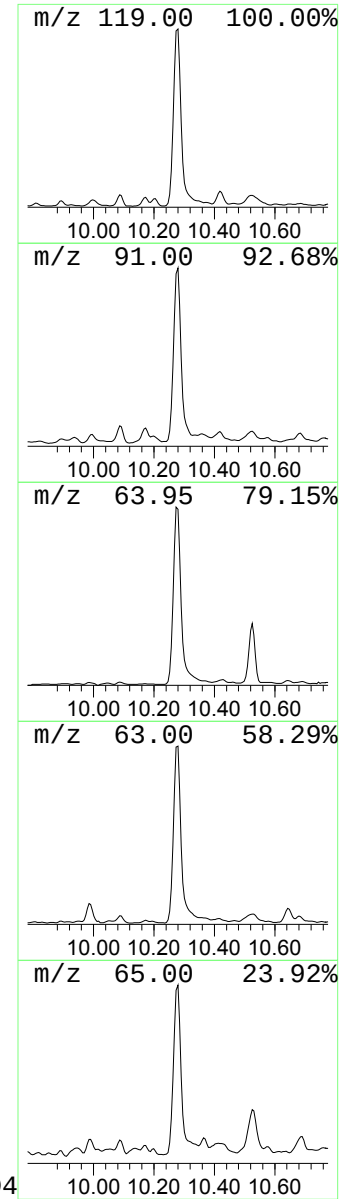
****

Peak Number 6 1H-Benzotriazole Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.279	6.96 ng/uL	284507	A Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Benzotriazole	119	C6H5N3	000095-14-7	96
2	1H-Benzotriazole	119	C6H5N3	000095-14-7	94
3	2,1-Benzisoxazole	119	C7H5NO	000271-58-9	87
4	Benzoxazole	119	C7H5NO	000273-53-0	87
5	2,1-Benzisoxazole	119	C7H5NO	000271-58-9	87





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2014.D
Acq On : 20 Dec 2022 18:11
Operator : NM1
Sample : |604449018|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB05-23-265375|MIX[A,B,J,D,E]||
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

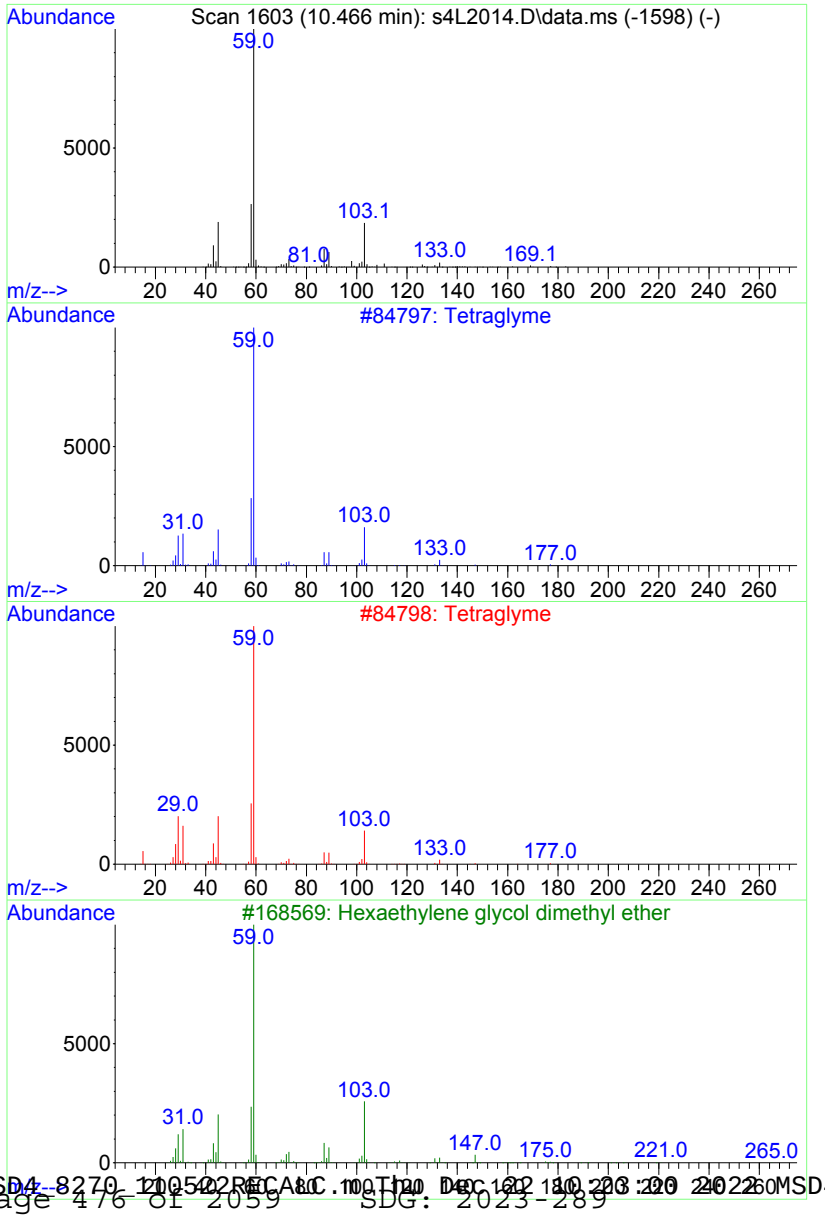
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

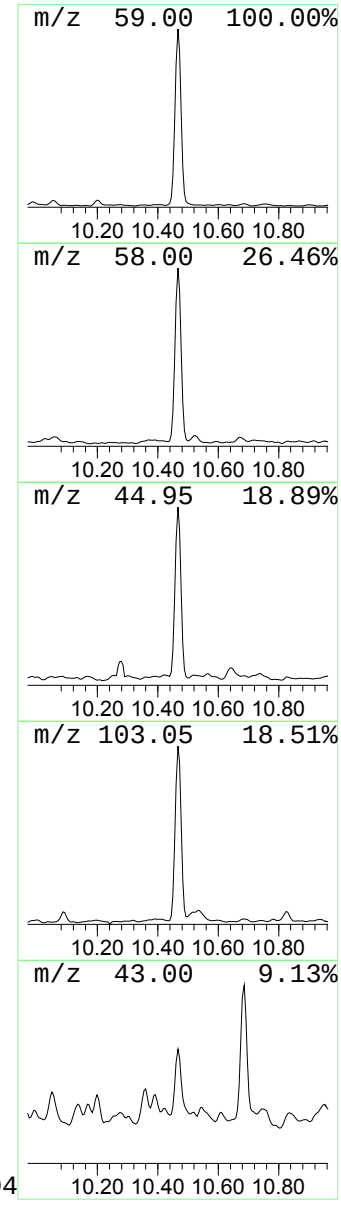
****

Peak Number 7 Tetraglyme Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.466	4.45 ng/uL	181868	A Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tetraglyme	222	C10H22O5	000143-24-8	90
2	Tetraglyme	222	C10H22O5	000143-24-8	90
3	Hexaethylene glycol dimethyl ether	310	C14H30O7	001072-40-8	83
4	Tetraglyme	222	C10H22O5	000143-24-8	83
5	2,5,8,11-Tetraoxadodecane	178	C8H18O4	000112-49-2	78





Library Search Compound Report

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Acq On : 20 Dec 2022 18:11
Operator : NM1
Sample : |604449018|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB05-23-265375|MIX[A,B,J,D,E]||
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

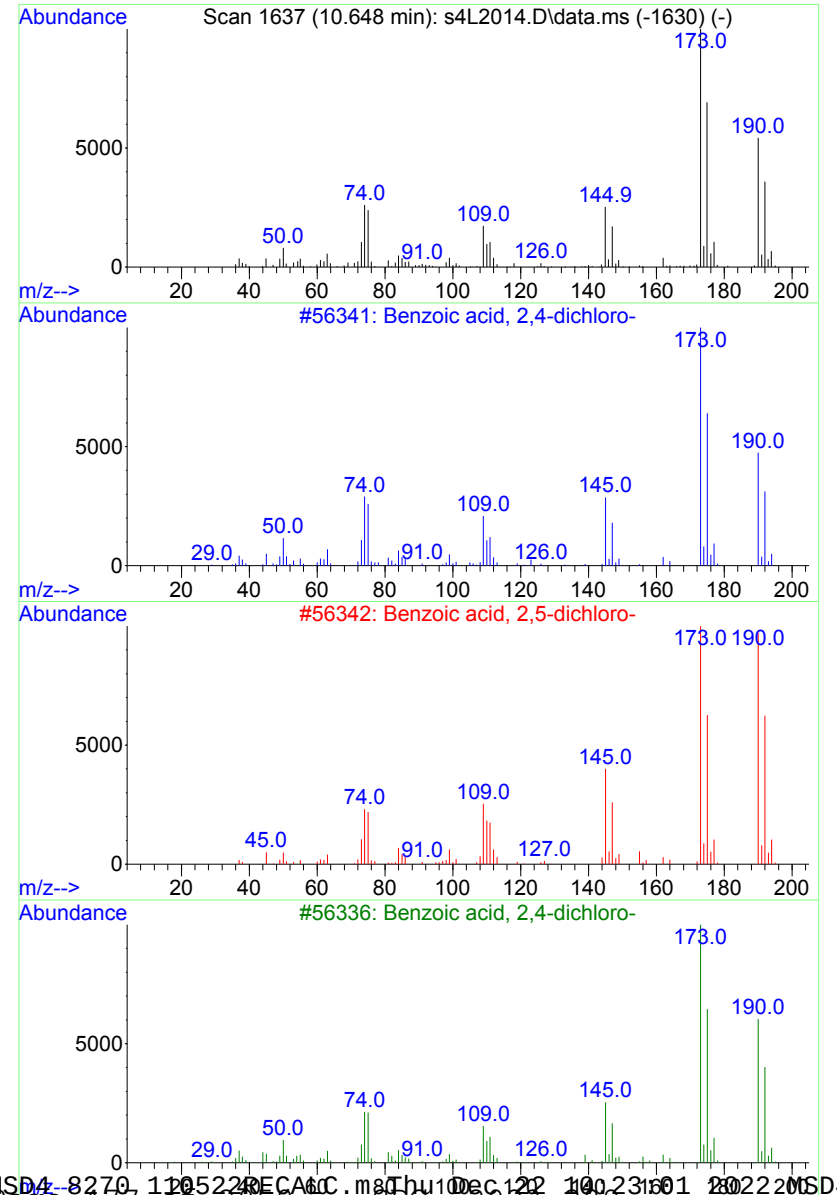
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

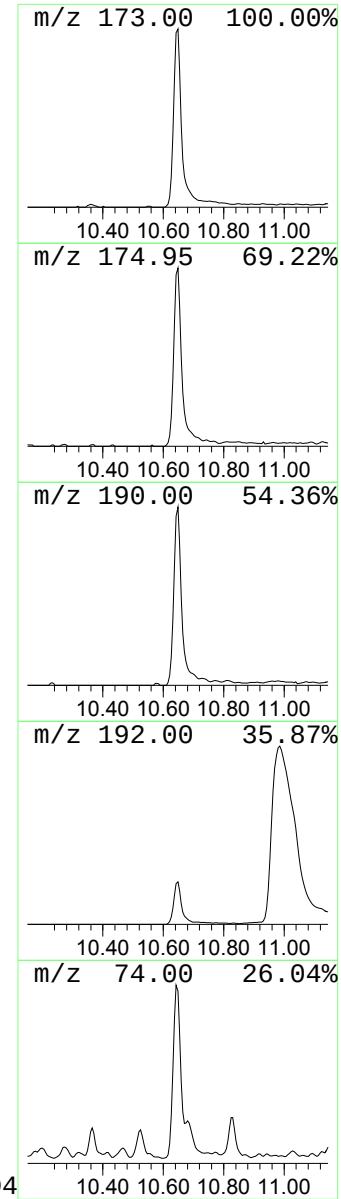
****

Peak Number 8 Benzoic acid, 2,4-dichloro- Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.648	4.88 ng/uL	199369	D Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzoic acid, 2,4-dichloro-	190	C7H4Cl2O2	000050-84-0	99
2	Benzoic acid, 2,5-dichloro-	190	C7H4Cl2O2	000050-79-3	97
3	Benzoic acid, 2,4-dichloro-	190	C7H4Cl2O2	000050-84-0	96
4	Benzoic acid, 2,5-dichloro-	190	C7H4Cl2O2	000050-79-3	96
5	Benzoic acid, 2,6-dichloro-	190	C7H4Cl2O2	000050-30-6	96





Library Search Compound Report

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Data File : s4L2014.D
Acq On : 20 Dec 2022 18:11
Operator : NM1
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Misc : |MSD1C70E_L|WATER|SMEB05-23-265375|MIX[A,B,J,D,E]||
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

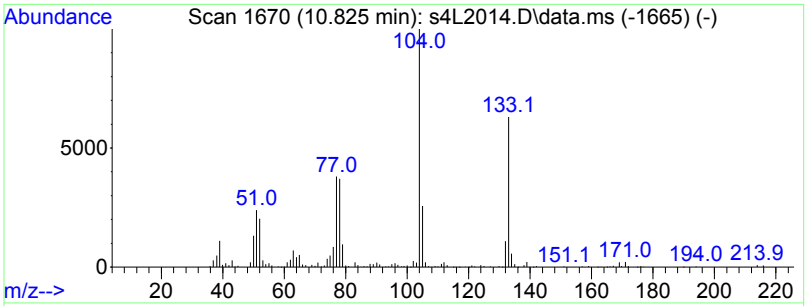
TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

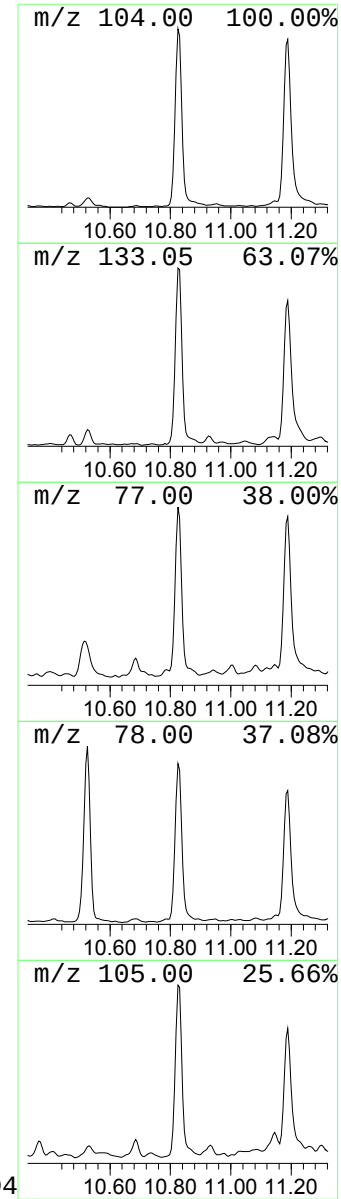
****

Peak Number 9 1H-Benzotriazole, 4-methyl- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.825	6.27 ng/uL	256349	D Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Benzotriazole, 4-methyl-	133	C7H7N3	029878-31-7	98
2	1H-Benzotriazole, 5-methyl-	133	C7H7N3	000136-85-6	95
3	1H-Benzotriazole, 5-methyl-	133	C7H7N3	000136-85-6	95
4	1H-Benzotriazole, 4-methyl-	133	C7H7N3	029878-31-7	94
5	1H-Benzotriazole, 5-methyl-	133	C7H7N3	000136-85-6	93





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2014.D
Acq On : 20 Dec 2022 18:11
Operator : NM1
Sample : |604449018|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB05-23-265375|MIX[A,B,J,D,E]||
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

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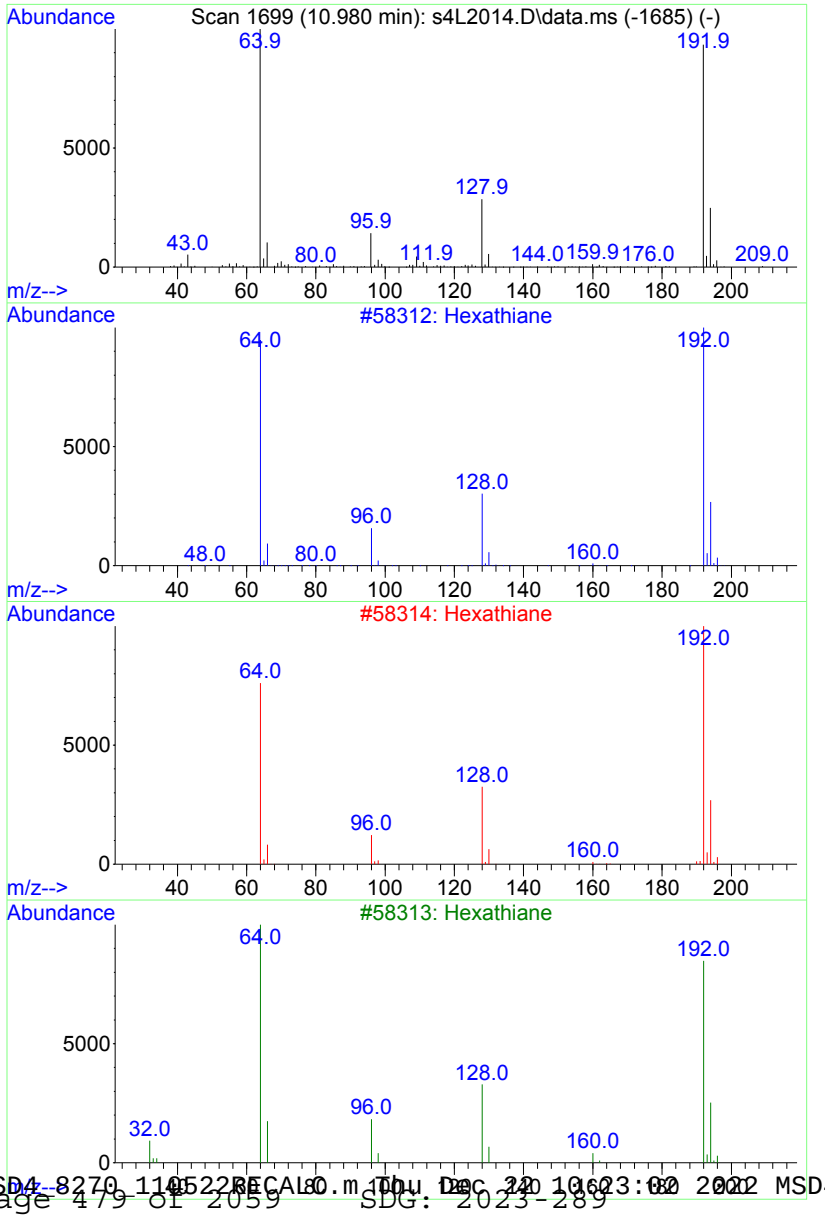
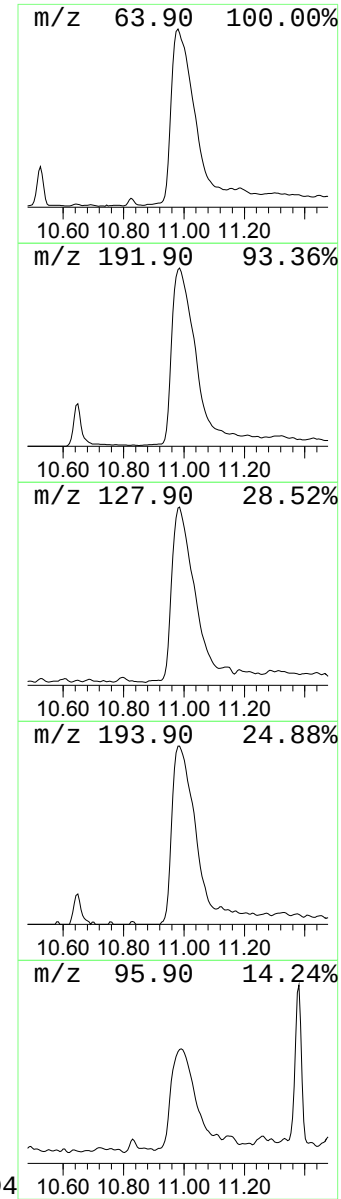
Peak Number 10 Hexathiane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.980	13.72 ng/uL	560587	D Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexathiane	192	S6	013798-23-7	96
2	Hexathiane	192	S6	013798-23-7	94
3	Hexathiane	192	S6	013798-23-7	43
4	Pyrazole, 3-(p-chlorophenyl)-5-m...	192	C10H9ClN2	017629-27-5	9
5	Benzene, 1-bromo-4-chloro-	190	C6H4BrCl	000106-39-8	9





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2014.D
Acq On : 20 Dec 2022 18:11
Operator : NM1
Sample : |604449018|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB05-23-265375|MIX[A,B,J,D,E]||
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

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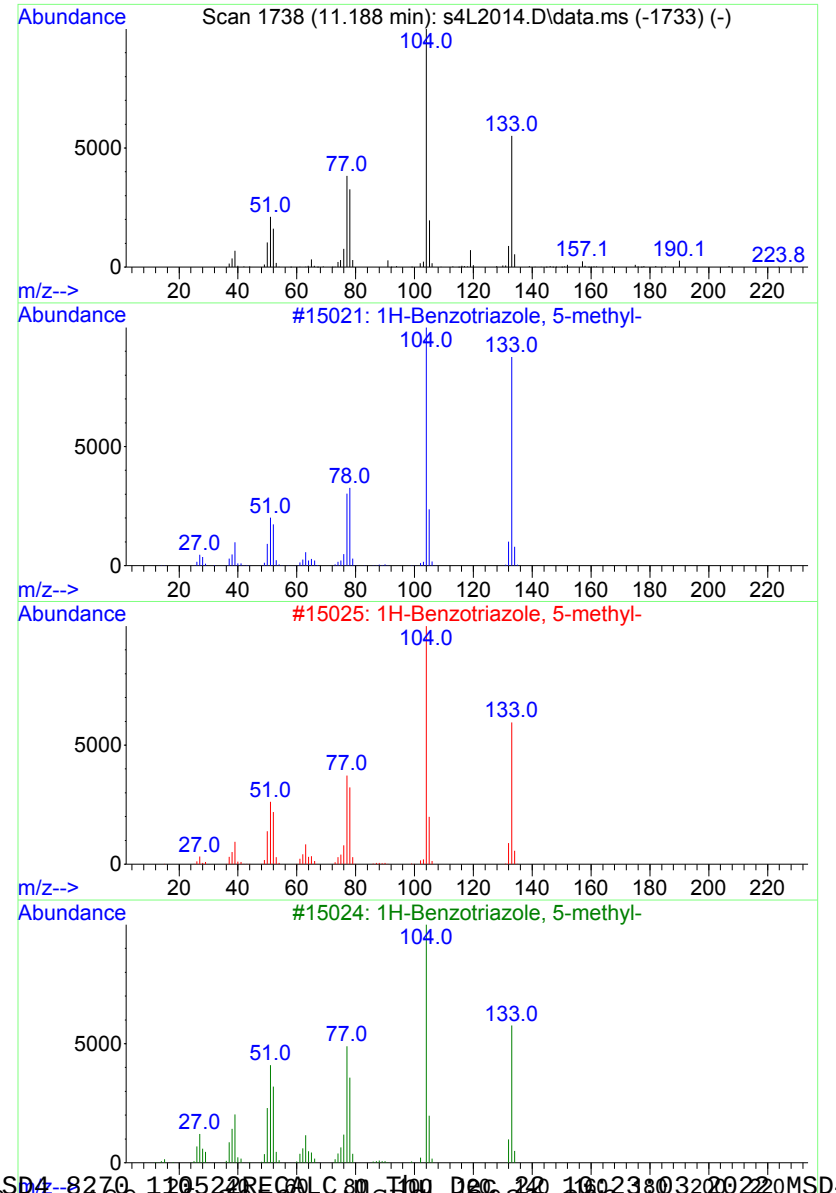
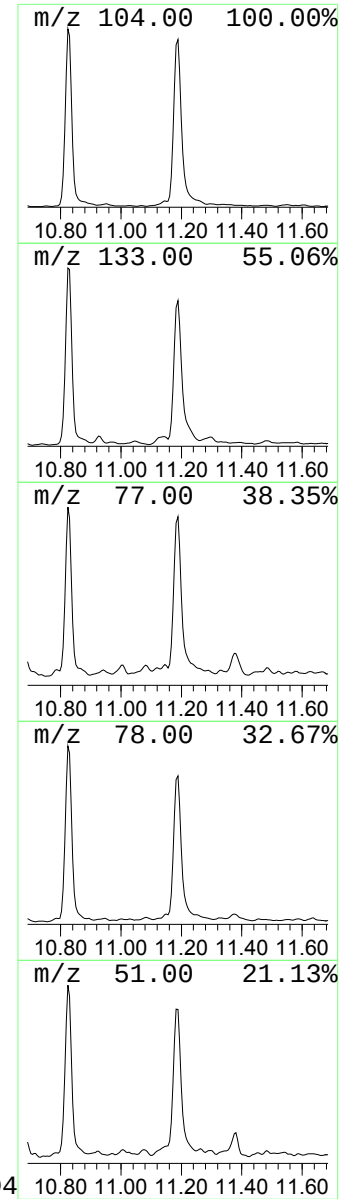
Peak Number 11 1H-Benzotriazole, 5-methyl- Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.188	4.51 ng/uL	184456	D Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Benzotriazole, 5-methyl-	133	C7H7N3	000136-85-6	97
2	1H-Benzotriazole, 5-methyl-	133	C7H7N3	000136-85-6	95
3	1H-Benzotriazole, 5-methyl-	133	C7H7N3	000136-85-6	90
4	1H-Benzotriazole, 4-methyl-	133	C7H7N3	029878-31-7	87
5	1H-Benzotriazole, 4-methyl-	133	C7H7N3	029878-31-7	86





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2014.D
Acq On : 20 Dec 2022 18:11
Operator : NM1
Sample : |604449018|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB05-23-265375|MIX[A,B,J,D,E]||
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

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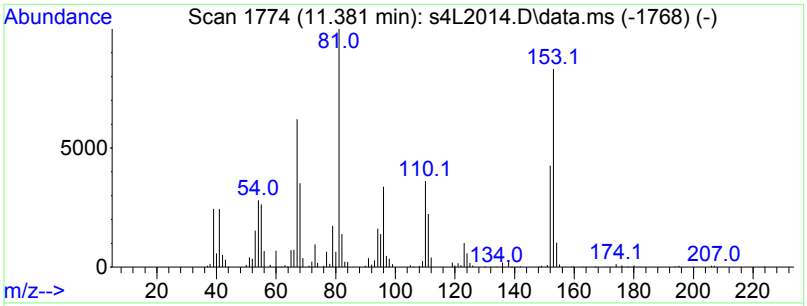
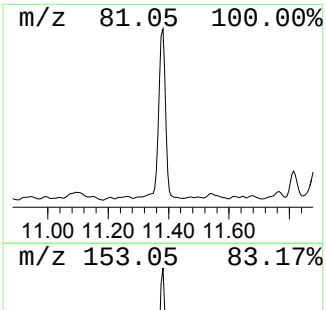
Peak Number 12 Gabapentin lactam Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.381	7.13 ng/uL	291256	D Acenaphthene-d10	10.525

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Gabapentin lactam	153	C9H15NO	064744-50-9	98
2	Cyclohexene, 3-methyl-	96	C7H12	000591-48-0	42
3	Methyl ethyl cyclopentene	110	C8H14	019780-56-4	35
4	Cyclohexane, ethylidene-	110	C8H14	001003-64-1	35
5	Cyclohexene, 1-methyl-	96	C7H12	000591-49-1	30





Library Search Compound Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2014.D
Acq On : 20 Dec 2022 18:11
Operator : NM1
Sample : |604449018|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB05-23-265375|MIX[A,B,J,D,E]||
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

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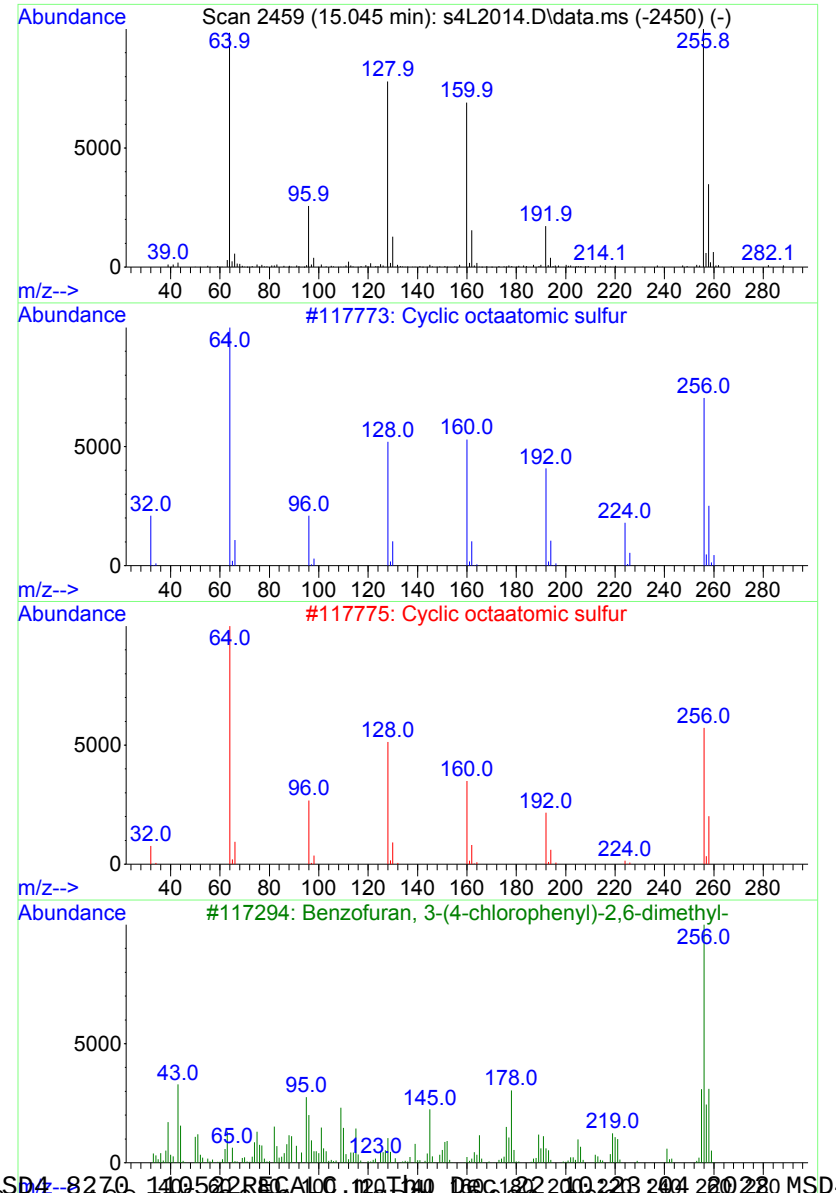
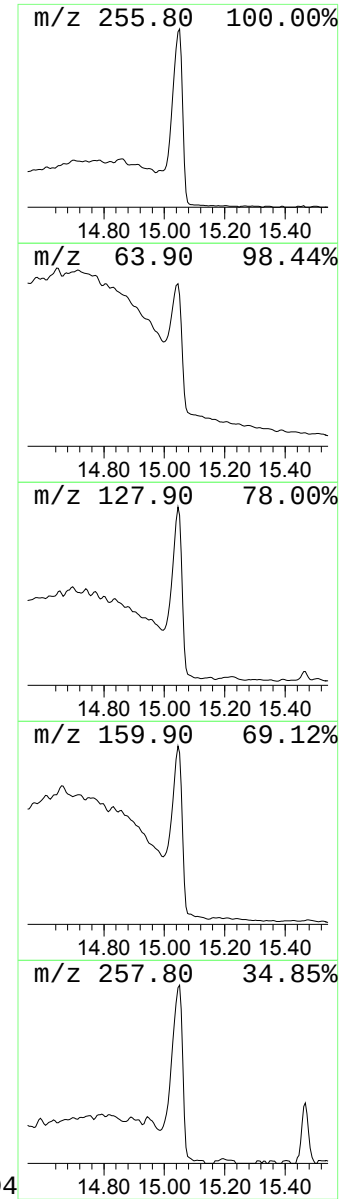
Peak Number 13 Cyclic octaatomic sulfur Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.045	9.19 ng/uL	423482	D Phenanthrene-d10	12.948

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclic octaatomic sulfur	256	S8	010544-50-0	93
2	Cyclic octaatomic sulfur	256	S8	010544-50-0	25
3	Benzofuran, 3-(4-chlorophenyl)-2...	256	C16H13ClO	074228-99-2	9
4	Dihydropyrimidine-2-methyl thios...	208	C5H8N2O3S2	1000256-28-8	9
5	Hexathiane	192	S6	013798-23-7	9





Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2014.D
Acq On : 20 Dec 2022 18:11
Operator : NM1
Sample : |604449018|2358006|1|SVM|1|TNSL|||
Misc : |MSD1C70E_L|WATER|SMEB05-23-265375|MIX[A,B,J,D,E]||
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

			(ng/uL)		Internal Standard		
TIC Top Hit name	CAS #	RT	EstConc	Response	#	RT	Resp	Conc
unknown	000646-04-8	5.465	4.5	94855	1	5.754	846937	40.0
unknown	000075-09-2	5.957	9.3	197964	2	5.754	846937	40.0
Diethyl carbitol	000112-36-7	6.364	12.7	268525	2	5.754	846937	40.0
unknown	001121-89-7	8.723	6.5	205747	7	7.690	1264210	40.0
2,4,7,9-Tetramethyl-5-decyn...	000126-86-3	9.680	12.7	519960	8	10.525	1634920	40.0
1H-Benzotriazole	000095-14-7	10.279	7.0	284507	8	10.525	1634920	40.0
Tetraglyme	000143-24-8	10.466	4.4	181868	8	10.525	1634920	40.0
Benzoic acid, 2,4-dichloro-	000050-84-0	10.648	4.9	199369	10	10.525	1634920	40.0
1H-Benzotriazole, 4-methyl-	029878-31-7	10.825	6.3	256349	10	10.525	1634920	40.0
Hexathiane	013798-23-7	10.980	13.7	560587	10	10.525	1634920	40.0
1H-Benzotriazole, 5-methyl-	000136-85-6	11.188	4.5	184456	10	10.525	1634920	40.0
Gabapentin lactam	064744-50-9	11.381	7.1	291256	10	10.525	1634920	40.0
Cyclic octaatomic sulfur	010544-50-0	15.045	9.2	423482	14	12.948	1842550	40.0

Standards

SW846 8270/EPA 625

Calibration Standard Concentration Levels*

MEGA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8	Level 9	Level 10
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD)										
Naphthalene-d8 (INTERNAL STANDARD)										
Acenaphthene-d10 (INTERNAL STANDARD)										
Phenanthrene-d10 (INTERNAL STANDARD)										
Chrysene-d12 (INTERNAL STANDARD)										
Perylene-d12 (INTERNAL STANDARD)										
2-Fluorophenol (SURROGATE)		10	20	40	50	80	100	120	30	60
Phenol-d5 (SURROGATE)		10	20	40	50	80	100	120	30	60
2-Chlorophenol-d4 (CLP SURROGATE)		10	20	40	50	80	100	120	30	60
1,2-Dichlorobenzene-d4 (CLP SURROGATE)		10	20	40	50	80	100	120	30	60
Nitrobenzene-d5 (SURROGATE)		10	20	40	50	80	100	120	30	60
2-Fluorobiphenyl (SURROGATE)		10	20	40	50	80	100	120	30	60
2,4,6-Tribromophenol (SURROGATE)		10	20	40	50	80	100	120	30	60
p-Terphenyl-d14 (SURROGATE)		10	20	40	50	80	100	120	30	60
N-Nitrosodimethylamine	1**	10	20	40	50	80	100	120	30	60
Pyridine		10	20	40	50	80	100	120	30	60
Aniline		10	20	40	50	80	100	120	30	60
Phenol		10	20	40	50	80	100	120	30	60
bis(2-Chloroethyl)ether		10	20	40	50	80	100	120	30	60
2-Chlorophenol		10	20	40	50	80	100	120	30	60
n-Decane		10	20	40	50	80	100	120	30	60
1,3-Dichlorobenzene		10	20	40	50	80	100	120	30	60
1,4-Dichlorobenzene		10	20	40	50	80	100	120	30	60
Benzyl Alcohol		10	20	40	50	80	100	120	30	60
1,2-Dichlorobenzene		10	20	40	50	80	100	120	30	60
bis(2-Chloro-1-methylethyl)ether		10	20	40	50	80	100	120	30	60
o-Cresol (2-Methylphenol)		10	20	40	50	80	100	120	30	60
N-Nitrosodipropylamine		10	20	40	50	80	100	120	30	60
m,p-Cresols (3-Methylphenol & 4-Methylphenol)		10	20	40	50	80	100	120	30	60
Hexachloroethane		10	20	40	50	80	100	120	30	60
Nitrobenzene		10	20	40	50	80	100	120	30	60
Isophorone		10	20	40	50	80	100	120	30	60
2-Nitrophenol		10	20	40	50	80	100	120	30	60
2,4-Dimethylphenol		10	20	40	50	80	100	120	30	60
bis(2-Chloroethoxy)methane		10	20	40	50	80	100	120	30	60
2,4-Dichlorophenol		10	20	40	50	80	100	120	30	60
Benzoic Acid			20	40	50	80	100	120	30	60
1,2,4-Trichlorobenzene		10	20	40	50	80	100	120	30	60
Naphthalene	1	10	20	40	50	80	100	120	30	60
alpha-Terpineol		10	20	40	50	80	100	120	30	60
4-Chloroaniline		10	20	40	50	80	100	120	30	60

SW846 8270/EPA 625										
Calibration Standard Concentration Levels*										
MEGA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8	Level 9	Level 10
Hexachlorobutadiene		10	20	40	50	80	100	120	30	60
4-Chloro-3-methylphenol		10	20	40	50	80	100	120	30	60
2-Methylnaphthalene	1	10	20	40	50	80	100	120	30	60
1-Methylnaphthalene	1	10	20	40	50	80	100	120	30	60
Hexachlorocyclopentadiene		10	20	40	50	80	100	120	30	60
2,3-Dichloroaniline		10	20	40	50	80	100	120	30	60
2,4,6-Trichlorophenol		10	20	40	50	80	100	120	30	60
2,4,5-Trichlorophenol		10	20	40	50	80	100	120	30	60
2-Chloronaphthalene	1	10	20	40	50	80	100	120	30	60
o-Nitroaniline		10	20	40	50	80	100	120	30	60
m-Nitroaniline		10	20	40	50	80	100	120	30	60
Dimethylphthalate	1**	10	20	40	50	80	100	120	30	60
2,6-Dinitrotoluene		10	20	40	50	80	100	120	30	60
Acenaphthylene	1	10	20	40	50	80	100	120	30	60
Acenaphthene	1	10	20	40	50	80	100	120	30	60
2,4-Dinitrophenol			20	40	50	80	100	120	30	60
Dibenzofuran		10	20	40	50	80	100	120	30	60
2,4-Dinitrotoluene		10	20	40	50	80	100	120	30	60
Diethylphthalate	1**	10	20	40	50	80	100	120	30	60
4-Nitrophenol		10	20	40	50	80	100	120	30	60
Fluorene	1	10	20	40	50	80	100	120	30	60
4-Chlorophenyl phenyl ether		10	20	40	50	80	100	120	30	60
2-Methyl-4,6-dinitrophenol		10	20	40	50	80	100	120	30	60
p-Nitroaniline		10	20	40	50	80	100	120	30	60
Diphenylamine		10	20	40	50	80	100	120	30	60
1,2-Diphenylhydrazine		10	20	40	50	80	100	120	30	60
4-Bromophenyl phenyether		10	20	40	50	80	100	120	30	60
Hexachlorobenzene		10	20	40	50	80	100	120	30	60
Pentachlorophenol		10	20	40	50	80	100	120	30	60
n-Octadecane		10	20	40	50	80	100	120	30	60
Phenanthrene	1	10	20	40	50	80	100	120	30	60
Anthracene	1	10	20	40	50	80	100	120	30	60
Di-n-butylphthalate	1**	10	20	40	50	80	100	120	30	60
Fluoranthene	1	10	20	40	50	80	100	120	30	60
Pyrene	1	10	20	40	50	80	100	120	30	60
Butylbenzylphthalate	1**	10	20	40	50	80	100	120	30	60
Benzo(a)anthracene	1	10	20	40	50	80	100	120	30	60
Chrysene	1	10	20	40	50	80	100	120	30	60
bis (2-Ethylhexyl) phthalate	1	10	20	40	50	80	100	120	30	60
Di-n-octylphthalate	1**	10	20	40	50	80	100	120	30	60

SW846 8270/EPA 625										
Calibration Standard Concentration Levels*										
MEGA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8	Level 9	Level 10
Benzo(b)fluoranthene	1	10	20	40	50	80	100	120	30	60
Benzo(k)fluoranthene	1	10	20	40	50	80	100	120	30	60
Benzo(a)pyrene	1	10	20	40	50	80	100	120	30	60
Indeno-(1,2,3-cd)pyrene	1	10	20	40	50	80	100	120	30	60
Dibenzo(a,h)anthracene	1	10	20	40	50	80	100	120	30	60
Benzo(ghi)perylene	1	10	20	40	50	80	100	120	30	60
m-Dinitrobenzene		10	20	40	50	80	100	120	30	60
2,3,4,6-Tetrachlorophenol		10	20	40	50	80	100	120	30	60
Dinoseb		10	20	40	50	80	100	120	30	60
Carbazole	1	10	20	40	50	80	100	120	30	60
p-Benzoquinone		10	20	40	50	80	100	120	30	60
Methoxychlor		10	20	40	50	80	100	120	30	60
p-Toluidine		10	20	40	50	80	100	120	30	60
m-Toluidine		10	20	40	50	80	10	120	30	60
1,4-Dinitrobenzene		10	20	40	50	80	100	120	30	60
2-Ethoxyethanol		10	20	40	50	80	100	120	30	60
Phthalic anhydride		10	20	40	50	80	100	120	30	60
Methylenebis(2-chloroaniline)		10	20	40	50	80	100	120	30	60
Dibenzo(a,e)pyrene		10	20	40	50	80	100	120	30	60

SW846 8270/EPA 625										
Calibration Standard Concentration Levels*										
AP MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8	Level 9	Level 10
Benzaldehyde		10	20	40	50	80	100	120	30	60
Acetophenone		10	20	40	50	80	100	120	30	60
Caprolactam		10	20	40	50	80	100	120	30	60
1,1'-Biphenyl		10	20	40	50	80	100	120	30	60
Atrazine		10	20	40	50	80	100	120	30	60
Benzidine		10	20	40	50	80	100	120	30	60
3,3'-Dichlorobenzidene		10	20	40	50	80	100	120	30	60
1,4-Dioxane		10	20	40	50	80	100	120	30	60
Methyl methacrylate		10	20	40	50	80	100	120	30	60
Ethyl methacrylate		10	20	40	50	80	100	120	30	60
2-Picoline		10	20	40	50	80	100	120	30	60
N-Nitrosomethylethylamine		10	20	40	50	80	100	120	30	60
2-Butoxyethanol		10	20	40	50	80	100	120	30	60
Methyl methanesulfonate		10	20	40	50	80	100	120	30	60
N-Nitrosodiethylamine		10	20	40	50	80	100	120	30	60
Ethyl methanesulfonate		10	20	40	50	80	100	120	30	60
Pentachloroethane		10	20	40	50	80	100	120	30	60
N-Nitrosopyrrolidine		10	20	40	50	80	100	120	30	60
N-Nitrosomorpholine		10	20	40	50	80	100	120	30	60
o-Toluidine		10	20	40	50	80	100	120	30	60
N-Nitrosopiperidine		10	20	40	50	80	100	120	30	60
a,a-Dimethylphenethylamine		10	20	40	50	80	100	120	30	60
2,6-Dichlorophenol		10	20	40	50	80	100	120	30	60

SW846 8270/EPA 625										
Calibration Standard Concentration Levels*										
AP MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8	Level 9	Level 10
Hexachloropropene		10	20	40	50	80	100	120	30	60
N-Nitrosodi-n-butylamine		10	20	40	50	80	100	120	30	60
Safrole		10	20	40	50	80	100	120	30	60
1,2,4,5-Tetrachlorobenzene		10	20	40	50	80	100	120	30	60
Isosafrole		10	20	40	50	80	100	120	30	60
1,4-Naphthoquinone		10	20	40	50	80	100	120	30	60
Pentachlorobenzene		10	20	40	50	80	100	120	30	60
1-Naphthylamine		10	20	40	50	80	100	120	30	60
2-Naphthylamine		10	20	40	50	80	100	120	30	60
5-Nitro-o-toluidine		10	20	40	50	80	100	120	30	60
1,3,5-Trinitrobenzene		10	20	40	50	80	100	120	30	60
Phenacetin		10	20	40	50	80	100	120	30	60
Diallate		10	20	40	50	80	100	120	30	60
cis-Diallate		1.5	3	6	7.5	12	15	18	4.5	9
trans-Diallate		8.5	17	34	42	68	85	102	25.5	51
4-Aminobiphenyl		10	20	40	50	80	100	120	30	60
Pentachloronitrobenzene		10	20	40	50	80	100	120	30	60
Pronamide		10	20	40	50	80	100	120	30	60
4-Nitroquinoline-1-oxide		10	20	40	50	80	100	120	30	60
Methapyrilene		10	20	40	50	80	100	120	30	60
Isodrin		10	20	40	50	80	100	120	30	60
Aramite		10	20	40	50	80	100	120	30	60
Kepone		10	20	40	50	80	100	120	30	60
p-(Dimethylamino)azobenzene		10	20	40	50	80	100	120	30	60
Chlorobenzilate		10	20	40	50	80	100	120	30	60
3,3'-Dimethylbenzidine		10	20	40	50	80	100	120	30	60
2-Acetylaminofluorene		10	20	40	50	80	100	120	30	60
7,12-Dimethylbenz(a)anthracene		10	20	40	50	80	100	120	30	60
3-Methylcholanthrene		10	20	40	50	80	100	120	30	60

SW846 8270/EPA 625										
Calibration Standard Concentration Levels*										
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8	Level 9	Level 10
Hexachlorophene		500	1000	1250	1500	1750	2000			
p-Phenylenediamine		500	1000	1250	1500	1750	2000			

SW846 8270/EPA 625										
Calibration Standard Concentration Levels*										
PEST MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8	Level 9	Level 10
bis(Chloromethyl)ether		10	20	40	50	80	100	120	30	60
Tributylphosphate		10	20	40	50	80	100	120	30	60
Triethylphosphorothioate		10	20	40	50	80	100	120	30	60
Thionazin		10	20	40	50	80	100	120	30	60
Sulfotepp		10	20	40	50	80	100	120	30	60
Phorate		10	20	40	50	80	100	120	30	60
Dimethoate		10	20	40	50	80	100	120	30	60
Disulfoton		10	20	40	50	80	100	120	30	60
Methyl parathion		10	20	40	50	80	100	120	30	60
Famphur		10	20	40	50	80	100	120	30	60
Parathion		10	20	40	50	80	100	120	30	60

SW846 8270/EPA 625										
Calibration Standard Concentration Levels*										
NEVADA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8	Level 9	Level 10
bis(Chloromethyl)ether		10	20	40	50	80	100	120	30	60
4-Chlorothiophenol		10	20	40	50	80	100	120	30	60
4-Chlorothioanisole		10	20	40	50	80	100	120	30	60
Phthalic acid		10	20	40	50	80	100	120	30	60
Hydroxymethyl phthalimide		10	20	40	50	80	100	120	30	60
Diphenyl sulfide		10	20	40	50	80	100	120	30	60
Diphenyl disulfide		10	20	40	50	80	100	120	30	60
Phenyl sulfone		10	20	40	50	80	100	120	30	60
Octachlorostyrene		10	20	40	50	80	100	120	30	60
Thiophenol		10	20	40	50	80	100	120	30	60
2,2'-Dichlorobenzil		10	20	40	50	80	100	120	30	60
bis(p-Chlorophenyl)disulfide		10	20	40	50	80	100	120	30	60
bis(p-Chlorophenyl)sulfone		10	20	40	50	80	100	120	30	60

All values are mg/L without the prep factor.
# Indicates the calibration verification concentration level used
* Usual calibration levels using SCAN methodology
** This analyte included in this level at special client request.

EPA 522								
Calibration Standard Concentration Levels#								
	Level 1	Level 2	Level 3	Level 4	Level 5	ICV	CCV	
Tetrahydrofuran-d8 (INTERNAL STANDARD)								
1,4-Dioxane-d8 (SURROGATE)	50	100	200	400	500	200	See Method	
1,4-Dioxane	50	100	200	400	500	200	See Method	

All values are ug/L without the prep factor.
Usual calibration levels using SIM methodology

SW846 8270SIM										
Calibration Standard Concentration Levels*										
MEGASIM analytes (A)	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6#	Level 7	Level 8	Level 9	Level 10
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD)										
Naphthalene-d8 (INTERNAL STANDARD)										
Acenaphthene-d10 (INTERNAL STANDARD)										
Phenanthrene-d10 (INTERNAL STANDARD)										
Chrysene-d12 (INTERNAL STANDARD)										
Perylene-d12 (INTERNAL STANDARD)										
5-alpha-Androstane (SURROGATE)	$0.1	0.2	0.5	1	2	5	10	20		
$N-Methyl-N-nitrosomethylamine		0.2	0.5	1	2	5	10	20		
$bis(2-Chloroethyl)ether	0.1	0.2	0.5	1	2	5	10	20		
$N-Nitrosodipropylamine	0.1	0.2	0.5	1	2	5	10	20		
Naphthalene	$0.1	0.2	0.5	1	2	5	10	20		
2-Methylnaphthalene	$0.1	0.2	0.5	1	2	5	10	20		
1-Methylnaphthalene	$0.1	0.2	0.5	1	2	5	10	20		
2-Chloronaphthalene	$0.1	0.2	0.5	1	2	5	10	20		
Acenaphthylene	$0.1	0.2	0.5	1	2	5	10	20		
Acenaphthene	$0.1	0.2	0.5	1	2	5	10	20		
Fluorene	$0.1	0.2	0.5	1	2	5	10	20		
Phenanthrene	$0.1	0.2	0.5	1	2	5	10	20		
Anthracene	$0.1	0.2	0.5	1	2	5	10	20		
Fluoranthene	$0.1	0.2	0.5	1	2	5	10	20		
Pyrene	$0.1	0.2	0.5	1	2	5	10	20		
Benzo(a)anthracene	$0.1	0.2	0.5	1	2	5	10	20		
Chrysene	$0.1	0.2	0.5	1	2	5	10	20		
Benzo(b)fluoranthene	$0.1	0.2	0.5	1	2	5	10	20		
Benzo(k)fluoranthene	$0.1	0.2	0.5	1	2	5	10	20		
Benzo(a)pyrene	$0.1	0.2	0.5	1	2	5	10	20		
Indeno-(1,2,3-cd)pyrene	$0.1	0.2	0.5	1	2	5	10	20		
Dibenzo(a,h)anthracene	$0.1	0.2	0.5	1	2	5	10	20		
Benzo(ghi)perylene	$0.1	0.2	0.5	1	2	5	10	20		

$ By special request - Not for regulatory purposes

SW846 8270SIM										
Calibration Standard Concentration Levels*										
APSIM analytes (A)	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6#	Level 7	Level 8	Level 9	Level 10
$N-Nitrosodimethylamine	0.1	0.2	0.5	1	2	5	10	20		
$N-Nitrosopyrrolidine	0.1	0.2	0.5	1	2	5	10	20		
$N-Nitrosodi-n-butylamine	0.1	0.2	0.5	1	2	5	10	20		
$Benzidine			2.5	5	10	25	50	100		
$3,3'-Dichlorobenzidine	0.1	0.2	0.5	1	2	5	10	20		

$ By special request - Not for regulatory purposes

All values are mg/L without prep factor.

# indicates the calibraton verification concentration level used.

* Usual calibration levels using SIM methodology

(10/16/Full list)

Calibration History Report MSD4
GEL Laboratories, LLC

Method File : C:\msdchem\1\data\S121922\MSD4_8270_110522RECALC.m
Last Update : Wed Nov 16 11:38:14 2022
Integrator : (RTE Integrator) Response via : Initial Calibration

12/22/2022

Cal Lvl:1 Amt:1.00 Last Updated with: C:\msdchem\1\data\S110522SCANICAL\s4K0502.D

Injection Date	Mix	Calibration File
05 Nov 2022 15:30	A	C:\msdchem\1\data\S110522SCANICAL\s4K0502.D

Cal Lvl:2 Amt:10.00 Last Updated with: C:\msdchem\1\data\S110522SCANICAL\s4K0547.D

Injection Date	Mix	Calibration File
05 Nov 2022 16:03	A	C:\msdchem\1\data\S110522SCANICAL\s4K0503.D
06 Nov 2022 00:12	B	C:\msdchem\1\data\S110522SCANICAL\s4K0520.D
05 Nov 2022 20:28	J	C:\msdchem\1\data\S110522SCANICAL\s4K0511.D
06 Nov 2022 04:01	D	C:\msdchem\1\data\S110522SCANICAL\s4K0530.D
07 Nov 2022 11:47	E	C:\msdchem\1\data\S110522SCANICAL\s4K0547.D

Cal Lvl:3 Amt:20.00 Last Updated with: C:\msdchem\1\data\S110522SCANICAL\s4K0548.D

Injection Date	Mix	Calibration File
05 Nov 2022 16:37	A	C:\msdchem\1\data\S110522SCANICAL\s4K0504.D
06 Nov 2022 00:41	B	C:\msdchem\1\data\S110522SCANICAL\s4K0521.D
05 Nov 2022 20:54	J	C:\msdchem\1\data\S110522SCANICAL\s4K0512.D
06 Nov 2022 04:28	D	C:\msdchem\1\data\S110522SCANICAL\s4K0531.D
07 Nov 2022 12:13	E	C:\msdchem\1\data\S110522SCANICAL\s4K0548.D

Cal Lvl:4 Amt:40.00 Last Updated with: C:\msdchem\1\data\S110522SCANICAL\s4K0549.D

Injection Date	Mix	Calibration File
05 Nov 2022 17:10	A	C:\msdchem\1\data\S110522SCANICAL\s4K0505.D
06 Nov 2022 01:39	B	C:\msdchem\1\data\S110522SCANICAL\s4K0523.D
05 Nov 2022 21:20	J	C:\msdchem\1\data\S110522SCANICAL\s4K0513.D
06 Nov 2022 04:54	D	C:\msdchem\1\data\S110522SCANICAL\s4K0532.D
07 Nov 2022 12:39	E	C:\msdchem\1\data\S110522SCANICAL\s4K0549.D

Cal Lvl:5 Amt:50.00 Last Updated with: C:\msdchem\1\data\S110522SCANICAL\s4K0550.D

Injection Date	Mix	Calibration File
05 Nov 2022 17:43	A	C:\msdchem\1\data\S110522SCANICAL\s4K0506.D
06 Nov 2022 01:08	B	C:\msdchem\1\data\S110522SCANICAL\s4K0524.D
05 Nov 2022 21:46	J	C:\msdchem\1\data\S110522SCANICAL\s4K0514.D
06 Nov 2022 05:20	D	C:\msdchem\1\data\S110522SCANICAL\s4K0533.D
07 Nov 2022 13:05	E	C:\msdchem\1\data\S110522SCANICAL\s4K0550.D

Cal Lvl:6 Amt:80.00 Last Updated with: C:\msdchem\1\data\S110522SCANICAL\s4K0551.D

Injection Date	Mix	Calibration File
05 Nov 2022 18:16	A	C:\msdchem\1\data\S110522SCANICAL\s4K0507.D
06 Nov 2022 02:06	B	C:\msdchem\1\data\S110522SCANICAL\s4K0526.D
05 Nov 2022 22:12	J	C:\msdchem\1\data\S110522SCANICAL\s4K0515.D
06 Nov 2022 05:46	D	C:\msdchem\1\data\S110522SCANICAL\s4K0534.D
07 Nov 2022 13:31	E	C:\msdchem\1\data\S110522SCANICAL\s4K0551.D

Cal Lvl:7 Amt:100.00 Last Updated with: C:\msdchem\1\data\S110522SCANICAL\s4K0552.D

Injection Date	Mix	Calibration File
05 Nov 2022 18:49	A	C:\msdchem\1\data\S110522SCANICAL\s4K0508.D
06 Nov 2022 02:35	B	C:\msdchem\1\data\S110522SCANICAL\s4K0527.D

Calibration History Report MSD4
GEL Laboratories, LLC
Method File : C:\msdchem\1\data\S121922\MSD4_8270_110522RECALC.m
Last Update : Wed Nov 16 11:38:14 2022
Integrator : (RTE Integrator) Response via : Initial Calibration

05 Nov 2022 22:39	J	C:\msdchem\1\data\S110522SCANICAL\s4K0516.D
06 Nov 2022 06:12	D	C:\msdchem\1\data\S110522SCANICAL\s4K0535.D
07 Nov 2022 13:57	E	C:\msdchem\1\data\S110522SCANICAL\s4K0552.D

Cal Lvl:8 Amt:120.00 Last Updated with: C:\msdchem\1\data\S110522SCANICAL\s4K0536.D

Injection Date	Mix	Calibration File
05 Nov 2022 19:22	A	C:\msdchem\1\data\S110522SCANICAL\s4K0509.D
06 Nov 2022 03:04	B	C:\msdchem\1\data\S110522SCANICAL\s4K0528.D
05 Nov 2022 23:05	J	C:\msdchem\1\data\S110522SCANICAL\s4K0517.D
06 Nov 2022 06:38	D	C:\msdchem\1\data\S110522SCANICAL\s4K0536.D

Cal Lvl:9 Amt:30.00 Last Updated with: C:\msdchem\1\data\S110522SCANICAL\s4K0522.D

Injection Date	Mix	Calibration File
06 Nov 2022 01:10	B	C:\msdchem\1\data\S110522SCANICAL\s4K0522.D

Cal Lvl:10 Amt:60.00 Last Updated with: C:\msdchem\1\data\S110522SCANICAL\s4K0525.D

Injection Date	Mix	Calibration File
06 Nov 2022 01:37	B	C:\msdchem\1\data\S110522SCANICAL\s4K0525.D

MSD4_8270_110522RECALC.m Wed Dec 21 10:50:25 2022 MSD4

Response Factor Report MSD4
GEL Laboratories, LLC

Method File : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Last Update : Wed Nov 16 11:38:14 2022
Integrator : (RTE Integrator) Response via : Initial Calibration

12/22/2022

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound b m1 m2	1 7	2 8	3 9	4 10	5	6	Avg	Curve	Exp	%RSD/r2
2)A 2-Ethoxyethanol	0.7821628	0.7780083	0.7933008	0.8006442	0.8293578	0.8732346				
	0.8505494	0.8688552					0.8220	AVRG		4.7097
3)AM N-Methyl-N-nitrosomethyl	0.9458132	0.9110905	0.9360351	0.9392895	0.9736004	1.0036729				
	0.9853161	1.0144629					0.9637	AVRG		3.7597
4)AM Pyridine		1.4824794	1.5228682	1.6050104	1.6061412	1.7034318				
	1.6686798	1.7030094					1.6131	AVRG		5.3478
5)SA 2-Fluorophenol		1.2597846	1.2839798	1.2975274	1.3317419	1.3863288				
	1.3841791	1.4046781					1.3355	AVRG		4.2778
6)A p-Benzoquinone		0.6705148	0.7467538	0.7562734	0.7893029	0.8197167				
	0.7915321	0.7799202					0.7649	AVRG		6.2810
7)AM Aniline		2.1439322	2.1878587	2.2010748	2.2268864	2.3350715				
	2.2819892	2.2652329					2.2346	AVRG		2.8810
8)SA Phenol-d5		1.5658771	1.6300720	1.6610560	1.6841915	1.7665605				
	1.7456816	1.7653458					1.6884	AVRG		4.4905
9)AMC Phenol		1.7641984	1.7545116	1.7953618	1.8097672	1.9184594				
	1.8955276	1.9237553					1.8374	AVRG		3.9850
10)AM bis(2-Chloroethyl) ether		1.3951930	1.4254570	1.4566515	1.4462585	1.5431020				
	1.5191495	1.5245402					1.4729	AVRG		3.8203
11)AM 2-Chlorophenol		1.2801653	1.2939873	1.3154693	1.3350496	1.4140630				
	1.4083915	1.4374169					1.3549	AVRG		4.7080
12)AM n-Decane		1.4584878	1.4583575	1.4837146	1.4880672	1.5843911				
	1.5549692	1.5793371					1.5153	AVRG		3.6799
13)AM 1,3-Dichlorobenzene		1.4624459	1.4701844	1.4806269	1.5103414	1.5813512				
	1.5634676	1.5884096					1.5224	AVRG		3.5707
14)AMC 1,4-Dichlorobenzene		1.4906733	1.4953767	1.5055036	1.5100730	1.5923527				
	1.5766599	1.6084358					1.5399	AVRG		3.2770
15)AM 1,2-Dichlorobenzene		1.3814786	1.4244645	1.4326593	1.4494789	1.5228858				
	1.5195296	1.5392818					1.4671	AVRG		4.1007
16)AM bis(2-Chloro-1-methyleth		1.8515889	1.8654371	1.8820422	1.8874431	2.0042628				
	1.9743316	2.0144713					1.9257	AVRG		3.6048

Response Factor Report MSD4
GEL Laboratories, LLC

Method File : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Last Update : Wed Nov 16 11:38:14 2022
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	1 7	2 8	3 9	4 10	5	6	Avg	Curve	Exp	%RSD/r2
17)AM Benzyl alcohol	0.9970965	0.8598783 1.0144490	0.9310231	0.9241932	0.9330213	1.0043662	0.9520	AVRG		5.8698
18)AM o-Cresol	1.2458556	1.1016344 1.2635048	1.1584484	1.1706403	1.2011796	1.2543145	1.1994	AVRG		4.9734
19)AM m,p-Cresols	1.4133704	1.2439869 1.4489672	1.2971466	1.3348466	1.3536978	1.4317904	1.3605	AVRG		5.5327
20)AMP N-Nitrosodipropylamine	1.1870046	1.0611855 1.2201996	1.0986353	1.1158799	1.1361605	1.1982260	1.1453	AVRG		5.0851
21)AM Hexachloroethane	0.6281477	0.5669447 0.6378411	0.5793069	0.5920087	0.5894776	0.6327420	0.6038	AVRG		4.7290
23)SA Nitrobenzene-d5	0.4402244	0.3896682 0.4405759	0.3991903	0.4013506	0.4211910	0.4335727	0.4180	AVRG		5.0659
24)AM Nitrobenzene	0.4439106	0.4014249 0.4404759	0.4115969	0.4086947	0.4233658	0.4401329	0.4242	AVRG		4.1121
25)AM Isophorone	0.7969671	0.7170331 0.7950299	0.7352563	0.7384777	0.7577614	0.7865725	0.7610	AVRG		4.2306
26)AMC 2-Nitrophenol	0.1866327	0.1519972 0.1883322	0.1612778	0.1658811	0.1746317	0.1841743	0.1733	AVRG		8.0835
27)AM 2,4-Dimethylphenol	0.3328652	0.2973032 0.3338757	0.3039646	0.3006920	0.3206135	0.3288473	0.3169	AVRG		5.0124
28)AM bis(2-Chloroethoxy)metha	0.4971630	0.4557505 0.4927253	0.4542429	0.4555580	0.4739269	0.4911930	0.4744	AVRG		4.0780
29)AMC 2,4-Dichlorophenol	0.3098893	0.2695373 0.3086399	0.2853989	0.2833089	0.2977325	0.3082360	0.2947	AVRG		5.3061
30)AM Benzoic acid -0.0658 | 0.3258 | 0.00	352870	444604	48558	114815	164445	270360		1/x^2 LINR	#	0.9961
31)AM 1,2,4-Trichlorobenzene	0.3509664	0.3321265 0.3502396	0.3279901	0.3227387	0.3393445	0.3505749	0.3391	AVRG		3.4813
32)AM alpha-Terpineol	0.3348372	0.2985360 0.3365482	0.3057677	0.3066063	0.3233248	0.3326329	0.3198	AVRG		4.9562

Response Factor Report MSD4
GEL Laboratories, LLC

Method File : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Last Update : Wed Nov 16 11:38:14 2022
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound b m1 m2	1 7	2 8	3 9	4 10	5	6	Avg	Curve	Exp	%RSD/r2
33)AM Naphthalene	1.0367277	0.9902601	0.9987277	0.9832184	1.0365438	1.0549228				
	1.0728167	1.0596168					1.0291	AVRG		3.3175
34)AM 4-Chloroaniline		0.4035422	0.4239488	0.4182155	0.4400525	0.4543066				
	0.4543613	0.4529627					0.4353	AVRG		4.6780
35)AMC Hexachlorobutadiene		0.2109236	0.2128759	0.2093731	0.2183041	0.2247474				
	0.2265851	0.2295740					0.2189	AVRG		3.7215
36)AMC 4-Chloro-3-methylphenol		0.3002691	0.3074570	0.3096322	0.3248600	0.3346278				
	0.3390333	0.3408324					0.3224	AVRG		5.1408
37)AM 2-Methylnaphthalene	0.6398368	0.6586070	0.6768588	0.6602008	0.6851990	0.7133178				
	0.7169040	0.7137184					0.6831	AVRG		4.2977
38)AM 1-Methylnaphthalene	0.6364524	0.6106690	0.6197546	0.6172624	0.6426655	0.6600522				
	0.6693334	0.6681741					0.6405	AVRG		3.6664
40)AMP Hexachlorocyclopentadien		0.4753249	0.4965295	0.5084559	0.5283308	0.5669645				
	0.5536267	0.5659358					0.5279	AVRG		6.8132
41)AM 2,3-Dichloroaniline		0.6210272	0.6250621	0.6462127	0.6632542	0.7100832				
	0.6998347	0.7142055					0.6685	AVRG		5.9410
42)AMC 2,4,6-Trichlorophenol		0.3842712	0.3995807	0.4240718	0.4271449	0.4554935				
	0.4560349	0.4655614					0.4303	AVRG		7.1322
43)AM 2,4,5-Trichlorophenol		0.4212200	0.4401009	0.4375413	0.4509110	0.4862565				
	0.4727414	0.4785461					0.4553	AVRG		5.3270
44)SA 2-Fluorobiphenyl		1.4295508	1.4406444	1.4417148	1.4732345	1.5520969				
	1.5155635	1.5480664					1.4858	AVRG		3.5254
45)AM 2-Chloronaphthalene	1.2083427	1.1745841	1.1761180	1.1910011	1.2176403	1.2769105				
	1.2534837	1.2756634					1.2217	AVRG		3.4458
46)AM o-Nitroaniline		0.3488056	0.3761413	0.3855028	0.4037266	0.4270790				
	0.4223232	0.4378647					0.4002	AVRG		7.9536
47)A 1,4-Dinitrobenzene		0.1568760	0.1798214	0.1806899	0.1924716	0.2072247				
	0.2086919	0.2138048					0.1914	AVRG		10.6521
48)AM m-Nitroaniline		0.3068467	0.3171817	0.3313445	0.3476738	0.3640295				
	0.3553056	0.3632115					0.3408	AVRG		6.6693

Response Factor Report MSD4
GEL Laboratories, LLC

Method File : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Last Update : Wed Nov 16 11:38:14 2022
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	1 7	2 8	3 9	4 10	5	6	Avg	Curve	Exp	%RSD/r2
49)AM Dimethylphthalate	1.3151451 1.4227561	1.3548621 1.4419465	1.3525155	1.3523948	1.3881236	1.4407385	1.3836	AVRG		3.4202
50)A m-Dinitrobenzene	0.2360696	0.1935776 0.2416903	0.2018711	0.2139418	0.2258316	0.2410059	0.2220	AVRG		8.7026
51)AM 2,6-Dinitrotoluene	0.3272714	0.2874989 0.3398079	0.3027329	0.3063073	0.3148163	0.3315997	0.3157	AVRG		5.8121
52)AM 2,4-Dinitrotoluene	0.4570573	0.3827221 0.4741818	0.3995264	0.4196338	0.4345328	0.4623202	0.4329	AVRG		7.8704
53)AM Acenaphthylene	1.7277669 1.9360416	1.7548720 1.9721937	1.7965062	1.8248217	1.8643378	1.9758855	1.8566	AVRG		5.2115
54)AMC Acenaphthene	1.1534654 1.1996230	1.1057623 1.2191951	1.1209705	1.1275778	1.1648785	1.2194263	1.1639	AVRG		3.8519
55)AMP 2,4-Dinitrophenol -0.0402 | 0.2157 | 0.00	126384	158871	18304	41946	58976	97547		1/x^2 LINR		0.9961
56)AM Dibenzofuran	1.8724522	1.7661610 1.8987937	1.7549457	1.7658091	1.8184288	1.9102662	1.8267	AVRG		3.6630
57)A 2,3,4,6-Tetrachloropheno	0.4435010	0.3975214 0.4577716	0.4073059	0.4171172	0.4241154	0.4459169	0.4276	AVRG		5.1743
58)AM Diethylphthalate	1.2837122 1.4329193	1.3276696 1.4644970	1.3515062	1.3833713	1.3970069	1.4743252	1.3894	AVRG		4.8095
59)AMP 4-Nitrophenol	0.2234878	0.1716588 0.2280836	0.1960559	0.2043773	0.2114334	0.2249815	0.2086	AVRG		9.6234
60)AM Fluorene	1.4191689 1.5339169	1.3487644 1.5549398	1.4237034	1.4323604	1.4650944	1.5612640	1.4674	AVRG		5.1798
61)AM 4-Chlorophenylphenylethe	0.7687165	0.7092298 0.7866667	0.7198137	0.7271974	0.7446756	0.7818964	0.7483	AVRG		4.1598
62)AM p-Nitroaniline	0.3718875	0.3145760 0.3834723	0.3326398	0.3438728	0.3563312	0.3789442	0.3545	AVRG		7.2163
63)SA 2,4,6-Tribromophenol	0.3619448	0.3070445 0.3655964	0.3149689	0.3365020	0.3417724	0.3628378	0.3415	AVRG		6.9394

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Compound b | m1 | m2	1 7	2 8	3 9	4 10	5	6	Avg	Curve	Exp	%RSD/r2
65)AM 2-Methyl-4,6-dinitrophen -0.0131 | 0.1316 | 0.00	167172	10800 210412	25860	58419	83065	130458		1/x^2 LINR	#|	0.9953
66)AMC Diphenylamine	0.6216290	0.5469634 0.6289005	0.5724982	0.5756138	0.5973355	0.6271903	0.5957	AVRG		5.3461
67)AM 1,2-Diphenylhydrazine	0.8087865	0.7243881 0.8183460	0.7554248	0.7591366	0.7731847	0.8162317	0.7794	AVRG		4.6225
68)AM 4-Bromophenylphenylether	0.2474280	0.2241590 0.2507867	0.2286498	0.2290568	0.2346530	0.2483396	0.2376	AVRG		4.6372
69)AM Hexachlorobenzene	0.3056392	0.2844414 0.3137581	0.2893929	0.2855839	0.2931049	0.3077444	0.2971	AVRG		3.9635
70)AM Pentachlorophenol	0.1944848	0.1409815 0.1987289	0.1631713	0.1755455	0.1785373	0.1919687	0.1776	AVRG		11.4735
71)AM n-Octadecane	0.5155888	0.4326062 0.5297047	0.4505809	0.4762293	0.4864168	0.5251847	0.4880	AVRG		7.7089
72)A Dinoseb -0.0230 | 0.2103 | 0.00	269382	16437 344951	39578	92098	127001	205566		1/x^2 LINR	#|	0.9925
73)AM Phenanthrene	1.0836635 1.1126707	1.0329283 1.1244189	1.0612624	1.0526247	1.0793484	1.1105767	1.0822	AVRG		2.9774
74)AM Anthracene	0.9989081 1.1335099	1.0227633 1.1550229	1.0606062	1.0698182	1.1041176	1.1402978	1.0856	AVRG		5.2555
75)AM Carbazole	0.8841998 1.0172939	0.9131110 1.0296257	0.9301141	0.9454953	0.9670471	1.0126372	0.9624	AVRG		5.5470
76)AM Di-n-butylphthalate	0.8823591 1.1723847	0.9711904 1.1911634	1.0402136	1.0927155	1.1203377	1.1853558	1.0820	AVRG		10.2584
77)AMC Fluoranthene	1.0563878 1.2294107	1.0864917 1.2402330	1.1316563	1.1512200	1.1805541	1.2298181	1.1632	AVRG		5.9462
78)AM Pyrene	1.0778904 1.2903479	1.1607157 1.2934920	1.1933404	1.2083132	1.2415684	1.2901882	1.2195	AVRG		6.2217
79)SA p-Terphenyl-d14	1.1072995	0.9851635 1.0995300	1.0189061	1.0298643	1.0593764	1.0944058	1.0564	AVRG		4.4214

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Compound b | m1 | m2	1 7	2 8	3 9	4 10	5	6	Avg	Curve	Exp	%RSD/r2
81)AM Butylbenzylphthalate -0.0065 | 0.4216 | 0.00	3713 654346	46051	109664	234457	329060	507823		1/x LINR	#	0.9952
82)AM bis(2-Ethylhexyl)phthala -0.0064 | 0.6424 | 0.00	5123 1020504	76869 1254009	175844	378527	514099	799489		1/x^2 LINR	#	0.9939
83)AM Benzo(a)anthracene	1.1196198 1.1553224	1.0616625 1.1658737	1.0673464	1.0958436	1.1122829	1.1523668	1.1163	AVRG		3.5686
84)AM Chrysene	1.1238137 1.0823958	1.0181620 1.0830329	1.0213148	1.0182687	1.0428263	1.0898591	1.0600	AVRG		3.7871
85)A Methoxychlor	0.7324055	0.5512659 0.7470046	0.6044362	0.6514313	0.6870171	0.7312545	0.6721	AVRG		10.9629
86)A Methylenebis(2-chloroani	0.2375103	0.2082722 0.2425307	0.2077378	0.2165486	0.2223466	0.2390637	0.2249	AVRG		6.5907
87)AMC Di-n-octylphthalate -0.0180 | 0.9994 | 0.00	7285	105513	256763	573130	793894	1238738		1/x LINR	#	0.9927
89)AM Benzo(b)fluoranthene	0.8778402 1.0924628	0.9392431 1.1020859	0.9951895	1.0052279	1.0320646	1.0973718	1.0177	AVRG		7.9346
90)AM Benzo(k)fluoranthene	0.8857749 1.0951539	0.9890209 1.1114737	0.9898624	1.0033824	1.0605844	1.0997697	1.0294	AVRG		7.4784
91)AMC Benzo(a)pyrene	0.7244602 0.9557574	0.8163090 0.9815795	0.8490960	0.8737068	0.9088934	0.9686528	0.8848	AVRG		9.9092
92)AM Indeno(1,2,3-cd)pyrene	0.9199159 1.1100128	0.9201455 1.1428102	0.9532850	0.9905754	1.0462021	1.1125349	1.0244	AVRG		8.8533
93)AM Dibenzo(a,h)anthracene	0.9437200 1.1400802	0.9611613 1.1571096	1.0048105	1.0298061	1.0757281	1.1457830	1.0573	AVRG		8.0445
94)AM Benzo(ghi)perylene	0.9839759 1.1152198	0.9879140 1.1277175	1.0056988	1.0248379	1.0648862	1.1248893	1.0544	AVRG		5.8660
95)A Dibenzo(a,e)pyrene	0.8312794	0.6938750 0.8434427	0.7200850	0.7444054	0.7946087	0.8387685	0.7809	AVRG		7.8573
97)BM 1,4-Dioxane	0.6077963	0.6745173 0.6083529	0.5932255 0.6152698	0.6147438 0.6248108	0.6279257	0.6091257	0.6195	AVRG		3.7098

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Compound	1	2	3	4	5	6	Avg	Curve	Exp	%RSD/r2
b m1 m2	7	8	9	10						
98)B Methyl methacrylate		0.2727722	0.2407663	0.2639385	0.2602208	0.2502883				
	0.2549820	0.2541383	0.2540760	0.2609903			0.2569	AVRG		3.5154
99)B Ethyl methacrylate		1.3656334	1.2749602	1.3161048	1.3621900	1.3055777				
	1.3051406	1.3151663	1.3461511	1.3378574			1.3254	AVRG		2.2471
100)B 2-Picoline		1.7567102	1.6109274	1.6962005	1.7291805	1.6664679				
	1.6728662	1.7035738	1.6920447	1.7221460			1.6945	AVRG		2.4835
101)B N-Nitrosomethylethylamin		0.6918659	0.6312477	0.6682017	0.6800018	0.6703296				
	0.6735098	0.6820641	0.6948617	0.6845183			0.6752	AVRG		2.7850
102)B Methyl methanesulfonate		0.9278958	0.8540978	0.8615411	0.8780404	0.8255979				
	0.8120257	0.8168930	0.8708548	0.8514331			0.8554	AVRG		4.1978
103)B N-Nitrosodiethylamine		0.6709044	0.6126424	0.6669287	0.6812212	0.6688600				
	0.6676160	0.6865051	0.6691775	0.6818332			0.6673	AVRG		3.2577
104)B 2-Butoxyethanol		1.4855400	1.4034975	1.5101119	1.5617558	1.5419514				
	1.5562421	1.5984471	1.5500674	1.5723149			1.5311	AVRG		3.8001
105)B Ethyl methanesulfonate		1.2242881	1.1515834	1.2030613	1.2186602	1.1860762				
	1.1924277	1.2042634	1.2103475	1.2206873			1.2013	AVRG		1.8803
106)BM Benzaldehyde		1.3743588	1.2812079	1.3235553	1.3321612	1.2168181				
	1.1692792	1.1139266	1.3404237	1.2958205			1.2720	AVRG		6.8467
107)B Pentachloroethane		0.6025665	0.5499051	0.5763742	0.5788856	0.5713227				
	0.5742253	0.5758963	0.5775952	0.5910395			0.5775	AVRG		2.4699
108)BM N-Nitrosopyrrolidine		0.7077830	0.6644157	0.7232633	0.7324414	0.7288480				
	0.7292108	0.7481061	0.7151593	0.7265404			0.7195	AVRG		3.2674
109)BM Acetophenone		2.1407659	2.0294469	2.1234767	2.1760281	2.1030762				
	2.1088395	2.1414131	2.1375356	2.1395359			2.1222	AVRG		1.9210
110)B N-Nitrosomorpholine		0.7980709	0.7478256	0.7859563	0.8087204	0.7942562				
	0.7996841	0.8036177	0.8031152	0.7975898			0.7932	AVRG		2.2924
111)B o-Toluidine		2.4469060	2.2547317	2.3790661	2.4623547	2.4063507				
	2.4335451	2.4677669	2.3875067	2.4205396			2.4065	AVRG		2.6922
113)B N-Nitrosopiperidine		0.1760128	0.1721528	0.1780979	0.1838514	0.1789404				
	0.1819266	0.1848764	0.1810915	0.1813862			0.1798	AVRG		2.2188

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Compound			1	2	3	4	5	6	Avg	Curve	Exp	%RSD/r2
b	m1	m2	7	8	9	10						
114)B	a,a-Dimethylphenethylami			0.8279141	0.8358048	0.8896418	0.9066277	0.8890790				
			0.8952021	0.9181067	0.9010914	0.9097947			0.8859	AVRG		3.6251
115)BM	2,6-Dichlorophenol			0.2778924	0.2740512	0.2894410	0.2908660	0.2887037				
			0.2947447	0.3059291	0.2908830	0.2924015			0.2894	AVRG		3.1938
116)B	Hexachloropropene			0.2315399	0.2246634	0.2395120	0.2456068	0.2463705				
			0.2521595	0.2595323	0.2434853	0.2483916			0.2435	AVRG		4.3135
117)BM	Caprolactam			0.0835302	0.0892645	0.0963879	0.0986458	0.0978586				
			0.1011261	0.1050703	0.0940380	0.0984787			0.0960	AVRG		6.6870
118)B	N-Nitrosodi-n-butylamine			0.1769191	0.1769974	0.1837711	0.1878252	0.2023520				
			0.2058362	0.2089988	0.1853037	0.2005437			0.1921	AVRG		6.4902
119)B	Safrole			0.2602270	0.2608157	0.2704232	0.2777833	0.2728565				
			0.2770810	0.2847155	0.2761960	0.2790021			0.2732	AVRG		3.0091
121)B	1,2,4,5-Tetrachlorobenze			0.7427321	0.6804014	0.6914802	0.7130535	0.6891109				
			0.6936482	0.7034253	0.7139711	0.7129193			0.7045	AVRG		2.6561
122)BM	1,1-Biphenyl			1.6974234	1.6214170	1.6435796	1.6680411	1.6468706				
			1.6379335	1.6681361	1.6799980	1.7036575			1.6630	AVRG		1.6704
123)B	Isosafrole			0.5113758	0.5128290	0.5292993	0.5397847	0.5352039				
			0.5354353	0.5423315	0.5400942	0.5427275			0.5321	AVRG		2.2727
124)B	1,4-Naphthoquinone			0.4330416	0.4501519	0.4880219	0.4872441	0.4719976				
			0.4443281	0.4419516	0.4877484	0.4884433			0.4659	AVRG		4.9962
125)B	Pentachlorobenzene			0.6875709	0.6526233	0.6598431	0.6778539	0.6671340				
			0.6670214	0.6820027	0.6901052	0.6855025			0.6744	AVRG		1.9661
126)B	1-Naphthylamine			1.3226544	1.2776228	1.3499798	1.3632511	1.3546389				
			1.3476063	1.3722267	1.3844417	1.3783511			1.3501	AVRG		2.4388
127)B	2-Naphthylamine			1.4060444	1.3811072	1.4356252	1.4338199	1.4240575				
			1.4188774	1.4128993	1.4572924	1.4594183			1.4255	AVRG		1.7339
128)B	5-Nitro-o-toluidine			0.2931778	0.3109455	0.3618740	0.3659119	0.3759195				
			0.3871454	0.3993001	0.3575945	0.3824502			0.3594	AVRG		9.8141
130)B	1,3,5-Trinitrobenzene			0.1194351	0.1338771	0.1596612	0.1645876	0.1720008				
			0.1830643	0.1909035	0.1540196	0.1722009			0.1611	AVRG		14.1464

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131)B Phenacetin		0.3084315	0.3166259	0.3472451	0.3525920	0.3630628				
	0.3668604	0.3713570	0.3468524	0.3644357			0.3486	AVRG		6.3885
132)B Diallate		0.2173030	0.2123725	0.2211813	0.2271568	0.2244110				
	0.2253568	0.2292029	0.2186983	0.2339225			0.2233	AVRG		2.9583
133)B Cis Diallate		0.2556505	0.2498500	0.2602133	0.2672433	0.2640129				
	0.2651256	0.2696504	0.2572921	0.2752029			0.2627	AVRG		2.9583
134)B Trans Diallate		0.4887022	0.4986478	0.5176368	0.5198413	0.5255864				
	0.5165461	0.5330986	0.5210002	0.5444924			0.5184	AVRG		3.2232
135)BM Atrazine		0.2101893	0.2007791	0.2122515	0.2154960	0.2128375				
	0.2088083		0.2135248	0.2210448			0.2119	AVRG		2.7426
136)B 4-Aminobiphenyl		0.7959377	0.7651961	0.8140619	0.8252913	0.8547079				
	0.8479803	0.7761996	0.8107401	0.8433219			0.8148	AVRG		3.8665
137)B Pentachloronitrobenzene		0.0907542	0.0917424	0.1024128	0.1023828	0.1049431				
	0.1067593	0.1082964	0.1012965	0.1056268			0.1016	AVRG		6.1775
138)B Pronamide		0.2973710	0.3021298	0.3262370	0.3294084	0.3368834				
	0.3445944	0.3494742	0.3241798	0.3416296			0.3280	AVRG		5.5263
139)B 4-Nitroquinoline-1-oxide -0.0202 | 0.1090 | 0.00	192844	6621 244340	16175 41245	60194 83002	62326	131112		1/x LINR	#	0.9941
140)B Methapyrilene		0.3706451	0.3754756	0.3981657	0.3995762	0.3969245				
	0.3939257	0.3921582	0.4058726	0.4104269			0.3937	AVRG		3.3106
141)B Isodrin		0.1307843	0.1190147	0.1233830	0.1262275	0.1282506				
	0.1277256	0.1311183	0.1265253	0.1289071			0.1269	AVRG		2.9823
143)B Aramite		0.0455333	0.0488059	0.0557096	0.0582504	0.0594875				
	0.0587974	0.0601455	0.0555202	0.0586833			0.0557	AVRG		9.2054
144)B Kepone		0.1113761	0.1044964	0.1118226	0.1107584	0.1118107				
	0.1125005	0.1145842	0.1110354	0.1127664			0.1112	AVRG		2.4932
145)B p-(Dimethylamino)azobenz		0.1755829	0.1892918	0.2117280	0.2162097	0.2181640				
	0.2209728	0.2254698	0.2073850	0.2226679			0.2097	AVRG		7.9929
146)B Chlorobenzilate		0.2808176	0.2919551	0.3201801	0.3273136	0.3336188				
	0.3388841	0.3486060	0.3174370	0.3369398			0.3218	AVRG		6.9511

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Compound b m1 m2	1 7	2 8	3 9	4 10	5	6	Avg	Curve	Exp	%RSD/r2
147)B 2-Acetylaminofluorene	0.4304370	0.2873333 0.4450900	0.3264122 0.3760907	0.3907650 0.4066076	0.3947684	0.4177564	0.3861	AVRG		13.0720
149)B 7,12-Dimethylbenz(a)anth	0.4957051	0.4235348 0.5147744	0.4291862 0.4740985	0.4683188 0.4912649	0.4850411	0.4907867	0.4747	AVRG		6.4140
150)B 3-Methylcholanthrene	0.1388462	0.1108724 0.1435705	0.1187486 0.1270449	0.1278775 0.1357406	0.1316751	0.1348730	0.1299	AVRG		7.8287
152)J Sulfolane	0.1324378	0.1411211 0.1346265	0.1252425	0.1298463	0.1338582	0.1326646	0.1328	AVRG		3.6325
154)J Prometon	0.1583538	0.1312998 0.1666412	0.1254429	0.1431146	0.1498040	0.1555842	0.1472	AVRG		10.0868
155)JM Benzidine	0.7749184	0.6183009 0.7906034	0.5856063	0.6687035	0.7241406	0.7460264	0.7012	AVRG		11.2376
157)J 3,3'-Dimethylbenzidine	0.7390530	0.6069177 0.7746324	0.5815146	0.6686890	0.6948614	0.7270329	0.6847	AVRG		10.3089
158)JM 3,3'-Dichlorobenzidine	0.4398268	0.3747596 0.4654647	0.3682692	0.4051089	0.4243709	0.4353339	0.4162	AVRG		8.5271
160)D Triethylphosphorothioate	0.2086095	0.2123215 0.2190832	0.2040052	0.1989526	0.2094014	0.2064287	0.2084	AVRG		3.0538
162)D Thionazine	0.2665285	0.2333120 0.2740179	0.2366861	0.2482801	0.2559407	0.2569292	0.2531	AVRG		5.8710
163)DM Tributylphosphate	1.8773314	1.5036657 1.9380090	1.5503546	1.6842160	1.7482014	1.8159145	1.7311	AVRG		9.3823
165)D Sulfotepp	0.1775085	0.1609676 0.1832621	0.1618712	0.1667130	0.1743716	0.1761425	0.1715	AVRG		4.9394
166)D Phorate	0.4980078	0.4594316 0.5185307	0.4528646	0.4741564	0.4877068	0.4933727	0.4834	AVRG		4.7455
167)D Dimethoate	0.3143027	0.2647722 0.3235534	0.2718791	0.2937363	0.3040888	0.3077510	0.2972	AVRG		7.3350
168)D Disulfoton	0.4247185	0.3879834 0.4411677	0.3775406	0.4062577	0.4185974	0.4139210	0.4100	AVRG		5.2964

Response Factor Report MSD4
GEL Laboratories, LLC

Method File : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Last Update : Wed Nov 16 11:38:14 2022
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	1 7	2 8	3 9	4 10	5	6	Avg	Curve	Exp	%RSD/r2
169)D Methyl parathion		0.1784078	0.1837897	0.2131151	0.2278017	0.2385263				
	0.2544602	0.2579618					0.2220	AVRG		14.3538
170)D Parathion		9335	23689	62524	77648	135716		1/x^2		
-0.0112 | 0.1083 | 0.00	208417	169533						LINR	#	0.9951
172)D Famphur		0.4104605	0.4118625	0.4347215	0.4537053	0.4567304				
	0.4713965	0.4869690					0.4465	AVRG		6.4978
174)E p-Phenylenediamine		0.5571155	0.5529704	0.5506474	0.5565464	0.5613122				
	0.5663005						0.5575	AVRG		1.0163
176)E Hexachlorophene		869582	1109202	1231713	1517331	1796303		1/x^2		
-0.4937 | 0.1402 | 0.00	1999573							LINR		0.9985

(#) = Out of Range ($) = Individual RF Out of Range
AVRG = Average, LINR = Linear Regression, 1/x = the inverse of concentration, 1/x^2 = the inverse square of concentration

Continuing Calibration Summary

Client SDG: 2023-289

Instrument ID: MSD4.I **Injection Date:** 05-NOV-22 19:55

Data File: S110522SCANICAL\s4K0510.D **Init. Cal. Date(s)** 05-NOV-22 15:30 - 06-NOV-22 03:0

Lab Sample ID WBN221012-43 **Method:** S110522SCANICAL\MSD4_8270_110522RECAL

Quant Type ISTD **Method Update:** 16-NOV-22 11:38

	Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S	2-Fluorophenol	1.3355	1.31766		.01		-1.33583	20		Averaged
S	Phenol-d5	1.6884	1.71517		.01		1.58552	20		Averaged
S	Nitrobenzene-d5	0.418	0.42083		.01		0.67703	20		Averaged
S	2-Fluorobiphenyl	1.4858	1.47312		.01		-0.85341	20		Averaged
S	2,4,6-Tribromophenol	0.3415	0.33719		.01		-1.26208	20		Averaged
S	p-Terphenyl-d14	1.0564	1.02859		.01		-2.63253	20		Averaged
	N-Methyl-N-nitrosomethylami	0.9637	1.08197		.01		12.27249	20		Averaged
	Phenol	1.8374	2.05736		.8		11.97126	20		Averaged
	bis(2-Chloroethyl) ether	1.4729	1.60864		.7		9.21583	20		Averaged
	bis(2-Chloro-1-methylethyl)eth	1.9257	1.78161		.01		-7.48247	20		Averaged
	Hexachloroethane	0.6038	0.65565		.3		8.58728	20		Averaged
	Nitrobenzene	0.4242	0.43724		.2		3.07402	20		Averaged
	Isophorone	0.761	0.79334		.4		4.24967	20		Averaged
	2,4-Dichlorophenol	0.2947	0.30985		.2		5.14082	20		Averaged
	Naphthalene	1.0291	1.07254		.7		4.22116	20		Averaged
	Hexachlorobutadiene	0.2189	0.22945		.01		4.81955	20		Averaged
	2-Methylnaphthalene	0.6831	0.71764		.4		5.05636	20		Averaged
	1-Methylnaphthalene	0.6405	0.66459		.01		3.76112	20		Averaged
	Hexachlorocyclopentadiene	0.5279	0.5207		.05		-1.36389	20		Averaged
	2,4,6-Trichlorophenol	0.4303	0.44058		.2		2.38903	20		Averaged
	2,4,5-Trichlorophenol	0.4553	0.44547		.2		-2.15902	20		Averaged
	Dimethylphthalate	1.3836	1.36852		.01		-1.08991	20		Averaged
	2,6-Dinitrotoluene	0.3157	0.31823		.2		0.80139	20		Averaged
	2,4-Dinitrotoluene	0.4329	0.42883		.2		-0.94017	20		Averaged
	2,4-Dinitrophenol	40	40.61	40			1.525	20		Linear
	Diethylphthalate	1.3894	1.39326		.01		0.27782	20		Averaged
	Fluorene	1.4674	1.44586		.9		-1.4679	20		Averaged
	2-Methyl-4,6-dinitrophenol	40	41.76	40			4.4	20		Linear
	Diphenylamine	0.5957	0.60401		.01		1.395	20		Averaged
	1,2-Diphenylhydrazine	0.7794	0.79213		.01		1.63331	20		Averaged
	Hexachlorobenzene	0.2971	0.28708		.1		-3.3726	20		Averaged
	Pentachlorophenol	0.1776	0.18713		.05		5.36599	20		Averaged
	Phenanthrene	1.0822	1.07555		.7		-0.61449	20		Averaged
	Anthracene	1.0856	1.09904		.7		1.23803	20		Averaged
	Di-n-butylphthalate	1.082	1.16221		.01		7.41312	20		Averaged
	Fluoranthene	1.1632	1.17704		.6		1.18982	20		Averaged
	Pyrene	1.2195	1.22036		.6		0.07052	20		Averaged

Continuing Calibration Summary

Instrument ID: MSD4.I **Injection Date:** 05-NOV-22 19:55

Data File: S110522SCANICAL\s4K0510.D **Init. Cal. Date(s)** 05-NOV-22 15:30 06-NOV-22 03:0

Lab Sample ID WBN221012-43 **Method:** S110522SCANICAL\MSD4_8270_110522RECAL

Quant Type ISTD

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
bis(2-Ethylhexyl)phthalate	40	38.74	40			-3.15	20		Linear
Benzo(b)fluoranthene	1.0177	1.0333		.7		1.53287	20		Averaged
Benzo(k)fluoranthene	1.0294	1.06765		.7		3.71576	20		Averaged
Benzo(a)pyrene	0.8848	0.93942		.7		6.17315	20		Averaged

Quantitation Report

NM 11/16/2022

Data Path : C:\msdchem\1\data\S110522SCANICAL\
Data File : s4K0510.D
Acq On : 05 Nov 2022 19:55
Operator : NM1
Sample : |WBN221012-43|ICV|1|SVM|1|M-ICV
Misc : |MIX[A]
ALS Vial : 10 Sample Multiplier: 1

JCB 11/17/2022

Quant Time: Nov 16 11:55:00 2022
Quant Method : C:\msdchem\1\data\S110522SCANICAL\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	5.733	5.733	1.000	110734	40.00	ng/uL	0.00
22) A Naphthalene-d8	136	7.674	7.674	1.000	456506	40.00	ng/uL	0.00
39) A Acenaphthene-d10	164	10.504	10.504	1.000	253952	40.00	ng/uL	0.00
64) A Phenanthrene-d10	188	12.921	12.927	1.000	520348	40.00	ng/uL	0.00
80) A Chrysene-d12	240	17.254	17.254	1.000	592337	40.00	ng/uL	0.00
88) A Perylene-d12	264	20.259	20.259	1.000	625761	40.00	ng/uL	0.00
96) B 1,4-Dichlorobenzene-d4	152	5.733	5.733	1.000	110734	40.00	ng/uL	0.00
112) B Naphthalene-d8	136	7.674	7.674	1.000	456506	40.00	ng/uL	0.00
120) B Acenaphthene-d10	164	10.504	10.504	1.000	253952	40.00	ng/uL	0.00
129) B Phenanthrene-d10	188	12.921	12.927	1.000	520348	40.00	ng/uL	0.00
142) B Chrysene-d12	240	17.254	17.248	1.000	592337	40.00	ng/uL	0.00
148) B Perylene-d12	264	20.259	20.260	1.000	625761	40.00	ng/uL	0.00
151) J Naphthalene-d8	136	7.674	7.674	1.000	456506	40.00	ng/uL	0.00
153) J Phenanthrene-d10	188	12.921	12.921	1.000	520348	40.00	ng/uL	0.00
156) J Chrysene-d12	240	17.254	17.248	1.000	592337	40.00	ng/uL	0.00
159) D Naphthalene-d8	136	7.674	7.674	1.000	456506	40.00	ng/uL	0.00
161) D Acenaphthene-d10	164	10.504	10.504	1.000	253952	40.00	ng/uL	0.00
164) D Phenanthrene-d10	188	12.921	12.926	1.000	520348	40.00	ng/uL	0.00
171) D Chrysene-d12	240	17.254	17.248	1.000	592337	40.00	ng/uL	0.00
173) E Naphthalene-d8	136	7.674	7.674	1.000	456506	40.00	ng/uL	0.00
175) E Perylene-d12	264	20.259	20.270	1.000	625761	40.00	ng/uL	-0.01
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	3.914	3.914	0.683	145910	39.47	ng/uL	0.00
8) Phenol-d5	99	5.160	5.160	0.900	189928	40.63	ng/uL	0.00
23) Nitrobenzene-d5	82	6.551	6.551	0.854	192113	40.27	ng/uL	0.00
44) 2-Fluorobiphenyl	172	9.418	9.418	0.897	374102	39.66	ng/uL	0.00
63) 2,4,6-Tribromophenol	330	11.787	11.787	1.122	85630	39.49	ng/uL	0.00
79) p-Terphenyl-d14	244	15.553	15.553	1.204	535224	38.95	ng/uL	0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) 2-Ethoxyethanol	59	2.042	2.047	0.356	99374	43.67	ng/uL	98
3) N-Methyl-N-nitrosometh...	74	2.352	2.358	0.410	119811	44.91	ng/uL	98
4) Pyridine	79	2.411	2.411	0.421	200532	44.91	ng/uL	99
7) Aniline	93	5.251	5.251	0.916	274664	44.40	ng/uL	99
9) Phenol	94	5.182	5.182	0.904	227820	44.79	ng/uL	99
10) bis(2-Chloroethyl) ether	93	5.342	5.342	0.932	178131	43.69	ng/uL	99
11) 2-Chlorophenol	128	5.412	5.417	0.944	164947	43.97	ng/uL	99
12) n-Decane	43	5.492	5.492	0.958	180331	42.99	ng/uL	99
13) 1,3-Dichlorobenzene	146	5.647	5.647	0.985	179570	42.61	ng/uL	98
14) 1,4-Dichlorobenzene	146	5.754	5.754	1.004	187783	44.05	ng/uL	99
15) 1,2-Dichlorobenzene	146	5.973	5.979	1.042	177304	43.66	ng/uL	99
16) bis(2-Chloro-1-methyle...	45	6.134	6.134	1.070	197285	37.01	ng/uL	91
17) Benzyl alcohol	108	5.920	5.920	1.033	110771	42.03	ng/uL	99
18) o-Cresol	107	6.075	6.075	1.060	149700	45.09	ng/uL	99
19) m,p-Cresols	108	6.310	6.310	1.101	166137	44.11	ng/uL	91
20) N-Nitrosodipropylamine	70	6.332	6.326	1.104	129460	40.83	ng/uL	99
21) Hexachloroethane	117	6.487	6.487	1.132	72603	43.44	ng/uL	99
24) Nitrobenzene	77	6.583	6.583	0.858	199603	41.23	ng/uL	100
25) Isophorone	82	6.952	6.952	0.906	362166	41.70	ng/uL	100
26) 2-Nitrophenol	139	7.070	7.075	0.921	84475	42.72	ng/uL	99
27) 2,4-Dimethylphenol	122	7.139	7.139	0.930	152923	42.29	ng/uL	100
28) bis(2-Chloroethoxy)met...	93	7.300	7.305	0.951	224079	41.39	ng/uL	100
29) 2,4-Dichlorophenol	162	7.439	7.439	0.969	141447	42.06	ng/uL	98
30) Benzoic acid	105	7.252	7.252	0.945	115216	39.06	ng/uL#	97

Quantitation Report

Data Path : C:\msdchem\1\data\S110522SCANICAL\
Data File : s4K0510.D
Acq On : 05 Nov 2022 19:55
Operator : NM1
Sample : |WBN221012-43|ICV|1|SVM|1|M-ICV
Misc : |MIX[A]
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 16 11:55:00 2022
Quant Method : C:\msdchem\1\data\S110522SCANICAL\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
31) 1,2,4-Trichlorobenzene	180	7.583	7.583	0.988	159855	41.30	ng/uL	100
32) alpha-Terpineol	59	7.733	7.733	1.008	144525	39.60	ng/uL	100
33) Naphthalene	128	7.706	7.706	1.004	489623	41.69	ng/uL	100
34) 4-Chloroaniline	127	7.792	7.792	1.015	207294	41.72	ng/uL	99
35) Hexachlorobutadiene	225	7.910	7.909	1.031	104744	41.93	ng/uL	99
36) 4-Chloro-3-methylphenol	107	8.567	8.567	1.116	155265	42.20	ng/uL	98
37) 2-Methylnaphthalene	142	8.819	8.819	1.149	327607	42.02	ng/uL	99
38) 1-Methylnaphthalene	142	8.974	8.974	1.169	303388	41.50	ng/uL	99
40) Hexachlorocyclopentadiene	237	9.070	9.070	0.864	132232	39.46	ng/uL	99
41) 2,3-Dichloroaniline	161	9.268	9.268	0.882	167903	39.56	ng/uL	99
42) 2,4,6-Trichlorophenol	196	9.268	9.268	0.882	111886	40.95	ng/uL	99
43) 2,4,5-Trichlorophenol	196	9.316	9.316	0.887	113129	39.13	ng/uL	99
45) 2-Chloronaphthalene	162	9.600	9.600	0.914	310120	39.98	ng/uL	99
46) o-Nitroaniline	65	9.771	9.771	0.930	105309	41.45	ng/uL	97
47) 1,4-Dinitrobenzene	168	10.006	10.006	0.953	48928	40.27	ng/uL	97
48) m-Nitroaniline	138	10.439	10.439	0.994	87792	40.58	ng/uL	99
49) Dimethylphthalate	163	10.092	10.092	0.961	347539	39.57	ng/uL	99
50) m-Dinitrobenzene	168	10.124	10.124	0.964	56408	40.02	ng/uL	99
51) 2,6-Dinitrotoluene	165	10.177	10.177	0.969	80816	40.32	ng/uL	97
52) 2,4-Dinitrotoluene	165	10.825	10.830	1.031	108901	39.63	ng/uL	99
53) Acenaphthylene	152	10.274	10.274	0.978	494593	41.96	ng/uL	100
54) Acenaphthene	154	10.557	10.557	1.005	294976	39.92	ng/uL	100
55) 2,4-Dinitrophenol	184	10.611	10.611	1.010	45415	40.61	ng/uL	100
56) Dibenzofuran	168	10.841	10.841	1.032	472326	40.73	ng/uL	99
57) 2,3,4,6-Tetrachlorophenol	232	11.033	11.038	1.050	103347	38.07	ng/uL	98
58) Diethylphthalate	149	11.252	11.252	1.071	353820	40.11	ng/uL	100
59) 4-Nitrophenol	109	10.707	10.707	1.019	53774	40.61	ng/uL	96
60) Fluorene	166	11.397	11.397	1.085	367179	39.41	ng/uL	99
61) 4-Chlorophenylphenylether	204	11.418	11.418	1.087	187073	39.38	ng/uL	99
62) p-Nitroaniline	138	11.429	11.429	1.088	92168	40.95	ng/uL	99
65) 2-Methyl-4,6-dinitroph...	198	11.482	11.482	0.889	64696	41.76	ng/uL	99
66) Diphenylamine	169	11.605	11.611	0.898	314293	40.56	ng/uL	99
67) 1,2-Diphenylhydrazine	77	11.675	11.675	0.904	412181	40.66	ng/uL	99
68) 4-Bromophenylphenylether	248	12.215	12.215	0.945	125052	40.46	ng/uL	97
69) Hexachlorobenzene	284	12.285	12.285	0.951	149382	38.65	ng/uL	99
70) Pentachlorophenol	266	12.606	12.606	0.976	97374	42.14	ng/uL	99
71) n-Octadecane	57	12.814	12.814	0.992	234167	36.88	ng/uL	100
72) Dinoseb	211	12.932	12.937	1.001	93511	38.55	ng/uL	98
73) Phenanthrene	178	12.964	12.964	1.003	559658	39.75	ng/uL	100
74) Anthracene	178	13.044	13.044	1.010	571881	40.49	ng/uL	100
75) Carbazole	167	13.317	13.317	1.031	514042	41.06	ng/uL	100
76) Di-n-butylphthalate	149	13.932	13.932	1.078	604752	42.97	ng/uL	100
77) Fluoranthene	202	14.900	14.900	1.153	612471	40.48	ng/uL	100
78) Pyrene	202	15.264	15.264	1.181	635011	40.03	ng/uL	99
81) Butylbenzylphthalate	149	16.376	16.376	0.949	237933	38.73	ng/uL	99
82) bis(2-Ethylhexyl)phtha...	149	17.355	17.355	1.006	364735	38.74	ng/uL	99
83) Benzo(a)anthracene	228	17.238	17.238	0.999	659010	39.87	ng/uL	99
84) Chrysene	228	17.296	17.302	1.002	593164	37.79	ng/uL	99
85) Methoxychlor	227	17.168	17.168	0.995	390612	39.25	ng/uL	100
86) Methylenebis(2-chloroa...	231	17.227	17.227	0.998	136782	41.08	ng/uL	99
87) Di-n-octylphthalate	149	18.687	18.687	1.083	564795	38.88	ng/uL	100
89) Benzo(b)fluoranthene	252	19.463	19.463	0.961	646599	40.61	ng/uL	100
90) Benzo(k)fluoranthene	252	19.527	19.527	0.964	668096	41.49	ng/uL	100
91) Benzo(a)pyrene	252	20.147	20.147	0.994	587852	42.47	ng/uL	100
92) Indeno(1,2,3-cd)pyrene	276	22.153	22.153	1.093	633248	39.51	ng/uL	100
93) Dibenzo(a,h)anthracene	278	22.206	22.206	1.096	664216	40.16	ng/uL	99
94) Benzo(ghi)perylene	276	22.682	22.682	1.120	669529	40.59	ng/uL	99

Quantitation Report

Data Path : C:\msdchem\1\data\S110522SCANICAL\
Data File : s4K0510.D
Acq On : 05 Nov 2022 19:55
Operator : NM1
Sample : |WBN221012-43|ICV|1|SVM|1|M-ICV
Misc : |MIX[A]
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 16 11:55:00 2022
Quant Method : C:\msdchem\1\data\S110522SCANICAL\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

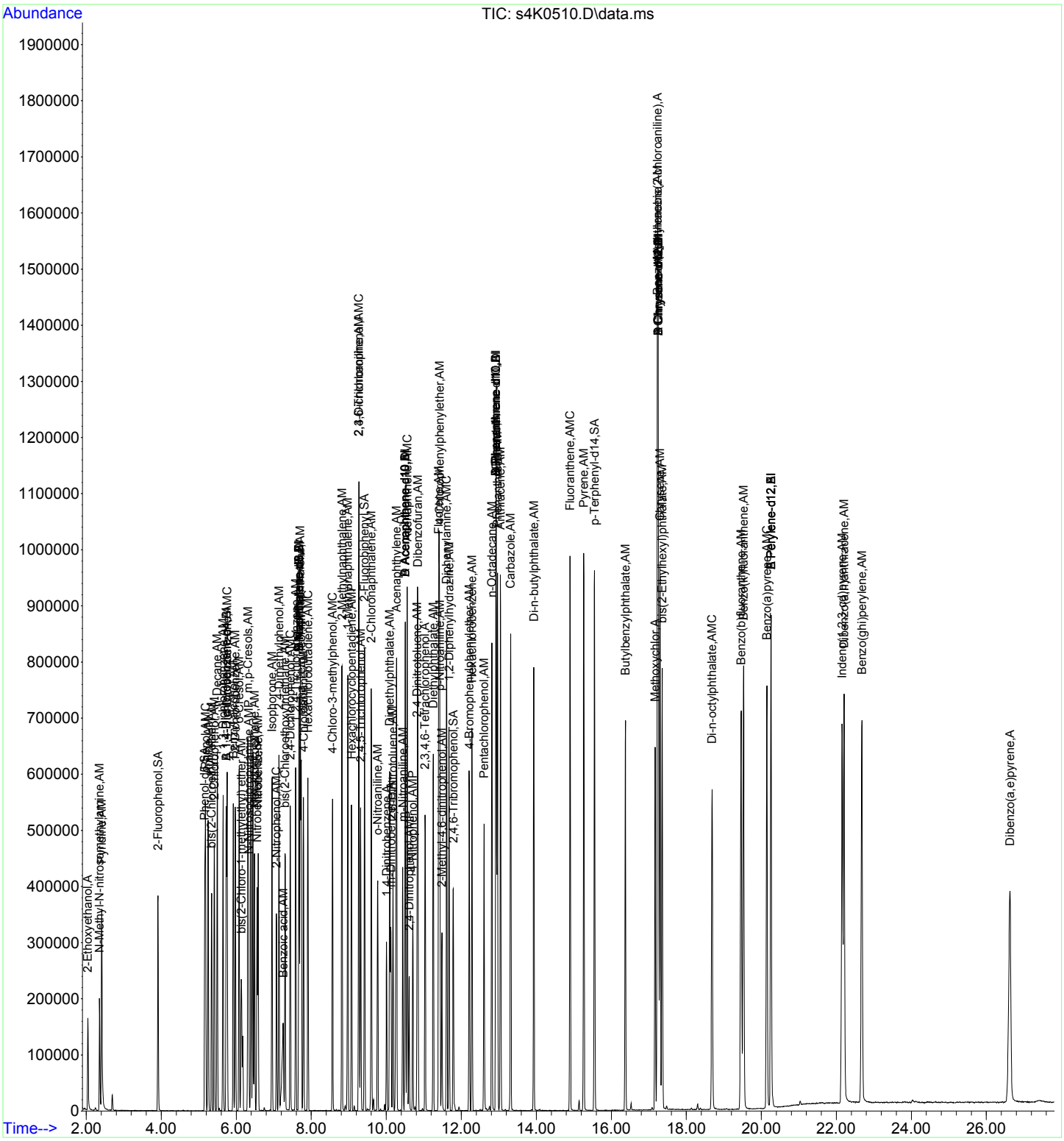
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
95) Dibenzo(a,e)pyrene	302	26.630	26.624	1.314	606870	49.68	ng/uL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report

Data Path : C:\msdchem\1\data\S110522SCANICAL\
Data File : s4K0510.D
Acq On : 05 Nov 2022 19:55
Operator : NM1
Sample : |WBN221012-43|ICV|1|SVM|1|M-ICV
Misc : |MIX[A]
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 16 11:55:00 2022
Quant Method : C:\msdchem\1\data\S110522SCANICAL\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration



Continuing Calibration Summary

Client SDG: 2023-289

Instrument ID: MSD4.I **Injection Date:** 05-NOV-22 23:31

Data File: S110522SCANICAL\s4K0518.D **Init. Cal. Date(s)** 05-NOV-22 15:30 - 06-NOV-22 03:0

Lab Sample ID WBN221104-50 **Method:** S110522SCANICAL\MSD4_8270_110522RECAL

Quant Type ISTD **Method Update:** 16-NOV-22 11:38

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
Benzidine	0.7012	0.844		.01		20.36509	20	*	Averaged
3,3'-Dichlorobenzidine	0.4162	0.40838		.01		-1.8789	20		Averaged
Sulfolane	0.1328	0.14782		.01		11.31024	20		Averaged
Prometon	0.1472	0.16586		.01		12.67663	20		Averaged

Quantitation Report

11/16/2022

Data Path : C:\msdchem\1\data\S110522SCANICAL\
Data File : s4K0518.D
Acq On : 05 Nov 2022 23:31
Operator : NM1
Sample : |WBN221104-50|ICAL|1|SVM|1|B-ICV
Misc : |MIX[J]
ALS Vial : 18 Sample Multiplier: 1

11/17/2022

Quant Time: Nov 16 11:54:12 2022
Quant Method : C:\msdchem\1\data\S110522SCANICAL\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

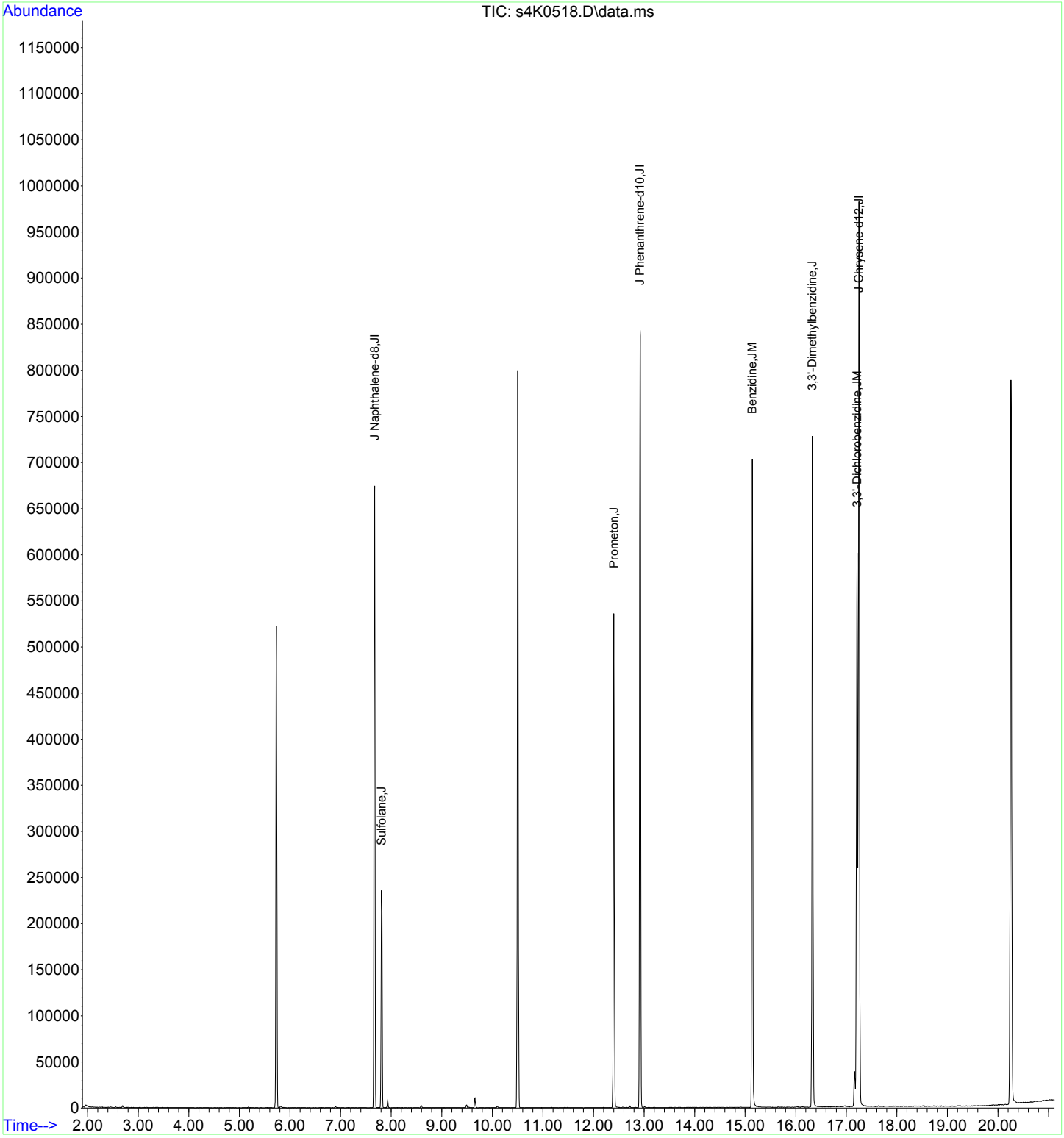
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	5.733	5.733	1.000	0m	40.00	ng/uL	0.00
22) A Naphthalene-d8	136	7.674	7.674	1.000	0m	40.00	ng/uL	0.00
39) A Acenaphthene-d10	164	10.504	10.504	1.000	0m	40.00	ng/uL	0.00
64) A Phenanthrene-d10	188	12.921	12.927	1.000	0m	40.00	ng/uL	0.00
80) A Chrysene-d12	240	17.248	17.254	1.000	0m	40.00	ng/uL	0.00
88) A Perylene-d12	264	20.254	20.259	1.000	0m	40.00	ng/uL	0.00
96) B 1,4-Dichlorobenzene-d4	152	5.733	5.733	1.000	0m	40.00	ng/uL	0.00
112) B Naphthalene-d8	136	7.674	7.674	1.000	0m	40.00	ng/uL	0.00
120) B Acenaphthene-d10	164	10.504	10.504	1.000	0m	40.00	ng/uL	0.00
129) B Phenanthrene-d10	188	12.921	12.927	1.000	0m	40.00	ng/uL	0.00
142) B Chrysene-d12	240	17.248	17.248	1.000	0m	40.00	ng/uL	0.00
148) B Perylene-d12	264	20.254	20.260	1.000	0m	40.00	ng/uL	0.00
151) J Naphthalene-d8	136	7.674	7.674	1.000	420715	40.00	ng/uL	0.00
153) J Phenanthrene-d10	188	12.921	12.921	1.000	476007	40.00	ng/uL	0.00
156) J Chrysene-d12	240	17.248	17.248	1.000	560313	40.00	ng/uL	0.00
159) D Naphthalene-d8	136	7.674	7.674	1.000	0m	40.00	ng/uL	0.00
161) D Acenaphthene-d10	164	10.504	10.504	1.000	0m	40.00	ng/uL	0.00
164) D Phenanthrene-d10	188	12.921	12.926	1.000	0m	40.00	ng/uL	0.00
171) D Chrysene-d12	240	17.248	17.248	1.000	0m	40.00	ng/uL	0.00
173) E Naphthalene-d8	136	7.674	7.674	1.000	0m	40.00	ng/uL	0.00
175) E Perylene-d12	264	20.254	20.270	1.000	0m	40.00	ng/uL	-0.02
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	0.000	3.914	0.000	0	0.00	ng/uL	
8) Phenol-d5	99	0.000	5.160	0.000	0	0.00	ng/uL	
23) Nitrobenzene-d5	82	0.000	6.551	0.000	0	0.00	ng/uL	
44) 2-Fluorobiphenyl	172	0.000	9.418	0.000	0	0.00	ng/uL	
63) 2,4,6-Tribromophenol	330	0.000	11.787	0.000	0	0.00	ng/uL	
79) p-Terphenyl-d14	244	0.000	15.553	0.000	0	0.00	ng/uL	
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
152) Sulfolane	56	7.813	7.813	1.018	62192	44.52	ng/uL	99
154) Prometon	210	12.402	12.402	0.960	78952	45.08	ng/uL	98
155) Benzidine	184	15.141	15.141	1.172	401752	48.15	ng/uL	99
157) 3,3'-Dimethylbenzidine	212	16.328	16.334	0.947	393731	41.05	ng/uL	100
158) 3,3'-Dichlorobenzidine	252	17.211	17.211	0.998	228820	39.25	ng/uL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report

Data Path : C:\msdchem\1\data\S110522SCANICAL\
Data File : s4K0518.D
Acq On : 05 Nov 2022 23:31
Operator : NM1
Sample : |WBN221104-50|ICAL|1|SVM|1|B-ICV
Misc : |MIX[J]
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 16 11:54:12 2022
Quant Method : C:\msdchem\1\data\S110522SCANICAL\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration



Continuing Calibration Summary

Client SDG: 2023-289

Instrument ID: MSD4.I **Injection Date:** 06-NOV-22 03:33

Data File: S110522SCANICAL\s4K0529.D **Init. Cal. Date(s)** 05-NOV-22 15:30 - 06-NOV-22 03:0

Lab Sample ID WBN220915-20 **Method:** S110522SCANICAL\MSD4_8270_110522RECAL

Quant Type ISTD **Method Update:** 16-NOV-22 11:38

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,4-Dioxane	0.6195	0.66829		.01		7.87571	20		Averaged
N-Nitrosodiethylamine	0.6673	0.72959		.01		9.33463	20		Averaged
N-Nitrosopyrrolidine	0.7195	0.83372		.01		15.87491	20		Averaged
N-Nitrosodi-n-butylamine	0.1921	0.20108		.01		4.67465	20		Averaged
1,2,4,5-Tetrachlorobenzene	0.7045	0.75278		.01		6.85309	20		Averaged
Pentachlorobenzene	0.6744	0.71665		.01		6.26483	20		Averaged
Atrazine	0.2119	0.24327		.01		14.80415	20		Averaged

Quantitation Report

NM 11/16/2022

Data Path : C:\msdchem\1\data\S110522SCANICAL\
Data File : s4K0529.D
Acq On : 06 Nov 2022 03:33
Operator : NM1
Sample : |WBN220915-20|ICV|1|SVM|1|A-ICV
Misc : |MIX[B]
ALS Vial : 28 Sample Multiplier: 1

JCB 11/17/2022

Quant Time: Nov 16 11:53:38 2022
Quant Method : C:\msdchem\1\data\S110522SCANICAL\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	5.727	5.733	1.000	141953	40.00	ng/uL	0.00
22) A Naphthalene-d8	136	7.669	7.674	1.000	552908	40.00	ng/uL	0.00
39) A Acenaphthene-d10	164	10.504	10.504	1.000	293048	40.00	ng/uL	0.00
64) A Phenanthrene-d10	188	12.926	12.927	1.000	609779	40.00	ng/uL	0.00
80) A Chrysene-d12	240	17.248	17.254	1.000	683164	40.00	ng/uL	0.00
88) A Perylene-d12	264	20.254	20.259	1.000	714980	40.00	ng/uL	0.00
96) B 1,4-Dichlorobenzene-d4	152	5.727	5.733	1.000	141953	40.00	ng/uL	0.00
112) B Naphthalene-d8	136	7.669	7.674	1.000	552908	40.00	ng/uL	0.00
120) B Acenaphthene-d10	164	10.504	10.504	1.000	293048	40.00	ng/uL	0.00
129) B Phenanthrene-d10	188	12.926	12.927	1.000	609779	40.00	ng/uL	0.00
142) B Chrysene-d12	240	17.248	17.248	1.000	683164	40.00	ng/uL	0.00
148) B Perylene-d12	264	20.254	20.260	1.000	714980	40.00	ng/uL	0.00
151) J Naphthalene-d8	136	7.669	7.674	1.000	552908	40.00	ng/uL	0.00
153) J Phenanthrene-d10	188	12.926	12.921	1.000	609779	40.00	ng/uL	0.00
156) J Chrysene-d12	240	17.248	17.248	1.000	683164	40.00	ng/uL	0.00
159) D Naphthalene-d8	136	7.669	7.674	1.000	552908	40.00	ng/uL	0.00
161) D Acenaphthene-d10	164	10.504	10.504	1.000	293048	40.00	ng/uL	0.00
164) D Phenanthrene-d10	188	12.926	12.926	1.000	609779	40.00	ng/uL	0.00
171) D Chrysene-d12	240	17.248	17.248	1.000	683164	40.00	ng/uL	0.00
173) E Naphthalene-d8	136	7.669	7.674	1.000	552908	40.00	ng/uL	0.00
175) E Perylene-d12	264	20.254	20.270	1.000	714980	40.00	ng/uL	-0.02
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	0.000	3.914	0.000	0	0.00	ng/uL	
8) Phenol-d5	99	5.155	5.160	0.900	1667	0.28	ng/uL	0.00
23) Nitrobenzene-d5	82	0.000	6.551	0.000	0	0.00	ng/uL	
44) 2-Fluorobiphenyl	172	9.418	9.418	0.897	3428	0.31	ng/uL	0.00
63) 2,4,6-Tribromophenol	330	11.782	11.787	1.122	2293	0.92	ng/uL	0.00
79) p-Terphenyl-d14	244	15.547	15.553	1.203	12332	0.77	ng/uL	0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
97) 1,4-Dioxane	88	2.047	2.047	0.357	94866	43.15	ng/uL	99
98) Methyl methacrylate	100	2.053	2.053	0.358	41361	45.37	ng/uL	99
99) Ethyl methacrylate	69	2.844	2.844	0.497	204286	43.43	ng/uL	98
100) 2-Picoline	93	3.224	3.224	0.563	257335	42.79	ng/uL	99
101) N-Nitrosomethylethylamine	88	3.342	3.342	0.583	107094	44.70	ng/uL	98
102) Methyl methanesulfonate	80	3.716	3.716	0.649	129511	42.66	ng/uL	99
103) N-Nitrosodiethylamine	102	4.230	4.230	0.739	103568	43.73	ng/uL	99
104) 2-Butoxyethanol	57	4.321	4.321	0.754	236657	43.55	ng/uL	99
105) Ethyl methanesulfonate	79	4.625	4.625	0.808	181570	42.59	ng/uL	97
106) Benzaldehyde	77	5.107	5.107	0.892	165374	36.64	ng/uL	99
107) Pentachloroethane	167	5.326	5.326	0.930	87082	42.49	ng/uL	100
108) N-Nitrosopyrrolidine	100	6.283	6.289	1.097	118349	46.35	ng/uL	98
109) Acetophenone	105	6.326	6.326	1.105	324260	43.05	ng/uL	99
110) N-Nitrosomorpholine	56	6.353	6.353	1.109	121012	42.99	ng/uL	98
111) o-Toluidine	106	6.374	6.380	1.113	368045	43.09	ng/uL	99
113) N-Nitrosopiperidine	114	6.813	6.813	0.888	111111	44.70	ng/uL	98
114) a,a-Dimethylphenethyla...	58	7.401	7.466	0.965	509673	41.62	ng/uL	100
115) 2,6-Dichlorophenol	162	7.802	7.803	1.017	165665	41.41	ng/uL	99
116) Hexachloropropene	213	7.845	7.845	1.023	150402	44.69	ng/uL	98
117) Caprolactam	113	8.311	8.316	1.084	55730	41.98	ng/uL	88
118) N-Nitrosodi-n-butylamine	57	8.348	8.348	1.089	111178	41.88	ng/uL	99
119) Safrole	162	8.685	8.690	1.133	152630	40.41	ng/uL	99
121) 1,2,4,5-Tetrachloroben...	216	9.086	9.086	0.865	220601	42.74	ng/uL	99
122) 1,1-Biphenyl	154	9.578	9.578	0.912	513799	42.17	ng/uL	100

Quantitation Report

Data Path : C:\msdchem\1\data\S110522SCANICAL\
Data File : s4K0529.D
Acq On : 06 Nov 2022 03:33
Operator : NM1
Sample : |WBN220915-20|ICV|1|SVM|1|A-ICV
Misc : |MIX[B]
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Nov 16 11:53:38 2022
Quant Method : C:\msdchem\1\data\S110522SCANICAL\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

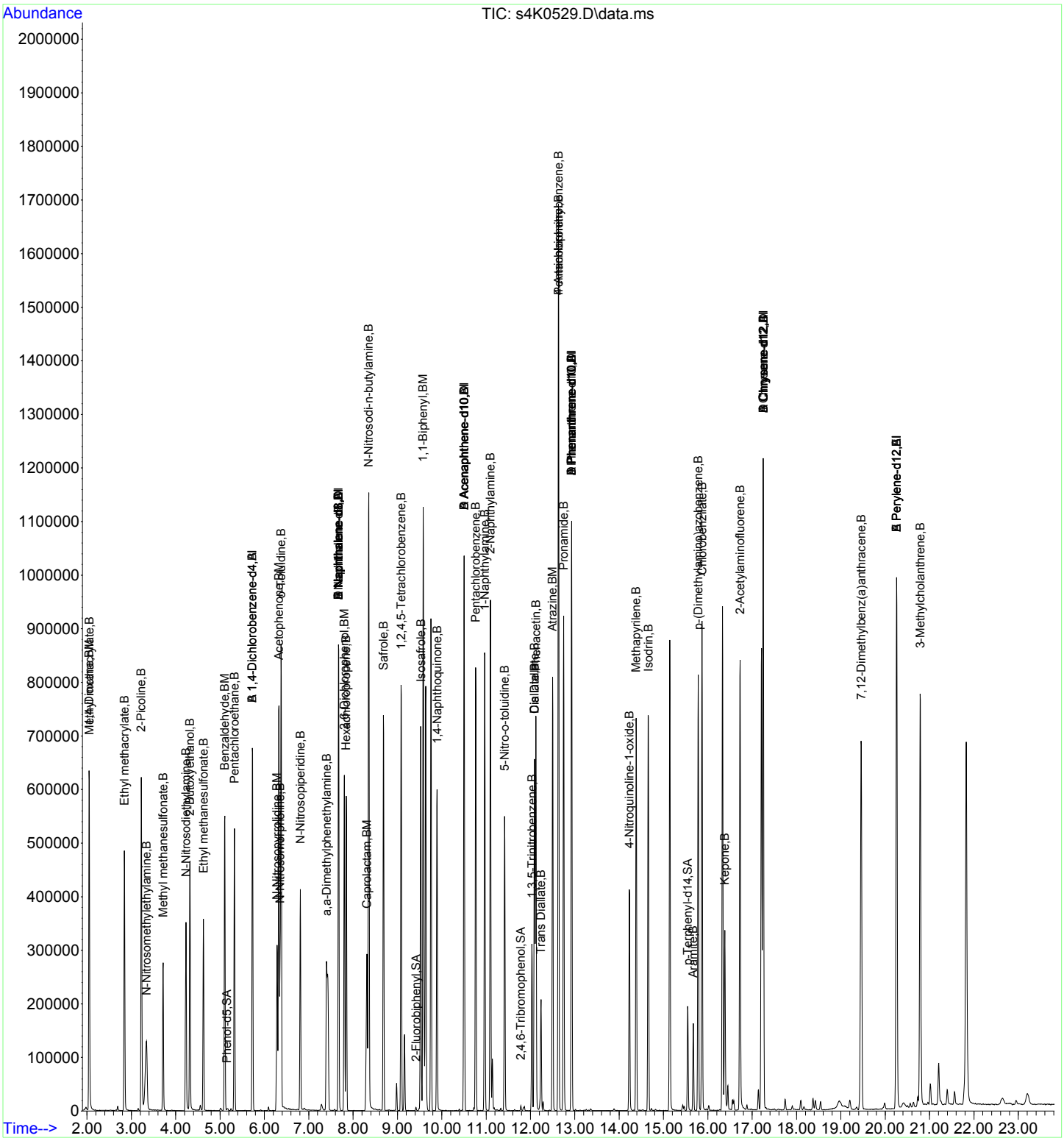
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
123) Isosafrole	162	9.530	9.530	0.907	180074	46.19	ng/uL	99
124) 1,4-Naphthoquinone	158	9.894	9.894	0.942	153851	45.08	ng/uL	100
125) Pentachlorobenzene	250	10.766	10.766	1.025	210012	42.51	ng/uL	100
126) 1-Naphthylamine	143	10.969	10.969	1.044	412732	41.73	ng/uL	98
127) 2-Naphthylamine	143	11.097	11.097	1.057	468133	44.83	ng/uL	99
128) 5-Nitro-o-toluidine	152	11.418	11.424	1.087	111455	42.33	ng/uL	98
130) 1,3,5-Trinitrobenzene	75	12.033	12.033	0.931	122346	49.82	ng/uL	98
131) Phenacetin	108	12.124	12.124	0.938	236255	44.46	ng/uL	99
132) Diallate	86	12.092	12.092	0.935	163922	48.16	ng/uL	100
133) Cis Diallate	86	12.092	12.092	0.935	163922	40.93	ng/uL	100
134) Trans Diallate	86	12.236	12.237	0.947	52890	6.69	ng/uL	98
135) Atrazine	200	12.499	12.499	0.967	148343	45.93	ng/uL	99
136) 4-Aminobiphenyl	169	12.632	12.638	0.977	550309	44.30	ng/uL	100
137) Pentachloronitrobenzene	237	12.632	12.632	0.977	67082	43.32	ng/uL	98
138) Pronamide	173	12.750	12.750	0.986	224181	44.84	ng/uL	99
139) 4-Nitroquinoline-1-oxide	190	14.232	14.232	1.101	53481	39.59	ng/uL	96
140) Methapyrilene	97	14.381	14.381	1.113	227829	37.96	ng/uL	100
141) Isodrin	193	14.659	14.660	1.134	75786	39.18	ng/uL	99
143) Aramite	185	15.670	15.670	0.909	21097	22.19	ng/uL	99
144) Kepone	272	16.382	16.382	0.950	55098	29.00	ng/uL	99
145) p-(Dimethylamino)azobe...	225	15.783	15.783	0.915	158628	44.29	ng/uL	99
146) Chlorobenzilate	251	15.868	15.868	0.920	242854	44.19	ng/uL	99
147) 2-Acetylaminofluorene	181	16.729	16.729	0.970	283380	42.97	ng/uL	99
149) 7,12-Dimethylbenz(a)an...	256	19.457	19.457	0.961	307385	36.22	ng/uL	100
150) 3-Methylcholanthrene	269	20.789	20.794	1.026	76313	32.86	ng/uL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report

Data Path : C:\msdchem\1\data\S110522SCANICAL\
Data File : s4K0529.D
Acq On : 06 Nov 2022 03:33
Operator : NM1
Sample : |WBN220915-20|ICV|1|SVM|1|A-ICV
Misc : |MIX[B]
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Nov 16 11:53:38 2022
Quant Method : C:\msdchem\1\data\S110522SCANICAL\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration



Continuing Calibration Summary

Client SDG: 2023-289

Instrument ID: MSD4.I **Injection Date:** 19-DEC-22 14:07

Data File: S121922\s4L1902.D **Init. Cal. Date(s)** 05-NOV-22 15:30 - 06-NOV-22 03:0

Lab Sample ID WBN221213-04.17 **Method:** S121922\MSD4_8270_110522RECALC.m

Quant Type ISTD **Method Update:** 16-NOV-22 11:38

	Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S	2-Fluorophenol	1.3355	1.37771		.01		3.16061	20		Averaged
S	Phenol-d5	1.6884	1.74153		.01		3.14677	20		Averaged
S	Nitrobenzene-d5	0.418	0.4233		.01		1.26794	20		Averaged
S	2-Fluorobiphenyl	1.4858	1.52489		.01		2.63091	20		Averaged
S	2,4,6-Tribromophenol	0.3415	0.32677		.01		-4.31332	20		Averaged
S	p-Terphenyl-d14	1.0564	1.0662		.01		0.92768	20		Averaged
	N-Methyl-N-nitrosomethylami	0.9637	0.98908		.01		2.6336	20		Averaged
	Phenol	1.8374	1.81663		.8		-1.1304	20		Averaged
	bis(2-Chloroethyl) ether	1.4729	1.44356		.7		-1.99199	20		Averaged
	bis(2-Chloro-1-methylethyl)eth	1.9257	1.85046		.01		-3.90715	20		Averaged
	Hexachloroethane	0.6038	0.59835		.3		-0.90262	20		Averaged
	Nitrobenzene	0.4242	0.41508		.2		-2.14993	20		Averaged
	Isophorone	0.761	0.76388		.4		0.37845	20		Averaged
	2,4-Dichlorophenol	0.2947	0.30711		.2		4.21106	20		Averaged
	Naphthalene	1.0291	1.03901		.7		0.96298	20		Averaged
	Hexachlorobutadiene	0.2189	0.2305		.01		5.29922	20		Averaged
	2-Methylnaphthalene	0.6831	0.70136		.4		2.67311	20		Averaged
	1-Methylnaphthalene	0.6405	0.65045		.01		1.55347	20		Averaged
	Hexachlorocyclopentadiene	0.5279	0.5108		.05		-3.23925	20		Averaged
	2,4,6-Trichlorophenol	0.4303	0.42654		.2		-0.87381	20		Averaged
	2,4,5-Trichlorophenol	0.4553	0.46046		.2		1.13332	20		Averaged
	Dimethylphthalate	1.3836	1.42629		.01		3.08543	20		Averaged
	2,6-Dinitrotoluene	0.3157	0.3335		.2		5.63826	20		Averaged
	2,4-Dinitrotoluene	0.4329	0.45191		.2		4.39131	20		Averaged
	2,4-Dinitrophenol	40	42.87	40			7.175	20		Linear
	Diethylphthalate	1.3894	1.404		.01		1.05081	20		Averaged
	Fluorene	1.4674	1.46711		.9		-0.01976	20		Averaged
	2-Methyl-4,6-dinitrophenol	40	44.88	40			12.2	20		Linear
	Diphenylamine	0.5957	0.59597		.01		0.04532	20		Averaged
	1,2-Diphenylhydrazine	0.7794	0.72448		.01		-7.04645	20		Averaged
	Hexachlorobenzene	0.2971	0.284		.1		-4.40929	20		Averaged
	Pentachlorophenol	0.1776	0.16192		.05		-8.82883	20		Averaged
	Phenanthrene	1.0822	1.07842		.7		-0.34929	20		Averaged
	Anthracene	1.0856	1.09151		.7		0.5444	20		Averaged
	Di-n-butylphthalate	1.082	1.13149		.01		4.57394	20		Averaged
	Fluoranthene	1.1632	1.20788		.6		3.84113	20		Averaged
	Pyrene	1.2195	1.24404		.6		2.0123	20		Averaged

Continuing Calibration Summary

Instrument ID: MSD4.I **Injection Date:** 19-DEC-22 14:07

Data File: S121922\s4L1902.D **Init. Cal. Date(s)** 05-NOV-22 15:30 06-NOV-22 03:0

Lab Sample ID WBN221213-04.17 **Method:** S121922\MSD4_8270_110522RECALC.m

Quant Type ISTD

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
bis(2-Ethylhexyl)phthalate	40	42.2	40			5.5	20		Linear
Benzo(b)fluoranthene	1.0177	1.05116		.7		3.28781	20		Averaged
Benzo(k)fluoranthene	1.0294	1.06185		.7		3.15232	20		Averaged
Benzo(a)pyrene	0.8848	0.93423		.7		5.58657	20		Averaged

Quantitation Report

12/22/2022

Data Path : C:\msdchem\1\data\S121922\
Data File : s4L1902.D
Acq On : 19 Dec 2022 14:07
Operator : NM1
Sample : |WBN221213-04.17|CCV|1|SVM|1|M-4
Misc : |MIX[A]
ALS Vial : 2 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 21 10:50:00 2022
Quant Method : C:\msdchem\1\data\S121922\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	5.749	5.749	1.000	155883	40.00	ng/uL	0.00
22) A Naphthalene-d8	136	7.690	7.690	1.000	601223	40.00	ng/uL	0.00
39) A Acenaphthene-d10	164	10.525	10.525	1.000	331625	40.00	ng/uL	0.00
64) A Phenanthrene-d10	188	12.948	12.948	1.000	690559	40.00	ng/uL	0.00
80) A Chrysene-d12	240	17.291	17.291	1.000	762539	40.00	ng/uL	0.00
88) A Perylene-d12	264	20.308	20.308	1.000	814615	40.00	ng/uL	0.00
96) B 1,4-Dichlorobenzene-d4	152	5.749	5.749	1.000	155883	40.00	ng/uL	0.00
112) B Naphthalene-d8	136	7.690	7.690	1.000	601223	40.00	ng/uL	0.00
120) B Acenaphthene-d10	164	10.525	10.525	1.000	331625	40.00	ng/uL	0.00
129) B Phenanthrene-d10	188	12.948	12.948	1.000	690559	40.00	ng/uL	0.00
142) B Chrysene-d12	240	17.291	17.291	1.000	762539	40.00	ng/uL	0.00
148) B Perylene-d12	264	20.308	20.308	1.000	814615	40.00	ng/uL	0.00
151) J Naphthalene-d8	136	7.690	7.690	1.000	601223	40.00	ng/uL	0.00
153) J Phenanthrene-d10	188	12.948	12.948	1.000	690559	40.00	ng/uL	0.00
156) J Chrysene-d12	240	17.291	17.291	1.000	762539	40.00	ng/uL	0.00
159) D Naphthalene-d8	136	7.690	7.690	1.000	601223	40.00	ng/uL	0.00
161) D Acenaphthene-d10	164	10.525	10.525	1.000	331625	40.00	ng/uL	0.00
164) D Phenanthrene-d10	188	12.948	12.948	1.000	690559	40.00	ng/uL	0.00
171) D Chrysene-d12	240	17.291	17.291	1.000	762539	40.00	ng/uL	0.00
173) E Naphthalene-d8	136	7.690	7.690	1.000	601223	40.00	ng/uL	0.00
175) E Perylene-d12	264	20.308	20.308	1.000	814615	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	3.941	3.941	0.686	214762	41.27	ng/uL	0.00
8) Phenol-d5	99	5.192	5.192	0.903	271475	41.26	ng/uL	0.00
23) Nitrobenzene-d5	82	6.572	6.572	0.855	254499	40.51	ng/uL	0.00
44) 2-Fluorobiphenyl	172	9.439	9.439	0.897	505691	41.05	ng/uL	0.00
63) 2,4,6-Tribromophenol	330	11.814	11.814	1.122	108364	38.27	ng/uL	0.00
79) p-Terphenyl-d14	244	15.579	15.579	1.203	736274	40.37	ng/uL	0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) 2-Ethoxyethanol	59	2.090	2.090	0.364	134885	42.11	ng/uL	97
3) N-Methyl-N-nitrosometh...	74	2.400	2.400	0.418	154180	41.05	ng/uL	87
4) Pyridine	79	2.454	2.454	0.427	259985	41.36	ng/uL	97
6) p-Benzoquinone	54	4.615	4.615	0.803	110243	36.99	ng/uL	93
7) Aniline	93	5.273	5.273	0.917	350730	40.28	ng/uL	98
9) Phenol	94	5.208	5.208	0.906	283181	39.55	ng/uL	96
10) bis(2-Chloroethyl) ether	93	5.363	5.363	0.933	225026	39.20	ng/uL	99
11) 2-Chlorophenol	128	5.438	5.438	0.946	215428	40.80	ng/uL	97
12) n-Decane	43	5.508	5.508	0.958	218716	37.04	ng/uL	94
13) 1,3-Dichlorobenzene	146	5.668	5.668	0.986	230466	38.85	ng/uL	98
14) 1,4-Dichlorobenzene	146	5.775	5.775	1.005	241336	40.22	ng/uL	100
15) 1,2-Dichlorobenzene	146	5.995	5.995	1.043	232913	40.74	ng/uL	99
16) bis(2-Chloro-1-methyle...	45	6.150	6.150	1.070	288456	38.44	ng/uL	99
17) Benzyl alcohol	108	5.941	5.941	1.033	139495	37.60	ng/uL	98
18) o-Cresol	107	6.102	6.102	1.061	184913	39.56	ng/uL	99
19) m,p-Cresols	108	6.337	6.337	1.102	211446	39.88	ng/uL	96
20) N-Nitrosodipropylamine	70	6.348	6.348	1.104	170639	38.23	ng/uL	91
21) Hexachloroethane	117	6.503	6.503	1.131	93272	39.64	ng/uL	94
24) Nitrobenzene	77	6.604	6.604	0.859	249555	39.14	ng/uL	98
25) Isophorone	82	6.973	6.973	0.907	459261	40.15	ng/uL	99
26) 2-Nitrophenol	139	7.091	7.091	0.922	113462	43.57	ng/uL	95
27) 2,4-Dimethylphenol	122	7.161	7.161	0.931	191729	40.25	ng/uL	97
28) bis(2-Chloroethoxy)met...	93	7.321	7.321	0.952	282179	39.58	ng/uL	100
29) 2,4-Dichlorophenol	162	7.465	7.465	0.971	184642	41.69	ng/uL	98

Quantitation Report

Data Path : C:\msdchem\1\data\S121922\
Data File : s4L1902.D
Acq On : 19 Dec 2022 14:07
Operator : NM1
Sample : |WBN221213-04.17|CCV|1|SVM|1|M-4
Misc : |MIX[A]
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 21 10:50:00 2022
Quant Method : C:\msdchem\1\data\S121922\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
30) Benzoic acid	105	7.289	7.289	0.948	151624	39.04	ng/uL	94
31) 1,2,4-Trichlorobenzene	180	7.605	7.605	0.989	209720	41.14	ng/uL	100
32) alpha-Terpineol	59	7.749	7.749	1.008	187496	39.01	ng/uL	99
33) Naphthalene	128	7.728	7.728	1.005	624676	40.38	ng/uL	99
34) 4-Chloroaniline	127	7.813	7.813	1.016	262358	40.09	ng/uL	98
35) Hexachlorobutadiene	225	7.925	7.925	1.031	138584	42.12	ng/uL	99
36) 4-Chloro-3-methylphenol	107	8.594	8.594	1.118	192824	39.79	ng/uL	99
37) 2-Methylnaphthalene	142	8.835	8.835	1.149	421674	41.07	ng/uL	100
38) 1-Methylnaphthalene	142	8.995	8.995	1.170	391068	40.62	ng/uL	99
40) Hexachlorocyclopentadiene	237	9.086	9.086	0.863	169395	38.71	ng/uL	98
41) 2,3-Dichloroaniline	161	9.289	9.289	0.883	228000	41.14	ng/uL	98
42) 2,4,6-Trichlorophenol	196	9.289	9.289	0.883	141451	39.65	ng/uL	100
43) 2,4,5-Trichlorophenol	196	9.343	9.343	0.888	152699	40.45	ng/uL	100
45) 2-Chloronaphthalene	162	9.621	9.621	0.914	404471	39.93	ng/uL	99
46) o-Nitroaniline	65	9.792	9.792	0.930	129706	39.09	ng/uL	95
47) 1,4-Dinitrobenzene	168	10.033	10.033	0.953	69544	43.83	ng/uL	87
48) m-Nitroaniline	138	10.466	10.466	0.994	113074	40.02	ng/uL	98
49) Dimethylphthalate	163	10.113	10.113	0.961	472995	41.24	ng/uL	99
50) m-Dinitrobenzene	168	10.150	10.150	0.964	76553	41.59	ng/uL	85
51) 2,6-Dinitrotoluene	165	10.204	10.204	0.970	110596	42.25	ng/uL	88
52) 2,4-Dinitrotoluene	165	10.857	10.857	1.032	149864	41.76	ng/uL	88
53) Acenaphthylene	152	10.295	10.295	0.978	624526	40.57	ng/uL	99
54) Acenaphthene	154	10.578	10.578	1.005	383033	39.70	ng/uL	99
55) 2,4-Dinitrophenol	184	10.637	10.637	1.011	63350	42.87	ng/uL	90
56) Dibenzofuran	168	10.862	10.862	1.032	610404	40.31	ng/uL	98
57) 2,3,4,6-Tetrachlorophenol	232	11.060	11.060	1.051	140514	39.64	ng/uL	99
58) Diethylphthalate	149	11.268	11.268	1.071	465602	40.42	ng/uL	98
59) 4-Nitrophenol	109	10.750	10.750	1.021	61685	35.67	ng/uL	96
60) Fluorene	166	11.423	11.423	1.085	486530	39.99	ng/uL	99
61) 4-Chlorophenylphenylether	204	11.434	11.434	1.086	253129	40.80	ng/uL	98
62) p-Nitroaniline	138	11.461	11.461	1.089	119430	40.63	ng/uL	95
65) 2-Methyl-4,6-dinitroph...	198	11.514	11.514	0.889	92949	44.88	ng/uL	91
66) Diphenylamine	169	11.632	11.632	0.898	411550	40.02	ng/uL	99
67) 1,2-Diphenylhydrazine	77	11.696	11.696	0.903	500293	37.18	ng/uL	97
68) 4-Bromophenylphenylether	248	12.231	12.231	0.945	163544	39.87	ng/uL	100
69) Hexachlorobenzene	284	12.311	12.311	0.951	196120	38.24	ng/uL	99
70) Pentachlorophenol	266	12.638	12.638	0.976	111814	36.46	ng/uL	99
71) n-Octadecane	57	12.830	12.830	0.991	333005	39.52	ng/uL	96
72) Dinoseb	211	12.959	12.959	1.001	145379	44.41	ng/uL	99
73) Phenanthrene	178	12.991	12.991	1.003	744716	39.86	ng/uL	100
74) Anthracene	178	13.071	13.071	1.010	753749	40.22	ng/uL	100
75) Carbazole	167	13.344	13.344	1.031	679634	40.90	ng/uL	100
76) Di-n-butylphthalate	149	13.953	13.953	1.078	781363	41.83	ng/uL	99
77) Fluoranthene	202	14.932	14.932	1.153	834112	41.54	ng/uL	100
78) Pyrene	202	15.296	15.296	1.181	859081	40.81	ng/uL	99
81) Butylbenzylphthalate	149	16.398	16.398	0.948	336192	42.45	ng/uL	97
82) bis(2-Ethylhexyl)phtha...	149	17.382	17.382	1.005	511884	42.20	ng/uL	99
83) Benzo(a)anthracene	228	17.275	17.275	0.999	875469	41.14	ng/uL	99
84) Chrysene	228	17.339	17.339	1.003	806103	39.89	ng/uL	100
85) Methoxychlor	227	17.200	17.200	0.995	595287	46.46	ng/uL	98
86) Methylenebis(2-chloroa...	231	17.259	17.259	0.998	188280	43.92	ng/uL	98
87) Di-n-octylphthalate	149	18.719	18.719	1.083	835918	44.59	ng/uL	96
89) Benzo(b)fluoranthene	252	19.516	19.516	0.961	856288	41.32	ng/uL	99
90) Benzo(k)fluoranthene	252	19.586	19.586	0.964	865002	41.26	ng/uL	99
91) Benzo(a)pyrene	252	20.195	20.195	0.994	761037	42.23	ng/uL	99
92) Indeno(1,2,3-cd)pyrene	276	22.222	22.222	1.094	883346	42.34	ng/uL	98
93) Dibenzo(a,h)anthracene	278	22.270	22.270	1.097	893653	41.50	ng/uL	99

Quantitation Report

Data Path : C:\msdchem\1\data\S121922\
Data File : s4L1902.D
Acq On : 19 Dec 2022 14:07
Operator : NM1
Sample : |WBN221213-04.17|CCV|1|SVM|1|M-4
Misc : |MIX[A]
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 21 10:50:00 2022
Quant Method : C:\msdchem\1\data\S121922\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

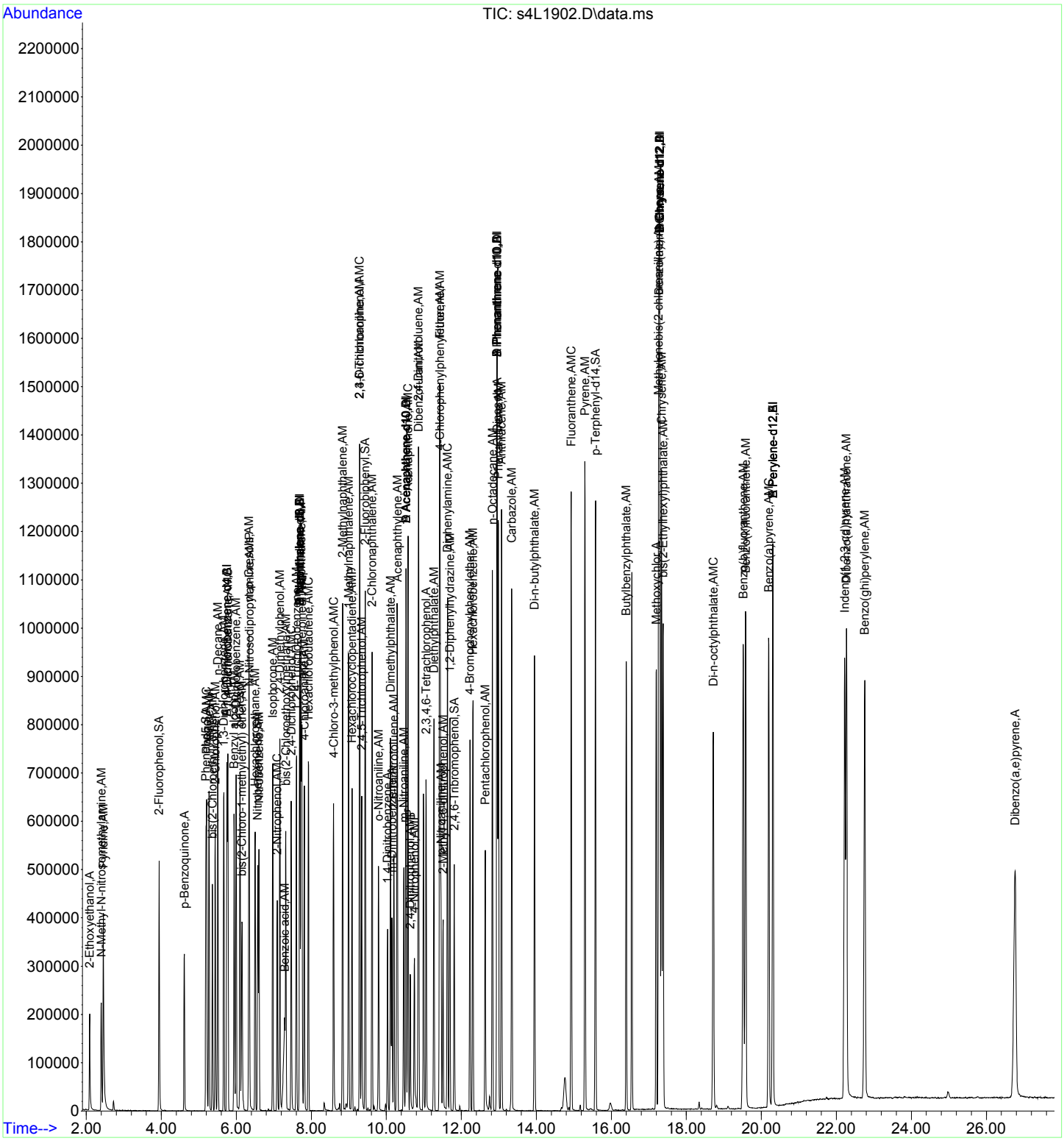
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
94) Benzo(ghi)perylene	276	22.757	22.757	1.121	879083	40.94	ng/uL	99
95) Dibenzo(a,e)pyrene	302	26.769	26.769	1.318	805014	50.62	ng/uL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report

Data Path : C:\msdchem\1\data\S121922\
Data File : s4L1902.D
Acq On : 19 Dec 2022 14:07
Operator : NM1
Sample : |WBN221213-04.17|CCV|1|SVM|1|M-4
Misc : |MIX[A]
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 21 10:50:00 2022
Quant Method : C:\msdchem\1\data\S121922\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration



Continuing Calibration Summary

Client SDG: 2023-289

Instrument ID: MSD4.I

Injection Date: 19-DEC-22 14:40

Data File: S121922\s4L1903.D

Init. Cal. Date(s) 05-NOV-22 15:30 - 06-NOV-22 03:0

Lab Sample ID WBN221215-13.3

Method: S121922\MSD4_8270_110522RECALC.m

Quant Type ISTD

Method Update: 16-NOV-22 11:38

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,4-Dioxane	0.6195	0.71127		.01		14.81356	20		Averaged
N-Nitrosodiethylamine	0.6673	0.74996		.01		12.38723	20		Averaged
N-Nitrosopyrrolidine	0.7195	0.82248		.01		14.31272	20		Averaged
N-Nitrosodi-n-butylamine	0.1921	0.19825		.01		3.20146	20		Averaged
1,2,4,5-Tetrachlorobenzene	0.7045	0.75684		.01		7.42938	20		Averaged
Pentachlorobenzene	0.6744	0.71631		.01		6.21441	20		Averaged
Atrazine	0.2119	0.23684		.01		11.7697	20		Averaged

Quantitation Report

12/22/2022

Data Path : C:\msdchem\1\data\S121922\
Data File : s4L1903.D
Acq On : 19 Dec 2022 14:40
Operator : NM1
Sample : |WBN221215-13.3|CCV|1|SVM|1|A-4
Misc : |MIX[B]
ALS Vial : 3 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 21 10:50:44 2022
Quant Method : C:\msdchem\1\data\S121922\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards									
1)	A 1,4-Dichlorobenzene-d4	152	5.748	5.749	1.000	107232	40.00	ng/uL	0.00
22)	A Naphthalene-d8	136	7.690	7.690	1.000	445100	40.00	ng/uL	0.00
39)	A Acenaphthene-d10	164	10.519	10.525	1.000	250620	40.00	ng/uL	0.00
64)	A Phenanthrene-d10	188	12.948	12.948	1.000	527366	40.00	ng/uL	0.00
80)	A Chrysene-d12	240	17.285	17.291	1.000	592525	40.00	ng/uL	0.00
88)	A Perylene-d12	264	20.302	20.308	1.000	633671	40.00	ng/uL	0.00
96)	B 1,4-Dichlorobenzene-d4	152	5.748	5.749	1.000	107232	40.00	ng/uL	0.00
112)	B Naphthalene-d8	136	7.690	7.690	1.000	445100	40.00	ng/uL	0.00
120)	B Acenaphthene-d10	164	10.519	10.525	1.000	250620	40.00	ng/uL	0.00
129)	B Phenanthrene-d10	188	12.948	12.948	1.000	527366	40.00	ng/uL	0.00
142)	B Chrysene-d12	240	17.285	17.291	1.000	592525	40.00	ng/uL	0.00
148)	B Perylene-d12	264	20.302	20.308	1.000	633671	40.00	ng/uL	0.00
151)	J Naphthalene-d8	136	7.690	7.690	1.000	445100	40.00	ng/uL	0.00
153)	J Phenanthrene-d10	188	12.948	12.948	1.000	527366	40.00	ng/uL	0.00
156)	J Chrysene-d12	240	17.285	17.291	1.000	592525	40.00	ng/uL	0.00
159)	D Naphthalene-d8	136	7.690	7.690	1.000	445100	40.00	ng/uL	0.00
161)	D Acenaphthene-d10	164	10.519	10.525	1.000	250620	40.00	ng/uL	0.00
164)	D Phenanthrene-d10	188	12.948	12.948	1.000	527366	40.00	ng/uL	0.00
171)	D Chrysene-d12	240	17.285	17.291	1.000	592525	40.00	ng/uL	0.00
173)	E Naphthalene-d8	136	7.690	7.690	1.000	445100	40.00	ng/uL	0.00
175)	E Perylene-d12	264	20.302	20.308	1.000	633671	40.00	ng/uL	0.00
System Monitoring Compounds									Dev(Min)
5)	2-Fluorophenol	112	0.000	3.941	0.000	0	0.00	ng/uL	
8)	Phenol-d5	99	0.000	5.192	0.000	0	0.00	ng/uL	
23)	Nitrobenzene-d5	82	0.000	6.572	0.000	0	0.00	ng/uL	
44)	2-Fluorobiphenyl	172	0.000	9.439	0.000	0	0.00	ng/uL	
63)	2,4,6-Tribromophenol	330	0.000	11.814	0.000	0	0.00	ng/uL	
79)	p-Terphenyl-d14	244	0.000	15.579	0.000	0	0.00	ng/uL	
Target Compounds		QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
97)	1,4-Dioxane	88	2.085	2.079	0.363	76271	45.92	ng/uL	99
98)	Methyl methacrylate	100	2.085	2.079	0.363	32132	46.65	ng/uL#	89
99)	Ethyl methacrylate	69	2.871	2.866	0.499	159719	44.95	ng/uL	93
100)	2-Picoline	93	3.256	3.251	0.566	200692	44.18	ng/uL	99
101)	N-Nitrosomethylethylamine	88	3.368	3.363	0.586	80954	44.73	ng/uL	85
102)	Methyl methanesulfonate	80	3.743	3.732	0.651	103805	45.27	ng/uL	97
103)	N-Nitrosodiethylamine	102	4.251	4.246	0.739	80420	44.96	ng/uL	91
104)	2-Butoxyethanol	57	4.342	4.331	0.755	171821	41.86	ng/uL	98
105)	Ethyl methanesulfonate	79	4.647	4.641	0.808	145985	45.33	ng/uL	99
106)	Benzaldehyde	77	5.128	5.117	0.892	161967	47.50	ng/uL	98
107)	Pentachloroethane	167	5.347	5.337	0.930	74556	48.15	ng/uL	99
108)	N-Nitrosopyrrolidine	100	6.310	6.300	1.098	88196	45.72	ng/uL	87
109)	Acetophenone	105	6.342	6.337	1.103	256237	45.04	ng/uL	98
110)	N-Nitrosomorpholine	56	6.374	6.364	1.109	89173	41.94	ng/uL	95
111)	o-Toluidine	106	6.396	6.385	1.113	280792	43.52	ng/uL	99
113)	N-Nitrosopiperidine	114	6.834	6.824	0.889	86130	43.05	ng/uL	86
114)	a,a-Dimethylphenethyla...	58	7.503	7.492	0.976	413301	41.93	ng/uL	99
115)	2,6-Dichlorophenol	162	7.824	7.813	1.017	142513	44.25	ng/uL	99
116)	Hexachloropropene	213	7.861	7.856	1.022	132657	48.96	ng/uL	99
117)	Caprolactam	113	8.337	8.321	1.084	45632	42.70	ng/uL	84
118)	N-Nitrosodi-n-butylamine	57	8.364	8.359	1.088	88242	41.29	ng/uL	89
119)	Safrole	162	8.706	8.696	1.132	138042	45.40	ng/uL	95
121)	1,2,4,5-Tetrachloroben...	216	9.102	9.092	0.865	189680	42.97	ng/uL	100
122)	1,1-Biphenyl	154	9.599	9.589	0.913	435121	41.76	ng/uL	99

Data Path : C:\msdchem\1\data\S121922\
Data File : s4L1903.D
Acq On : 19 Dec 2022 14:40
Operator : NM1
Sample : |WBN221215-13.3|CCV|1|SVM|1|A-4
Misc : |MIX[B]
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 21 10:50:44 2022
Quant Method : C:\msdchem\1\data\S121922\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

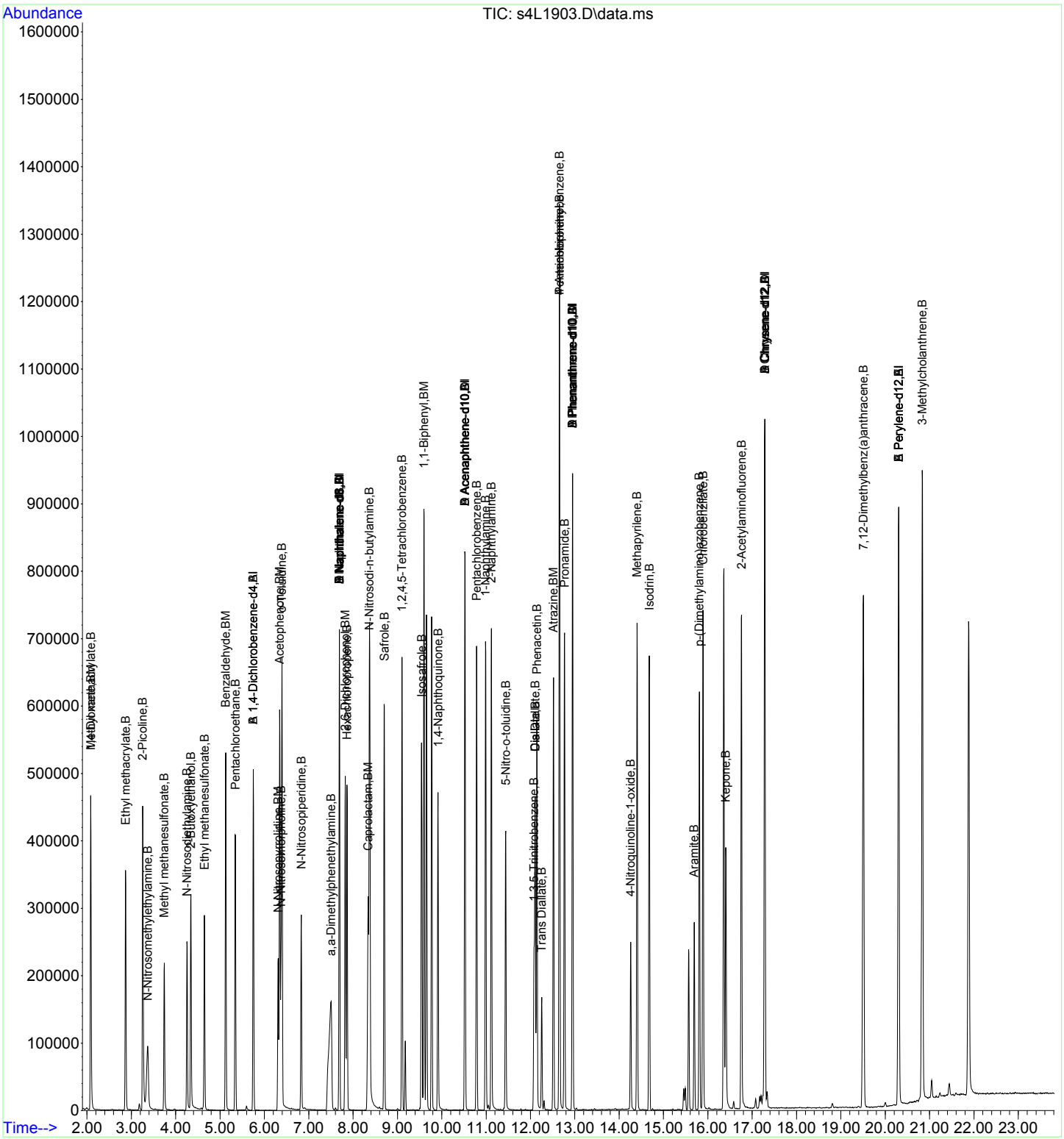
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
123) Isosafrole	162	9.546	9.535	0.907	144393	43.31	ng/uL	97
124) 1,4-Naphthoquinone	158	9.915	9.905	0.943	128910	44.16	ng/uL	96
125) Pentachlorobenzene	250	10.787	10.776	1.025	179522	42.49	ng/uL	99
126) 1-Naphthylamine	143	10.985	10.974	1.044	345888	40.89	ng/uL	97
127) 2-Naphthylamine	143	11.118	11.108	1.057	364879	40.85	ng/uL	97
128) 5-Nitro-o-toluidine	152	11.445	11.429	1.088	98793	43.88	ng/uL	93
130) 1,3,5-Trinitrobenzene	75	12.081	12.055	0.933	95048	44.75	ng/uL	97
131) Phenacetin	108	12.145	12.130	0.938	193008	41.99	ng/uL	94
132) Diallate	86	12.108	12.097	0.935	122143	41.49	ng/uL	91
133) Cis Diallate	86	12.108	12.097	0.935	122143	35.27	ng/uL	91
134) Trans Diallate	86	12.252	12.242	0.946	44122	6.46	ng/uL	92
135) Atrazine	200	12.520	12.509	0.967	124899	44.71	ng/uL	100
136) 4-Aminobiphenyl	169	12.654	12.643	0.977	437673	40.74	ng/uL	99
137) Pentachloronitrobenzene	237	12.654	12.643	0.977	58070	43.36	ng/uL	98
138) Pronamide	173	12.771	12.755	0.986	186902	43.22	ng/uL	99
139) 4-Nitroquinoline-1-oxide	190	14.258	14.242	1.101	37426	33.45	ng/uL	78
140) Methapyrilene	97	14.403	14.392	1.112	232076	44.71	ng/uL	99
141) Isodrin	193	14.681	14.665	1.134	71237	42.58	ng/uL	91
143) Aramite	185	15.692	15.681	0.908	39714	48.17	ng/uL	99
144) Kepone	272	16.403	16.392	0.949	64052	38.87	ng/uL	99
145) p-(Dimethylamino)azobe...	225	15.809	15.793	0.915	134961	43.44	ng/uL	92
146) Chlorobenzilate	251	15.889	15.879	0.919	215715	45.26	ng/uL	96
147) 2-Acetylaminofluorene	181	16.761	16.740	0.970	261324	45.69	ng/uL	99
149) 7,12-Dimethylbenz(a)an...	256	19.505	19.473	0.961	327784	43.58	ng/uL	99
150) 3-Methylcholanthrene	269	20.832	20.810	1.026	92133	44.77	ng/uL	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report

Data Path : C:\msdchem\1\data\S121922\
Data File : s4L1903.D
Acq On : 19 Dec 2022 14:40
Operator : NM1
Sample : |WBN221215-13.3|CCV|1|SVM|1|A-4
Misc : |MIX[B]
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 21 10:50:44 2022
Quant Method : C:\msdchem\1\data\S121922\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration



Continuing Calibration Summary

Client SDG: 2023-289

Instrument ID: MSD4.I

Injection Date: 19-DEC-22 15:09

Data File: S121922\s4L1904.D

Init. Cal. Date(s) 05-NOV-22 15:30 - 06-NOV-22 03:0

Lab Sample ID WBN221027-44.7

Method: S121922\MSD4_8270_110522RECALC.m

Quant Type ISTD

Method Update: 16-NOV-22 11:38

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
Benzidine	0.7012	0.87348		.01		24.56931	20	*	Averaged
3,3'-Dichlorobenzidine	0.4162	0.49679		.01		19.36329	20		Averaged
Sulfolane	0.1328	0.1256		.01		-5.42169	20		Averaged
Prometon	0.1472	0.18139		.01		23.2269	20	*	Averaged

Quantitation Report

12/22/2022

Data Path : C:\msdchem\1\data\S121922\
Data File : s4L1904.D
Acq On : 19 Dec 2022 15:09
Operator : NM1
Sample : |WBN221027-44.7|CCV|1|SVM|1|B-4
Misc : |MIX[J]
ALS Vial : 4 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 21 10:51:09 2022
Quant Method : C:\msdchem\1\data\S121922\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

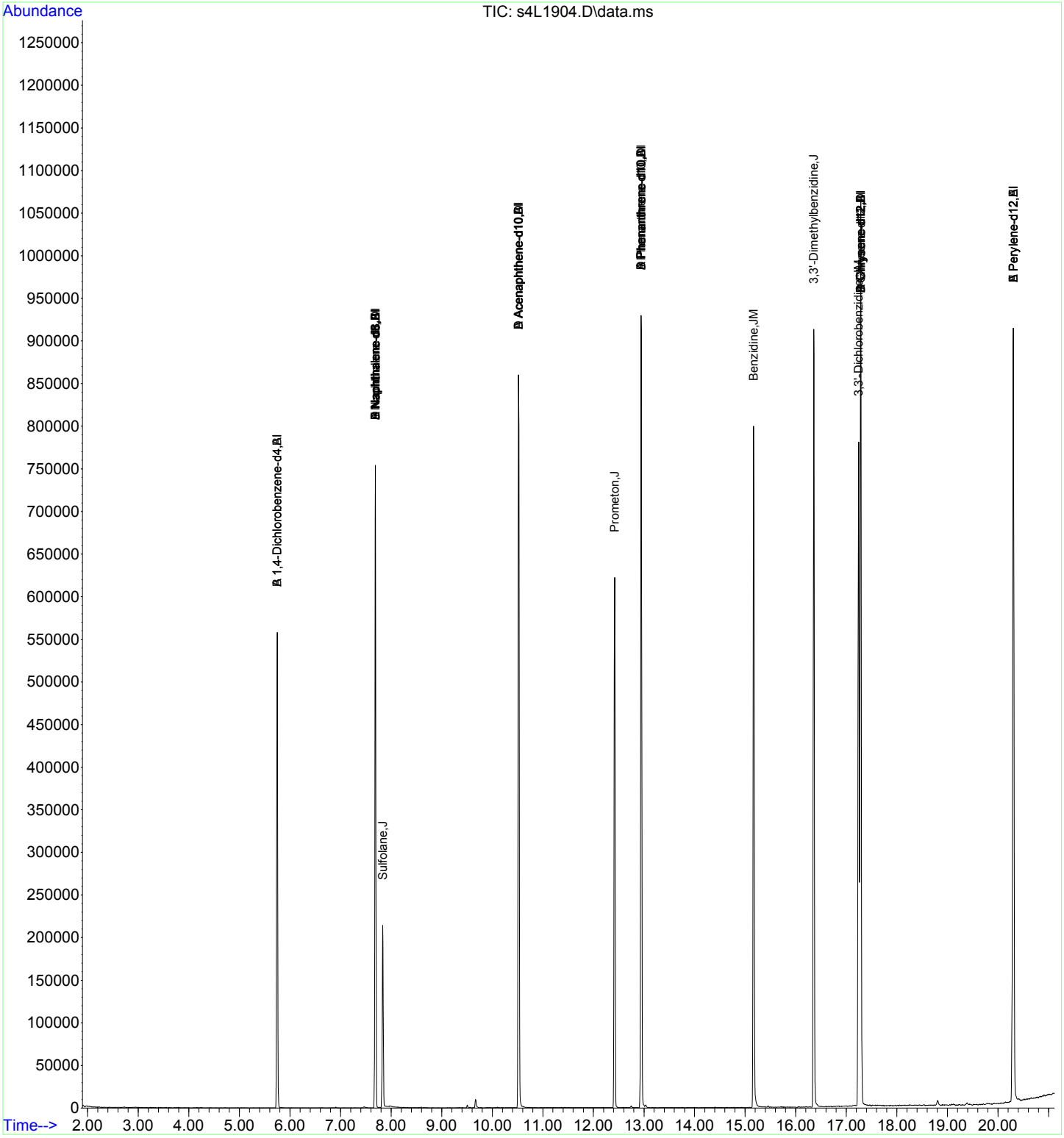
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	5.749	5.749	1.000	117285	40.00	ng/uL	0.00
22) A Naphthalene-d8	136	7.690	7.690	1.000	477363	40.00	ng/uL	0.00
39) A Acenaphthene-d10	164	10.520	10.525	1.000	258877	40.00	ng/uL	0.00
64) A Phenanthrene-d10	188	12.943	12.948	1.000	548829	40.00	ng/uL	0.00
80) A Chrysene-d12	240	17.286	17.291	1.000	615490	40.00	ng/uL	0.00
88) A Perylene-d12	264	20.302	20.308	1.000	644832	40.00	ng/uL	0.00
96) B 1,4-Dichlorobenzene-d4	152	5.749	5.749	1.000	117285	40.00	ng/uL	0.00
112) B Naphthalene-d8	136	7.690	7.690	1.000	477363	40.00	ng/uL	0.00
120) B Acenaphthene-d10	164	10.520	10.525	1.000	258877	40.00	ng/uL	0.00
129) B Phenanthrene-d10	188	12.943	12.948	1.000	548829	40.00	ng/uL	0.00
142) B Chrysene-d12	240	17.286	17.291	1.000	615490	40.00	ng/uL	0.00
148) B Perylene-d12	264	20.302	20.308	1.000	644832	40.00	ng/uL	0.00
151) J Naphthalene-d8	136	7.690	7.690	1.000	477363	40.00	ng/uL	0.00
153) J Phenanthrene-d10	188	12.943	12.948	1.000	548829	40.00	ng/uL	0.00
156) J Chrysene-d12	240	17.286	17.291	1.000	615490	40.00	ng/uL	0.00
159) D Naphthalene-d8	136	7.690	7.690	1.000	477363	40.00	ng/uL	0.00
161) D Acenaphthene-d10	164	10.520	10.525	1.000	258877	40.00	ng/uL	0.00
164) D Phenanthrene-d10	188	12.943	12.948	1.000	548829	40.00	ng/uL	0.00
171) D Chrysene-d12	240	17.286	17.291	1.000	615490	40.00	ng/uL	0.00
173) E Naphthalene-d8	136	7.690	7.690	1.000	477363	40.00	ng/uL	0.00
175) E Perylene-d12	264	20.302	20.308	1.000	644832	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	0.000	3.941	0.000	0	0.00	ng/uL	
8) Phenol-d5	99	0.000	5.192	0.000	0	0.00	ng/uL	
23) Nitrobenzene-d5	82	0.000	6.572	0.000	0	0.00	ng/uL	
44) 2-Fluorobiphenyl	172	0.000	9.439	0.000	0	0.00	ng/uL	
63) 2,4,6-Tribromophenol	330	0.000	11.814	0.000	0	0.00	ng/uL	
79) p-Terphenyl-d14	244	0.000	15.579	0.000	0	0.00	ng/uL	
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
152) Sulfolane	56	7.835	7.824	1.019	59957	37.82	ng/uL	98
154) Prometon	210	12.418	12.408	0.960	99554	49.30	ng/uL	94
155) Benzidine	184	15.168	15.151	1.172	479393	49.83	ng/uL	99
157) 3,3'-Dimethylbenzidine	212	16.355	16.344	0.946	511863	48.59	ng/uL	99
158) 3,3'-Dichlorobenzidine	252	17.243	17.227	0.998	305768	47.75	ng/uL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report

Data Path : C:\msdchem\1\data\S121922\
Data File : s4L1904.D
Acq On : 19 Dec 2022 15:09
Operator : NM1
Sample : |WBN221027-44.7|CCV|1|SVM|1|B-4
Misc : |MIX[J]
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 21 10:51:09 2022
Quant Method : C:\msdchem\1\data\S121922\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration



Continuing Calibration Summary

Client SDG: 2023-289

Instrument ID: MSD4.I **Injection Date:** 20-DEC-22 12:21

Data File: S122022\s4L2002.D **Init. Cal. Date(s)** 05-NOV-22 15:30 - 06-NOV-22 03:0

Lab Sample ID WBN221213-04.17 **Method:** S122022\MSD4_8270_110522RECALC.m

Quant Type ISTD **Method Update:** 16-NOV-22 11:38

	Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S	2-Fluorophenol	1.3355	1.3982		.01		4.69487	20		Averaged
S	Phenol-d5	1.6884	1.80065		.01		6.64831	20		Averaged
S	Nitrobenzene-d5	0.418	0.42664		.01		2.06699	20		Averaged
S	2-Fluorobiphenyl	1.4858	1.524		.01		2.57101	20		Averaged
S	2,4,6-Tribromophenol	0.3415	0.34761		.01		1.78917	20		Averaged
S	p-Terphenyl-d14	1.0564	1.14371		.01		8.26486	20		Averaged
	N-Methyl-N-nitrosomethylami	0.9637	0.99557		.01		3.30705	20		Averaged
	Phenol	1.8374	1.90387		.8		3.61761	20		Averaged
	bis(2-Chloroethyl) ether	1.4729	1.53844		.7		4.44973	20		Averaged
	bis(2-Chloro-1-methylethyl)eth	1.9257	1.94831		.01		1.17412	20		Averaged
	Hexachloroethane	0.6038	0.61394		.3		1.67936	20		Averaged
	Nitrobenzene	0.4242	0.41673		.2		-1.76096	20		Averaged
	Isophorone	0.761	0.77949		.4		2.4297	20		Averaged
	2,4-Dichlorophenol	0.2947	0.31065		.2		5.41228	20		Averaged
	Naphthalene	1.0291	1.05063		.7		2.09212	20		Averaged
	Hexachlorobutadiene	0.2189	0.23207		.01		6.01645	20		Averaged
	2-Methylnaphthalene	0.6831	0.72761		.4		6.51588	20		Averaged
	1-Methylnaphthalene	0.6405	0.68695		.01		7.25215	20		Averaged
	Hexachlorocyclopentadiene	0.5279	0.5164		.05		-2.17844	20		Averaged
	2,4,6-Trichlorophenol	0.4303	0.43862		.2		1.93353	20		Averaged
	2,4,5-Trichlorophenol	0.4553	0.46676		.2		2.51702	20		Averaged
	Dimethylphthalate	1.3836	1.49534		.01		8.07603	20		Averaged
	2,6-Dinitrotoluene	0.3157	0.34251		.2		8.49224	20		Averaged
	2,4-Dinitrotoluene	0.4329	0.4742		.2		9.54031	20		Averaged
	2,4-Dinitrophenol	40	44.41	40			11.025	20		Linear
	Diethylphthalate	1.3894	1.52796		.01		9.97265	20		Averaged
	Fluorene	1.4674	1.53788		.9		4.80305	20		Averaged
	2-Methyl-4,6-dinitrophenol	40	45.89	40			14.725	20		Linear
	Diphenylamine	0.5957	0.60057		.01		0.81753	20		Averaged
	1,2-Diphenylhydrazine	0.7794	0.71012		.01		-8.88889	20		Averaged
	Hexachlorobenzene	0.2971	0.29077		.1		-2.1306	20		Averaged
	Pentachlorophenol	0.1776	0.14324		.05		-19.34685	20		Averaged
	Phenanthrene	1.0822	1.08177		.7		-0.03973	20		Averaged
	Anthracene	1.0856	1.10856		.7		2.11496	20		Averaged
	Di-n-butylphthalate	1.082	1.19708		.01		10.63586	20		Averaged
	Fluoranthene	1.1632	1.26884		.6		9.08184	20		Averaged
	Pyrene	1.2195	1.31461		.6		7.7991	20		Averaged

Continuing Calibration Summary

Instrument ID: MSD4.I **Injection Date:** 20-DEC-22 12:21

Data File: S122022\s4L2002.D **Init. Cal. Date(s)** 05-NOV-22 15:30 06-NOV-22 03:0

Lab Sample ID WBN221213-04.17 **Method:** S122022\MSD4_8270_110522RECALC.m

Quant Type ISTD

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
bis(2-Ethylhexyl)phthalate	40	43.8	40			9.5	20		Linear
Benzo(b)fluoranthene	1.0177	1.07465		.7		5.59595	20		Averaged
Benzo(k)fluoranthene	1.0294	1.07171		.7		4.11016	20		Averaged
Benzo(a)pyrene	0.8848	0.95408		.7		7.83002	20		Averaged

Quantitation Report

12/22/2022

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2002.D
Acq On : 20 Dec 2022 12:21
Operator : NM1
Sample : |WBN221213-04.17|CCV|1|SVM|1|M-4
Misc : |MIX[A]
ALS Vial : 2 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 20 13:20:16 2022
Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	5.754	5.749	1.000	150429	40.00	ng/uL	0.00
22) A Naphthalene-d8	136	7.695	7.690	1.000	616937	40.00	ng/uL	0.00
39) A Acenaphthene-d10	164	10.525	10.525	1.000	358395	40.00	ng/uL	0.00
64) A Phenanthrene-d10	188	12.948	12.948	1.000	788745	40.00	ng/uL	0.00
80) A Chrysene-d12	240	17.296	17.291	1.000	943910	40.00	ng/uL	0.00
88) A Perylene-d12	264	20.307	20.308	1.000	1009512	40.00	ng/uL	0.00
96) B 1,4-Dichlorobenzene-d4	152	5.754	5.749	1.000	150429	40.00	ng/uL	0.00
112) B Naphthalene-d8	136	7.695	7.690	1.000	616937	40.00	ng/uL	0.00
120) B Acenaphthene-d10	164	10.525	10.525	1.000	358395	40.00	ng/uL	0.00
129) B Phenanthrene-d10	188	12.948	12.948	1.000	788745	40.00	ng/uL	0.00
142) B Chrysene-d12	240	17.296	17.291	1.000	943910	40.00	ng/uL	0.00
148) B Perylene-d12	264	20.307	20.308	1.000	1009512	40.00	ng/uL	0.00
151) J Naphthalene-d8	136	7.695	7.690	1.000	616937	40.00	ng/uL	0.00
153) J Phenanthrene-d10	188	12.948	12.948	1.000	788745	40.00	ng/uL	0.00
156) J Chrysene-d12	240	17.296	17.291	1.000	943910	40.00	ng/uL	0.00
159) D Naphthalene-d8	136	7.695	7.690	1.000	616937	40.00	ng/uL	0.00
161) D Acenaphthene-d10	164	10.525	10.525	1.000	358395	40.00	ng/uL	0.00
164) D Phenanthrene-d10	188	12.948	12.948	1.000	788745	40.00	ng/uL	0.00
171) D Chrysene-d12	240	17.296	17.291	1.000	943910	40.00	ng/uL	0.00
173) E Naphthalene-d8	136	7.695	7.690	1.000	616937	40.00	ng/uL	0.00
175) E Perylene-d12	264	20.307	20.308	1.000	1009512	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	3.951	3.941	0.687	210330	41.88	ng/uL	0.01
8) Phenol-d5	99	5.203	5.192	0.904	270870	42.66	ng/uL	0.01
23) Nitrobenzene-d5	82	6.577	6.572	0.855	263208	40.83	ng/uL	0.00
44) 2-Fluorobiphenyl	172	9.439	9.439	0.897	546195	41.03	ng/uL	0.00
63) 2,4,6-Tribromophenol	330	11.814	11.814	1.122	124583	40.71	ng/uL	0.00
79) p-Terphenyl-d14	244	15.579	15.579	1.203	902093	43.31	ng/uL	0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) 2-Ethoxyethanol	59	2.090	2.090	0.363	128990	41.73	ng/uL	98
3) N-Methyl-N-nitrosometh...	74	2.400	2.400	0.417	149763	41.32	ng/uL	87
4) Pyridine	79	2.459	2.454	0.427	251092	41.39	ng/uL	98
6) p-Benzoquinone	54	4.615	4.615	0.802	111846	38.88	ng/uL	91
7) Aniline	93	5.278	5.273	0.917	352027	41.89	ng/uL	98
9) Phenol	94	5.224	5.208	0.908	286397	41.45	ng/uL	96
10) bis(2-Chloroethyl) ether	93	5.363	5.363	0.932	231426	41.78	ng/uL	98
11) 2-Chlorophenol	128	5.444	5.438	0.946	216159	42.42	ng/uL	97
12) n-Decane	43	5.508	5.508	0.957	209246	36.72	ng/uL	93
13) 1,3-Dichlorobenzene	146	5.668	5.668	0.985	226535	39.57	ng/uL	99
14) 1,4-Dichlorobenzene	146	5.775	5.775	1.004	244302	42.19	ng/uL	99
15) 1,2-Dichlorobenzene	146	5.994	5.995	1.042	229686	41.63	ng/uL	99
16) bis(2-Chloro-1-methyle...	45	6.155	6.150	1.070	293082	40.47	ng/uL	99
17) Benzyl alcohol	108	5.946	5.941	1.033	146916	41.04	ng/uL	97
18) o-Cresol	107	6.112	6.102	1.062	184700	40.95	ng/uL	97
19) m,p-Cresols	108	6.348	6.337	1.103	218942	42.79	ng/uL	96
20) N-Nitrosodipropylamine	70	6.348	6.348	1.103	175284	40.70	ng/uL	93
21) Hexachloroethane	117	6.503	6.503	1.130	92354	40.67	ng/uL	94
24) Nitrobenzene	77	6.604	6.604	0.858	257097	39.29	ng/uL	98
25) Isophorone	82	6.973	6.973	0.906	480894	40.97	ng/uL	98
26) 2-Nitrophenol	139	7.096	7.091	0.922	118640	44.39	ng/uL	95
27) 2,4-Dimethylphenol	122	7.171	7.161	0.932	198847	40.69	ng/uL	99
28) bis(2-Chloroethoxy)met...	93	7.321	7.321	0.951	295478	40.39	ng/uL	97
29) 2,4-Dichlorophenol	162	7.471	7.465	0.971	191653	42.17	ng/uL	98

Quantitation Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2002.D
Acq On : 20 Dec 2022 12:21
Operator : NM1
Sample : |WBN221213-04.17|CCV|1|SVM|1|M-4
Misc : |MIX[A]
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 20 13:20:16 2022
Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
30) Benzoic acid	105	7.310	7.289	0.950	172800	42.46	ng/uL	93
31) 1,2,4-Trichlorobenzene	180	7.604	7.605	0.988	216682	41.43	ng/uL	99
32) alpha-Terpineol	59	7.749	7.749	1.007	193736	39.28	ng/uL	96
33) Naphthalene	128	7.727	7.728	1.004	648175	40.84	ng/uL	99
34) 4-Chloroaniline	127	7.818	7.813	1.016	276047	41.11	ng/uL	97
35) Hexachlorobutadiene	225	7.925	7.925	1.030	143171	42.40	ng/uL	99
36) 4-Chloro-3-methylphenol	107	8.605	8.594	1.118	210103	42.25	ng/uL	99
37) 2-Methylnaphthalene	142	8.835	8.835	1.148	448892	42.61	ng/uL	99
38) 1-Methylnaphthalene	142	8.995	8.995	1.169	423805	42.90	ng/uL	99
40) Hexachlorocyclopentadiene	237	9.086	9.086	0.863	185075	39.13	ng/uL	99
41) 2,3-Dichloroaniline	161	9.295	9.289	0.883	244943	40.89	ng/uL	98
42) 2,4,6-Trichlorophenol	196	9.295	9.289	0.883	157200	40.77	ng/uL	100
43) 2,4,5-Trichlorophenol	196	9.353	9.343	0.889	167284	41.00	ng/uL	98
45) 2-Chloronaphthalene	162	9.621	9.621	0.914	436479	39.87	ng/uL	99
46) o-Nitroaniline	65	9.797	9.792	0.931	141044	39.33	ng/uL	93
47) 1,4-Dinitrobenzene	168	10.038	10.033	0.954	79014	46.08	ng/uL	84
48) m-Nitroaniline	138	10.471	10.466	0.995	126365	41.38	ng/uL	99
49) Dimethylphthalate	163	10.113	10.113	0.961	535921	43.23	ng/uL	100
50) m-Dinitrobenzene	168	10.156	10.150	0.965	89730	45.11	ng/uL	81
51) 2,6-Dinitrotoluene	165	10.204	10.204	0.970	122755	43.39	ng/uL	88
52) 2,4-Dinitrotoluene	165	10.856	10.857	1.032	169952	43.82	ng/uL	88
53) Acenaphthylene	152	10.295	10.295	0.978	691339	41.56	ng/uL	99
54) Acenaphthene	154	10.578	10.578	1.005	427517	41.00	ng/uL	99
55) 2,4-Dinitrophenol	184	10.642	10.637	1.011	71442	44.41	ng/uL	93
56) Dibenzofuran	168	10.862	10.862	1.032	669246	40.89	ng/uL	99
57) 2,3,4,6-Tetrachlorophenol	232	11.065	11.060	1.051	153196	39.99	ng/uL	98
58) Diethylphthalate	149	11.268	11.268	1.071	547613	43.99	ng/uL	99
59) 4-Nitrophenol	109	10.765	10.750	1.023	68190	36.49	ng/uL	94
60) Fluorene	166	11.423	11.423	1.085	551168	41.92	ng/uL	99
61) 4-Chlorophenylphenylether	204	11.434	11.434	1.086	284646	42.45	ng/uL	98
62) p-Nitroaniline	138	11.466	11.461	1.089	136896	43.10	ng/uL	96
65) 2-Methyl-4,6-dinitroph...	198	11.514	11.514	0.889	108796	45.89	ng/uL	89
66) Diphenylamine	169	11.632	11.632	0.898	473694	40.32	ng/uL	100
67) 1,2-Diphenylhydrazine	77	11.696	11.696	0.903	560100	36.45	ng/uL	97
68) 4-Bromophenylphenylether	248	12.231	12.231	0.945	189027	40.35	ng/uL	99
69) Hexachlorobenzene	284	12.311	12.311	0.951	229342	39.15	ng/uL	100
70) Pentachlorophenol	266	12.643	12.638	0.976	112976	32.25	ng/uL	98
71) n-Octadecane	57	12.825	12.830	0.990	383438	39.84	ng/uL	95
72) Dinoseb	211	12.958	12.959	1.001	173325	46.17	ng/uL	98
73) Phenanthrene	178	12.991	12.991	1.003	853244	39.98	ng/uL	100
74) Anthracene	178	13.071	13.071	1.010	874373	40.84	ng/uL	100
75) Carbazole	167	13.349	13.344	1.031	780284	41.12	ng/uL	99
76) Di-n-butylphthalate	149	13.953	13.953	1.078	944188	44.26	ng/uL	99
77) Fluoranthene	202	14.932	14.932	1.153	1000789	43.63	ng/uL	100
78) Pyrene	202	15.296	15.296	1.181	1036896	43.12	ng/uL	100
81) Butylbenzylphthalate	149	16.398	16.398	0.948	422234	43.06	ng/uL	95
82) bis(2-Ethylhexyl)phtha...	149	17.376	17.382	1.005	657997	43.80	ng/uL	100
83) Benzo(a)anthracene	228	17.275	17.275	0.999	1094691	41.56	ng/uL	99
84) Chrysene	228	17.339	17.339	1.002	997550	39.88	ng/uL	99
85) Methoxychlor	227	17.200	17.200	0.994	769459	48.51	ng/uL	99
86) Methylenebis(2-chloroa...	231	17.264	17.259	0.998	239540	45.14	ng/uL	97
87) Di-n-octylphthalate	149	18.719	18.719	1.082	1067978	46.00	ng/uL	96
89) Benzo(b)fluoranthene	252	19.516	19.516	0.961	1084868	42.24	ng/uL	99
90) Benzo(k)fluoranthene	252	19.585	19.586	0.964	1081907	41.65	ng/uL	99
91) Benzo(a)pyrene	252	20.200	20.195	0.995	963154	43.13	ng/uL	99
92) Indeno(1,2,3-cd)pyrene	276	22.228	22.222	1.095	1087675	42.07	ng/uL	98
93) Dibenzo(a,h)anthracene	278	22.270	22.270	1.097	1116225	41.83	ng/uL	99

Quantitation Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2002.D
Acq On : 20 Dec 2022 12:21
Operator : NM1
Sample : |WBN221213-04.17|CCV|1|SVM|1|M-4
Misc : |MIX[A]
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 20 13:20:16 2022
Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

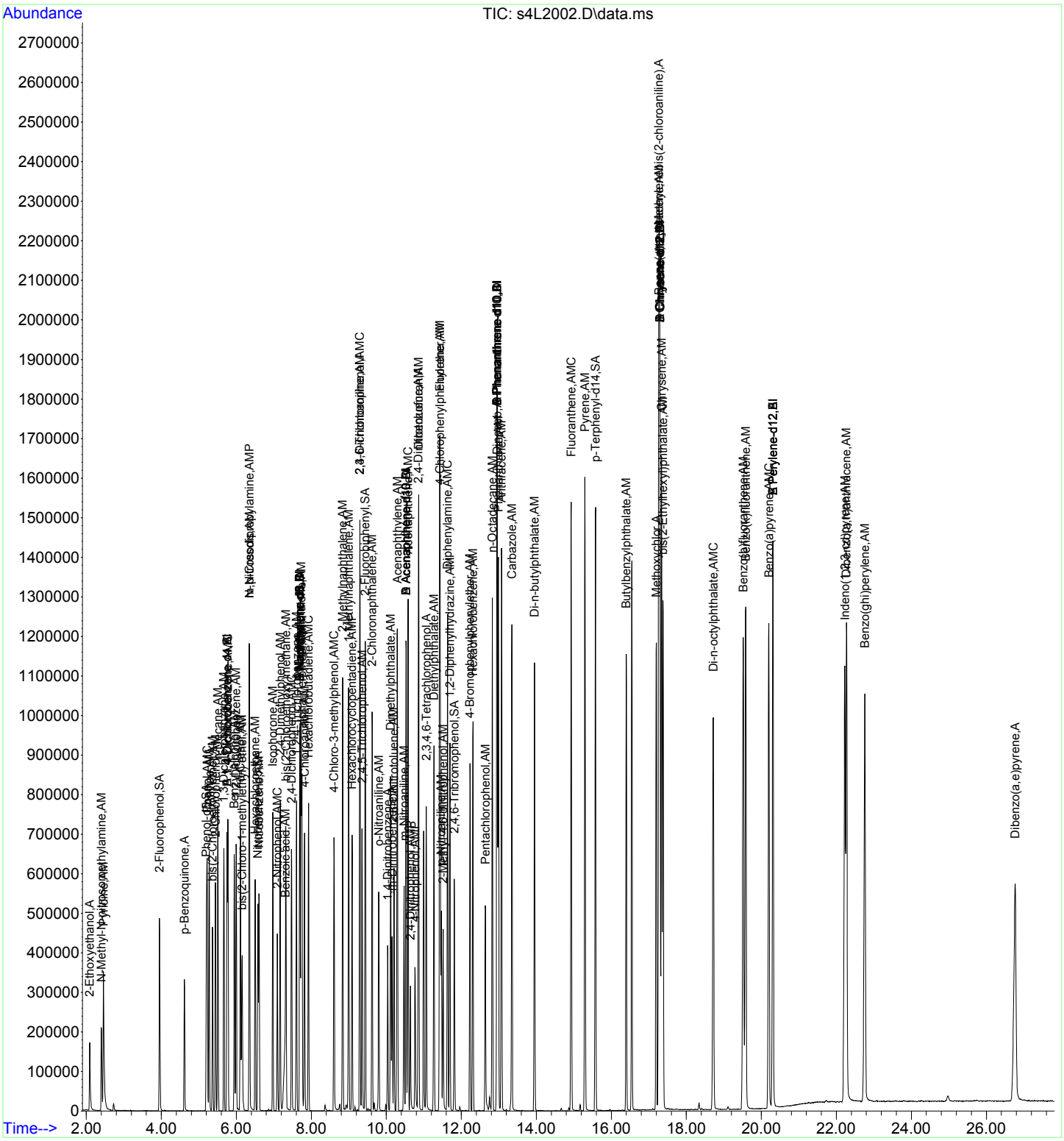
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
94) Benzo(ghi)perylene	276	22.762	22.757	1.121	1070382	40.22	ng/uL	99
95) Dibenzo(a,e)pyrene	302	26.769	26.769	1.318	899208	45.62	ng/uL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2002.D
Acq On : 20 Dec 2022 12:21
Operator : NM1
Sample : |WBN221213-04.17|CCV|1|SVM|1|M-4
Misc : |MIX[A]
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 20 13:20:16 2022
Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration



Continuing Calibration Summary

Client SDG: 2023-289

Instrument ID: MSD4.I

Injection Date: 20-DEC-22 12:54

Data File: S122022\s4L2003.D

Init. Cal. Date(s) 05-NOV-22 15:30 - 06-NOV-22 03:0

Lab Sample ID WBN221215-13.3

Method: S122022\MSD4_8270_110522RECALC.m

Quant Type ISTD

Method Update: 16-NOV-22 11:38

	Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S	p-Terphenyl-d14	1.0564	0.00194		.01		-99.81636	20	*	Averaged
	1,4-Dioxane	0.6195	0.67555		.01		9.04762	20		Averaged
	N-Nitrosodiethylamine	0.6673	0.77288		.01		15.82197	20		Averaged
	N-Nitrosopyrrolidine	0.7195	0.87851		.01		22.10007	20	*	Averaged
	N-Nitrosodi-n-butylamine	0.1921	0.20627		.01		7.37637	20		Averaged
	1,2,4,5-Tetrachlorobenzene	0.7045	0.72038		.01		2.25408	20		Averaged
	Pentachlorobenzene	0.6744	0.73586		.01		9.11329	20		Averaged
	Atrazine	0.2119	0.24422		.01		15.25248	20		Averaged

Quantitation Report

12/22/2022

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2003.D
Acq On : 20 Dec 2022 12:54
Operator : NM1
Sample : |WBN221215-13.3|CCV|1|SVM|1|A-4
Misc : |MIX[B]
ALS Vial : 3 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 20 13:21:11 2022
Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	5.749	5.754	1.000	106879	40.00	ng/uL	0.00
22) A Naphthalene-d8	136	7.690	7.695	1.000	465459	40.00	ng/uL	0.00
39) A Acenaphthene-d10	164	10.525	10.525	1.000	286425	40.00	ng/uL	0.00
64) A Phenanthrene-d10	188	12.948	12.948	1.000	658839	40.00	ng/uL	0.00
80) A Chrysene-d12	240	17.286	17.296	1.000	820367	40.00	ng/uL	-0.01
88) A Perylene-d12	264	20.302	20.307	1.000	906170	40.00	ng/uL	0.00
96) B 1,4-Dichlorobenzene-d4	152	5.749	5.754	1.000	106879	40.00	ng/uL	0.00
112) B Naphthalene-d8	136	7.690	7.695	1.000	465459	40.00	ng/uL	0.00
120) B Acenaphthene-d10	164	10.525	10.525	1.000	286425	40.00	ng/uL	0.00
129) B Phenanthrene-d10	188	12.948	12.948	1.000	658839	40.00	ng/uL	0.00
142) B Chrysene-d12	240	17.286	17.296	1.000	820367	40.00	ng/uL	-0.01
148) B Perylene-d12	264	20.302	20.307	1.000	906170	40.00	ng/uL	0.00
151) J Naphthalene-d8	136	7.690	7.695	1.000	465459	40.00	ng/uL	0.00
153) J Phenanthrene-d10	188	12.948	12.948	1.000	658839	40.00	ng/uL	0.00
156) J Chrysene-d12	240	17.286	17.296	1.000	820367	40.00	ng/uL	-0.01
159) D Naphthalene-d8	136	7.690	7.695	1.000	465459	40.00	ng/uL	0.00
161) D Acenaphthene-d10	164	10.525	10.525	1.000	286425	40.00	ng/uL	0.00
164) D Phenanthrene-d10	188	12.948	12.948	1.000	658839	40.00	ng/uL	0.00
171) D Chrysene-d12	240	17.286	17.296	1.000	820367	40.00	ng/uL	-0.01
173) E Naphthalene-d8	136	7.690	7.695	1.000	465459	40.00	ng/uL	0.00
175) E Perylene-d12	264	20.302	20.307	1.000	906170	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	0.000	3.951	0.000	0	0.00	ng/uL	
8) Phenol-d5	99	0.000	5.203	0.000	0	0.00	ng/uL	
23) Nitrobenzene-d5	82	0.000	6.577	0.000	0	0.00	ng/uL	
44) 2-Fluorobiphenyl	172	0.000	9.439	0.000	0	0.00	ng/uL	
63) 2,4,6-Tribromophenol	330	0.000	11.814	0.000	0	0.00	ng/uL	
79) p-Terphenyl-d14	244	15.574	15.579	1.203	1276	0.07	ng/uL	0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
97) 1,4-Dioxane	88	2.090	2.079	0.364	72202	43.62	ng/uL	96
98) Methyl methacrylate	100	2.090	2.079	0.364	31465	45.84	ng/uL#	86
99) Ethyl methacrylate	69	2.876	2.866	0.500	157416	44.45	ng/uL	91
100) 2-Picoline	93	3.261	3.251	0.567	194389	42.93	ng/uL	99
101) N-Nitrosomethylethylamine	88	3.374	3.363	0.587	81071	44.94	ng/uL	84
102) Methyl methanesulfonate	80	3.748	3.732	0.652	104968	45.93	ng/uL	97
103) N-Nitrosodiethylamine	102	4.256	4.246	0.740	82605	46.33	ng/uL	89
104) 2-Butoxyethanol	57	4.342	4.331	0.755	180723	44.18	ng/uL	96
105) Ethyl methanesulfonate	79	4.652	4.641	0.809	152559	47.53	ng/uL	99
106) Benzaldehyde	77	5.128	5.117	0.892	158800	46.72	ng/uL	97
107) Pentachloroethane	167	5.347	5.337	0.930	72989	47.30	ng/uL	100
108) N-Nitrosopyrrolidine	100	6.310	6.300	1.098	93894	48.84	ng/uL	87
109) Acetophenone	105	6.348	6.337	1.104	270057	47.62	ng/uL	97
110) N-Nitrosomorpholine	56	6.374	6.364	1.109	94095	44.40	ng/uL	94
111) o-Toluidine	106	6.396	6.385	1.113	298428	46.41	ng/uL	99
113) N-Nitrosopiperidine	114	6.834	6.824	0.889	93889	44.87	ng/uL	84
114) a,a-Dimethylphenethyla...	58	7.530	7.492	0.979	465700	45.17	ng/uL	99
115) 2,6-Dichlorophenol	162	7.824	7.813	1.017	160452	47.64	ng/uL	98
116) Hexachloropropene	213	7.861	7.856	1.022	136870	48.31	ng/uL	100
117) Caprolactam	113	8.343	8.321	1.085	55996	50.10	ng/uL	90
118) N-Nitrosodi-n-butylamine	57	8.364	8.359	1.088	96008	42.96	ng/uL#	71
119) Safrole	162	8.706	8.696	1.132	147856	46.50	ng/uL	97
121) 1,2,4,5-Tetrachloroben...	216	9.102	9.092	0.865	206335	40.90	ng/uL	98
122) 1,1-Biphenyl	154	9.600	9.589	0.912	494710	41.54	ng/uL	98

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2003.D
Acq On : 20 Dec 2022 12:54
Operator : NM1
Sample : |WBN221215-13.3|CCV|1|SVM|1|A-4
Misc : |MIX[B]
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 20 13:21:11 2022
Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

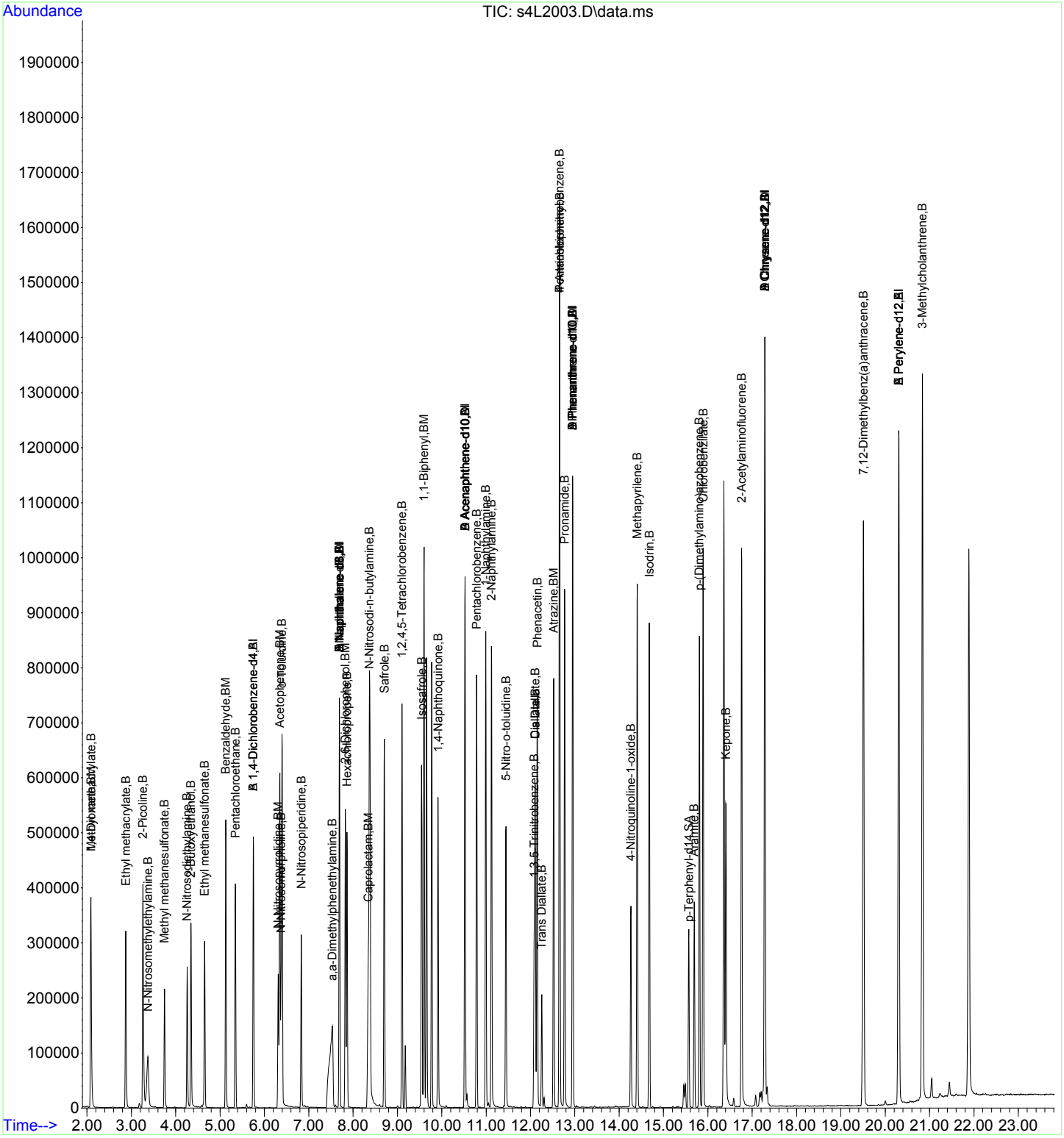
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
123) Isosafrole	162	9.546	9.535	0.907	162040	42.53	ng/uL	97
124) 1,4-Naphthoquinone	158	9.915	9.905	0.942	152942	45.85	ng/uL	98
125) Pentachlorobenzene	250	10.787	10.776	1.025	210768	43.64	ng/uL	98
126) 1-Naphthylamine	143	10.990	10.974	1.044	423459	43.80	ng/uL	96
127) 2-Naphthylamine	143	11.119	11.108	1.056	436626	42.78	ng/uL	98
128) 5-Nitro-o-toluidine	152	11.450	11.429	1.088	124816	48.50	ng/uL	92
130) 1,3,5-Trinitrobenzene	75	12.087	12.055	0.933	127978	48.24	ng/uL	97
131) Phenacetin	108	12.156	12.130	0.939	249179	43.40	ng/uL	94
132) Diallate	86	12.108	12.097	0.935	152146	41.37	ng/uL	87
133) Cis Diallate	86	12.108	12.097	0.935	152146	35.16	ng/uL	87
134) Trans Diallate	86	12.252	12.242	0.946	52312	6.13	ng/uL	93
135) Atrazine	200	12.525	12.509	0.967	160903	46.11	ng/uL	98
136) 4-Aminobiphenyl	169	12.659	12.643	0.978	553085	41.21	ng/uL	99
137) Pentachloronitrobenzene	237	12.654	12.643	0.977	74816	44.72	ng/uL	98
138) Pronamide	173	12.771	12.755	0.986	244981	45.35	ng/uL	98
139) 4-Nitroquinoline-1-oxide	190	14.264	14.242	1.102	59034	40.28	ng/uL	74
140) Methapyrilene	97	14.408	14.392	1.113	307970	47.49	ng/uL	98
141) Isodrin	193	14.681	14.665	1.134	93191	44.59	ng/uL	92
143) Aramite	185	15.692	15.681	0.908	54209	47.49	ng/uL	98
144) Kepone	272	16.408	16.392	0.949	93667	41.06	ng/uL	99
145) p-(Dimethylamino)azobe...	225	15.809	15.793	0.915	185300	43.08	ng/uL	92
146) Chlorobenzilate	251	15.895	15.879	0.920	297340	45.06	ng/uL	95
147) 2-Acetylaminofluorene	181	16.761	16.740	0.970	368217	46.50	ng/uL	98
149) 7,12-Dimethylbenz(a)an...	256	19.505	19.473	0.961	458642	42.64	ng/uL	99
150) 3-Methylcholanthrene	269	20.837	20.810	1.026	127342	43.27	ng/uL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2003.D
Acq On : 20 Dec 2022 12:54
Operator : NM1
Sample : |WBN221215-13.3|CCV|1|SVM|1|A-4
Misc : |MIX[B]
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 20 13:21:11 2022
Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration



Continuing Calibration Summary

Client SDG: 2023-289

Instrument ID: MSD4.I

Injection Date: 20-DEC-22 13:23

Data File: S122022\s4L2004.D

Init. Cal. Date(s) 05-NOV-22 15:30 - 06-NOV-22 03:0

Lab Sample ID WBN221027-44.7

Method: S122022\MSD4_8270_110522RECALC.m

Quant Type ISTD

Method Update: 16-NOV-22 11:38

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
Benzidine	0.7012	0.9102		.01		29.80605	20	*	Averaged
3,3'-Dichlorobenzidine	0.4162	0.48496		.01		16.5209	20		Averaged
Sulfolane	0.1328	0.12956		.01		-2.43976	20		Averaged
Prometon	0.1472	0.18296		.01		24.29348	20	*	Averaged

Quantitation Report

12/22/2022

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2004.D
Acq On : 20 Dec 2022 13:23
Operator : NM1
Sample : |WBN221027-44.7|CCV|1|SVM|1|B-4
Misc : |MIX[J]
ALS Vial : 4 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 20 13:44:38 2022
Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

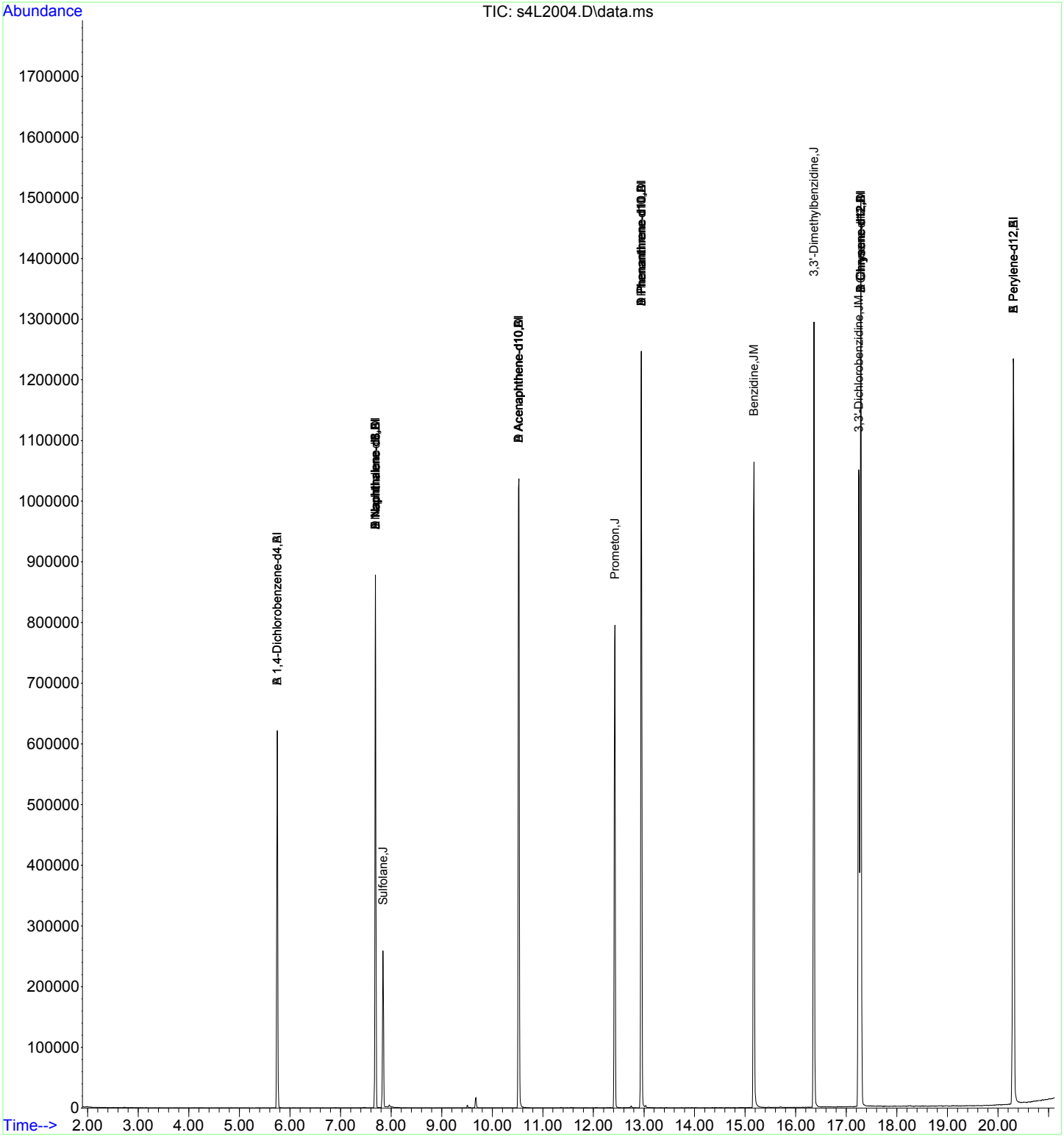
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	5.749	5.754	1.000	132626	40.00	ng/uL	0.00
22) A Naphthalene-d8	136	7.690	7.695	1.000	554037	40.00	ng/uL	0.00
39) A Acenaphthene-d10	164	10.520	10.525	1.000	321888	40.00	ng/uL	0.00
64) A Phenanthrene-d10	188	12.948	12.948	1.000	712007	40.00	ng/uL	0.00
80) A Chrysene-d12	240	17.286	17.296	1.000	866116	40.00	ng/uL	-0.01
88) A Perylene-d12	264	20.302	20.307	1.000	911694	40.00	ng/uL	0.00
96) B 1,4-Dichlorobenzene-d4	152	5.749	5.754	1.000	132626	40.00	ng/uL	0.00
112) B Naphthalene-d8	136	7.690	7.695	1.000	554037	40.00	ng/uL	0.00
120) B Acenaphthene-d10	164	10.520	10.525	1.000	321888	40.00	ng/uL	0.00
129) B Phenanthrene-d10	188	12.948	12.948	1.000	712007	40.00	ng/uL	0.00
142) B Chrysene-d12	240	17.286	17.296	1.000	866116	40.00	ng/uL	-0.01
148) B Perylene-d12	264	20.302	20.307	1.000	911694	40.00	ng/uL	0.00
151) J Naphthalene-d8	136	7.690	7.695	1.000	554037	40.00	ng/uL	0.00
153) J Phenanthrene-d10	188	12.948	12.948	1.000	712007	40.00	ng/uL	0.00
156) J Chrysene-d12	240	17.286	17.296	1.000	866116	40.00	ng/uL	-0.01
159) D Naphthalene-d8	136	7.690	7.695	1.000	554037	40.00	ng/uL	0.00
161) D Acenaphthene-d10	164	10.520	10.525	1.000	321888	40.00	ng/uL	0.00
164) D Phenanthrene-d10	188	12.948	12.948	1.000	712007	40.00	ng/uL	0.00
171) D Chrysene-d12	240	17.286	17.296	1.000	866116	40.00	ng/uL	-0.01
173) E Naphthalene-d8	136	7.690	7.695	1.000	554037	40.00	ng/uL	0.00
175) E Perylene-d12	264	20.302	20.307	1.000	911694	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	0.000	3.951	0.000	0	0.00	ng/uL	
8) Phenol-d5	99	0.000	5.203	0.000	0	0.00	ng/uL	
23) Nitrobenzene-d5	82	0.000	6.577	0.000	0	0.00	ng/uL	
44) 2-Fluorobiphenyl	172	0.000	9.439	0.000	0	0.00	ng/uL	
63) 2,4,6-Tribromophenol	330	0.000	11.814	0.000	0	0.00	ng/uL	
79) p-Terphenyl-d14	244	0.000	15.579	0.000	0	0.00	ng/uL	
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
152) Sulfolane	56	7.840	7.824	1.019	71780	39.02	ng/uL	96
154) Prometon	210	12.424	12.408	0.960	130266	49.72	ng/uL	94
155) Benzidine	184	15.173	15.151	1.172	648067	51.92	ng/uL	99
157) 3,3'-Dimethylbenzidine	212	16.360	16.344	0.946	704125	47.50	ng/uL	99
158) 3,3'-Dichlorobenzidine	252	17.248	17.227	0.998	420029	46.61	ng/uL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2004.D
Acq On : 20 Dec 2022 13:23
Operator : NM1
Sample : |WBN221027-44.7|CCV|1|SVM|1|B-4
Misc : |MIX[J]
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 20 13:44:38 2022
Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration



Quality Control Data

DFTPP Tune Report

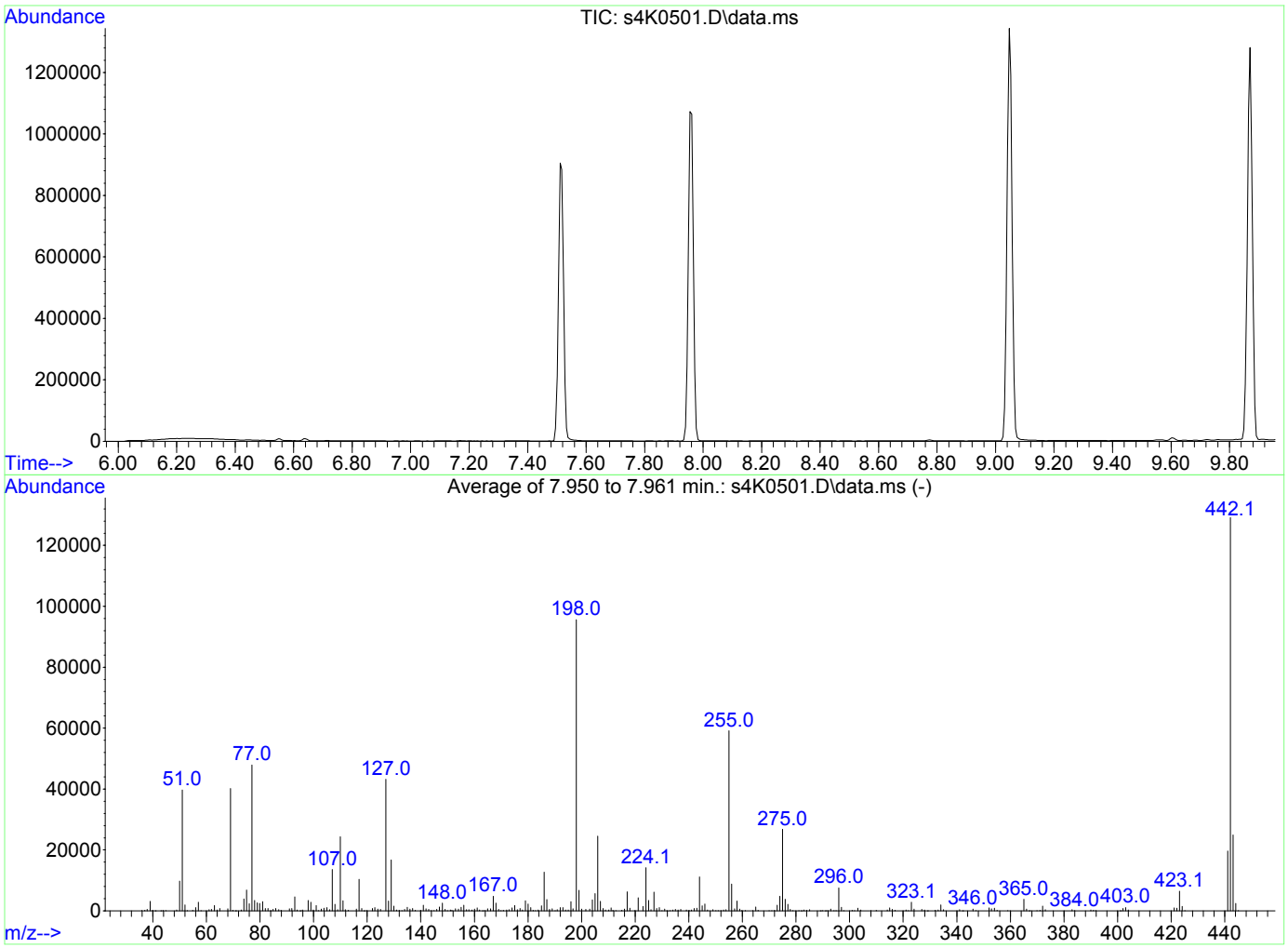
11/07/2022

Data Path : C:\msdchem\1\data\S110522SCANICAL\
Data File : s4K0501.D
Acq On : 05 Nov 2022 15:15
Operator : NM1
Sample : |WBN221014-99|DFTPP|1|SVM|1|DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

11/07/2022

Integration File: rteint.p

Method : C:\msdchem\1\data\S110522SCANICAL\BNABrk_Down8270E.m
Title : dftpp / endrin / ddt
Last Update : Fri Mar 29 12:50:37 2019



AutoFind: Scans 1469, 1470, 1471; Background Corrected with Scan 1463

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	1.7	698	PASS
69	198	0.00	100	42.0	40155	PASS
70	69	0.00	2	0.6	236	PASS
197	198	0.00	2	0.7	710	PASS
198	442	0.01	100	74.1	95651	PASS
199	198	5	9	7.0	6709	PASS
365	198	1	100	4.0	3791	PASS
441	443	0.01	150	78.9	19698	PASS
442	442	0.01	100	100.0	129133	PASS
443	442	15	24	19.3	24970	PASS

This report evaluates the Rel Abn% as passing only if it is greater than the Lower Limit and lower than the Upper Limit.

Quantitation Report

11/07/2022

Data Path : C:\msdchem\1\data\S110522SCANICAL\
Data File : s4K0501.D
Acq On : 05 Nov 2022 15:15
Operator : NM1
Sample : |WBN221014-99|DFTPP|1|SVM|1|DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

11/07/2022

Quant Time: Nov 07 10:06:18 2022
Quant Method : C:\msdchem\1\data\S110522SCANICAL\BNABrk_Down8270E.m
Quant Title : dftpp / endrin / ddt
QLast Update : Fri Mar 29 12:50:37 2019
Response via : Initial Calibration

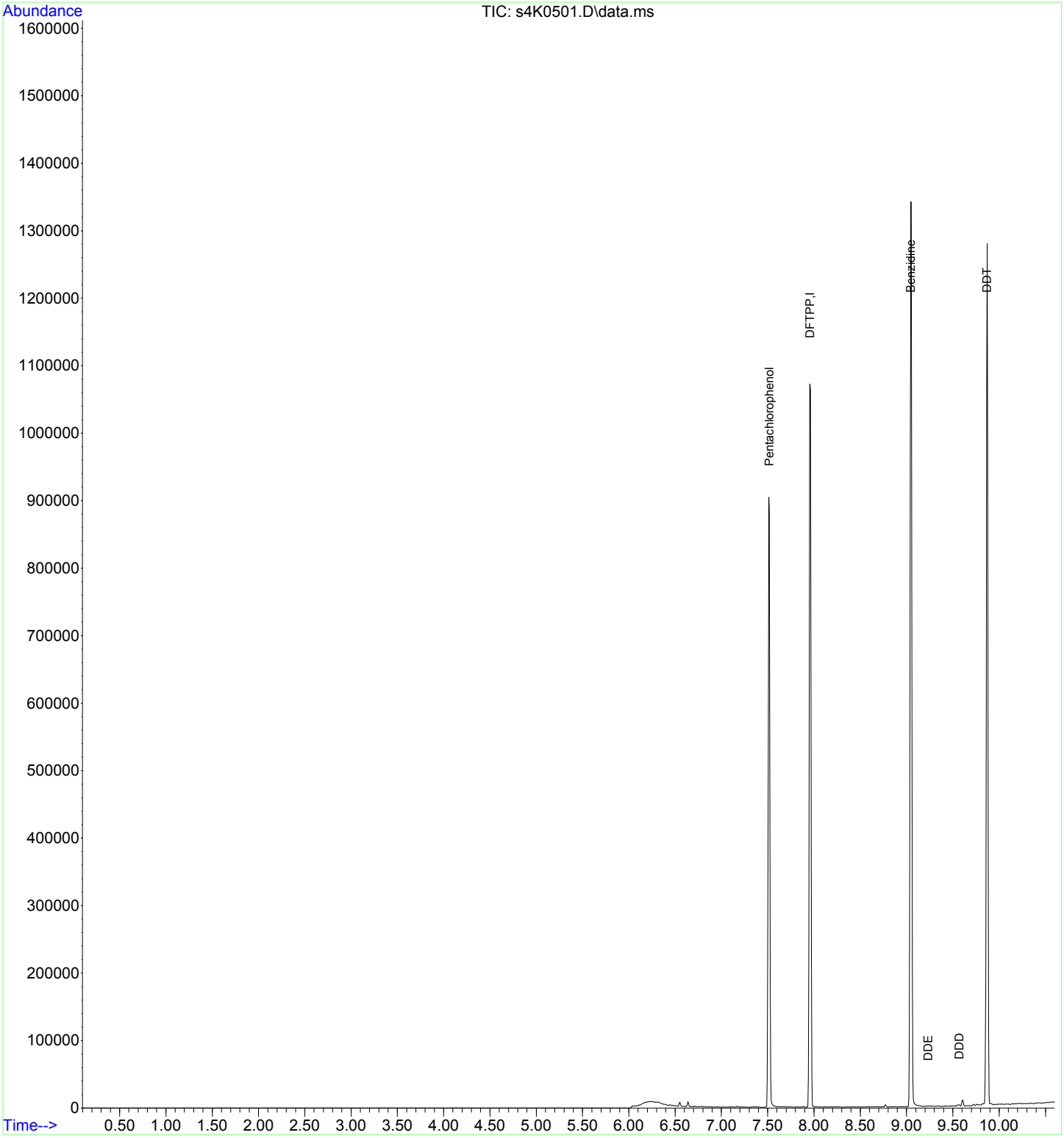
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) DFTPP	TIC	7.955	7.955	1.000	1290794	5.00	ug/l	# 0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) DFTPP	TIC	7.955	7.934	1.000	1290794	No Calib	#	
3) Pentachlorophenol	266	7.517	7.514	0.945	147528	8.79	ug/l	100
4) Benzidine	184	9.047	9.039	1.137	642791	7.86	ug/l	100
5) DDE	246	9.234	9.210	1.161	158	0.33	ug/l #	58
6) DDD	235	9.571	9.582	1.203	1114	0.40	ug/l	79
7) DDT	235	9.870	9.875	1.241	301807	4.46	ug/l	98

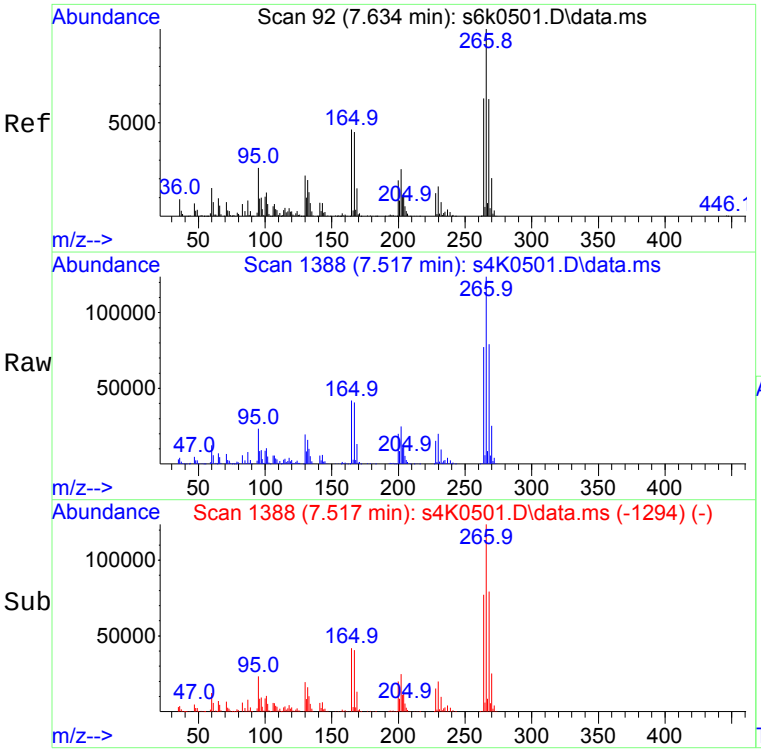
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report

Data Path : C:\msdchem\1\data\S110522SCANICAL\
Data File : s4K0501.D
Acq On : 05 Nov 2022 15:15
Operator : NM1
Sample : |WBN221014-99|DFTPP|1|SVM|1|DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Nov 07 10:06:18 2022
Quant Method : C:\msdchem\1\data\S110522SCANICAL\BNABrk_Down8270E.m
Quant Title : dftpp / endrin / ddt
QLast Update : Fri Mar 29 12:50:37 2019
Response via : Initial Calibration

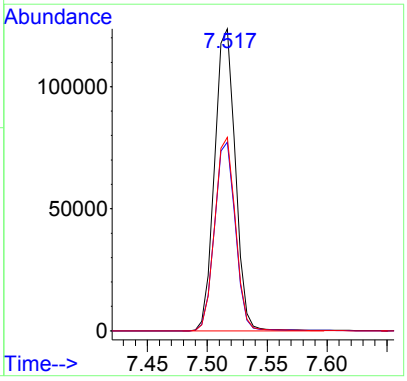


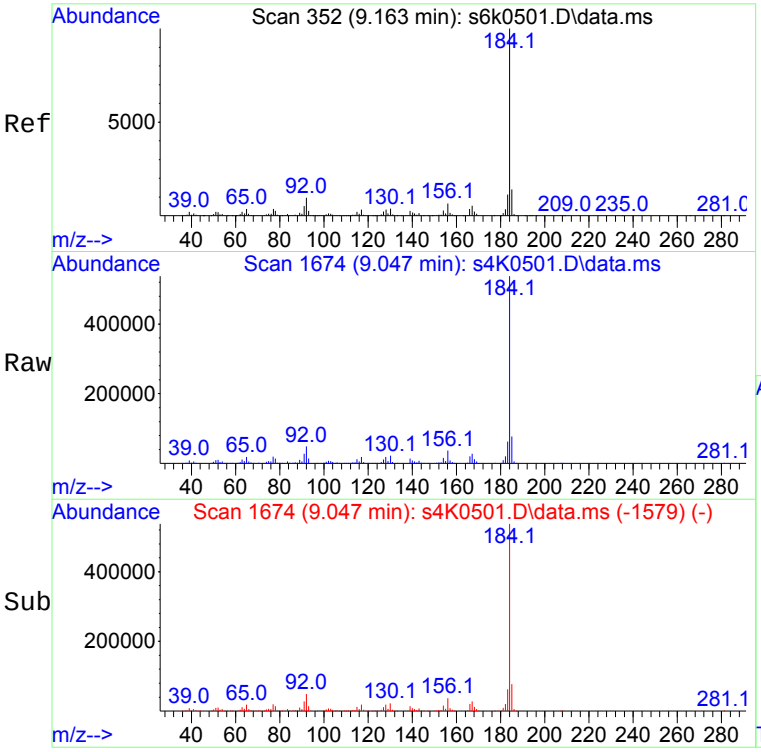


#3
Pentachlorophenol
Concen: 8.79 ug/l
RT: 7.517 min Scan# 1388
Delta R.T. 0.003 min
Lab File: s4K0501.D
Acq: 05 Nov 2022 15:15

Tgt Ion:266 Resp: 147528

Ion	Ratio	Lower	Upper
266	100		
264	62.7	0.0	162.7
268	64.1	0.0	163.8

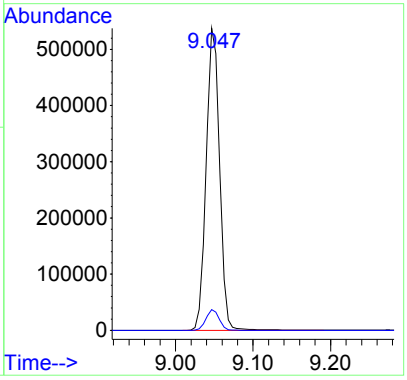


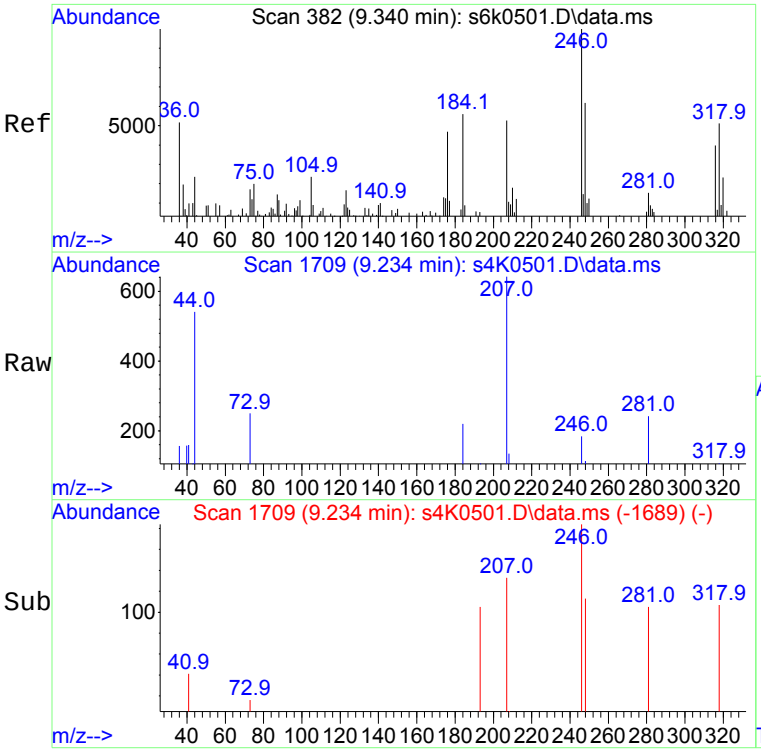


#4
Benzidine
Concen: 7.86 ug/l
RT: 9.047 min Scan# 1674
Delta R.T. 0.007 min
Lab File: s4K0501.D
Acq: 05 Nov 2022 15:15

Tgt Ion:184 Resp: 642791

Ion	Ratio	Lower	Upper
184	100		
156	6.7	0.0	106.6

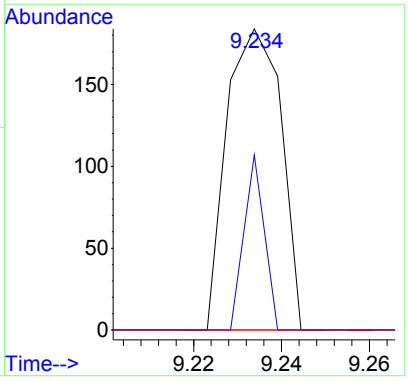


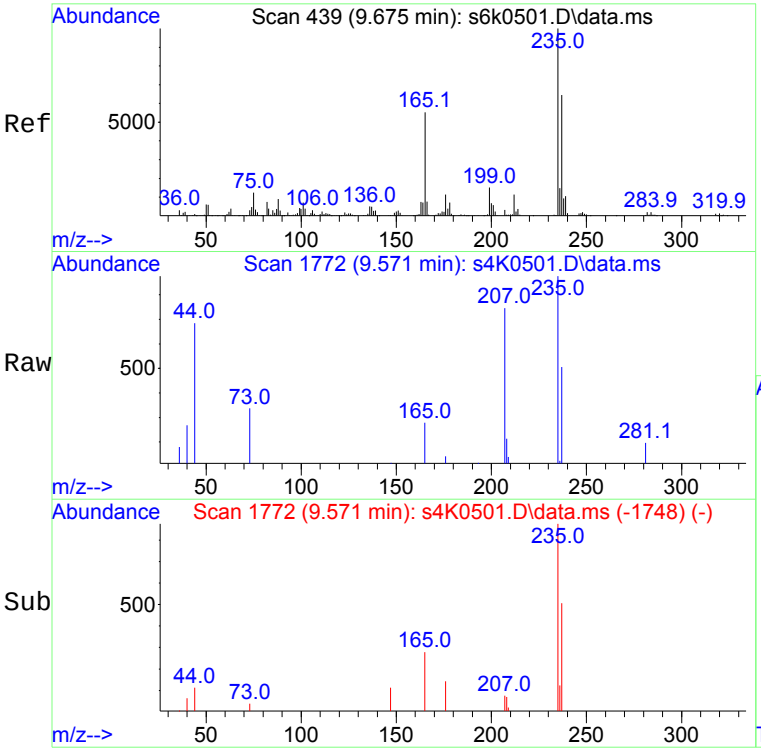


#5
DDE
Concen: 0.33 ug/l
RT: 9.234 min Scan# 1709
Delta R.T. 0.024 min
Lab File: s4K0501.D
Acq: 05 Nov 2022 15:15

Tgt Ion:246 Resp: 158

Ion	Ratio	Lower	Upper
246	100		
318	21.5	0.0	136.9
316	0.0	0.0	134.0

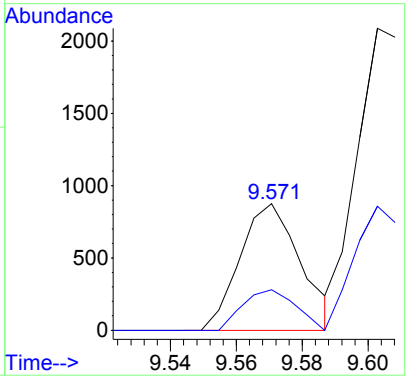


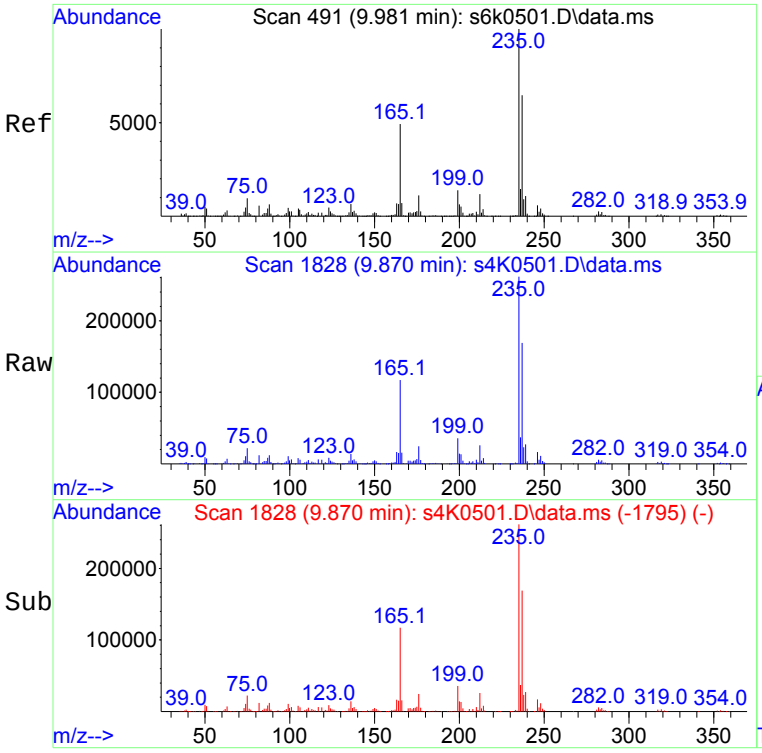


#6
DDD
Concen: 0.40 ug/l
RT: 9.571 min Scan# 1772
Delta R.T. -0.011 min
Lab File: s4K0501.D
Acq: 05 Nov 2022 15:15

Tgt Ion:235 Resp: 1114

Ion	Ratio	Lower	Upper
235	100		
165	27.9	0.0	140.9

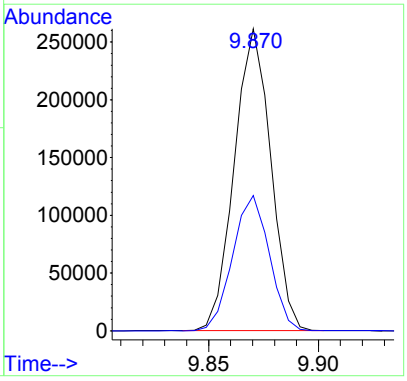




#7
DDT
Concen: 4.46 ug/l
RT: 9.870 min Scan# 1828
Delta R.T. -0.004 min
Lab File: s4K0501.D
Acq: 05 Nov 2022 15:15

Tgt Ion:235 Resp: 301807

Ion	Ratio	Lower	Upper
235	100		
165	45.1	0.0	143.9



8270 Breakdown Report

11/07/2022

Data File : C:\msdchem\1\data\S110522SCANICAL\s4K0501.D Vial: 1
Acq On : 05 Nov 2022 15:15 Operator: NM1
Sample : |WBN221014-99|DFTPP|1|SVM|1|DFTPP Inst : MSD4
Misc : Multiplr: 1.00
IntFile : rteint.p

11/07/2022

Compounds	Area/%Breakdown	8270C	8270D
DDE	158		
DDD	2451		
DDT	302871		
Breakdown	0.85%	Pass(<20)	Pass(<20)

Compounds	Tailing Factor	8270C	8270D
Benzidine	1.23	Pass(<3)	Pass(<2)
Pentachlorophenol	0.78	Pass(<5)	Pass(<2)

DFTPP Tune Report

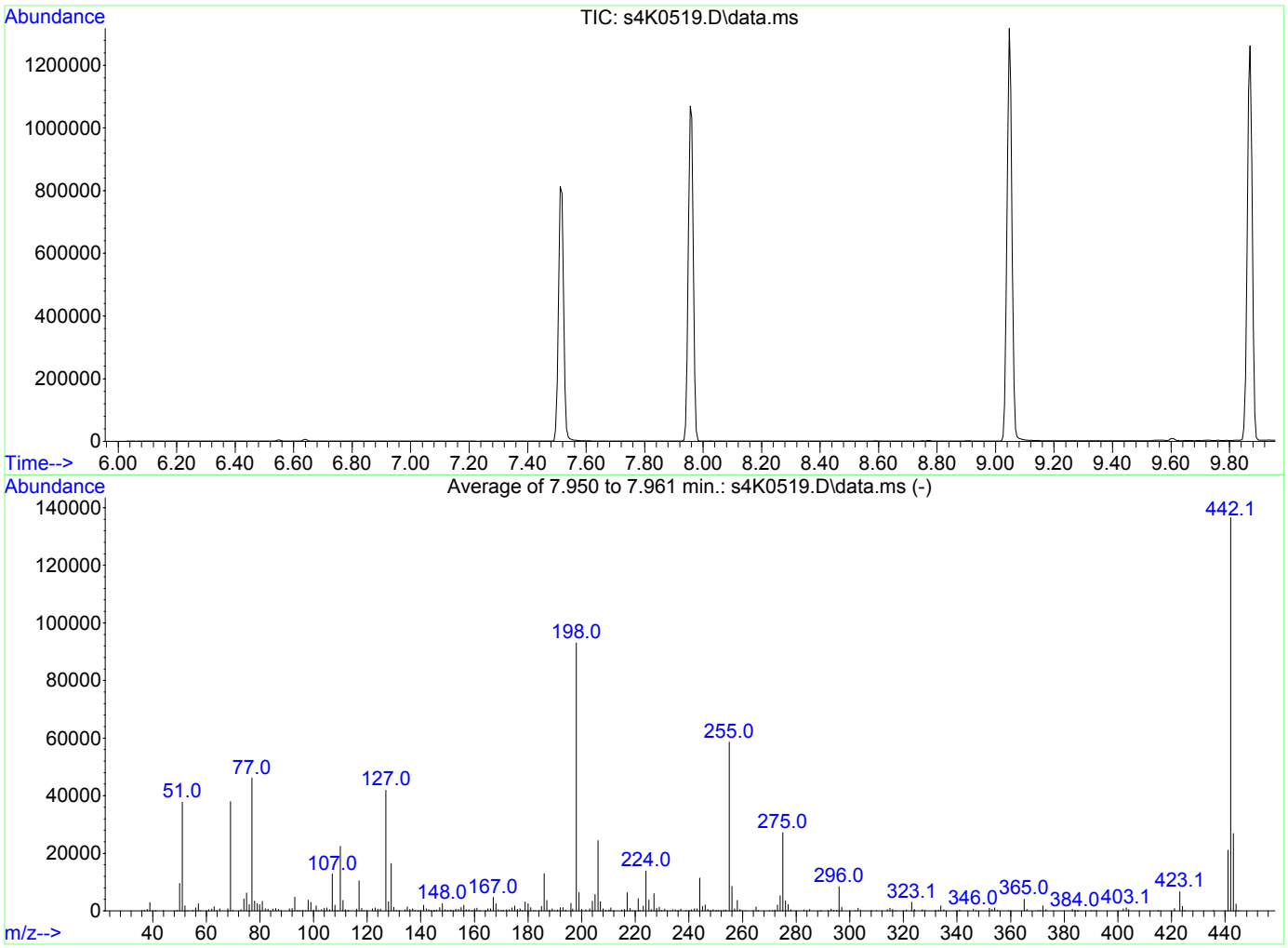
11/07/2022

Data Path : C:\msdchem\1\data\S110522SCANICAL\
Data File : s4K0519.D
Acq On : 05 Nov 2022 23:57
Operator : NM1
Sample : |WBN221014-99|DFTPP|1|SVM|1|DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

11/07/2022

Integration File: rteint.p

Method : C:\msdchem\1\data\S110522SCANICAL\BNABrk_Down8270E.m
Title : dftpp / endrin / ddt
Last Update : Fri Mar 29 12:50:37 2019



AutoFind: Scans 1469, 1470, 1471; Background Corrected with Scan 1463

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	1.8	694	PASS
69	198	0.00	100	40.8	37976	PASS
70	69	0.00	2	0.6	229	PASS
197	198	0.00	2	0.7	645	PASS
198	442	0.01	100	68.1	93051	PASS
199	198	5	9	6.8	6297	PASS
365	198	1	100	4.4	4083	PASS
441	443	0.01	150	78.7	21138	PASS
442	442	0.01	100	100.0	136579	PASS
443	442	15	24	19.7	26864	PASS

This report evaluates the Rel Abn% as passing only if it is greater than the Lower Limit and lower than the Upper Limit.

Quantitation Report

11/07/2022

Data Path : C:\msdchem\1\data\S110522SCANICAL\
Data File : s4K0519.D
Acq On : 05 Nov 2022 23:57
Operator : NM1
Sample : |WBN221014-99|DFTPP|1|SVM|1|DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

11/07/2022

Quant Time: Nov 07 10:07:54 2022
Quant Method : C:\msdchem\1\data\S110522SCANICAL\BNABrk_Down8270E.m
Quant Title : dftpp / endrin / ddt
QLast Update : Fri Mar 29 12:50:37 2019
Response via : Initial Calibration

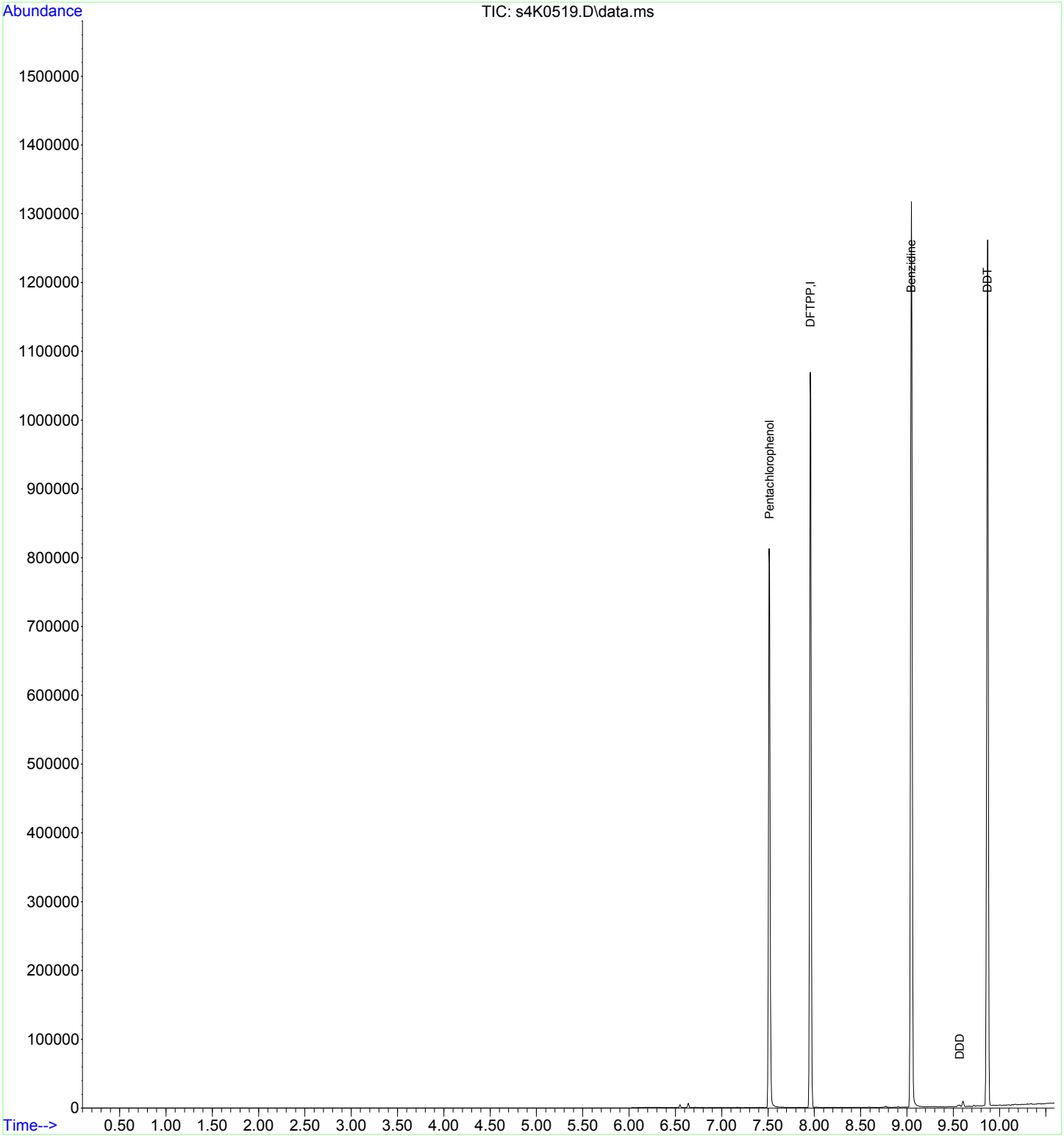
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) DFTPP	TIC	7.956	7.955	1.000	1273018	5.00	ug/l	# 0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) DFTPP	TIC	7.956	7.934	1.000	1273018	No Calib	#	
3) Pentachlorophenol	266	7.517	7.514	0.945	133929	8.09	ug/l	99
4) Benzidine	184	9.047	9.039	1.137	627505	7.78	ug/l	99
5) DDE		0.000	9.210	0.000	0	N.D.		
6) DDD	235	9.571	9.582	1.203	1051	0.38	ug/l	91
7) DDT	235	9.870	9.875	1.241	295166	4.43	ug/l	99

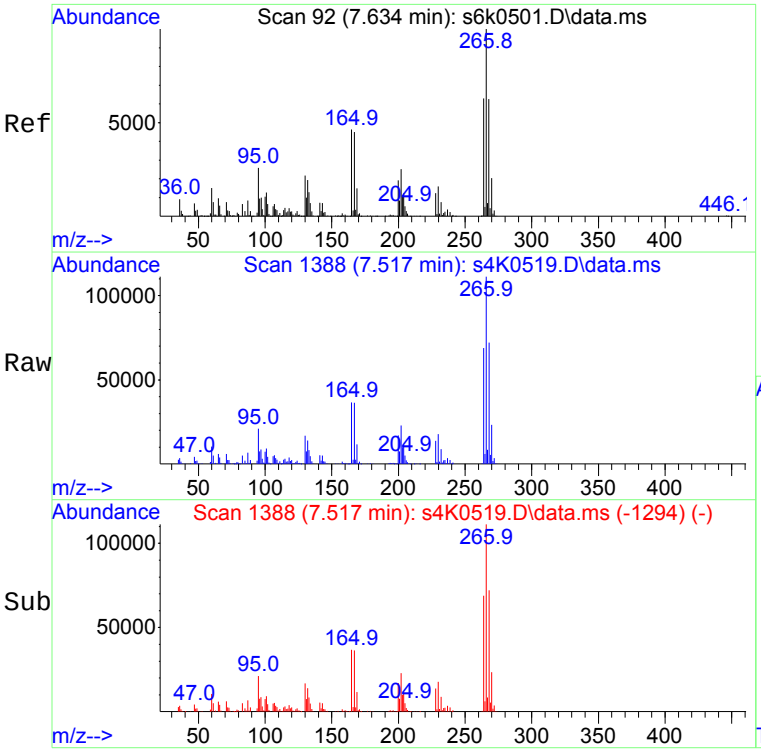
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report

Data Path : C:\msdchem\1\data\S110522SCANICAL\
Data File : s4K0519.D
Acq On : 05 Nov 2022 23:57
Operator : NM1
Sample : |WBN221014-99|DFTPP|1|SVM|1|DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Nov 07 10:07:54 2022
Quant Method : C:\msdchem\1\data\S110522SCANICAL\BNABrk_Down8270E.m
Quant Title : dftpp / endrin / ddt
QLast Update : Fri Mar 29 12:50:37 2019
Response via : Initial Calibration

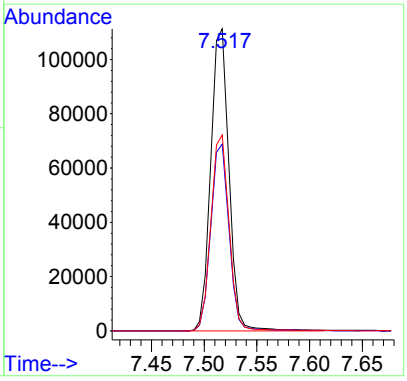


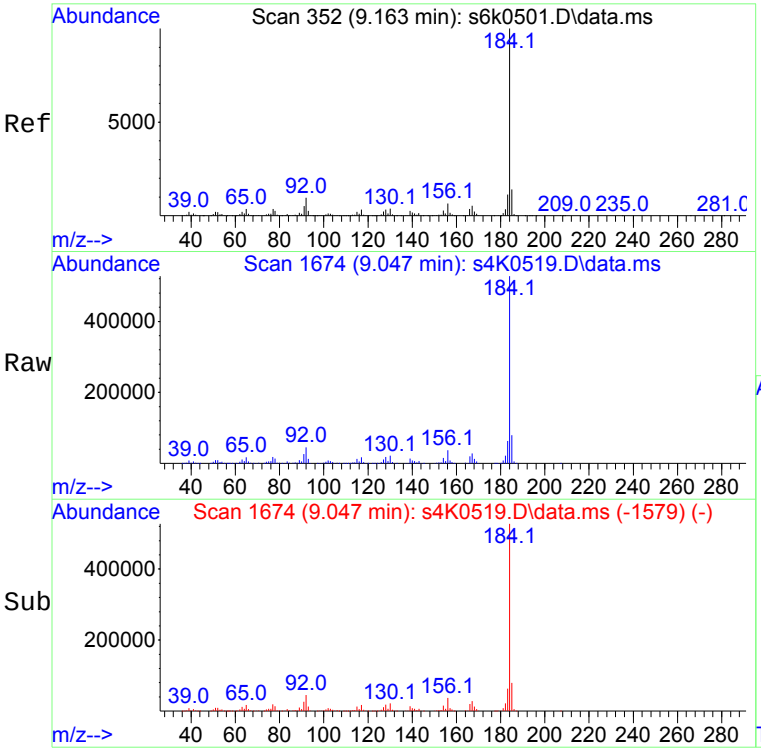


#3
Pentachlorophenol
Concen: 8.09 ug/l
RT: 7.517 min Scan# 1388
Delta R.T. 0.003 min
Lab File: s4K0519.D
Acq: 05 Nov 2022 23:57

Tgt Ion:266 Resp: 133929

Ion	Ratio	Lower	Upper
266	100		
264	62.0	0.0	162.7
268	65.0	0.0	163.8

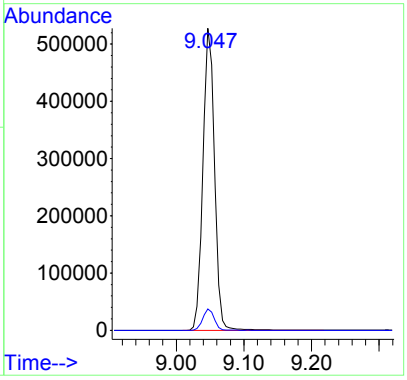


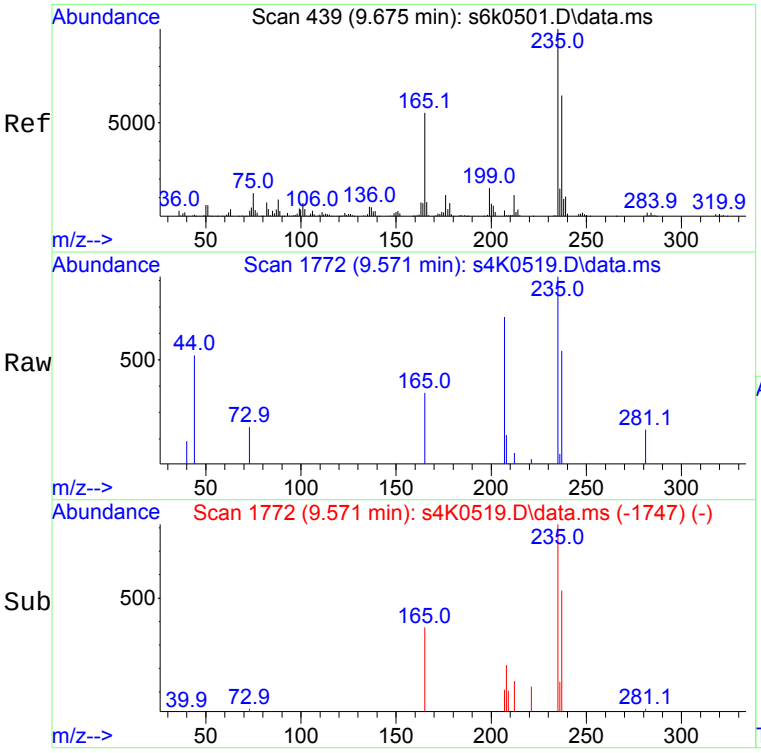


#4
Benzidine
Concen: 7.78 ug/l
RT: 9.047 min Scan# 1674
Delta R.T. 0.007 min
Lab File: s4K0519.D
Acq: 05 Nov 2022 23:57

Tgt Ion:184 Resp: 627505

Ion	Ratio	Lower	Upper
184	100		
156	6.9	0.0	106.6

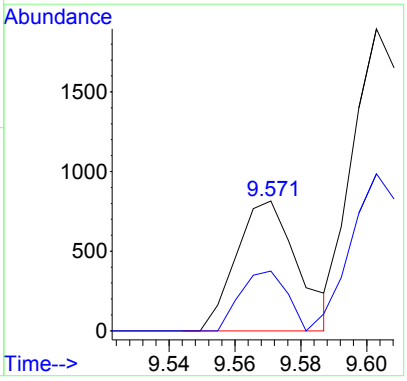


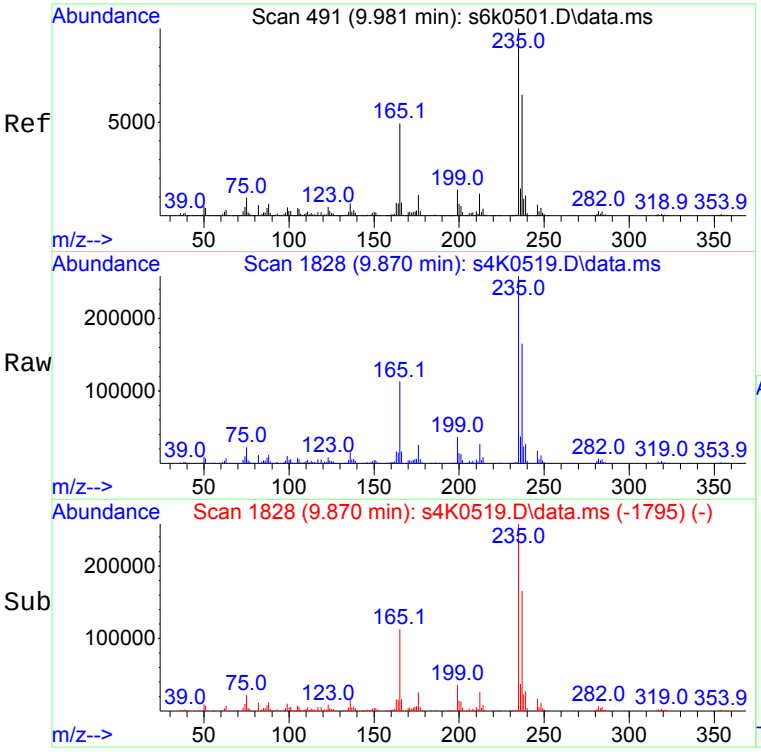


#6
DDD
Concen: 0.38 ug/l
RT: 9.571 min Scan# 1772
Delta R.T. -0.011 min
Lab File: s4K0519.D
Acq: 05 Nov 2022 23:57

Tgt Ion:235 Resp: 1051

Ion	Ratio	Lower	Upper
235	100		
165	35.0	0.0	140.9

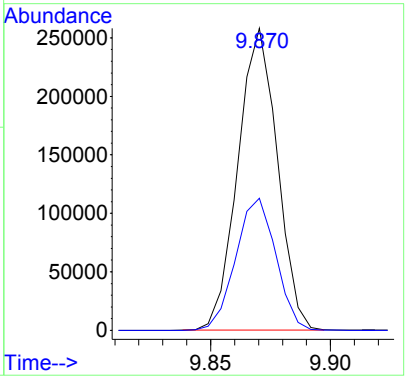




#7
DDT
Concen: 4.43 ug/l
RT: 9.870 min Scan# 1828
Delta R.T. -0.004 min
Lab File: s4K0519.D
Acq: 05 Nov 2022 23:57

Tgt Ion:235 Resp: 295166

Ion	Ratio	Lower	Upper
235	100		
165	44.5	0.0	143.9



8270 Breakdown Report

11/07/2022

Data File : C:\msdchem\1\data\S110522SCANICAL\s4K0519.D Vial: 1
Acq On : 05 Nov 2022 23:57 Operator: NM1
Sample : |WBN221014-99|DFTPP|1|SVM|1|DFTPP Inst : MSD4
Misc : Multiplr: 1.00
IntFile : rteint.p

11/07/2022

Compounds	Area/%Breakdown	8270C	8270D
DDE	0		
DDD	2186		
DDT	296182		
Breakdown	0.73%	Pass(<20)	Pass(<20)

Compounds	Tailing Factor	8270C	8270D
Benzidine	1.18	Pass(<3)	Pass(<2)
Pentachlorophenol	0.78	Pass(<5)	Pass(<2)

DFTPP Tune Report

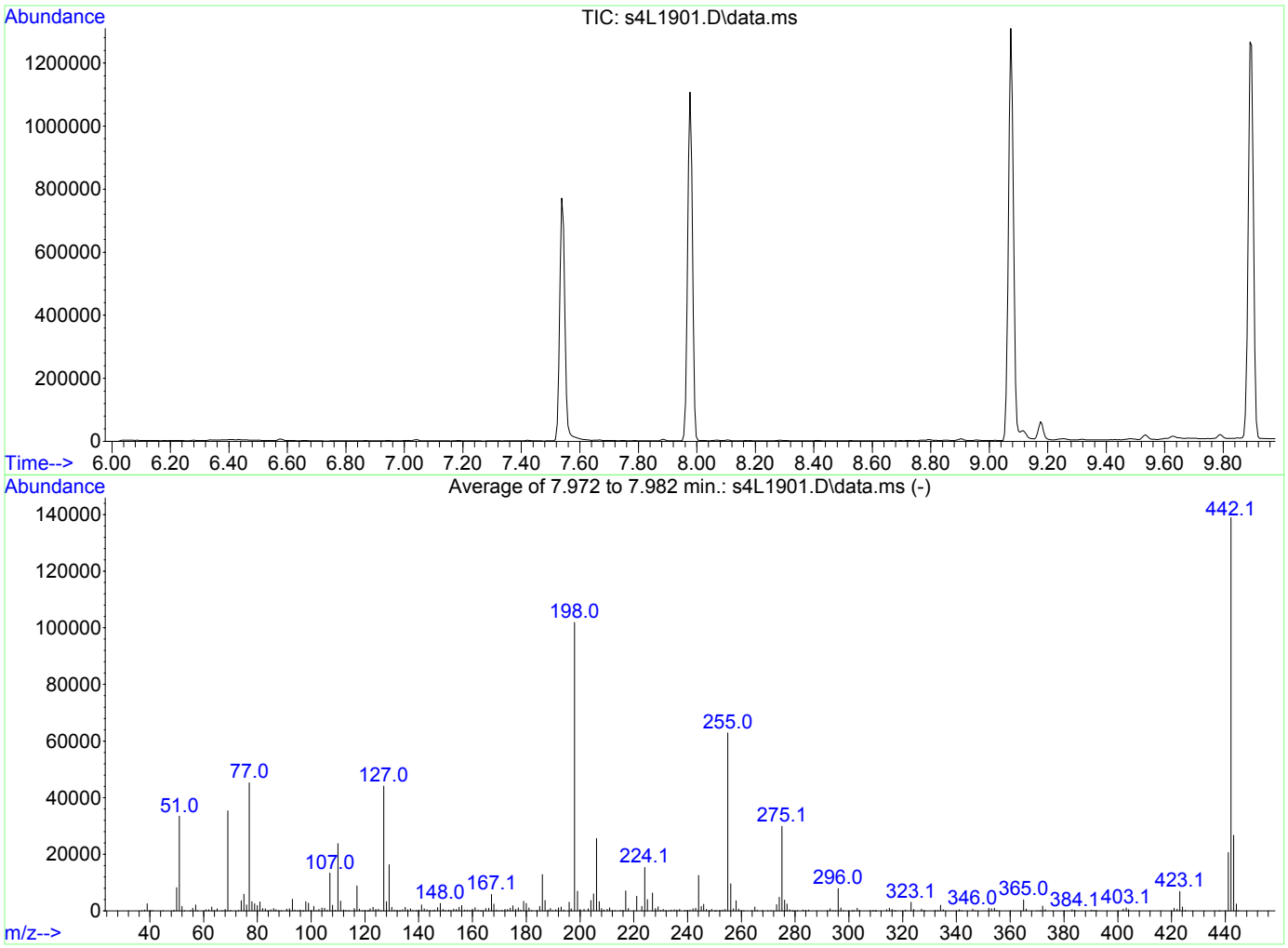
12/22/2022

Data Path : C:\msdchem\1\data\S121922\
Data File : s4L1901.D
Acq On : 19 Dec 2022 13:51
Operator : NM1
Sample : |WBN221215-99|DFTPP|1|SVM|1|DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

12/22/2022

Integration File: rteint.p

Method : C:\msdchem\1\data\S121922\BNABrk_Down8270E.m
Title : dftpp / endrin / ddt
Last Update : Fri Mar 29 12:50:37 2019



AutoFind: Scans 1473, 1474, 1475; Background Corrected with Scan 1466

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	1.5	544	PASS
69	198	0.00	100	34.7	35352	PASS
70	69	0.00	2	0.6	213	PASS
197	198	0.00	2	0.7	707	PASS
198	442	0.01	100	73.4	101936	PASS
199	198	5	9	6.9	6990	PASS
365	198	1	100	3.8	3897	PASS
441	443	0.01	150	77.5	20669	PASS
442	442	0.01	100	100.0	138941	PASS
443	442	15	24	19.2	26683	PASS

This report evaluates the Rel Abn% as passing only if it is greater than the Lower Limit and lower than the Upper Limit.

Quantitation Report

12/22/2022

Data Path : C:\msdchem\1\data\S121922\
Data File : s4L1901.D
Acq On : 19 Dec 2022 13:51
Operator : NM1
Sample : |WBN221215-99|DFTPP|1|SVM|1|DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 19 14:04:58 2022
Quant Method : C:\msdchem\1\data\S121922\BNABrk_Down8270E.m
Quant Title : dftpp / endrin / ddt
QLast Update : Fri Mar 29 12:50:37 2019
Response via : Initial Calibration

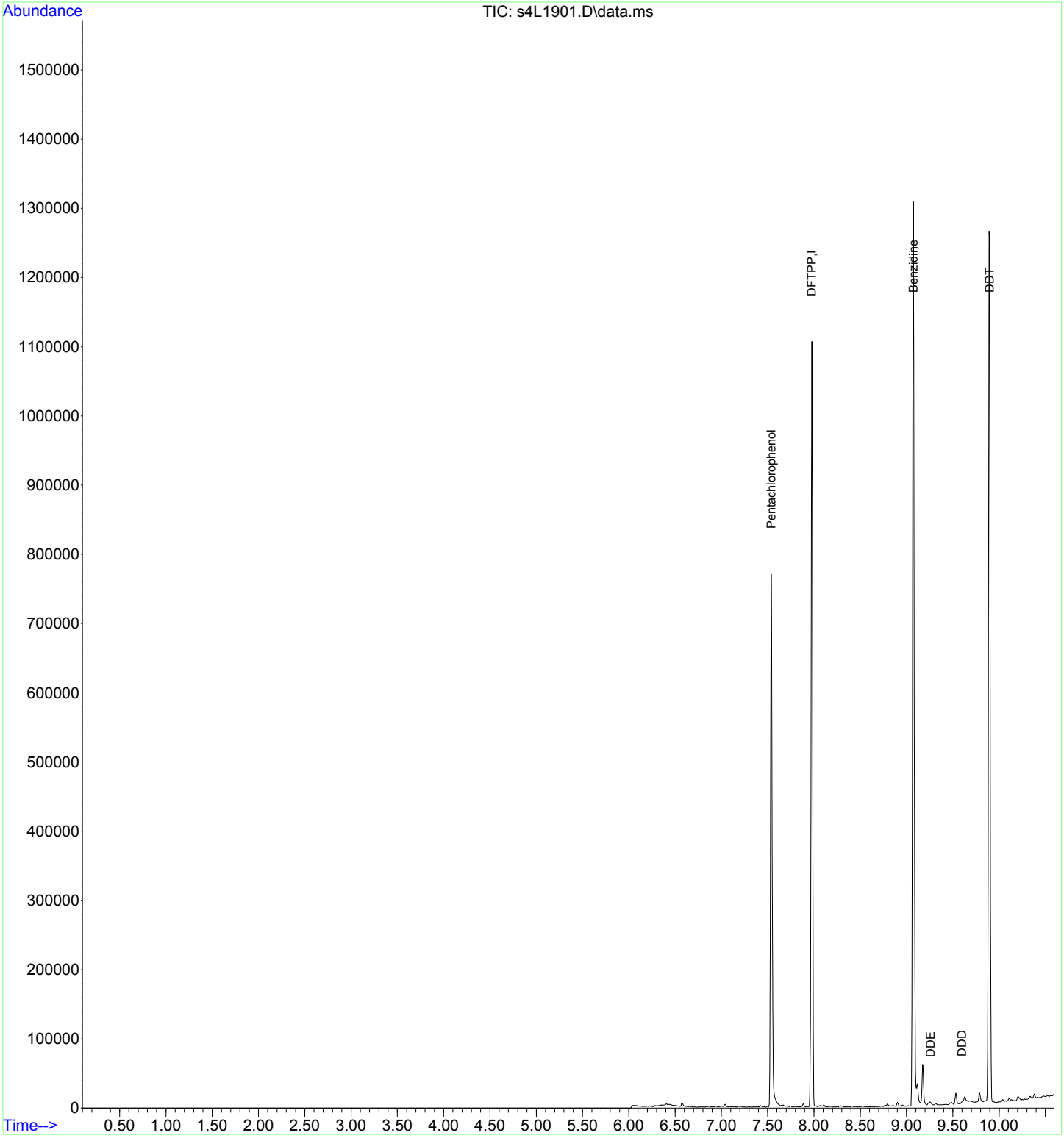
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) DFTPP	TIC	7.977	7.966	1.000	1271649	5.00	ug/l	# 0.01
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) DFTPP	TIC	7.977	7.966	1.000	1271649	No Calib	#	
3) Pentachlorophenol	266	7.538	7.528	0.945	132511	8.02	ug/l	99
4) Benzidine	184	9.073	9.057	1.137	652841	8.10	ug/l	100
5) DDE	246	9.261	9.245	1.161	585	1.26	ug/l	92
6) DDD	235	9.598	9.581	1.203	1285	0.47	ug/l	99
7) DDT	235	9.897	9.881	1.241	325493	4.89	ug/l	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report

Data Path : C:\msdchem\1\data\S121922\
Data File : s4L1901.D
Acq On : 19 Dec 2022 13:51
Operator : NM1
Sample : |WBN221215-99|DFTPP|1|SVM|1|DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 19 14:04:58 2022
Quant Method : C:\msdchem\1\data\S121922\BNABrk_Down8270E.m
Quant Title : dftpp / endrin / ddt
QLast Update : Fri Mar 29 12:50:37 2019
Response via : Initial Calibration



8270 Breakdown Report

12/22/2022

Data File : C:\msdchem\1\data\S121922\s4L1901.D Vial: 1
Acq On : 19 Dec 2022 13:51 Operator: NM1
Sample : |WBN221215-99|DFTPP|1|SVM|1|DFTPP Inst : MSD4
Misc : Multiplr: 1.00
IntFile : rteint.p

12/22/2022

Compounds	Area/%Breakdown	8270C	8270D
DDE	585		
DDD	1285		
DDT	325493		
Breakdown	0.57%	Pass(<20)	Pass(<20)

Compounds	Tailing Factor	8270C	8270D
Benzidine	1.17	Pass(<3)	Pass(<2)
Pentachlorophenol	1.37	Pass(<5)	Pass(<2)

DFTPP Tune Report

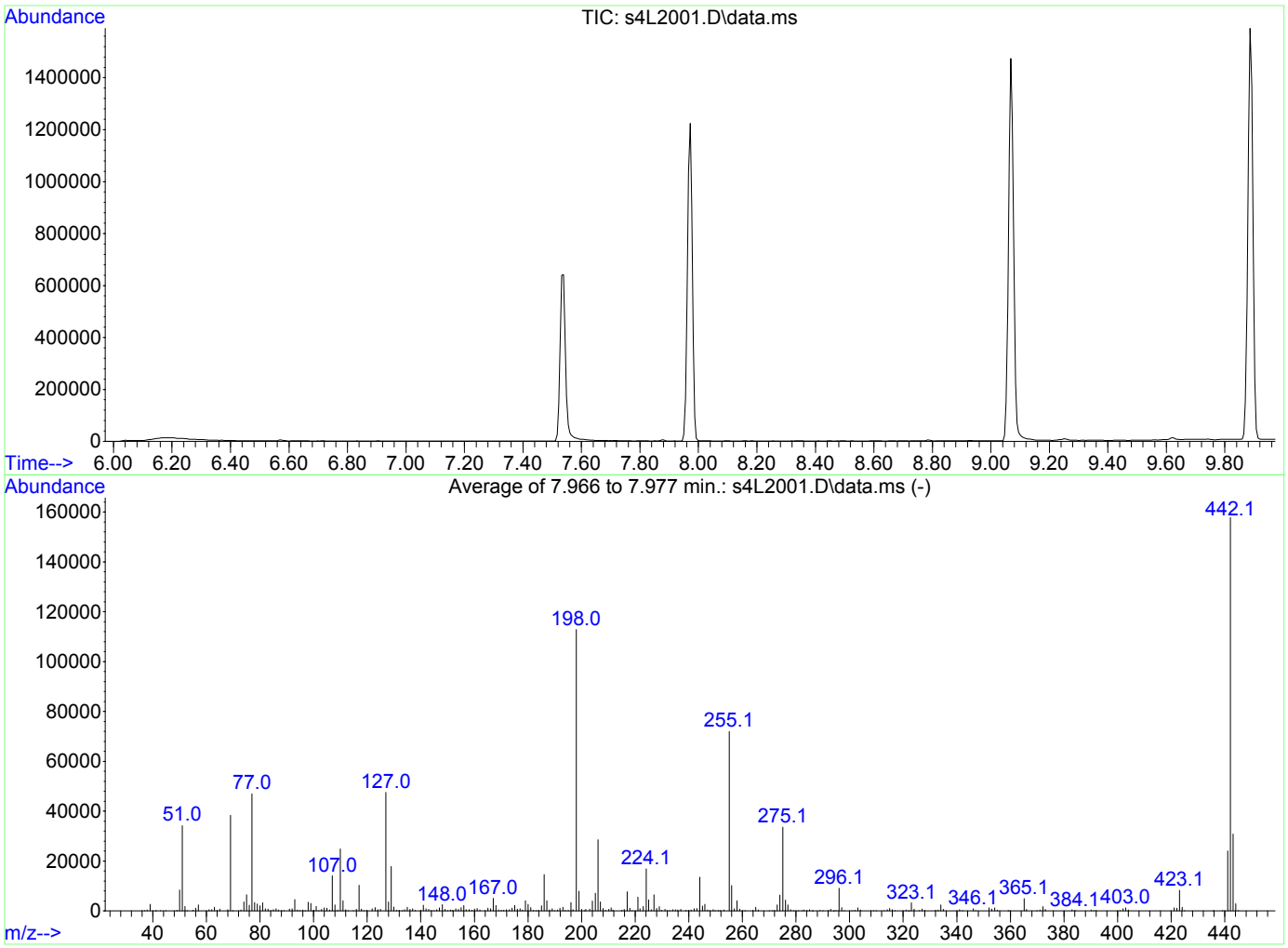
12/22/2022

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2001.D
Acq On : 20 Dec 2022 12:05
Operator : NM1
Sample : |WBN221215-99|DFTPP|1|SVM|1|DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

12/22/2022

Integration File: rteint.p

Method : C:\msdchem\1\data\S122022\BNABrk_Down8270E.m
Title : dftpp / endrin / ddt
Last Update : Fri Mar 29 12:50:37 2019



AutoFind: Scans 1472, 1473, 1474; Background Corrected with Scan 1465

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	1.2	456	PASS
69	198	0.00	100	33.9	38304	PASS
70	69	0.00	2	0.4	157	PASS
197	198	0.00	2	0.5	517	PASS
198	442	0.01	100	71.6	112933	PASS
199	198	5	9	7.0	7876	PASS
365	198	1	100	4.3	4877	PASS
441	443	0.01	150	77.9	24056	PASS
442	442	0.01	100	100.0	157773	PASS
443	442	15	24	19.6	30864	PASS

This report evaluates the Rel Abn% as passing only if it is greater than the Lower Limit and lower than the Upper Limit.

Quantitation Report

12/22/2022

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2001.D
Acq On : 20 Dec 2022 12:05
Operator : NM1
Sample : |WBN221215-99|DFTPP|1|SVM|1|DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 21 11:58:03 2022
Quant Method : C:\msdchem\1\data\S122022\BNABrk_Down8270E.m
Quant Title : dftpp / endrin / ddt
QLast Update : Fri Mar 29 12:50:37 2019
Response via : Initial Calibration

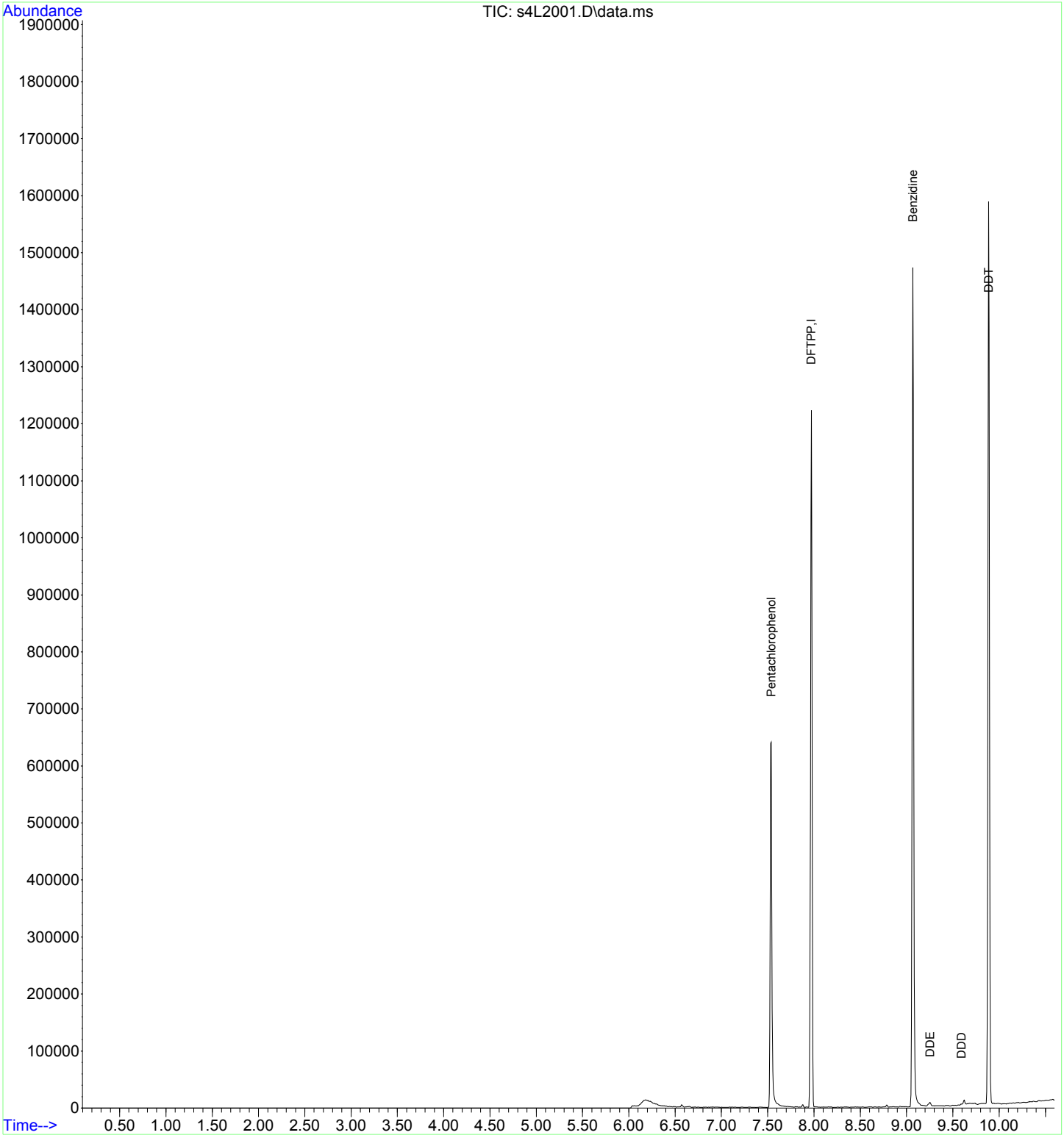
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) DFTPP	TIC	7.972	7.966	1.000	1410290	5.00	ug/l	# 0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) DFTPP	TIC	7.972	7.966	1.000	1410290	No Calib	#	
3) Pentachlorophenol	266	7.538	7.528	0.946	117888	6.43	ug/l	99
4) Benzidine	184	9.068	9.057	1.138	739914	8.28	ug/l	100
5) DDE	246	9.255	9.245	1.161	934	1.81	ug/l	81
6) DDD	235	9.592	9.581	1.203	1048	0.34	ug/l	96
7) DDT	235	9.886	9.881	1.240	394556	5.34	ug/l	100

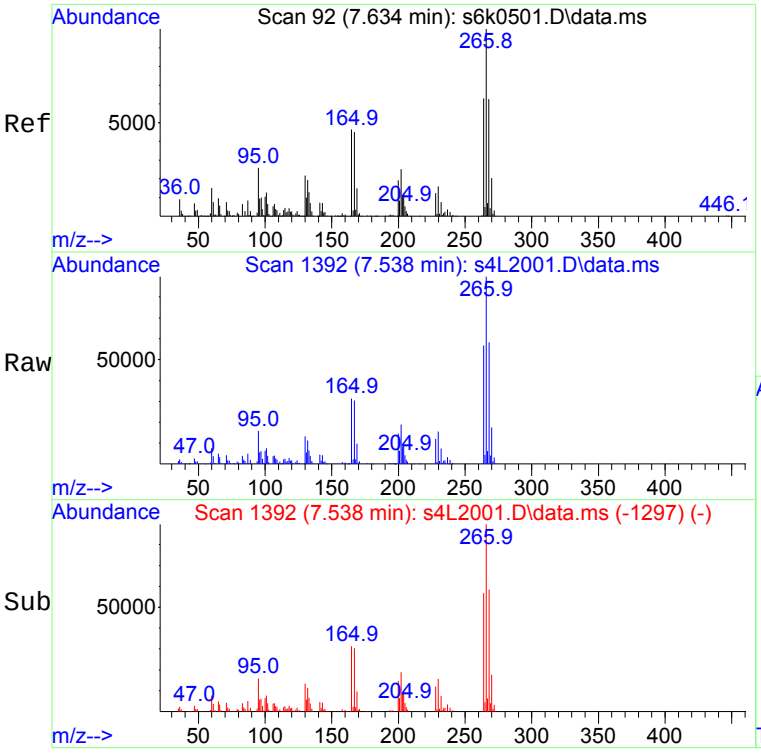
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2001.D
Acq On : 20 Dec 2022 12:05
Operator : NM1
Sample : |WBN221215-99|DFTPP|1|SVM|1|DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 21 11:58:03 2022
Quant Method : C:\msdchem\1\data\S122022\BNABrk_Down8270E.m
Quant Title : dftpp / endrin / ddt
QLast Update : Fri Mar 29 12:50:37 2019
Response via : Initial Calibration

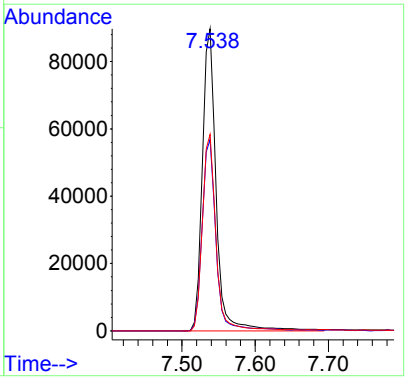


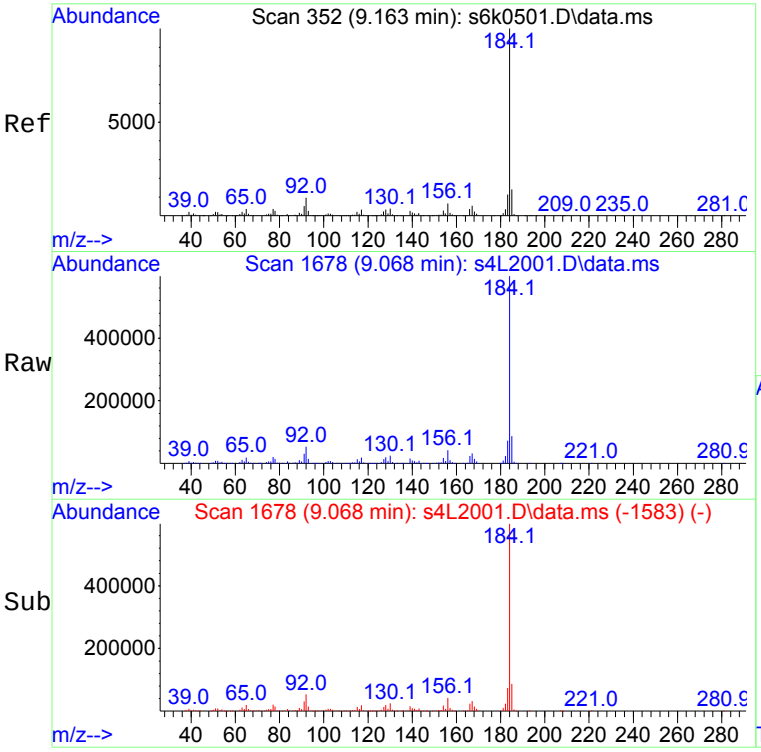


#3
Pentachlorophenol
Concen: 6.43 ug/l
RT: 7.538 min Scan# 1392
Delta R.T. 0.011 min
Lab File: s4L2001.D
Acq: 20 Dec 2022 12:05

Tgt Ion:266 Resp: 117888

Ion	Ratio	Lower	Upper
266	100		
264	63.0	0.0	162.4
268	64.1	0.0	164.3

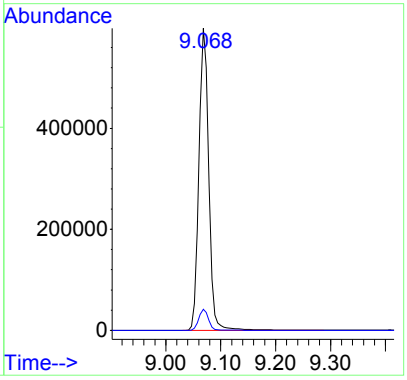


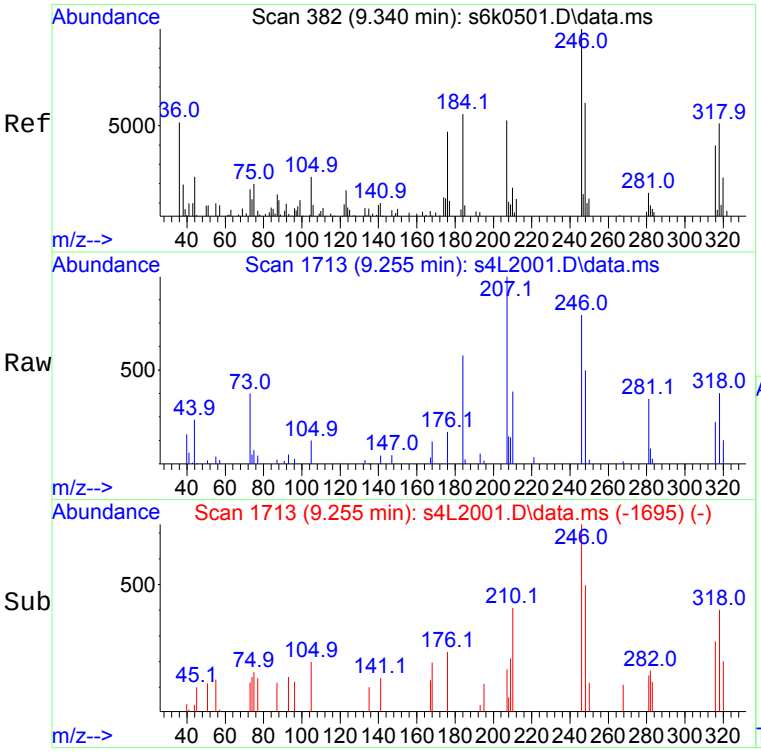


#4
Benzidine
Concen: 8.28 ug/l
RT: 9.068 min Scan# 1678
Delta R.T. 0.011 min
Lab File: s4L2001.D
Acq: 20 Dec 2022 12:05

Tgt Ion:184 Resp: 739914

Ion	Ratio	Lower	Upper
184	100		
156	6.8	0.0	106.8

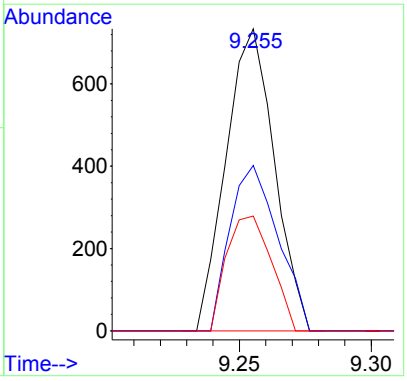


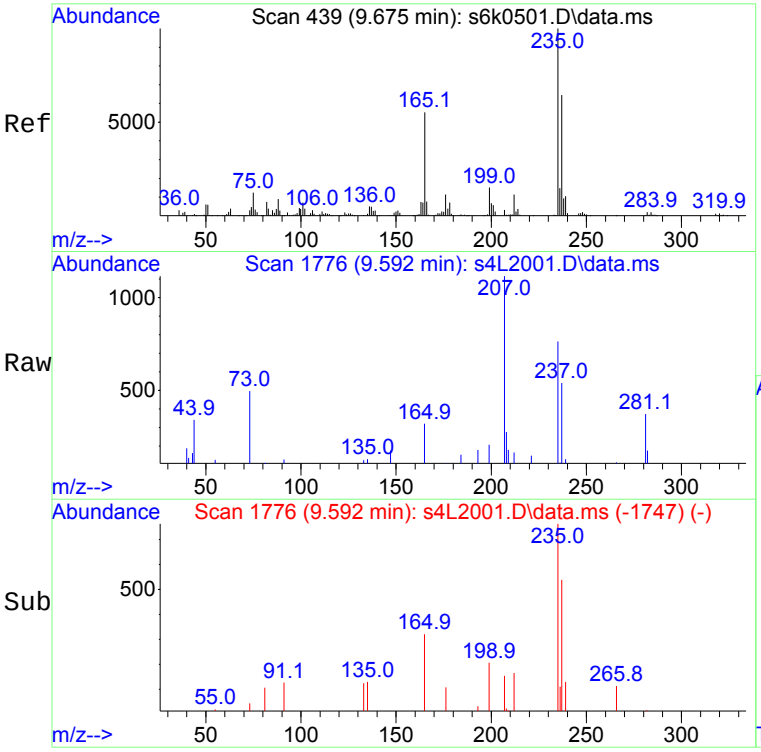


#5
DDE
Concen: 1.81 ug/l
RT: 9.255 min Scan# 1713
Delta R.T. 0.011 min
Lab File: s4L2001.D
Acq: 20 Dec 2022 12:05

Tgt Ion:246 Resp: 934

Ion	Ratio	Lower	Upper
246	100		
318	54.5	0.0	156.6
316	35.2	0.0	161.6

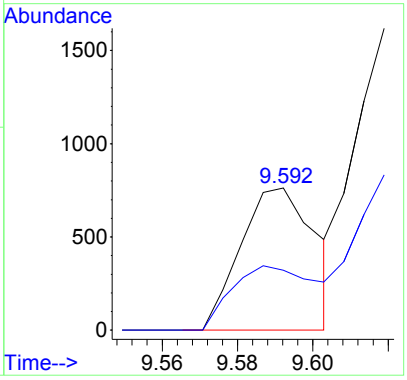


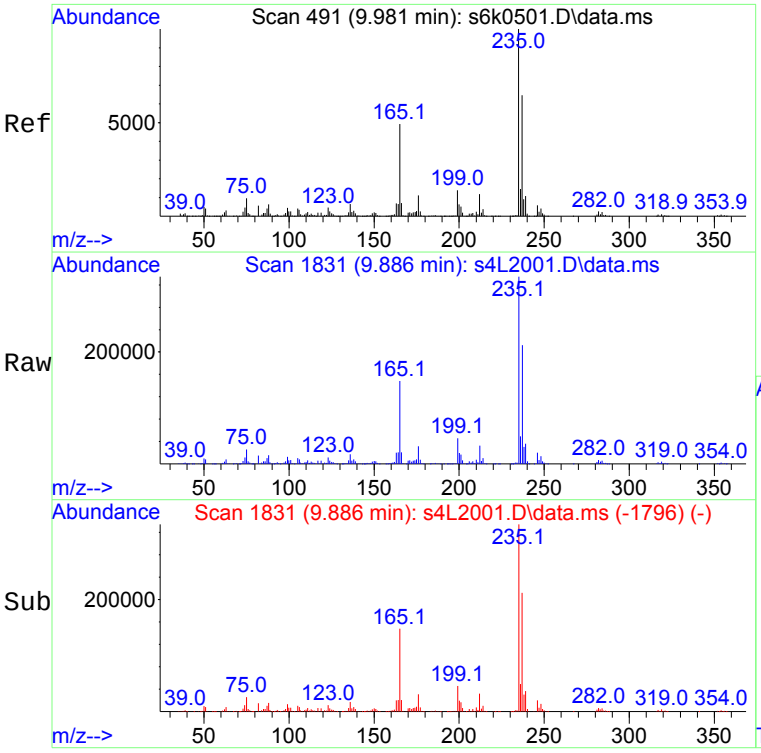


#6
DDD
Concen: 0.34 ug/l
RT: 9.592 min Scan# 1776
Delta R.T. 0.011 min
Lab File: s4L2001.D
Acq: 20 Dec 2022 12:05

Tgt Ion:235 Resp: 1048

Ion	Ratio	Lower	Upper
235	100		
165	50.6	0.0	147.7

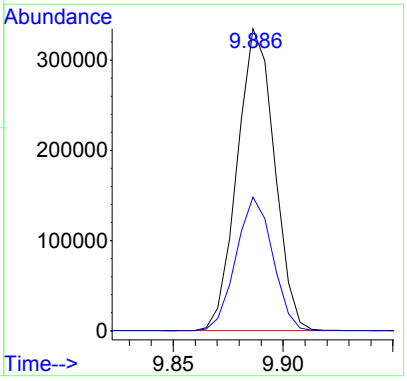




#7
DDT
Concen: 5.34 ug/l
RT: 9.886 min Scan# 1831
Delta R.T. 0.005 min
Lab File: s4L2001.D
Acq: 20 Dec 2022 12:05

Tgt Ion:235 Resp: 394556

Ion	Ratio	Lower	Upper
235	100		
165	43.8	0.0	144.0



8270 Breakdown Report

12/22/2022

Data File : C:\msdchem\1\data\S122022\s4L2001.D Vial: 1
Acq On : 20 Dec 2022 12:05 Operator: NM1
Sample : |WBN221215-99|DFTPP|1|SVM|1|DFTPP Inst : MSD4
Misc : Multiplr: 1.00
IntFile : rteint.p

12/22/2022

Compounds	Area/%Breakdown	8270C	8270D
DDE	934		
DDD	1048		
DDT	394556		
Breakdown	0.50%	Pass(<20)	Pass(<20)

Compounds	Tailing Factor	8270C	8270D
Benzidine	1.21	Pass(<3)	Pass(<2)
Pentachlorophenol	0.92	Pass(<5)	Pass(<2)

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**			**Matrix:**	**WATER**
Lab Sample ID:	**1205274620**				
Client Sample:	**QC for batch 2358005**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**MB for batch 2358005**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 18:23**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**S121922\s4L1908.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
1610-18-0	Prometon	U	3.00	ug/L	3.00	10.0
126-33-0	Sulfolane	U	3.00	ug/L	3.00	10.0
PAH-tot-3a	Total PAHs 3a	U	0.000	ug/L		
62-75-9	N-Methyl-N-nitrosomethylamine	U	3.00	ug/L	3.00	10.0
108-95-2	Phenol	U	3.00	ug/L	3.00	10.0
111-44-4	bis(2-Chloroethyl) ether	U	3.00	ug/L	3.00	10.0
108-60-1	bis(2-Chloro-1-methylethyl)ether	U	3.00	ug/L	3.00	10.0
67-72-1	Hexachloroethane	U	3.00	ug/L	3.00	10.0
98-95-3	Nitrobenzene	U	3.00	ug/L	3.00	10.0
78-59-1	Isophorone	U	3.50	ug/L	3.50	10.0
120-83-2	2,4-Dichlorophenol	U	3.00	ug/L	3.00	10.0
87-68-3	Hexachlorobutadiene	U	3.00	ug/L	3.00	10.0
91-57-6	2-Methylnaphthalene	U	0.300	ug/L	0.300	1.00
91-20-3	Naphthalene	U	0.300	ug/L	0.300	1.00
90-12-0	1-Methylnaphthalene	U	0.300	ug/L	0.300	1.00
77-47-4	Hexachlorocyclopentadiene	U	3.00	ug/L	3.00	10.0
88-06-2	2,4,6-Trichlorophenol	U	3.00	ug/L	3.00	10.0
95-95-4	2,4,5-Trichlorophenol	U	3.00	ug/L	3.00	10.0
131-11-3	Dimethylphthalate	U	0.300	ug/L	0.300	1.00
606-20-2	2,6-Dinitrotoluene	U	3.00	ug/L	3.00	10.0
121-14-2	2,4-Dinitrotoluene	U	3.00	ug/L	3.00	10.0
51-28-5	2,4-Dinitrophenol	U	5.00	ug/L	5.00	20.0
84-66-2	Diethylphthalate	U	0.300	ug/L	0.300	1.00
86-73-7	Fluorene	U	0.300	ug/L	0.300	1.00
534-52-1	2-Methyl-4,6-dinitrophenol	U	3.00	ug/L	3.00	10.0
122-39-4	Diphenylamine	U	3.00	ug/L	3.00	10.0
103-33-3	Azobenzene	U	3.00	ug/L	3.00	10.0
122-66-7	*1,2-Diphenylhydrazine*					
118-74-1	Hexachlorobenzene	U	3.00	ug/L	3.00	10.0
87-86-5	Pentachlorophenol	U	3.00	ug/L	3.00	10.0
85-01-8	Phenanthrene	U	0.300	ug/L	0.300	1.00
120-12-7	Anthracene	U	0.300	ug/L	0.300	1.00
84-74-2	Di-n-butylphthalate	U	0.300	ug/L	0.300	1.00
206-44-0	Fluoranthene	U	0.300	ug/L	0.300	1.00
129-00-0	Pyrene	U	0.300	ug/L	0.300	1.00
117-81-7	bis(2-Ethylhexyl)phthalate	U	0.300	ug/L	0.300	1.00
205-99-2	Benzo(b)fluoranthene	U	0.300	ug/L	0.300	1.00
207-08-9	Benzo(k)fluoranthene	U	0.300	ug/L	0.300	1.00
50-32-8	Benzo(a)pyrene	U	0.300	ug/L	0.300	1.00

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**			**Matrix:**	**WATER**
Lab Sample ID:	**1205274620**				
Client Sample:	**QC for batch 2358005**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**MB for batch 2358005**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 18:23**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**S121922\s4L1908.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
123-91-1	1,4-Dioxane	U	3.00	ug/L	3.00	10.0
55-18-5	N-Nitrosodiethylamine	U	3.00	ug/L	3.00	10.0
930-55-2	N-Nitrosopyrrolidine	U	3.00	ug/L	3.00	10.0
924-16-3	N-Nitrosodi-n-butylamine	U	3.00	ug/L	3.00	10.0
95-94-3	1,2,4,5-Tetrachlorobenzene	U	3.00	ug/L	3.00	10.0
608-93-5	Pentachlorobenzene	U	3.00	ug/L	3.00	10.0
1912-24-9	Atrazine	U	3.00	ug/L	3.00	10.0
92-87-5	Benzidine	U	3.90	ug/L	3.90	10.0
91-94-1	3,3'-Dichlorobenzidine	U	3.00	ug/L	3.00	10.0

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
2,4,6-Tribromophenol	69.4	100	ug/L	69	(37%-132%)
2-Fluorobiphenyl	36.8	50.0	ug/L	74	(39%-112%)
2-Fluorophenol	37.1	100	ug/L	37	(11%-79%)
Nitrobenzene-d5	34.7	50.0	ug/L	69	(39%-112%)
Phenol-d5	27.9	100	ug/L	28	(15%-85%)
p-Terphenyl-d14	38.4	50.0	ug/L	77	(24%-129%)

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	Estimated RT	Units	Fit	Qual
	No Tentatively Identified Compounds Found		ug/L		

Quantitation Report

12/22/2022

Data Path : C:\msdchem\1\data\S121922\
Data File : s4L1908.D
Acq On : 19 Dec 2022 18:23
Operator : NM1
Sample : |1205274620|2358006|1|SVM|1|MB|||
Misc : |MSD1C70E_L|WATER|QC A|MIX[A,B,J,D,E]||
ALS Vial : 7 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 21 10:54:59 2022
Quant Method : C:\msdchem\1\data\S121922\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	5.754	5.749	1.000	146422	40.00	ng/uL	0.00
22) A Naphthalene-d8	136	7.690	7.690	1.000	564949	40.00	ng/uL	0.00
39) A Acenaphthene-d10	164	10.525	10.525	1.000	306417	40.00	ng/uL	0.00
64) A Phenanthrene-d10	188	12.948	12.948	1.000	623835	40.00	ng/uL	0.00
80) A Chrysene-d12	240	17.291	17.291	1.000	645046	40.00	ng/uL	0.00
88) A Perylene-d12	264	20.308	20.308	1.000	687528	40.00	ng/uL	0.00
96) B 1,4-Dichlorobenzene-d4	152	5.754	5.749	1.000	146422	40.00	ng/uL	0.00
112) B Naphthalene-d8	136	7.690	7.690	1.000	564949	40.00	ng/uL	0.00
120) B Acenaphthene-d10	164	10.525	10.525	1.000	306417	40.00	ng/uL	0.00
129) B Phenanthrene-d10	188	12.948	12.948	1.000	623835	40.00	ng/uL	0.00
142) B Chrysene-d12	240	17.291	17.291	1.000	645046	40.00	ng/uL	0.00
148) B Perylene-d12	264	20.308	20.308	1.000	687528	40.00	ng/uL	0.00
151) J Naphthalene-d8	136	7.690	7.690	1.000	564949	40.00	ng/uL	0.00
153) J Phenanthrene-d10	188	12.948	12.948	1.000	623835	40.00	ng/uL	0.00
156) J Chrysene-d12	240	17.291	17.291	1.000	645046	40.00	ng/uL	0.00
159) D Naphthalene-d8	136	7.690	7.690	1.000	564949	40.00	ng/uL	0.00
161) D Acenaphthene-d10	164	10.525	10.525	1.000	306417	40.00	ng/uL	0.00
164) D Phenanthrene-d10	188	12.948	12.948	1.000	623835	40.00	ng/uL	0.00
171) D Chrysene-d12	240	17.291	17.291	1.000	645046	40.00	ng/uL	0.00
173) E Naphthalene-d8	136	7.690	7.690	1.000	564949	40.00	ng/uL	0.00
175) E Perylene-d12	264	20.308	20.308	1.000	687528	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	3.941	3.941	0.685	181510	37.13	ng/uL	0.00
8) Phenol-d5	99	5.187	5.192	0.901	172284	27.88	ng/uL	0.00
23) Nitrobenzene-d5	82	6.572	6.572	0.855	204762	34.69	ng/uL	0.00
44) 2-Fluorobiphenyl	172	9.439	9.439	0.897	418716	36.79	ng/uL	0.00
63) 2,4,6-Tribromophenol	330	11.814	11.814	1.122	181453	69.36	ng/uL	0.00
79) p-Terphenyl-d14	244	15.579	15.579	1.203	632152	38.37	ng/uL	0.00

Compound	Amount	Range	Recovery
5) 2-Fluorophenol	100.000	11 - 79	37%
8) Phenol-d5	100.000	15 - 85	28%
23) Nitrobenzene-d5	50.000	39 - 112	69%
44) 2-Fluorobiphenyl	50.000	39 - 112	74%
63) 2,4,6-Tribromophenol	100.000	37 - 132	69%
79) p-Terphenyl-d14	50.000	24 - 129	77%

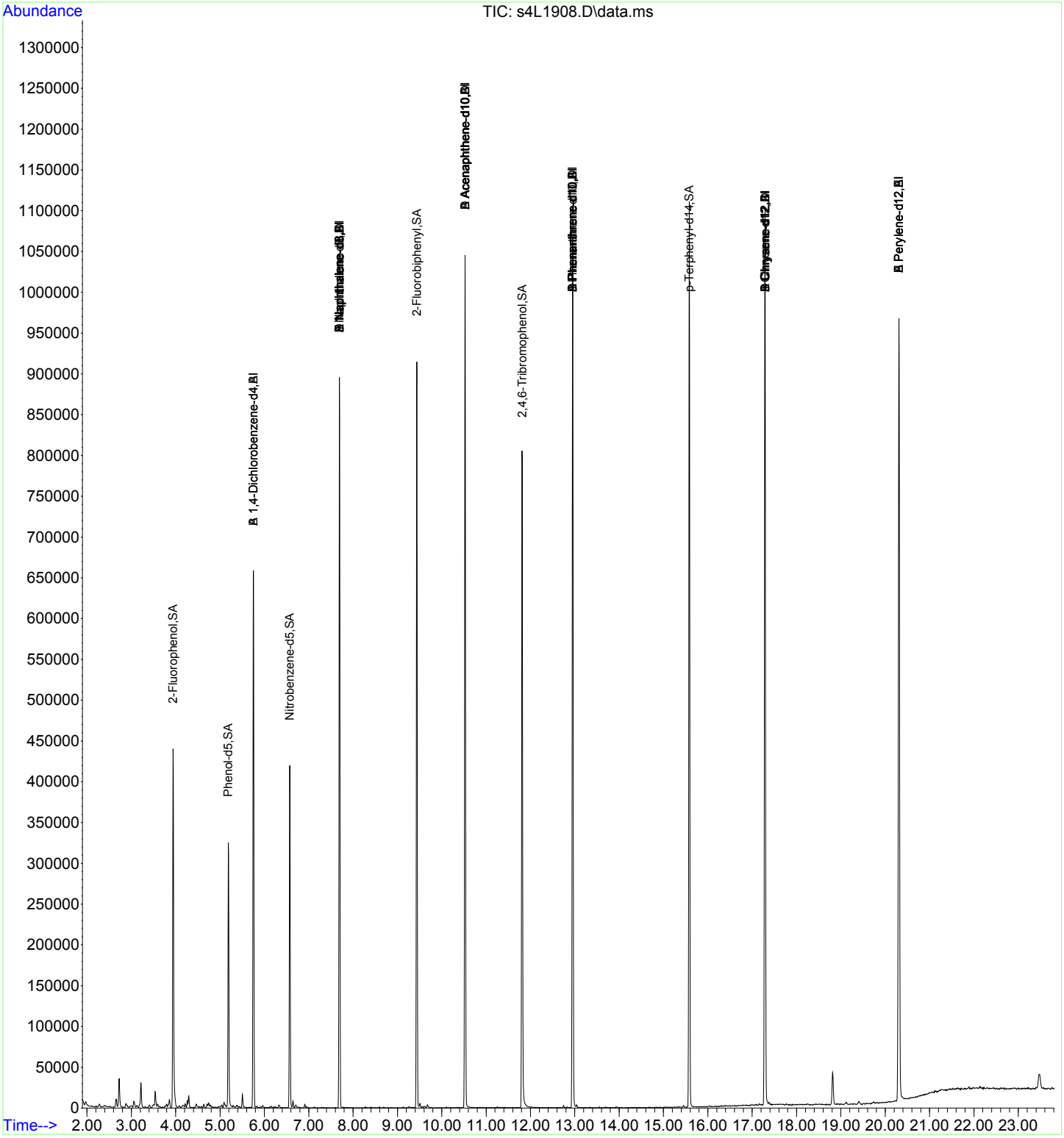
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue

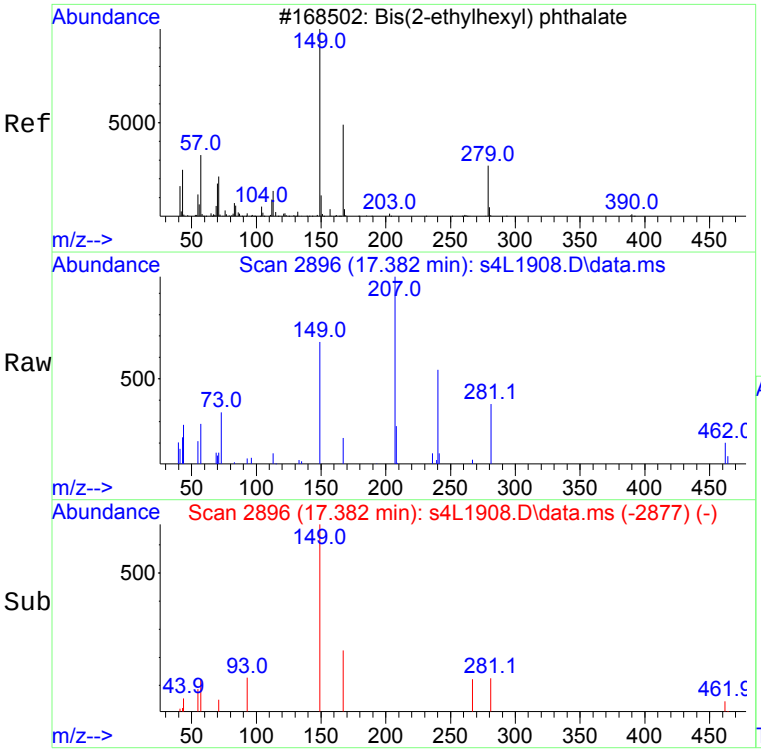
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report

Data Path : C:\msdchem\1\data\S121922\
Data File : s4L1908.D
Acq On : 19 Dec 2022 18:23
Operator : NM1
Sample : |1205274620|2358006|1|SVM|1|MB|||
Misc : |MSD1C70E_L|WATER|QC A|MIX[A,B,J,D,E]||
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 21 10:54:59 2022
Quant Method : C:\msdchem\1\data\S121922\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

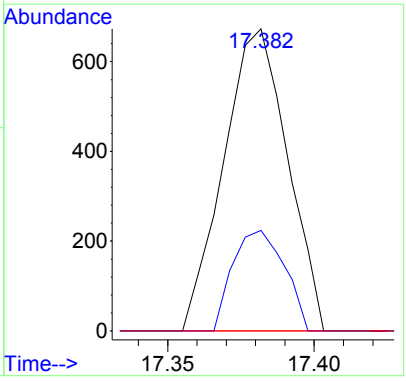




#82 BEFORE analyst DELETION
bis(2-Ethylhexyl)phthalate
Concen: 0.49 ng/uL
RT: 17.382 min Scan# 2896
Delta R.T. -0.000 min
Lab File: s4L1908.D
Acq: 19 Dec 2022 18:23

Tgt Ion:149 Resp: 1020

Ion	Ratio	Lower	Upper
149	100		
167	27.0	0.0	57.6
279	0.0	0.0	35.2



Library Search Compound Report

12/22/2022

Data Path : C:\msdchem\1\data\S121922\
Data File : s4L1908.D
Acq On : 19 Dec 2022 18:23
Operator : NM1
Sample : |1205274620|2358006|1|SVM|1|MB|||
Misc : |MSD1C70E_L|WATER|QC A|MIX[A,B,J,D,E]||
ALS Vial : 7 Sample Multiplier: 1

12/22/2022

Quant Method : C:\msdchem\1\data\S121922\MSD4_8270_110522RECALC.m
Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\data\S121922\
Data File : s4L1908.D
Acq On : 19 Dec 2022 18:23
Operator : NM1
Sample : |1205274620|2358006|1|SVM|1|MB|||
Misc : |MSD1C70E_L|WATER|QC A|MIX[A,B,J,D,E]||
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\msdchem\1\data\S121922\MSD4_8270_110522RECALC.m
Quant Title : BNA01

TIC Library : C:\Database\NIST14.L
TIC Integration Parameters: TIC.p

			(ng/uL)		Internal Standard		
TIC Top Hit name	CAS #	RT	EstConc	Response	# RT	Resp	Conc

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**			**Matrix:**	**WATER**
Lab Sample ID:	**1205274621**				
Client Sample:	**QC for batch 2358005**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**LCS for batch 2358005**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 18:51**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**S121922\s4L1909.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
1610-18-0	Prometon		56.7	ug/L	3.00	10.0
126-33-0	Sulfolane		33.8	ug/L	3.00	10.0
PAH-tot-3a	Total PAHs 3a		125	ug/L		
62-75-9	N-Methyl-N-nitrosomethylamine		25.4	ug/L	3.00	10.0
108-95-2	Phenol		14.4	ug/L	3.00	10.0
111-44-4	bis(2-Chloroethyl) ether		38.2	ug/L	3.00	10.0
108-60-1	bis(2-Chloro-1-methylethyl)ether		36.3	ug/L	3.00	10.0
67-72-1	Hexachloroethane		31.7	ug/L	3.00	10.0
98-95-3	Nitrobenzene		37.9	ug/L	3.00	10.0
78-59-1	Isophorone		35.6	ug/L	3.50	10.0
120-83-2	2,4-Dichlorophenol		38.0	ug/L	3.00	10.0
87-68-3	Hexachlorobutadiene		35.5	ug/L	3.00	10.0
91-57-6	2-Methylnaphthalene		41.8	ug/L	0.300	1.00
91-20-3	Naphthalene		40.1	ug/L	0.300	1.00
90-12-0	1-Methylnaphthalene		43.6	ug/L	0.300	1.00
77-47-4	Hexachlorocyclopentadiene		12.9	ug/L	3.00	10.0
88-06-2	2,4,6-Trichlorophenol		43.2	ug/L	3.00	10.0
95-95-4	2,4,5-Trichlorophenol		43.1	ug/L	3.00	10.0
131-11-3	Dimethylphthalate		50.2	ug/L	0.300	1.00
606-20-2	2,6-Dinitrotoluene		46.5	ug/L	3.00	10.0
121-14-2	2,4-Dinitrotoluene		48.1	ug/L	3.00	10.0
51-28-5	2,4-Dinitrophenol		45.4	ug/L	5.00	20.0
84-66-2	Diethylphthalate		50.9	ug/L	0.300	1.00
86-73-7	Fluorene		46.3	ug/L	0.300	1.00
534-52-1	2-Methyl-4,6-dinitrophenol		51.6	ug/L	3.00	10.0
122-39-4	Diphenylamine		47.0	ug/L	3.00	10.0
103-33-3	Azobenzene		44.6	ug/L	3.00	10.0
122-66-7	*1,2-Diphenylhydrazine*					
118-74-1	Hexachlorobenzene		47.3	ug/L	3.00	10.0
87-86-5	Pentachlorophenol		47.5	ug/L	3.00	10.0
85-01-8	Phenanthrene		47.1	ug/L	0.300	1.00
120-12-7	Anthracene		46.4	ug/L	0.300	1.00
84-74-2	Di-n-butylphthalate		52.5	ug/L	0.300	1.00
206-44-0	Fluoranthene		50.0	ug/L	0.300	1.00
129-00-0	Pyrene		49.6	ug/L	0.300	1.00
117-81-7	bis(2-Ethylhexyl)phthalate		50.0	ug/L	0.300	1.00
205-99-2	Benzo(b)fluoranthene		46.3	ug/L	0.300	1.00
207-08-9	Benzo(k)fluoranthene		47.9	ug/L	0.300	1.00
50-32-8	Benzo(a)pyrene		49.6	ug/L	0.300	1.00

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**			**Matrix:**	**WATER**
Lab Sample ID:	**1205274621**				
Client Sample:	**QC for batch 2358005**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**LCS for batch 2358005**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/19/2022 18:51**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**S121922\s4L1909.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
123-91-1	1,4-Dioxane		20.6	ug/L	3.00	10.0
55-18-5	N-Nitrosodiethylamine	U	3.00	ug/L	3.00	10.0
930-55-2	N-Nitrosopyrrolidine		39.2	ug/L	3.00	10.0
924-16-3	N-Nitrosodi-n-butylamine	U	3.00	ug/L	3.00	10.0
95-94-3	1,2,4,5-Tetrachlorobenzene		39.5	ug/L	3.00	10.0
608-93-5	Pentachlorobenzene	U	3.00	ug/L	3.00	10.0
1912-24-9	Atrazine		52.3	ug/L	3.00	10.0
92-87-5	Benzidine		63.7	ug/L	3.90	10.0
91-94-1	3,3'-Dichlorobenzidine		45.9	ug/L	3.00	10.0

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
2,4,6-Tribromophenol	79.5	100	ug/L	79	(37%-132%)
2-Fluorobiphenyl	39.3	50.0	ug/L	79	(39%-112%)
2-Fluorophenol	34.8	100	ug/L	35	(11%-79%)
Nitrobenzene-d5	35.4	50.0	ug/L	71	(39%-112%)
Phenol-d5	27.9	100	ug/L	28	(15%-85%)
p-Terphenyl-d14	40.2	50.0	ug/L	80	(24%-129%)

Quantitation Report

12/22/2022

Data Path : C:\msdchem\1\data\S121922\
Data File : s4L1909.D
Acq On : 19 Dec 2022 18:51
Operator : NM1
Sample : |1205274621|2358006|1|SVM|1|LCS|||
Misc : |MSD1C70E_L|WATER|QC A|MIX[A,B,J,D,E]||
ALS Vial : 8 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 21 10:55:23 2022
Quant Method : C:\msdchem\1\data\S121922\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	5.748	5.749	1.000	121009	40.00	ng/uL	0.00
22) A Naphthalene-d8	136	7.690	7.690	1.000	478682	40.00	ng/uL	0.00
39) A Acenaphthene-d10	164	10.525	10.525	1.000	261600	40.00	ng/uL	0.00
64) A Phenanthrene-d10	188	12.948	12.948	1.000	529837	40.00	ng/uL	0.00
80) A Chrysene-d12	240	17.291	17.291	1.000	580803	40.00	ng/uL	0.00
88) A Perylene-d12	264	20.302	20.308	1.000	628002	40.00	ng/uL	0.00
96) B 1,4-Dichlorobenzene-d4	152	5.748	5.749	1.000	121009	40.00	ng/uL	0.00
112) B Naphthalene-d8	136	7.690	7.690	1.000	478682	40.00	ng/uL	0.00
120) B Acenaphthene-d10	164	10.525	10.525	1.000	261600	40.00	ng/uL	0.00
129) B Phenanthrene-d10	188	12.948	12.948	1.000	529837	40.00	ng/uL	0.00
142) B Chrysene-d12	240	17.291	17.291	1.000	580803	40.00	ng/uL	0.00
148) B Perylene-d12	264	20.302	20.308	1.000	628002	40.00	ng/uL	0.00
151) J Naphthalene-d8	136	7.690	7.690	1.000	478682	40.00	ng/uL	0.00
153) J Phenanthrene-d10	188	12.948	12.948	1.000	529837	40.00	ng/uL	0.00
156) J Chrysene-d12	240	17.291	17.291	1.000	580803	40.00	ng/uL	0.00
159) D Naphthalene-d8	136	7.690	7.690	1.000	478682	40.00	ng/uL	0.00
161) D Acenaphthene-d10	164	10.525	10.525	1.000	261600	40.00	ng/uL	0.00
164) D Phenanthrene-d10	188	12.948	12.948	1.000	529837	40.00	ng/uL	0.00
171) D Chrysene-d12	240	17.291	17.291	1.000	580803	40.00	ng/uL	0.00
173) E Naphthalene-d8	136	7.690	7.690	1.000	478682	40.00	ng/uL	0.00
175) E Perylene-d12	264	20.302	20.308	1.000	628002	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	3.941	3.941	0.686	140587	34.80	ng/uL	0.00
8) Phenol-d5	99	5.187	5.192	0.902	142683	27.93	ng/uL	0.00
23) Nitrobenzene-d5	82	6.572	6.572	0.855	176967	35.38	ng/uL	0.00
44) 2-Fluorobiphenyl	172	9.439	9.439	0.897	381474	39.26	ng/uL	0.00
63) 2,4,6-Tribromophenol	330	11.814	11.814	1.122	177496	79.47	ng/uL	0.00
79) p-Terphenyl-d14	244	15.574	15.579	1.203	561770	40.15	ng/uL	0.00

Compound	Amount	Range	Recovery
5) 2-Fluorophenol	100.000	11 - 79	35%
8) Phenol-d5	100.000	15 - 85	28%
23) Nitrobenzene-d5	50.000	39 - 112	71%
44) 2-Fluorobiphenyl	50.000	39 - 112	79%
63) 2,4,6-Tribromophenol	100.000	37 - 132	79%
79) p-Terphenyl-d14	50.000	24 - 129	80%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
3) N-Methyl-N-nitrosometh...	74	2.390	2.400	0.416	74152	25.44	ng/uL	86
4) Pyridine	79	2.454	2.454	0.427	96769	19.83	ng/uL	96
7) Aniline	93	5.267	5.273	0.916	171468	25.36	ng/uL	99
9) Phenol	94	5.208	5.208	0.906	79764	14.35	ng/uL	99
10) bis(2-Chloroethyl) ether	93	5.358	5.363	0.932	170336	38.23	ng/uL	99
11) 2-Chlorophenol	128	5.433	5.438	0.945	130296	31.79	ng/uL	96
12) n-Decane	43	5.508	5.508	0.958	108700	23.71	ng/uL	93
13) 1,3-Dichlorobenzene	146	5.663	5.668	0.985	153450	33.32	ng/uL	99
14) 1,4-Dichlorobenzene	146	5.775	5.775	1.005	162491	34.88	ng/uL	100
15) 1,2-Dichlorobenzene	146	5.995	5.995	1.043	162690	36.66	ng/uL	99
16) bis(2-Chloro-1-methyle...	45	6.150	6.150	1.070	211234	36.26	ng/uL	97
17) Benzyl alcohol	108	5.941	5.941	1.033	87423	30.35	ng/uL	97
18) o-Cresol	107	6.101	6.102	1.061	98494	27.15	ng/uL	96
19) m,p-Cresols	108	6.331	6.337	1.101	108538	26.37	ng/uL#	15
20) N-Nitrosodipropylamine	70	6.342	6.348	1.103	134219	38.74	ng/uL	92
21) Hexachloroethane	117	6.503	6.503	1.131	57933	31.72	ng/uL	94
24) Nitrobenzene	77	6.604	6.604	0.859	192163	37.85	ng/uL	97

Quantitation Report

Data Path : C:\msdchem\1\data\S121922\
Data File : s4L1909.D
Acq On : 19 Dec 2022 18:51
Operator : NM1
Sample : |1205274621|2358006|1|SVM|1|LCS|||
Misc : |MSD1C70E_L|WATER|QC A|MIX[A,B,J,D,E]||
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 21 10:55:23 2022
Quant Method : C:\msdchem\1\data\S121922\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
25) Isophorone	82	6.968	6.973	0.906	324466	35.63	ng/uL	98
26) 2-Nitrophenol	139	7.091	7.091	0.922	83639	40.34	ng/uL	94
27) 2,4-Dimethylphenol	122	7.161	7.161	0.931	87605	23.10	ng/uL	98
28) bis(2-Chloroethoxy)met...	93	7.316	7.321	0.951	233104	41.06	ng/uL	99
29) 2,4-Dichlorophenol	162	7.465	7.465	0.971	133876	37.96	ng/uL	98
30) Benzoic acid	105	7.257	7.289	0.944	47506	20.26	ng/uL	88
31) 1,2,4-Trichlorobenzene	180	7.599	7.605	0.988	152380	37.55	ng/uL	99
32) alpha-Terpineol	59	7.749	7.749	1.008	152678	39.90	ng/uL	97
33) Naphthalene	128	7.722	7.728	1.004	494077	40.12	ng/uL	99
34) 4-Chloroaniline	127	7.813	7.813	1.016	188098	36.10	ng/uL	98
35) Hexachlorobutadiene	225	7.920	7.925	1.030	92954	35.48	ng/uL	99
36) 4-Chloro-3-methylphenol	107	8.594	8.594	1.118	142774	37.01	ng/uL	99
37) 2-Methylnaphthalene	142	8.835	8.835	1.149	341273	41.75	ng/uL	100
38) 1-Methylnaphthalene	142	8.990	8.995	1.169	334013	43.57	ng/uL	99
40) Hexachlorocyclopentadiene	237	9.086	9.086	0.863	44649	12.93	ng/uL	98
41) 2,3-Dichloroaniline	161	9.289	9.289	0.883	194638	44.52	ng/uL	98
42) 2,4,6-Trichlorophenol	196	9.289	9.289	0.883	121685	43.24	ng/uL	99
43) 2,4,5-Trichlorophenol	196	9.343	9.343	0.888	128479	43.14	ng/uL	100
45) 2-Chloronaphthalene	162	9.621	9.621	0.914	345757	43.27	ng/uL	97
46) o-Nitroaniline	65	9.792	9.792	0.930	112995	43.17	ng/uL	93
48) m-Nitroaniline	138	10.461	10.466	0.994	95963	43.06	ng/uL	97
49) Dimethylphthalate	163	10.108	10.113	0.960	454526	50.23	ng/uL	100
51) 2,6-Dinitrotoluene	165	10.199	10.204	0.969	96048	46.52	ng/uL	90
52) 2,4-Dinitrotoluene	165	10.851	10.857	1.031	136252	48.13	ng/uL	88
53) Acenaphthylene	152	10.289	10.295	0.978	518180	42.68	ng/uL	99
54) Acenaphthene	154	10.573	10.578	1.005	337723	44.37	ng/uL	99
55) 2,4-Dinitrophenol	184	10.637	10.637	1.011	53519	45.39	ng/uL	88
56) Dibenzofuran	168	10.862	10.862	1.032	526650	44.08	ng/uL	99
57) 2,3,4,6-Tetrachlorophenol	232	11.060	11.060	1.051	121076	43.29	ng/uL	99
58) Diethylphthalate	149	11.268	11.268	1.071	462559	50.91	ng/uL	99
59) 4-Nitrophenol	109	10.755	10.750	1.022	20362	14.93	ng/uL	97
60) Fluorene	166	11.418	11.423	1.085	444259	46.29	ng/uL	100
61) 4-Chlorophenylphenylether	204	11.434	11.434	1.086	229860	46.97	ng/uL	99
62) p-Nitroaniline	138	11.455	11.461	1.088	105432	45.47	ng/uL	95
65) 2-Methyl-4,6-dinitroph...	198	11.514	11.514	0.889	83094	51.63	ng/uL	90
66) Diphenylamine	169	11.627	11.632	0.898	370800	46.99	ng/uL	98
67) 1,2-Diphenylhydrazine	77	11.691	11.696	0.903	460710	44.63	ng/uL	97
68) 4-Bromophenylphenylether	248	12.231	12.231	0.945	153007	48.62	ng/uL	98
69) Hexachlorobenzene	284	12.306	12.311	0.950	186093	47.29	ng/uL	99
70) Pentachlorophenol	266	12.638	12.638	0.976	111805	47.52	ng/uL	99
71) n-Octadecane	57	12.825	12.830	0.990	271897	42.06	ng/uL	96
73) Phenanthrene	178	12.985	12.991	1.003	674623	47.06	ng/uL	99
74) Anthracene	178	13.071	13.071	1.010	667259	46.40	ng/uL	100
75) Carbazole	167	13.344	13.344	1.031	621622	48.76	ng/uL	99
76) Di-n-butylphthalate	149	13.948	13.953	1.077	752608	52.51	ng/uL	99
77) Fluoranthene	202	14.927	14.932	1.153	769644	49.95	ng/uL	99
78) Pyrene	202	15.296	15.296	1.181	801696	49.63	ng/uL	100
81) Butylbenzylphthalate	149	16.398	16.398	0.948	317263	52.45	ng/uL	96
82) bis(2-Ethylhexyl)phtha...	149	17.376	17.382	1.005	462795	50.01	ng/uL	99
83) Benzo(a)anthracene	228	17.269	17.275	0.999	774657	47.79	ng/uL	95
84) Chrysene	228	17.334	17.339	1.002	750328	48.75	ng/uL	100
85) Methoxychlor	227	17.269	17.200	0.999	54087	5.54	ng/uL#	1
87) Di-n-octylphthalate	149	18.714	18.719	1.082	755676	52.79	ng/uL	96
89) Benzo(b)fluoranthene	252	19.516	19.516	0.961	740182	46.33	ng/uL	100
90) Benzo(k)fluoranthene	252	19.580	19.586	0.964	774558	47.93	ng/uL	99
91) Benzo(a)pyrene	252	20.195	20.195	0.995	689328	49.62	ng/uL	100
92) Indeno(1,2,3-cd)pyrene	276	22.217	22.222	1.094	767390	47.71	ng/uL	98

Data Path : C:\msdchem\1\data\S121922\
Data File : s4L1909.D
Acq On : 19 Dec 2022 18:51
Operator : NM1
Sample : |1205274621|2358006|1|SVM|1|LCS|||
Misc : |MSD1C70E_L|WATER|QC A|MIX[A,B,J,D,E]||
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 21 10:55:23 2022
Quant Method : C:\msdchem\1\data\S121922\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

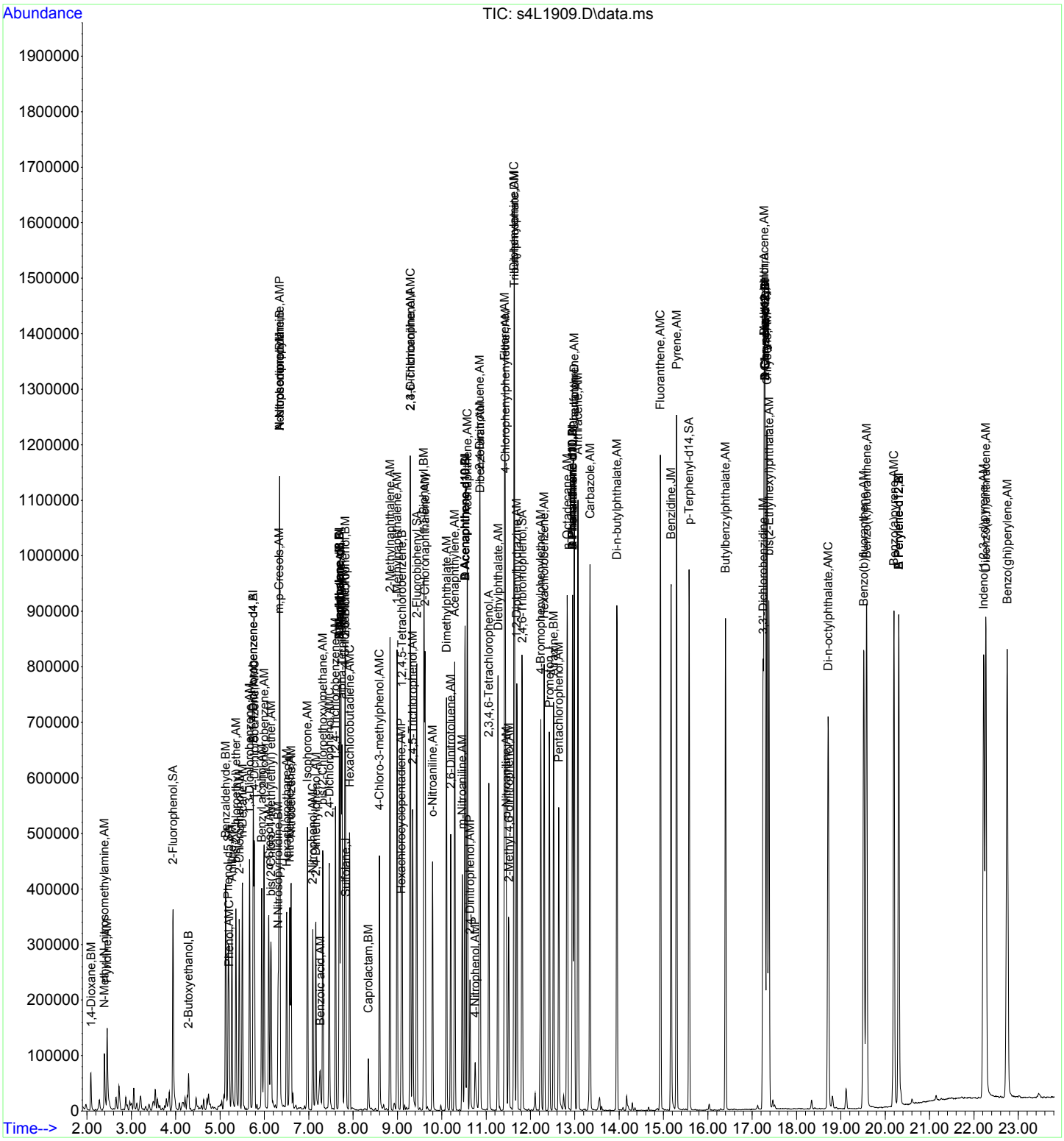
	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
93)	Dibenzo(a,h)anthracene	278	22.265	22.270	1.097	791286	47.67	ng/uL	99
94)	Benzo(ghi)perylene	276	22.752	22.757	1.121	797410	48.17	ng/uL	99
97)	1,4-Dioxane	88	2.090	2.079	0.364	38553	20.57	ng/uL	97
104)	2-Butoxyethanol	57	4.288	4.331	0.746	18764	4.05	ng/uL#	42
106)	Benzaldehyde	77	5.128	5.117	0.892	122091	31.73	ng/uL	96
108)	N-Nitrosopyrrolidine	100	6.310	6.300	1.098	85269	39.17	ng/uL	90
109)	Acetophenone	105	6.342	6.337	1.103	260082	40.51	ng/uL	87
110)	N-Nitrosomorpholine	56	6.342	6.364	1.103	10038	4.18	ng/uL#	42
115)	2,6-Dichlorophenol	162	7.824	7.813	1.017	140488	40.56	ng/uL	100
117)	Caprolactam	113	8.343	8.321	1.085	15914	13.85	ng/uL#	77
121)	1,2,4,5-Tetrachloroben...	216	9.102	9.092	0.865	182114	39.52	ng/uL	99
122)	1,1-Biphenyl	154	9.594	9.589	0.912	452157	41.57	ng/uL	98
135)	Atrazine	200	12.525	12.509	0.967	146879	52.34	ng/uL	99
152)	Sulfolane	56	7.840	7.824	1.019	53686	33.77	ng/uL	97
154)	Prometon	210	12.429	12.408	0.960	110615	56.74	ng/uL	95
155)	Benzidine	184	15.173	15.151	1.172	591841	63.72	ng/uL	100
158)	3,3'-Dichlorobenzidine	252	17.243	17.227	0.997	277234	45.88	ng/uL	98
163)	Tributylphosphate	99	11.637	11.621	1.106	572709	50.59	ng/uL	99
168)	Disulfoton	88	12.985	12.969	1.003	46710	8.60	ng/uL#	1

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report

Data Path : C:\msdchem\1\data\S121922\
Data File : s4L1909.D
Acq On : 19 Dec 2022 18:51
Operator : NM1
Sample : |1205274621|2358006|1|SVM|1|LCS|||
Misc : |MSD1C70E_L|WATER|QC A|MIX[A,B,J,D,E]||
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 21 10:55:23 2022
Quant Method : C:\msdchem\1\data\S121922\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration



Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:36**	**Matrix:**	**W**
Lab Sample ID:	**1205274624**	**Date Received:**	**12/16/2022 09:15**		
Client Sample:	**QC for batch 2358005**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB02-23-265372MS**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 16:15**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**450 mL**	**Final Volume:**	**1 mL**
Data File:	**S122022\s4L2010.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
1610-18-0	Prometon	U	6.67	ug/L	6.67	22.2
126-33-0	Sulfolane	U	6.67	ug/L	6.67	22.2
PAH-tot-3a	Total PAHs 3a		138	ug/L		
62-75-9	N-Methyl-N-nitrosomethylamine		45.7	ug/L	6.67	22.2
108-95-2	Phenol		38.8	ug/L	6.67	22.2
111-44-4	bis(2-Chloroethyl) ether		46.4	ug/L	6.67	22.2
108-60-1	bis(2-Chloro-1-methylethyl)ether		41.4	ug/L	6.67	22.2
67-72-1	Hexachloroethane		32.8	ug/L	6.67	22.2
98-95-3	Nitrobenzene		61.0	ug/L	6.67	22.2
78-59-1	Isophorone		40.3	ug/L	7.78	22.2
120-83-2	2,4-Dichlorophenol		45.4	ug/L	6.67	22.2
87-68-3	Hexachlorobutadiene		37.7	ug/L	6.67	22.2
91-57-6	2-Methylnaphthalene		45.9	ug/L	0.667	2.22
91-20-3	Naphthalene		43.5	ug/L	0.667	2.22
90-12-0	1-Methylnaphthalene		48.6	ug/L	0.667	2.22
77-47-4	Hexachlorocyclopentadiene	U	6.67	ug/L	6.67	22.2
88-06-2	2,4,6-Trichlorophenol		45.9	ug/L	6.67	22.2
95-95-4	2,4,5-Trichlorophenol		51.1	ug/L	6.67	22.2
131-11-3	Dimethylphthalate		63.9	ug/L	0.667	2.22
606-20-2	2,6-Dinitrotoluene		59.7	ug/L	6.67	22.2
121-14-2	2,4-Dinitrotoluene		63.3	ug/L	6.67	22.2
51-28-5	2,4-Dinitrophenol		53.7	ug/L	11.1	44.4
84-66-2	Diethylphthalate		67.3	ug/L	0.667	2.22
86-73-7	Fluorene		54.9	ug/L	0.667	2.22
534-52-1	2-Methyl-4,6-dinitrophenol		53.0	ug/L	6.67	22.2
122-39-4	Diphenylamine		55.4	ug/L	6.67	22.2
103-33-3	Azobenzene		49.9	ug/L	6.67	22.2
122-66-7	*1,2-Diphenylhydrazine*					
118-74-1	Hexachlorobenzene		51.0	ug/L	6.67	22.2
87-86-5	Pentachlorophenol		44.0	ug/L	6.67	22.2
85-01-8	Phenanthrene		55.9	ug/L	0.667	2.22
120-12-7	Anthracene		54.1	ug/L	0.667	2.22
84-74-2	Di-n-butylphthalate		60.6	ug/L	0.667	2.22
206-44-0	Fluoranthene		60.4	ug/L	0.667	2.22
129-00-0	Pyrene		59.3	ug/L	0.667	2.22
117-81-7	bis(2-Ethylhexyl)phthalate		53.6	ug/L	0.667	2.22
205-99-2	Benzo(b)fluoranthene		50.3	ug/L	0.667	2.22
207-08-9	Benzo(k)fluoranthene		51.4	ug/L	0.667	2.22
50-32-8	Benzo(a)pyrene		52.1	ug/L	0.667	2.22

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:36**	**Matrix:**	**W**
Lab Sample ID:	**1205274624**	**Date Received:**	**12/16/2022 09:15**		
Client Sample:	**QC for batch 2358005**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB02-23-265372MS**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 16:15**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**450 mL**	**Final Volume:**	**1 mL**
Data File:	**S122022\s4L2010.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
123-91-1	1,4-Dioxane		36.6	ug/L	6.67	22.2
55-18-5	N-Nitrosodiethylamine	U	6.67	ug/L	6.67	22.2
930-55-2	N-Nitrosopyrrolidine		55.4	ug/L	6.67	22.2
924-16-3	N-Nitrosodi-n-butylamine	U	6.67	ug/L	6.67	22.2
95-94-3	1,2,4,5-Tetrachlorobenzene		40.5	ug/L	6.67	22.2
608-93-5	Pentachlorobenzene	U	6.67	ug/L	6.67	22.2
1912-24-9	Atrazine		65.2	ug/L	6.67	22.2
92-87-5	Benzidine	U	8.67	ug/L	8.67	22.2
91-94-1	3,3'-Dichlorobenzidine	U	6.67	ug/L	6.67	22.2

Surrogate/Tracer recovery	Result	Nominal		Recovery%		Acceptable Limits
2,4,6-Tribromophenol	92.9	222	ug/L	42		(37%-132%)
2-Fluorobiphenyl	40.0	111	ug/L	36	*	(39%-112%)
2-Fluorophenol	65.8	222	ug/L	30		(11%-79%)
Nitrobenzene-d5	40.6	111	ug/L	37	*	(39%-112%)
Phenol-d5	75.9	222	ug/L	34		(15%-85%)
p-Terphenyl-d14	25.7	111	ug/L	23	*	(24%-129%)

Quantitation Report

12/22/2022

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2010.D
Acq On : 20 Dec 2022 16:15
Operator : NM1
Sample : |1205274624|2358006|1|SVM|1|MS|||
Misc : |MSD1C70E_L|WATER|QC A|MIX[A,B,J,D,E]||
ALS Vial : 10 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 21 12:25:59 2022
Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	5.749	5.754	1.000	134074	40.00	ng/uL	0.00
22) A Naphthalene-d8	136	7.690	7.695	1.000	555926	40.00	ng/uL	0.00
39) A Acenaphthene-d10	164	10.525	10.525	1.000	327692	40.00	ng/uL	0.00
64) A Phenanthrene-d10	188	12.948	12.948	1.000	719138	40.00	ng/uL	0.00
80) A Chrysene-d12	240	17.291	17.296	1.000	850476	40.00	ng/uL	0.00
88) A Perylene-d12	264	20.308	20.307	1.000	885963	40.00	ng/uL	0.00
96) B 1,4-Dichlorobenzene-d4	152	5.749	5.754	1.000	134074	40.00	ng/uL	0.00
112) B Naphthalene-d8	136	7.690	7.695	1.000	555926	40.00	ng/uL	0.00
120) B Acenaphthene-d10	164	10.525	10.525	1.000	327692	40.00	ng/uL	0.00
129) B Phenanthrene-d10	188	12.948	12.948	1.000	719138	40.00	ng/uL	0.00
142) B Chrysene-d12	240	17.291	17.296	1.000	850476	40.00	ng/uL	0.00
148) B Perylene-d12	264	20.308	20.307	1.000	885963	40.00	ng/uL	0.00
151) J Naphthalene-d8	136	7.690	7.695	1.000	555926	40.00	ng/uL	0.00
153) J Phenanthrene-d10	188	12.948	12.948	1.000	719138	40.00	ng/uL	0.00
156) J Chrysene-d12	240	17.291	17.296	1.000	850476	40.00	ng/uL	0.00
159) D Naphthalene-d8	136	7.690	7.695	1.000	555926	40.00	ng/uL	0.00
161) D Acenaphthene-d10	164	10.525	10.525	1.000	327692	40.00	ng/uL	0.00
164) D Phenanthrene-d10	188	12.948	12.948	1.000	719138	40.00	ng/uL	0.00
171) D Chrysene-d12	240	17.291	17.296	1.000	850476	40.00	ng/uL	0.00
173) E Naphthalene-d8	136	7.690	7.695	1.000	555926	40.00	ng/uL	0.00
175) E Perylene-d12	264	20.308	20.307	1.000	885963	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	3.952	3.951	0.687	132538	29.61	ng/uL	0.00
8) Phenol-d5	99	5.208	5.203	0.906	193333	34.16	ng/uL	0.00
23) Nitrobenzene-d5	82	6.572	6.577	0.855	106267	18.29	ng/uL	0.00
44) 2-Fluorobiphenyl	172	9.439	9.439	0.897	219316	18.02	ng/uL	0.00
63) 2,4,6-Tribromophenol	330	11.814	11.814	1.122	116985	41.81	ng/uL	0.00
79) p-Terphenyl-d14	244	15.574	15.579	1.203	219313	11.55	ng/uL	0.00

Compound	Amount	Range	Recovery
5) 2-Fluorophenol	100.000	11 - 79	30%
8) Phenol-d5	100.000	15 - 85	34%
23) Nitrobenzene-d5	50.000	39 - 112	37%#
44) 2-Fluorobiphenyl	50.000	39 - 112	36%#
63) 2,4,6-Tribromophenol	100.000	37 - 132	42%
79) p-Terphenyl-d14	50.000	24 - 129	23%#

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
3) N-Methyl-N-nitrosometh...	74	2.395	2.400	0.417	66411	20.56	ng/uL	86
4) Pyridine	79	2.459	2.459	0.428	97473	18.03	ng/uL	94
7) Aniline	93	5.278	5.278	0.918	92727	12.38	ng/uL	98
9) Phenol	94	5.225	5.224	0.909	107414	17.44	ng/uL	98
10) bis(2-Chloroethyl) ether	93	5.364	5.363	0.933	103058	20.87	ng/uL	97
11) 2-Chlorophenol	128	5.444	5.444	0.947	80699	17.77	ng/uL	96
12) n-Decane	43	5.508	5.508	0.958	51725	10.18	ng/uL	95
13) 1,3-Dichlorobenzene	146	5.668	5.668	0.986	77220	15.13	ng/uL	99
14) 1,4-Dichlorobenzene	146	5.775	5.775	1.005	82381	15.96	ng/uL	98
15) 1,2-Dichlorobenzene	146	5.995	5.994	1.043	99334	20.20	ng/uL	99
16) bis(2-Chloro-1-methyle...	45	6.150	6.155	1.070	120324	18.64	ng/uL#	66
17) Benzyl alcohol	108	5.947	5.946	1.034	77702	24.35	ng/uL	96
18) o-Cresol	107	6.118	6.112	1.064	82663	20.56	ng/uL	97
19) m,p-Cresols	108	6.342	6.348	1.103	100550	22.05	ng/uL#	43
20) N-Nitrosodipropylamine	70	6.342	6.348	1.103	78929	20.56	ng/uL	90
21) Hexachloroethane	117	6.503	6.503	1.131	29825	14.74	ng/uL	97
24) Nitrobenzene	77	6.604	6.604	0.859	161706	27.43	ng/uL	98

Quantitation Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2010.D
Acq On : 20 Dec 2022 16:15
Operator : NM1
Sample : |1205274624|2358006|1|SVM|1|MS|||
Misc : |MSD1C70E_L|WATER|QC A|MIX[A,B,J,D,E]||
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 21 12:25:59 2022
Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
25) Isophorone	82	6.974	6.973	0.907	191714	18.13	ng/uL	98
26) 2-Nitrophenol	139	7.091	7.096	0.922	45754	19.00	ng/uL	92
27) 2,4-Dimethylphenol	122	7.171	7.171	0.933	68151	15.47	ng/uL	97
28) bis(2-Chloroethoxy)met...	93	7.321	7.321	0.952	136361	20.68	ng/uL	93
29) 2,4-Dichlorophenol	162	7.476	7.471	0.972	83610	20.42	ng/uL	98
30) Benzoic acid	105	7.321	7.310	0.952	194286	50.98	ng/uL	93
31) 1,2,4-Trichlorobenzene	180	7.605	7.604	0.989	84577	17.94	ng/uL	98
32) alpha-Terpineol	59	7.749	7.749	1.008	92083	20.72	ng/uL	97
33) Naphthalene	128	7.722	7.727	1.004	279886	19.57	ng/uL	100
34) 4-Chloroaniline	127	7.819	7.818	1.017	75246	12.44	ng/uL	97
35) Hexachlorobutadiene	225	7.926	7.925	1.031	51607	16.96	ng/uL	98
36) 4-Chloro-3-methylphenol	107	8.616	8.605	1.120	116263	25.95	ng/uL	97
37) 2-Methylnaphthalene	142	8.835	8.835	1.149	196228	20.67	ng/uL	99
38) 1-Methylnaphthalene	142	8.995	8.995	1.170	194695	21.87	ng/uL	98
42) 2,4,6-Trichlorophenol	196	9.300	9.295	0.884	72849	20.67	ng/uL	99
43) 2,4,5-Trichlorophenol	196	9.359	9.353	0.889	85812	23.00	ng/uL	98
45) 2-Chloronaphthalene	162	9.621	9.621	0.914	209461	20.93	ng/uL	95
46) o-Nitroaniline	65	9.798	9.797	0.931	46780	14.27	ng/uL	93
49) Dimethylphthalate	163	10.108	10.113	0.960	325742	28.74	ng/uL	100
51) 2,6-Dinitrotoluene	165	10.204	10.204	0.970	69530	26.88	ng/uL	87
52) 2,4-Dinitrotoluene	165	10.857	10.856	1.032	101061	28.50	ng/uL	86
53) Acenaphthylene	152	10.290	10.295	0.978	321767	21.16	ng/uL	100
54) Acenaphthene	154	10.579	10.578	1.005	207904	21.80	ng/uL	100
55) 2,4-Dinitrophenol	184	10.643	10.642	1.011	29523	24.16	ng/uL	92
56) Dibenzofuran	168	10.862	10.862	1.032	351477	23.49	ng/uL	99
57) 2,3,4,6-Tetrachlorophenol	232	11.065	11.065	1.051	74531	21.28	ng/uL	97
58) Diethylphthalate	149	11.269	11.268	1.071	344746	30.29	ng/uL	99
59) 4-Nitrophenol	109	10.787	10.765	1.025	36457	21.34	ng/uL	96
60) Fluorene	166	11.418	11.423	1.085	297225	24.72	ng/uL	99
61) 4-Chlorophenylphenylether	204	11.434	11.434	1.086	149491	24.39	ng/uL	99
62) p-Nitroaniline	138	11.424	11.466	1.085	8889	3.06	ng/uL#	38
65) 2-Methyl-4,6-dinitroph...	198	11.515	11.514	0.889	47050	23.85	ng/uL	96
66) Diphenylamine	169	11.632	11.632	0.898	267118	24.94	ng/uL	96
67) 1,2-Diphenylhydrazine	77	11.691	11.696	0.903	314808	22.47	ng/uL	95
68) 4-Bromophenylphenylether	248	12.231	12.231	0.945	104567	24.48	ng/uL	98
69) Hexachlorobenzene	284	12.306	12.311	0.950	122682	22.97	ng/uL	99
70) Pentachlorophenol	266	12.643	12.643	0.976	63178	19.78	ng/uL	98
71) n-Octadecane	57	12.825	12.825	0.990	162489	18.52	ng/uL	95
73) Phenanthrene	178	12.985	12.991	1.003	489492	25.16	ng/uL	100
74) Anthracene	178	13.071	13.071	1.010	474870	24.33	ng/uL	100
75) Carbazole	167	13.349	13.349	1.031	492461	28.46	ng/uL	99
76) Di-n-butylphthalate	149	13.954	13.953	1.078	530772	27.29	ng/uL	99
77) Fluoranthene	202	14.932	14.932	1.153	568932	27.20	ng/uL	99
78) Pyrene	202	15.296	15.296	1.181	585341	26.70	ng/uL	99
81) Butylbenzylphthalate	149	16.398	16.398	0.948	239899	27.38	ng/uL	95
82) bis(2-Ethylhexyl)phtha...	149	17.382	17.376	1.005	324085	24.12	ng/uL	99
83) Benzo(a)anthracene	228	17.275	17.275	0.999	551296	23.23	ng/uL	95
84) Chrysene	228	17.334	17.339	1.002	530927	23.56	ng/uL	100
87) Di-n-octylphthalate	149	18.714	18.719	1.082	551639	26.68	ng/uL	95
89) Benzo(b)fluoranthene	252	19.516	19.516	0.961	510256	22.64	ng/uL	98
90) Benzo(k)fluoranthene	252	19.580	19.585	0.964	527707	23.15	ng/uL	99
91) Benzo(a)pyrene	252	20.195	20.200	0.994	459492	23.45	ng/uL	100
92) Indeno(1,2,3-cd)pyrene	276	22.217	22.228	1.094	475259	20.95	ng/uL	99
93) Dibenzo(a,h)anthracene	278	22.265	22.270	1.096	490389	20.94	ng/uL	99
94) Benzo(ghi)perylene	276	22.752	22.762	1.120	476430	20.40	ng/uL	99
97) 1,4-Dioxane	88	2.090	2.079	0.364	34173	16.46	ng/uL	96
106) Benzaldehyde	77	5.128	5.117	0.892	66164	15.52	ng/uL	97

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2010.D
Acq On : 20 Dec 2022 16:15
Operator : NM1
Sample : |1205274624|2358006|1|SVM|1|MS|||
Misc : |MSD1C70E_L|WATER|QC A|MIX[A,B,J,D,E]||
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 21 12:25:59 2022
Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

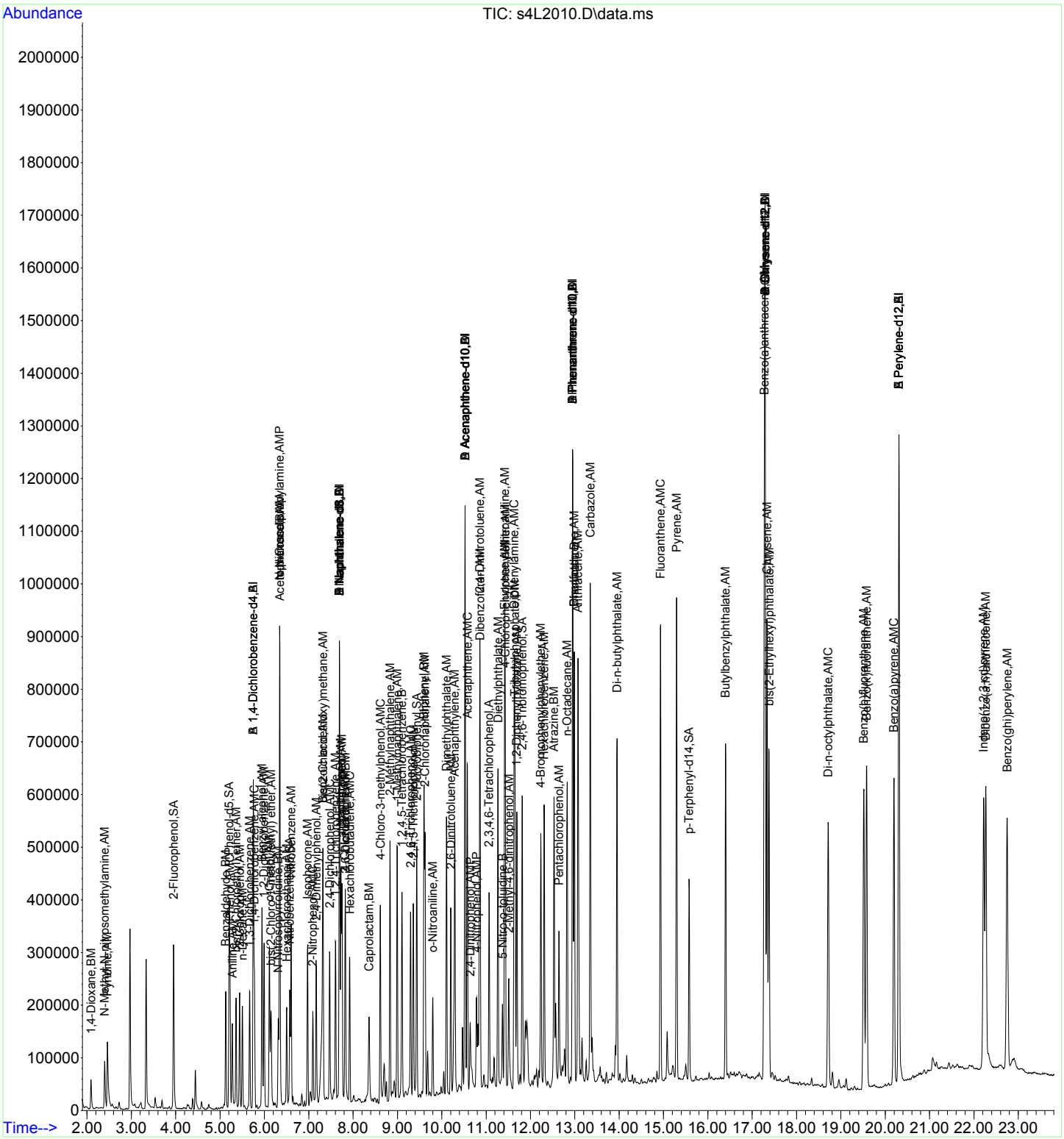
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
108) N-Nitrosopyrrolidine	100	6.310	6.300	1.098	60112	24.92	ng/uL	87
109) Acetophenone	105	6.348	6.337	1.104	155373	21.84	ng/uL	79
115) 2,6-Dichlorophenol	162	7.829	7.813	1.018	77307	19.22	ng/uL	99
117) Caprolactam	113	8.359	8.321	1.087	31372	23.50	ng/uL#	81
121) 1,2,4,5-Tetrachloroben...	216	9.102	9.092	0.865	105218	18.23	ng/uL	99
122) 1,1-Biphenyl	154	9.600	9.589	0.912	276094	20.27	ng/uL	98
128) 5-Nitro-o-toluidine	152	11.370	11.429	1.080	10590	3.60	ng/uL#	12
135) Atrazine	200	12.531	12.509	0.968	111783	29.35	ng/uL	97
163) Tributylphosphate	99	11.648	11.621	1.107	415649	29.31	ng/uL	99
168) Disulfoton	88	12.985	12.969	1.003	34251	4.65	ng/uL#	1

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2010.D
Acq On : 20 Dec 2022 16:15
Operator : NM1
Sample : |1205274624|2358006|1|SVM|1|MS|||
Misc : |MSD1C70E_L|WATER|QC A|MIX[A,B,J,D,E]||
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 21 12:25:59 2022
Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration



Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:36**	**Matrix:**	**W**
Lab Sample ID:	**1205274625**	**Date Received:**	**12/16/2022 09:15**		
Client Sample:	**QC for batch 2358005**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB02-23-265372MSD**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 16:44**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**450 mL**	**Final Volume:**	**1 mL**
Data File:	**S122022\s4L2011.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
1610-18-0	Prometon	U	6.67	ug/L	6.67	22.2
126-33-0	Sulfolane	U	6.67	ug/L	6.67	22.2
PAH-tot-3a	Total PAHs 3a		217	ug/L		
62-75-9	N-Methyl-N-nitrosomethylamine		57.2	ug/L	6.67	22.2
108-95-2	Phenol		58.2	ug/L	6.67	22.2
111-44-4	bis(2-Chloroethyl) ether		67.2	ug/L	6.67	22.2
108-60-1	bis(2-Chloro-1-methylethyl)ether		62.2	ug/L	6.67	22.2
67-72-1	Hexachloroethane		44.9	ug/L	6.67	22.2
98-95-3	Nitrobenzene		90.0	ug/L	6.67	22.2
78-59-1	Isophorone		65.5	ug/L	7.78	22.2
120-83-2	2,4-Dichlorophenol		89.8	ug/L	6.67	22.2
87-68-3	Hexachlorobutadiene		54.3	ug/L	6.67	22.2
91-57-6	2-Methylnaphthalene		72.1	ug/L	0.667	2.22
91-20-3	Naphthalene		66.4	ug/L	0.667	2.22
90-12-0	1-Methylnaphthalene		78.2	ug/L	0.667	2.22
77-47-4	Hexachlorocyclopentadiene	J	8.16	ug/L	6.67	22.2
88-06-2	2,4,6-Trichlorophenol		93.1	ug/L	6.67	22.2
95-95-4	2,4,5-Trichlorophenol		98.5	ug/L	6.67	22.2
131-11-3	Dimethylphthalate		105	ug/L	0.667	2.22
606-20-2	2,6-Dinitrotoluene		96.4	ug/L	6.67	22.2
121-14-2	2,4-Dinitrotoluene		102	ug/L	6.67	22.2
51-28-5	2,4-Dinitrophenol		104	ug/L	11.1	44.4
84-66-2	Diethylphthalate		108	ug/L	0.667	2.22
86-73-7	Fluorene		86.0	ug/L	0.667	2.22
534-52-1	2-Methyl-4,6-dinitrophenol		106	ug/L	6.67	22.2
122-39-4	Diphenylamine		89.7	ug/L	6.67	22.2
103-33-3	Azobenzene		77.6	ug/L	6.67	22.2
122-66-7	*1,2-Diphenylhydrazine*					
118-74-1	Hexachlorobenzene		74.5	ug/L	6.67	22.2
87-86-5	Pentachlorophenol		91.7	ug/L	6.67	22.2
85-01-8	Phenanthrene		82.6	ug/L	0.667	2.22
120-12-7	Anthracene		80.7	ug/L	0.667	2.22
84-74-2	Di-n-butylphthalate		90.6	ug/L	0.667	2.22
206-44-0	Fluoranthene		87.5	ug/L	0.667	2.22
129-00-0	Pyrene		85.0	ug/L	0.667	2.22
117-81-7	bis(2-Ethylhexyl)phthalate		78.1	ug/L	0.667	2.22
205-99-2	Benzo(b)fluoranthene		71.8	ug/L	0.667	2.22
207-08-9	Benzo(k)fluoranthene		70.3	ug/L	0.667	2.22
50-32-8	Benzo(a)pyrene		73.8	ug/L	0.667	2.22

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:36**	**Matrix:**	**W**
Lab Sample ID:	**1205274625**	**Date Received:**	**12/16/2022 09:15**		
Client Sample:	**QC for batch 2358005**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB02-23-265372MSD**	**Method:**	**SW846 3510C/8270E**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**2358006**	**Inst:**	**MSD4.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 16:44**	**Analyst:**	**NM1**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 11:35**	**Aliquot:**	**450 mL**	**Final Volume:**	**1 mL**
Data File:	**S122022\s4L2011.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
123-91-1	1,4-Dioxane		44.7	ug/L	6.67	22.2
55-18-5	N-Nitrosodiethylamine	U	6.67	ug/L	6.67	22.2
930-55-2	N-Nitrosopyrrolidine		83.8	ug/L	6.67	22.2
924-16-3	N-Nitrosodi-n-butylamine	U	6.67	ug/L	6.67	22.2
95-94-3	1,2,4,5-Tetrachlorobenzene		63.5	ug/L	6.67	22.2
608-93-5	Pentachlorobenzene	U	6.67	ug/L	6.67	22.2
1912-24-9	Atrazine		106	ug/L	6.67	22.2
92-87-5	Benzidine	U	8.67	ug/L	8.67	22.2
91-94-1	3,3'-Dichlorobenzidine	U	6.67	ug/L	6.67	22.2

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
2,4,6-Tribromophenol	184	222	ug/L	83	(37%-132%)
2-Fluorobiphenyl	65.8	111	ug/L	59	(39%-112%)
2-Fluorophenol	103	222	ug/L	46	(11%-79%)
Nitrobenzene-d5	64.2	111	ug/L	58	(39%-112%)
Phenol-d5	113	222	ug/L	51	(15%-85%)
p-Terphenyl-d14	37.0	111	ug/L	33	(24%-129%)

Quantitation Report

12/22/2022

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2011.D
Acq On : 20 Dec 2022 16:44
Operator : NM1
Sample : |1205274625|2358006|1|SVM|1|MSD|||
Misc : |MSD1C70E_L|WATER|QC A|MIX[A,B,J,D,E]||
ALS Vial : 11 Sample Multiplier: 1

12/22/2022

Quant Time: Dec 21 12:26:12 2022
Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	5.749	5.754	1.000	127720	40.00	ng/uL	0.00
22) A Naphthalene-d8	136	7.690	7.695	1.000	525777	40.00	ng/uL	0.00
39) A Acenaphthene-d10	164	10.525	10.525	1.000	311922	40.00	ng/uL	0.00
64) A Phenanthrene-d10	188	12.953	12.948	1.000	666290	40.00	ng/uL	0.00
80) A Chrysene-d12	240	17.291	17.296	1.000	795686	40.00	ng/uL	0.00
88) A Perylene-d12	264	20.308	20.307	1.000	830310	40.00	ng/uL	0.00
96) B 1,4-Dichlorobenzene-d4	152	5.749	5.754	1.000	127720	40.00	ng/uL	0.00
112) B Naphthalene-d8	136	7.690	7.695	1.000	525777	40.00	ng/uL	0.00
120) B Acenaphthene-d10	164	10.525	10.525	1.000	311922	40.00	ng/uL	0.00
129) B Phenanthrene-d10	188	12.953	12.948	1.000	666290	40.00	ng/uL	0.00
142) B Chrysene-d12	240	17.291	17.296	1.000	795686	40.00	ng/uL	0.00
148) B Perylene-d12	264	20.308	20.307	1.000	830310	40.00	ng/uL	0.00
151) J Naphthalene-d8	136	7.690	7.695	1.000	525777	40.00	ng/uL	0.00
153) J Phenanthrene-d10	188	12.953	12.948	1.000	666290	40.00	ng/uL	0.00
156) J Chrysene-d12	240	17.291	17.296	1.000	795686	40.00	ng/uL	0.00
159) D Naphthalene-d8	136	7.690	7.695	1.000	525777	40.00	ng/uL	0.00
161) D Acenaphthene-d10	164	10.525	10.525	1.000	311922	40.00	ng/uL	0.00
164) D Phenanthrene-d10	188	12.953	12.948	1.000	666290	40.00	ng/uL	0.00
171) D Chrysene-d12	240	17.291	17.296	1.000	795686	40.00	ng/uL	0.00
173) E Naphthalene-d8	136	7.690	7.695	1.000	525777	40.00	ng/uL	0.00
175) E Perylene-d12	264	20.308	20.307	1.000	830310	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	3.957	3.951	0.688	197776	46.38	ng/uL	0.00
8) Phenol-d5	99	5.208	5.203	0.906	274530	50.92	ng/uL	0.00
23) Nitrobenzene-d5	82	6.572	6.577	0.855	158602	28.87	ng/uL	0.00
44) 2-Fluorobiphenyl	172	9.439	9.439	0.897	343182	29.62	ng/uL	0.00
63) 2,4,6-Tribromophenol	330	11.819	11.814	1.123	220091	82.64	ng/uL	0.00
79) p-Terphenyl-d14	244	15.574	15.579	1.202	293250	16.67	ng/uL	0.00

Compound	Amount	Range	Recovery
5) 2-Fluorophenol	100.000	11 - 79	46%
8) Phenol-d5	100.000	15 - 85	51%
23) Nitrobenzene-d5	50.000	39 - 112	58%
44) 2-Fluorobiphenyl	50.000	39 - 112	59%
63) 2,4,6-Tribromophenol	100.000	37 - 132	83%
79) p-Terphenyl-d14	50.000	24 - 129	33%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
3) N-Methyl-N-nitrosometh...	74	2.400	2.400	0.418	79215	25.74	ng/uL	85
4) Pyridine	79	2.465	2.459	0.429	72325	14.04	ng/uL	97
7) Aniline	93	5.278	5.278	0.918	67181	9.42	ng/uL	94
9) Phenol	94	5.230	5.224	0.910	153677	26.19	ng/uL	98
10) bis(2-Chloroethyl) ether	93	5.364	5.363	0.933	142201	30.24	ng/uL	99
11) 2-Chlorophenol	128	5.444	5.444	0.947	139972	32.35	ng/uL	97
12) n-Decane	43	5.508	5.508	0.958	57574	11.90	ng/uL	95
13) 1,3-Dichlorobenzene	146	5.668	5.668	0.986	107949	22.21	ng/uL	99
14) 1,4-Dichlorobenzene	146	5.775	5.775	1.005	118906	24.18	ng/uL	100
15) 1,2-Dichlorobenzene	146	5.995	5.994	1.043	133195	28.43	ng/uL	99
16) bis(2-Chloro-1-methyle...	45	6.150	6.155	1.070	172061	27.98	ng/uL#	62
17) Benzyl alcohol	108	5.947	5.946	1.034	109849	36.14	ng/uL	96
18) o-Cresol	107	6.118	6.112	1.064	132037	34.48	ng/uL	99
19) m,p-Cresols	108	6.348	6.348	1.104	156855	36.11	ng/uL#	47
20) N-Nitrosodipropylamine	70	6.348	6.348	1.104	115834	31.67	ng/uL	92
21) Hexachloroethane	117	6.503	6.503	1.131	38975	20.22	ng/uL	88
24) Nitrobenzene	77	6.604	6.604	0.859	225731	40.48	ng/uL	98

Quantitation Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2011.D
Acq On : 20 Dec 2022 16:44
Operator : NM1
Sample : |1205274625|2358006|1|SVM|1|MSD|||
Misc : |MSD1C70E_L|WATER|QC A|MIX[A,B,J,D,E]||
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 21 12:26:12 2022
Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
25) Isophorone	82	6.973	6.973	0.907	294918	29.48	ng/uL	98
26) 2-Nitrophenol	139	7.097	7.096	0.923	81671	35.86	ng/uL	95
27) 2,4-Dimethylphenol	122	7.171	7.171	0.933	111239	26.71	ng/uL	97
28) bis(2-Chloroethoxy)met...	93	7.321	7.321	0.952	209781	33.64	ng/uL	93
29) 2,4-Dichlorophenol	162	7.476	7.471	0.972	156579	40.42	ng/uL	98
30) Benzoic acid	105	7.348	7.310	0.955	288479	75.43	ng/uL	95
31) 1,2,4-Trichlorobenzene	180	7.605	7.604	0.989	121122	27.17	ng/uL	99
32) alpha-Terpineol	59	7.749	7.749	1.008	143586	34.16	ng/uL	96
33) Naphthalene	128	7.728	7.727	1.005	404306	29.89	ng/uL	100
34) 4-Chloroaniline	127	7.819	7.818	1.017	51193	8.95	ng/uL	96
35) Hexachlorobutadiene	225	7.926	7.925	1.031	70284	24.43	ng/uL	99
36) 4-Chloro-3-methylphenol	107	8.616	8.605	1.120	194077	45.80	ng/uL	100
37) 2-Methylnaphthalene	142	8.835	8.835	1.149	291297	32.44	ng/uL	99
38) 1-Methylnaphthalene	142	8.995	8.995	1.170	296174	35.18	ng/uL	99
40) Hexachlorocyclopentadiene	237	9.086	9.086	0.863	15103	3.67	ng/uL	98
42) 2,4,6-Trichlorophenol	196	9.300	9.295	0.884	140554	41.89	ng/uL	97
43) 2,4,5-Trichlorophenol	196	9.364	9.353	0.890	157318	44.31	ng/uL	100
45) 2-Chloronaphthalene	162	9.621	9.621	0.914	320654	33.66	ng/uL	95
46) o-Nitroaniline	65	9.798	9.797	0.931	40371	12.94	ng/uL	91
49) Dimethylphthalate	163	10.113	10.113	0.961	507443	47.03	ng/uL	99
51) 2,6-Dinitrotoluene	165	10.204	10.204	0.970	106769	43.37	ng/uL	89
52) 2,4-Dinitrotoluene	165	10.857	10.856	1.032	154788	45.86	ng/uL	85
53) Acenaphthylene	152	10.295	10.295	0.978	507131	35.03	ng/uL	99
54) Acenaphthene	154	10.578	10.578	1.005	320788	35.35	ng/uL	99
55) 2,4-Dinitrophenol	184	10.643	10.642	1.011	66164	46.78	ng/uL	93
56) Dibenzofuran	168	10.862	10.862	1.032	524066	36.79	ng/uL	98
57) 2,3,4,6-Tetrachlorophenol	232	11.071	11.065	1.052	147827	44.33	ng/uL	98
58) Diethylphthalate	149	11.268	11.268	1.071	528419	48.77	ng/uL	99
59) 4-Nitrophenol	109	10.792	10.765	1.025	51064	31.39	ng/uL	96
60) Fluorene	166	11.424	11.423	1.085	442611	38.68	ng/uL	99
61) 4-Chlorophenylphenylether	204	11.434	11.434	1.086	216426	37.09	ng/uL	99
62) p-Nitroaniline	138	11.424	11.466	1.085	14118	5.11	ng/uL#	28
65) 2-Methyl-4,6-dinitroph...	198	11.515	11.514	0.889	96165	47.83	ng/uL	96
66) Diphenylamine	169	11.632	11.632	0.898	400544	40.36	ng/uL	99
67) 1,2-Diphenylhydrazine	77	11.696	11.696	0.903	453602	34.94	ng/uL	95
68) 4-Bromophenylphenylether	248	12.237	12.231	0.945	145590	36.79	ng/uL	100
69) Hexachlorobenzene	284	12.311	12.311	0.950	165962	33.54	ng/uL	99
70) Pentachlorophenol	266	12.648	12.643	0.976	122085	41.26	ng/uL	99
71) n-Octadecane	57	12.825	12.825	0.990	220191	27.09	ng/uL	94
73) Phenanthrene	178	12.991	12.991	1.003	670013	37.17	ng/uL	99
74) Anthracene	178	13.071	13.071	1.009	656449	36.30	ng/uL	100
75) Carbazole	167	13.354	13.349	1.031	727949	45.41	ng/uL	100
76) Di-n-butylphthalate	149	13.953	13.953	1.077	734601	40.76	ng/uL	99
77) Fluoranthene	202	14.932	14.932	1.153	762655	39.36	ng/uL	99
78) Pyrene	202	15.296	15.296	1.181	776591	38.23	ng/uL	99
81) Butylbenzylphthalate	149	16.403	16.398	0.949	337576	40.87	ng/uL	95
82) bis(2-Ethylhexyl)phtha...	149	17.377	17.376	1.005	443796	35.13	ng/uL	100
83) Benzo(a)anthracene	228	17.275	17.275	0.999	721131	32.48	ng/uL	95
84) Chrysene	228	17.339	17.339	1.003	690705	32.76	ng/uL	99
87) Di-n-octylphthalate	149	18.714	18.719	1.082	754590	38.68	ng/uL	95
89) Benzo(b)fluoranthene	252	19.516	19.516	0.961	682034	32.29	ng/uL	100
90) Benzo(k)fluoranthene	252	19.580	19.585	0.964	675618	31.62	ng/uL	99
91) Benzo(a)pyrene	252	20.195	20.200	0.994	609779	33.20	ng/uL	99
92) Indeno(1,2,3-cd)pyrene	276	22.217	22.228	1.094	640268	30.11	ng/uL	99
93) Dibenzo(a,h)anthracene	278	22.271	22.270	1.097	641214	29.22	ng/uL	99
94) Benzo(ghi)perylene	276	22.752	22.762	1.120	615885	28.14	ng/uL	100
97) 1,4-Dioxane	88	2.096	2.079	0.365	39771	20.11	ng/uL	95

Quantitation Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2011.D
Acq On : 20 Dec 2022 16:44
Operator : NM1
Sample : |1205274625|2358006|1|SVM|1|MSD|||
Misc : |MSD1C70E_L|WATER|QC A|MIX[A,B,J,D,E]||
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 21 12:26:12 2022
Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration

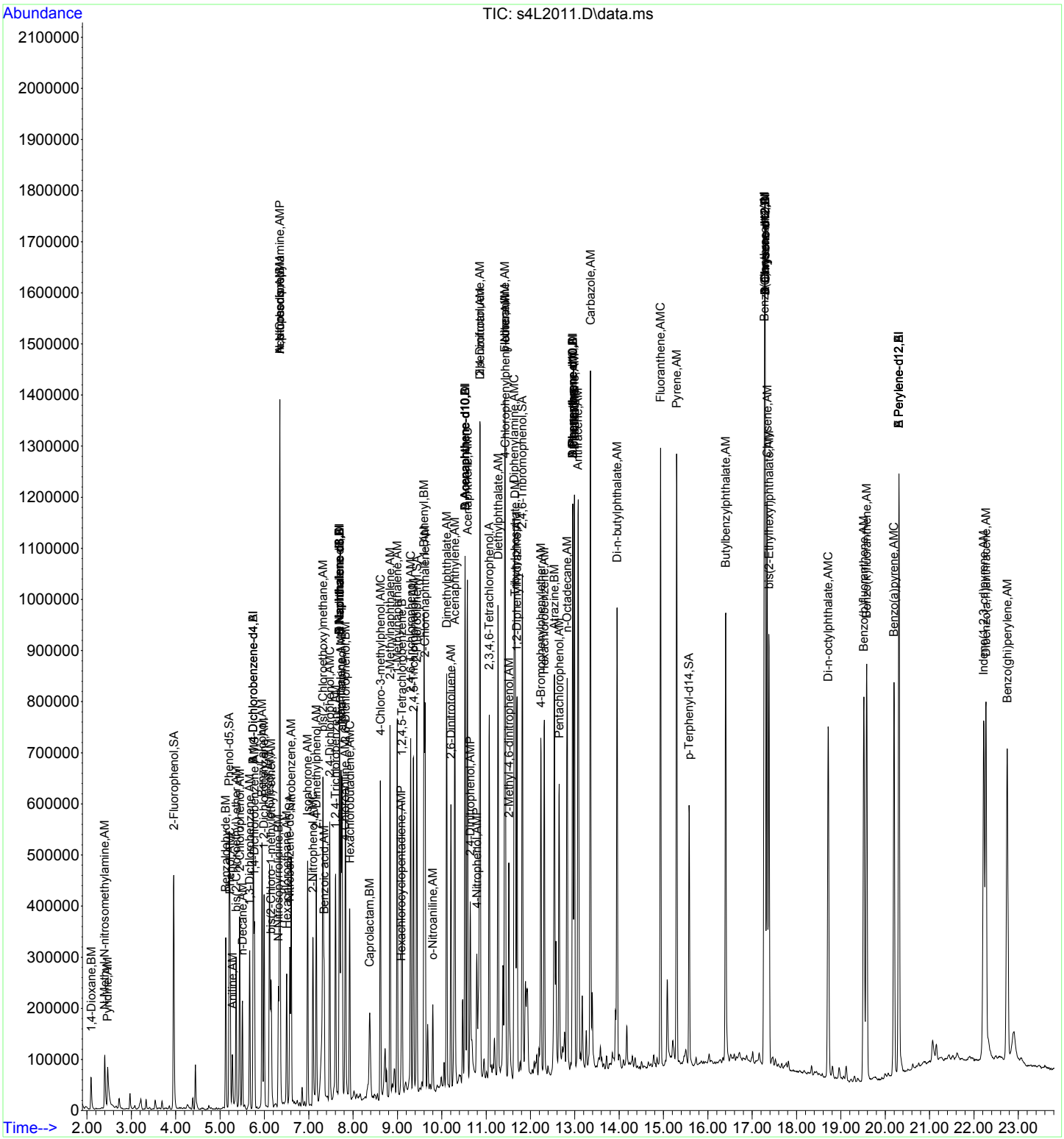
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
106) Benzaldehyde	77	5.128	5.117	0.892	101949	25.10	ng/uL	98
108) N-Nitrosopyrrolidine	100	6.316	6.300	1.099	86595	37.69	ng/uL	89
109) Acetophenone	105	6.348	6.337	1.104	221949	32.75	ng/uL	75
115) 2,6-Dichlorophenol	162	7.829	7.813	1.018	154632	40.65	ng/uL	99
117) Caprolactam	113	8.375	8.321	1.089	34946	27.68	ng/uL#	77
121) 1,2,4,5-Tetrachloroben...	216	9.102	9.092	0.865	157069	28.59	ng/uL	100
122) 1,1-Biphenyl	154	9.600	9.589	0.912	427647	32.98	ng/uL	99
135) Atrazine	200	12.541	12.509	0.968	168389	47.71	ng/uL	97
163) Tributylphosphate	99	11.654	11.621	1.107	607698	45.02	ng/uL	98
168) Disulfoton	88	12.991	12.969	1.003	46705	6.84	ng/uL#	2

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report

Data Path : C:\msdchem\1\data\S122022\
Data File : s4L2011.D
Acq On : 20 Dec 2022 16:44
Operator : NM1
Sample : |1205274625|2358006|1|SVM|1|MSD|||
Misc : |MSD1C70E_L|WATER|QC A|MIX[A,B,J,D,E]||
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 21 12:26:12 2022
Quant Method : C:\msdchem\1\data\S122022\MSD4_8270_110522RECALC.m
Quant Title : BNA01
QLast Update : Wed Nov 16 11:38:14 2022
Response via : Initial Calibration



Miscellaneous

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Groundwater, Wastewater, and Other Aqueous Samples

Batch ID: 2358005 **Verified by:** _____
Analyst: Taylor Hardin
Method: SW846 3510C

Lab SOP: GL-OA-E-013 REV# 35
Instrument: Semi-Volatiles Manual

Sample ID	Prep Date	Initial Wt (g)	Final Wt (g)	Initial Volume (mL)	Ph 1	Ph 2	Ph 3	Final Volume (mL)	Prepped Factor (mL/mL)
1205274620 MB	19-DEC-2022 11:35:00			1000	7	1	13	1	0.001
1205274621 LCS	19-DEC-2022 11:35:00	0		1000	7	1	13	1	0.001
604231001	19-DEC-2022 11:35:00			17.2	7	1	13	4.5	0.26163
604231002	19-DEC-2022 11:35:00			17	5	1	13	6	0.35294
604398009	19-DEC-2022 11:35:00			1011	7	1	13	1	0.00099
1205274622 MS (604398009)	19-DEC-2022 11:35:00			500	7	1	13	1	0.002
1205274623 MSD (604398009)	19-DEC-2022 11:35:00			500	7	1	13	1	0.002
604398021	19-DEC-2022 11:35:00	1561.95	512.75	1049.2	7	1	13	1	0.00095
604398025	19-DEC-2022 11:35:00	1563.82	512.99	1050.83	7	1	13	1	0.00095
604398035	19-DEC-2022 11:35:00	1563.74	514.67	1049.07	7	1	13	1	0.00095
604398036	19-DEC-2022 11:35:00	1562.77	511.21	1051.56	7	1	13	1	0.00095
604398037	19-DEC-2022 11:35:00	1564.07	512.81	1051.26	7	1	13	1	0.00095
604398038	19-DEC-2022 11:35:00	1565.76	515.28	1050.48	7	1	13	1	0.00095
604449002	19-DEC-2022 11:35:00	1429.47	445.11	984.36	10	1	13	1	0.00102
604449006	19-DEC-2022 11:35:00			1000	10	1	13	1	0.001
1205274624 MS (604449006)	19-DEC-2022 11:35:00			450	10	1	13	1	0.00222
1205274625 MSD (604449006)	19-DEC-2022 11:35:00			450	10	1	13	1	0.00222
604449010	19-DEC-2022 11:35:00	1556.57	443.65	1112.92	10	1	13	1	0.0009
604449014	19-DEC-2022 11:35:00	1501.56	444.14	1057.42	10	1	13	1	0.00095
604449018	19-DEC-2022 11:35:00	1462.08	510.05	952.03	10	1	13	1	0.00105
604458001	19-DEC-2022 11:35:00			1000	7	1	13	1	0.001
1205274626 MS (604458001)	19-DEC-2022 11:35:00			455	7	1	13	1	0.0022
1205274627 MSD (604458001)	19-DEC-2022 11:35:00			455	7	1	13	1	0.0022

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1205274621	PrometonSulfolane 50 ppm	WBN221210-11	1	mL
LCS	1205274621	BENZIDINE/Atrazine LCS	WE221020-49	1	mL
LCS	1205274621	BNA LCS w/o Benzidine/Atrazine 50ppm	WE221201-41	1	mL
MS	1205274622	BENZIDINE/Atrazine LCS	WE221020-49	1	mL
MS	1205274622	BNA LCS w/o Benzidine/Atrazine 50ppm	WE221201-41	1	mL

Comments:

Final Solvent: CH2CL2
Verified by: De'Asia Gathers
Turbovap: 4,5,6
Balance # OPWBAL-01
The PM said to use all of sample 604231002.
4 ml of acid was added to sample 604449010 to adjust for the pH for acid extraction.
Samples 604449006 and its MS/MSD were emulisve during base extraction.

Prep Logbook

Batch ID: 2358005 **Verified by:** _____
Analyst: Taylor Hardin
Method: SW846 3510C

Lab SOP: GL-OA-E-013 REV# 35
Instrument: Semi-Volatiles Manual

Sample ID		Prep Date	Initial Wt (g)	Final Wt (g)	Initial Volume (mL)	Ph 1	Ph 2	Ph 3	Final Volume (mL)	Prepped Factor (mL/mL)
MS	1205274624	BENZIDINE/Atrazine LCS			WE221020-49		1	mL		
MS	1205274624	BNA LCS w/o Benzidine/Atrazine 50ppm			WE221201-41		1	mL		
MS	1205274626	PrometonSulfolane 50 ppm			WBN221210-11		1	mL		
MS	1205274626	BENZIDINE/Atrazine LCS			WE221020-49		1	mL		
MS	1205274626	BNA LCS w/o Benzidine/Atrazine 50ppm			WE221201-41		1	mL		
MSD	1205274623	BENZIDINE/Atrazine LCS			WE221020-49		1	mL		
MSD	1205274623	BNA LCS w/o Benzidine/Atrazine 50ppm			WE221201-41		1	mL		
MSD	1205274625	BENZIDINE/Atrazine LCS			WE221020-49		1	mL		
MSD	1205274625	BNA LCS w/o Benzidine/Atrazine 50ppm			WE221201-41		1	mL		
MSD	1205274627	PrometonSulfolane 50 ppm			WBN221210-11		1	mL		
MSD	1205274627	BENZIDINE/Atrazine LCS			WE221020-49		1	mL		
MSD	1205274627	BNA LCS w/o Benzidine/Atrazine 50ppm			WE221201-41		1	mL		
SURR	All	BNA for all Surrogate			UE221112-15		1	mL		
REGNT	All	Methylene Chloride			3483519		360	mL		
REGNT	All	10 N Sodium Hydroxide			3648039		10	mL		
REGNT	All	Sulfuric Acid 1:1 H2SO4/H2O			3648652		2	mL		
SOURC	All	SODIUM SULFATE			3493987		30	g		

Sample 604449018 was emulsive during acid and base extraction.
Sample 604458001 and it's MS/MSD was emulsive during acid extraction.

ORGANIC RUN LOG - INSTRUMENT ID#MSD4

GEL ORGANIC RUN LOG

DATE: 5-Nov-22 METHOD: See Data OPERATOR: NM1 Sequence Number: S110522SCANICAL

Internal Std ID: UBN220317-01.2

Solvent Reference ID: 3394373

Calibration Information:
Initial Calibration Dates: See Calibration History
Initial Calibration Std ID's: See Associated Data and Run Log
GEL SOP: GL-OA-E-009

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Dil. Factor	AS Slot #	Analyst	Comments
11/05/2022	15:15	s4K0501.D	WBN221014-99	DFTPP	DFTPP	1	1	NM1	
11/05/2022	15:30	s4K0502.D	WBN221010-01.1	M-1	ICAL	1	2	NM1	
11/05/2022	16:03	s4K0503.D	WBN221010-02.1	M-2	ICAL	1	3	NM1	
11/05/2022	16:37	s4K0504.D	WBN221010-03.1	M-3	ICAL	1	4	NM1	
11/05/2022	17:10	s4K0505.D	WBN221010-04.1	M-4	ICAL	1	5	NM1	
11/05/2022	17:43	s4K0506.D	WBN221010-05	M-5	ICAL	1	6	NM1	
11/05/2022	18:16	s4K0507.D	WBN221010-06	M-6	ICAL	1	7	NM1	
11/05/2022	18:49	s4K0508.D	WBN221010-07	M-7	ICAL	1	8	NM1	
11/05/2022	19:22	s4K0509.D	WBN221010-08	M-8	ICAL	1	9	NM1	
11/05/2022	19:55	s4K0510.D	WBN221012-43	M-ICV	ICV	1	10	NM1	
11/05/2022	20:28	s4K0511.D	WBN220915-42.1	B-2	ICAL	1	11	NM1	
11/05/2022	20:54	s4K0512.D	WBN220915-43	B-3	ICAL	1	12	NM1	
11/05/2022	21:20	s4K0513.D	WBN220915-44.1	B-4	ICAL	1	13	NM1	
11/05/2022	21:46	s4K0514.D	WBN220915-45	B-5	ICAL	1	14	NM1	
11/05/2022	22:12	s4K0515.D	WBN220915-46	B-6	ICAL	1	15	NM1	
11/05/2022	22:39	s4K0516.D	WBN220915-47	B-7	ICAL	1	16	NM1	
11/05/2022	23:05	s4K0517.D	WBN220915-48	B-8	ICAL	1	17	NM1	
11/05/2022	23:31	s4K0518.D	WBN221104-50	B-ICV	ICAL	1	18	NM1	
11/05/2022	23:57	s4K0519.D	WBN221014-99	DFTPP	DFTPP	1	1	NM1	
11/06/2022	00:12	s4K0520.D	WBN221026-10.1	A-2	ICAL	1	19	NM1	
11/06/2022	00:41	s4K0521.D	WBN221026-11	A-3	ICAL	1	20	NM1	
11/06/2022	01:10	s4K0522.D	WBN221026-12	A-9	ICAL	1	21	NM1	**NOTE: Standards ran across daylight savings time change**
11/06/2022	01:39	s4K0523.D	WBN221026-13.1	A-4	ICAL	1	22	NM1	**NOTE: Standards ran across daylight savings time change**
11/06/2022	01:08	s4K0524.D	WBN221026-14	A-5	ICAL	1	23	NM1	**NOTE: Standards ran across daylight savings time change**
11/06/2022	01:37	s4K0525.D	WBN221026-15	A-10	ICAL	1	24	NM1	**NOTE: Standards ran across daylight savings time change**
11/06/2022	02:06	s4K0526.D	WBN221026-16	A-6	ICAL	1	25	NM1	
11/06/2022	02:35	s4K0527.D	WBN221026-17	A-7	ICAL	1	26	NM1	
11/06/2022	03:04	s4K0528.D	WBN221026-18	A-8	ICAL	1	27	NM1	
11/06/2022	03:33	s4K0529.D	WBN220915-20	A-ICV	ICV	1	28	NM1	
11/06/2022	04:01	s4K0530.D	WBN221028-27.1	P-2	ICAL	1	29	NM1	
11/06/2022	04:28	s4K0531.D	WBN221028-26	P-3	ICAL	1	30	NM1	
11/06/2022	04:54	s4K0532.D	WBN221028-25	P-4	ICAL	1	31	NM1	
11/06/2022	05:20	s4K0533.D	WBN221028-24	P-5	ICAL	1	32	NM1	
11/06/2022	05:46	s4K0534.D	WBN221028-23	P-6	ICAL	1	33	NM1	
11/06/2022	06:12	s4K0535.D	WBN221028-22	P-7	ICAL	1	34	NM1	
11/06/2022	06:38	s4K0536.D	WBN221028-21	P-8	ICAL	1	35	NM1	
11/06/2022	07:04	s4K0537.D	WBN221012-26	P-ICV	ICAL	1	36	NM1	
11/06/2022	07:30	s4K0538.D	WBN221014-99	DFTPP	DFTPP	1	1	NM1	
11/06/2022	07:46	s4K0539.D	WBN220922-31.2	H-2	ICAL	1	37	NM1	DUSE - recalibrated with fresh standards

GEL ORGANIC RUN LOG

11/06/2022 08:12	s4K0540.D	WBN220922-32	H-3	ICAL	1	38	NM1	DUSE - recalibrated with fresh standards
11/06/2022 08:38	s4K0541.D	WBN220922-33	H-4	ICAL	1	39	NM1	DUSE - recalibrated with fresh standards
11/06/2022 09:04	s4K0542.D	WBN220922-34	H-5	ICAL	1	40	NM1	DUSE - recalibrated with fresh standards
11/06/2022 09:30	s4K0543.D	WBN220922-35	H-6	ICAL	1	41	NM1	DUSE - recalibrated with fresh standards
11/06/2022 09:57	s4K0544.D	WBN220922-37	H-7	ICAL	1	42	NM1	DUSE - recalibrated with fresh standards
11/06/2022 10:23	s4K0545.D	WBN221014-37	H-ICV	ICV	1	43	NM1	DUSE - recalibrated with fresh standards
11/07/2022 11:32	s4K0546.D	WBN221014-99	DFTPP	DFTPP	1	1	NM1	
11/07/2022 11:47	s4K0547.D	WBN221107-31.1	H-2	ICAL	1	37	NM1	
11/07/2022 12:13	s4K0548.D	WBN221107-32	H-3	ICAL	1	38	NM1	
11/07/2022 12:39	s4K0549.D	WBN221107-33	H-4	ICAL	1	39	NM1	
11/07/2022 13:05	s4K0550.D	WBN221107-34	H-5	ICAL	1	40	NM1	
11/07/2022 13:31	s4K0551.D	WBN221107-35	H-6	ICAL	1	41	NM1	
11/07/2022 13:57	s4K0552.D	WBN221107-37	H-7	ICAL	1	42	NM1	
11/07/2022 14:23	s4K0553.D	WBN221014-37	H-ICV	ICV	1	43	NM1	

12/22/2022

GEL ORGANIC RUN LOG

DATE: 19-Dec-22 METHOD: See Data OPERATOR: NM1 Sequence Number: S121922

Internal Std ID: UBN220317-01.4

Solvent Reference ID: 3483519

Calibration Information:
Initial Calibration Dates: See Calibration History
Initial Calibration Std ID's: See Associated Data and Run Log
GEL SOP: GL-OA-E-009

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Dil. Factor	AS Slot #	Analyst	Comments
12/19/2022	10:01	Rinse01.D	WBN221010-04.1	M-4	CCV	1	2	NM1	
12/19/2022	13:51	s4L1901.D	WBN221215-99	DFTPP	DFTPP	1	1	NM1	
12/19/2022	14:07	s4L1902.D	WBN221213-04.17	M-4	CCV	1	2	NM1	
12/19/2022	14:40	s4L1903.D	WBN221215-13.3	A-4	CCV	1	3	NM1	
12/19/2022	15:09	s4L1904.D	WBN221027-44.7	B-4	CCV	1	4	NM1	benzidine high
12/19/2022	15:35	s4L1905.D	WBN221028-25.9	P-4	CCV	1	5	NM1	
12/19/2022	16:01	s4L1906.D	WBN221107-33	H-4	CCV	1	6	NM1	
12/19/2022	16:29	s4L1907.D	WBN221107-31.2	H-2	CCV	1	100	NM1	
12/19/2022	18:23	s4L1908.D	1205274620	MB	2358006	1	7	NM1	
12/19/2022	18:51	s4L1909.D	1205274621	LCS	2358006	1	8	NM1	
12/19/2022	19:20	s4L1910.D	604231001	DSSI	2358006	10	9	NM1	
12/19/2022	19:53	s4L1911.D	604231002	DSSI	2358006	10	10	NM1	
12/19/2022	20:26	s4L1912.D	604398009	CPRC	2358006	1	11	NM1	Benzidine hit, RR with passing CCV, see MSDH 12-21-22
12/19/2022	20:55	s4L1913.D	1205274622	MS	2358006	1	12	NM1	Benzidine hit, RR with passing CCV, see MSDH 12-21-22
12/19/2022	21:24	s4L1914.D	1205274623	MSD	2358006	1	13	NM1	Benzidine hit, RR with passing CCV, see MSDH 12-21-22
12/19/2022	21:53	s4L1915.D	604398021	CPRC	2358006	1	14	NM1	
12/19/2022	22:22	s4L1916.D	604398025	CPRC	2358006	1	15	NM1	
12/19/2022	22:51	s4L1917.D	604398035	CPRC	2358006	1	16	NM1	
12/19/2022	23:19	s4L1918.D	604398036	CPRC	2358006	1	17	NM1	
12/19/2022	23:48	s4L1919.D	604398037	CPRC	2358006	1	18	NM1	
12/20/2022	00:17	s4L1920.D	604398038	CPRC	2358006	1	19	NM1	
12/20/2022	00:46	s4L1921.D	604449002	TNSL	2358006	10	20	NM1	DUSE - RR neat
12/20/2022	01:15	s4L1922.D	604449006	TNSL	2358006	10	21	NM1	DUSE - RR neat
12/20/2022	01:44	s4L1923.D	1205274624	MS	2358006	10	22	NM1	DUSE - RR neat
12/20/2022	02:12	s4L1924.D	1205274625	MSD	2358006	10	23	NM1	DUSE - RR neat
12/20/2022	02:41	s4L1925.D	604449010	TNSL	2358006	10	24	NM1	DUSE - RR neat
12/20/2022	03:10	s4L1926.D	604449014	TNSL	2358006	1	25	NM1	DUSE - RR neat
12/20/2022	03:39	s4L1927.D	604449018	TNSL	2358006	10	26	NM1	DUSE - RR neat
12/20/2022	04:08	s4L1928.D	604458001	N3BL	2358006	1	27	NM1	DUSE - out of tune
12/20/2022	04:37	s4L1929.D	1205274626	MS	2358006	1	28	NM1	DUSE - out of tune
12/20/2022	05:06	s4L1930.D	1205274627	MSD	2358006	1	29	NM1	DUSE - out of tune

ORGANIC RUN LOG - INSTRUMENT ID#MSD4

GEL ORGANIC RUN LOG

DATE: 20-Dec-22 METHOD: See Data OPERATOR: NM1 Sequence Number: S122022

Internal Std ID: UBN220317-01.4

Solvent Reference ID: 3483519

Calibration Information:
Initial Calibration Dates: See Calibration History
Initial Calibration Std ID's: See Associated Data and Run Log
GEL SOP: GL-OA-E-009

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Dil. Factor	AS Slot #	Analyst	Comments
12/20/2022	09:06	Rinse01.D	WBN221010-04.1	M-4	CCV	1	2	NM1	
12/20/2022	11:07	Rinse02.D	WBN221010-04.1	M-4	CCV	1	2	NM1	
12/20/2022	12:05	s4L2001.D	WBN221215-99	DFTPP	DFTPP	1	1	NM1	pass
12/20/2022	12:21	s4L2002.D	WBN221213-04.17	M-4	CCV	1	2	NM1	pass
12/20/2022	12:54	s4L2003.D	WBN221215-13.3	A-4	CCV	1	3	NM1	pass
12/20/2022	13:23	s4L2004.D	WBN221027-44.7	B-4	CCV	1	4	NM1	benzidine high
12/20/2022	13:49	s4L2005.D	604458001	N3BL	2358006	1	5	NM1	report
12/20/2022	14:18	s4L2006.D	1205274626	MS	2358006	1	6	NM1	report
12/20/2022	14:47	s4L2007.D	1205274627	MSD	2358006	1	7	NM1	report
12/20/2022	15:16	s4L2008.D	604449002	TNSL	2358006	1	8	NM1	report - surrogates low, matrix interference
12/20/2022	15:46	s4L2009.D	604449006	TNSL	2358006	1	9	NM1	report - surrogates low, matrix interference
12/20/2022	16:15	s4L2010.D	1205274624	MS	2358006	1	10	NM1	report - surrogates low, matrix interference
12/20/2022	16:44	s4L2011.D	1205274625	MSD	2358006	1	11	NM1	report - surrogates low, matrix interference
12/20/2022	17:13	s4L2012.D	604449010	TNSL	2358006	1	12	NM1	report - surrogates low, matrix interference
12/20/2022	17:42	s4L2013.D	604449014	TNSL	2358006	1	13	NM1	report - surrogates low, matrix interference
12/20/2022	18:11	s4L2014.D	604449018	TNSL	2358006	1	14	NM1	report - surrogates low, matrix interference
12/20/2022	18:40	s4L2015.D	1205276808	MB	2359116	1	15	NM1	report
12/20/2022	19:08	s4L2016.D	1205276809	LCS	2359116	1	16	NM1	report
12/20/2022	19:37	s4L2017.D	603185001	TNSL	2359116	10	17	NM1	report
12/20/2022	20:06	s4L2018.D	1205276810	MS	2359116	10	18	NM1	report
12/20/2022	20:35	s4L2019.D	1205276811	MSD	2359116	10	19	NM1	report

Explosives by LCMSMS Analysis

Case Narrative

Explosives by LCMSMS
Technical Case Narrative
Triad National Security, LLC
SDG #: 2023-289
Work Order #: 604449

Product: **The Processing, Extraction, and Analysis of Nitroaromatics, Nitroamines, and Nitrate Esters by SW-846 8330B**
Analytical Method: SW846 3535A/8330B
Analytical Procedure: GL-OA-E-068 REV# 8
Analytical Batch: 2358905

Preparation Method: SW846 3535A
Preparation Procedure: GL-OA-E-033 REV# 25
Preparation Batch: 2358904

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
604449002	SMEB01-23-265371
604449006	SMEB02-23-265372
604449010	SMEB03-23-265373
604449014	SMEB04-23-265374
604449018	SMEB05-23-265375
1205276411	Method Blank (MB)
1205276412	Laboratory Control Sample (LCS)
1205276413	604449014(SMEB04-23-265374) Matrix Spike (MS)
1205276414	604449014(SMEB04-23-265374) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Calibration Information

Calibration Verification Standard Requirements
All continuing calibration verification standards (CCV) have not met requirements of 80-120% for in this SDG. Please refer to Form 7 of the data package for a list of recoveries. The standard bracketing these samples recovered outside the acceptance range. The samples were analyzed three (3) times on different instruments and similar failures were observed. 604449002 (SMEB01-23-265371), 604449006 (SMEB02-23-265372), 604449010 (SMEB03-23-265373), 604449014 (SMEB04-23-265374) and 604449018 (SMEB05-23-265375).

CRI Requirements
All Low Level Calibration Verification Standards (CRI) did not meet requirements of 70-130% for samples in this SDG. Please refer to Form 7 of the data package for a list of recoveries. The Low Level standard bracketing these samples recovered outside the acceptance range. The samples were analyzed three (3) times on different instruments and similar failures were observed. 604449002 (SMEB01-23-265371), 604449006 (SMEB02-23-265372), 604449010 (SMEB03-23-265373), 604449014 (SMEB04-23-265374) and 604449018

(SMEB05-23-265375).

Technical Information

Sample Dilutions
In accordance with GEL SOP GL-OA-056, all sample and QC extracts are diluted 1:1 v/v with LC reagent grade Water.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Qualifier Definition Report
for

TNSL001 Triad National Security, LLC (620266)

Client SDG: 2023-289 GEL Work Order: 604449

The Qualifiers in this report are defined as follows:

U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
* A quality control analyte recovery is outside of specified acceptance criteria
** Analyte is a surrogate compound

DL Indicates that sample is diluted.
RA Indicates that sample is re-analyzed without re-extraction.
RE Indicates that sample is re-extracted.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature: Nik-Cole A. Elmore **Name: Nik-Cole Elmore**

Date: 05 JAN 2023 **Title: Analyst II**
Data Validator

Sample Data Summary

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: SMEB01-23-265371

Lab Code: GEL

GEL Job No (SDG): 2023-289

Matrix: WATER

GEL Sample ID: 604449002

Sample Amount : 965 mL

Date Received: 16-DEC-22

Moisture:

Extraction Batch ID: 2358904

Extraction Type: Sol Exchange

Date Extracted: 21-DEC-22

Concentrated Extract Volume (mL) 5

Injection Volume (uL):50

GEL data file: EXP122922017.wiff

Date Analyzed: 30-DEC-22 01:26

Dilution Factor: 2

Concentration Units: ug/L

Cas No.	Compound	Concentration*	Q	MDL	PQL
2691-41-0	HMX	.0829	U	0.0829	0.259
2691-41-0	*HMX*				
118-96-7	2,4,6-Trinitrotoluene	.0829	U	0.0829	0.259
118-96-7	*2,4,6-Trinitrotoluene*				
121-82-4	RDX	.0829	U	0.0829	0.259
121-82-4	*RDX*				

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: SMEB02-23-265372

Lab Code: GEL

GEL Job No (SDG): 2023-289

Matrix: WATER

GEL Sample ID: 604449006

Sample Amount : 1010 mL

Date Received: 16-DEC-22

Moisture:

Extraction Batch ID: 2358904

Extraction Type: Sol Exchange

Date Extracted: 21-DEC-22

Concentrated Extract Volume (mL) 5

Injection Volume (uL):50

GEL data file: EXP122922018.wiff

Date Analyzed: 30-DEC-22 02:02

Dilution Factor: 2

Concentration Units: ug/L

Cas No.	Compound	Concentration*	Q	MDL	PQL
121-82-4	RDX	.0793	U	0.0793	0.248
121-82-4	*RDX*				
2691-41-0	HMX	.0793	U	0.0793	0.248
2691-41-0	*HMX*				
118-96-7	2,4,6-Trinitrotoluene	.0793	U	0.0793	0.248
118-96-7	*2,4,6-Trinitrotoluene*				

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: SMEB03-23-265373

Lab Code: GEL

GEL Job No (SDG): 2023-289

Matrix: WATER

GEL Sample ID: 604449010

Sample Amount : 1100 mL

Date Received: 16-DEC-22

Moisture:

Extraction Batch ID: 2358904

Extraction Type: Sol Exchange

Date Extracted: 21-DEC-22

Concentrated Extract Volume (mL) 5

Injection Volume (uL):50

GEL data file: EXP122922019.wiff

Date Analyzed: 30-DEC-22 02:37

Dilution Factor: 2

Concentration Units: ug/L

Cas No.	Compound	Concentration*	Q	MDL	PQL
2691-41-0	HMX	.0726	U	0.0726	0.227
2691-41-0	*HMX*				
118-96-7	2,4,6-Trinitrotoluene	.0726	U	0.0726	0.227
118-96-7	*2,4,6-Trinitrotoluene*				
121-82-4	RDX	.0726	U	0.0726	0.227
121-82-4	*RDX*				

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: SMEB04-23-265374

Lab Code: GEL

GEL Job No (SDG): 2023-289

Matrix: WATER

GEL Sample ID: 604449014

Sample Amount : 1020 mL

Date Received: 16-DEC-22

Moisture:

Extraction Batch ID: 2358904

Extraction Type: Sol Exchange

Date Extracted: 21-DEC-22

Concentrated Extract Volume (mL) 5

Injection Volume (uL):50

GEL data file: EXP122922020.wiff

Date Analyzed: 30-DEC-22 03:13

Dilution Factor: 2

Concentration Units: ug/L

Cas No.	Compound	Concentration*	Q	MDL	PQL
118-96-7	2,4,6-Trinitrotoluene	.0788	U	0.0788	0.246
118-96-7	*2,4,6-Trinitrotoluene*				
2691-41-0	HMX	.0788	U	0.0788	0.246
2691-41-0	*HMX*				
121-82-4	RDX	.0788	U	0.0788	0.246
121-82-4	*RDX*				

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: SMEB05-23-265375

Lab Code: GEL

GEL Job No (SDG): 2023-289

Matrix: WATER

GEL Sample ID: 604449018

Sample Amount : 968 mL

Date Received: 16-DEC-22

Moisture:

Extraction Batch ID: 2358904

Extraction Type: Sol Exchange

Date Extracted: 21-DEC-22

Concentrated Extract Volume (mL) 5

Injection Volume (uL):50

GEL data file: EXP122922023.wiff

Date Analyzed: 30-DEC-22 05:00

Dilution Factor: 2

Concentration Units: ug/L

Cas No.	Compound	Concentration*	Q	MDL	PQL
2691-41-0	HMX	.0826	U	0.0826	0.258
2691-41-0	*HMX*				
121-82-4	RDX	.0826	U	0.0826	0.258
121-82-4	*RDX*				
118-96-7	2,4,6-Trinitrotoluene	.0826	U	0.0826	0.258
118-96-7	*2,4,6-Trinitrotoluene*				

Quality Control Summary

High Explosives Surrogate Recovery Summary

Lab Name: GEL Laboratories LLC **GEL Job No (SDG):** 2023-289

Lab Code: GEL **HPLC Column:** Ultracarb Phenomenex 5u ODS (20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
604449002	SMEB01-23-265371	103	44 - 142	
604449006	SMEB02-23-265372	113	44 - 142	
604449010	SMEB03-23-265373	107	44 - 142	
604449014	SMEB04-23-265374	110	44 - 142	
604449018	SMEB05-23-265375	116	44 - 142	
1205276411	MB for batch 2358904	93	44 - 142	
1205276412	LCS for batch 2358904	98	44 - 142	
1205276413	SMEB04-23-265374MS	119	44 - 142	
1205276414	SMEB04-23-265374MSD	97	44 - 142	

DNT = 3,4-Dinitrotoluene

3B
High Explosives LCS/LCS Duplicate Summary

Lab Name: GEL Laboratories LLC

Client ID: LCS

Lab Code: GEL

GEL Job No (SDG) 2023-289

Extract Batch Code: 2358904

Date Extracted: 21-DEC-22

GEL LCS ID: 1205276412

GEL LCSDUP ID:

Analysis Date/Time: 30-DEC-22 00:50

DUP Analysis Date/Time:

Reporting Units: ug/L

QC Type: LCS/LCSD

Compound	Spike Added	LCS Conc	LCS Rec	#	LCSD Conc	LCSD Rec	#	RPD	#	RPD	Recovery Limits
2,4,6-Trinitrotoluene	5	5.06	101								62 - 120
RDX	5	5.05	101								56 - 140
HMX	5	4.84	97								50 - 127

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: SMEB04-23-265374

Lab Code: GEL

GEL Job No (SDG) 2023-289

Extract Batch Code: 2358904

Date Extracted: 21-DEC-22

GEL Spike ID: 1205276413

GEL SpikeDup ID: 1205276414

Analysis Date/Time: 30-DEC-22 03:49

MSD Analysis Date/Time: 30-DEC-22 04:24

Reporting Units: ug/L

QC Type: MS/MSD

Compound	Spike Added	Sample Conc	MS Conc	MS Rec	#	MSD Conc	MSD Rec	#	RPD	#	RPD Limit	Rec Limits
2,4,6-Trinitrotoluene	4.74757	0	4.41	93		4.35	90		1		30	53 - 115
RDX	4.74757	0	3.71	78		3.38	70		9		30	43 - 135
HMX	4.74757	0	3.04	64		2.73	56		11		30	42 - 139

#Column to be used to flag recovery and RPD values with an asterisk

High Explosives Internal Standard Summary

Lab Name: *GEL Laboratories LLC* **GEL Job No (SDG):** *2023-289*

Lab Code: *GEL* **Instrument ID:** *LCMSMS*

HPLC Column: Ultracarb Phenomenex 5u ODS (20)

	Analysis Date/Time	GEL Data File	IS1 (DNB) (Area) #	IS2 (DNT) (Area) #
			34670.694	44383.654
Upper Limit			69341.388	88767.308
Lower Limit			17335.347	22191.827
MB for batch 2358904	30-dec-22 00:15	EXP122922015	33904.474	41566.435
LCS for batch 2358904	30-dec-22 00:50	EXP122922016	32481.14	41484.187
SMEB01-23-265371	30-dec-22 01:26	EXP122922017	34198.004	41099.707
SMEB02-23-265372	30-dec-22 02:02	EXP122922018	34567.789	40257.276
SMEB03-23-265373	30-dec-22 02:37	EXP122922019	36363.34	40217.747
SMEB04-23-265374	30-dec-22 03:13	EXP122922020	35894.57	43893.826
SMEB04-23-265374(604449014MS)	30-dec-22 03:49	EXP122922021	33955.858	39957.294
SMEB04-23-265374(604449014MSD	30-dec-22 04:24	EXP122922022	37353.34	41232.795
SMEB05-23-265375	30-dec-22 05:00	EXP122922023	35670.53	40577.763

IS1 (DNB) = 1,3-Dinitrobenzene-d4
IS2 (DNT) = 2,6-Dinitrotoluene-d3

For Method SW846 8330B:
Area Upper Limit = + 200% of average IS area from multipoint calibration
Area Lower Limit = - 50% of average IS area from multipoint calibration

For Other Methods:
Area Upper Limit = + 30% of average IS area from multipoint calibration
Area Lower Limit = - 30% of average IS area from multipoint calibration

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits

Sample Data

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: SMEB01-23-265371

Lab Code: GEL

GEL Job No (SDG): 2023-289

Matrix: WATER

GEL Sample ID: 604449002

Sample Amount : 965 mL

Date Received: 16-DEC-22

Moisture:

Extraction Batch ID: 2358904

Extraction Type: Sol Exchange

Date Extracted: 21-DEC-22

Concentrated Extract Volume (mL) 5

Injection Volume (uL): 50

GEL data file: EXP122922017.wiff

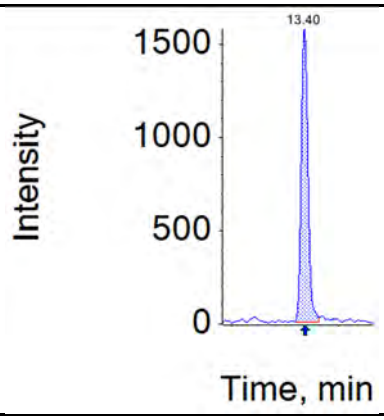
Date Analyzed: 30-DEC-22 01:26

Dilution Factor: 2

Concentration Units: ug/L

Cas No.	Compound	Concentration*	Q	MDL	PQL
2691-41-0	HMX	.0829	U	0.0829	0.259
2691-41-0	*HMX*				
118-96-7	2,4,6-Trinitrotoluene	.0829	U	0.0829	0.259
118-96-7	*2,4,6-Trinitrotoluene*				
121-82-4	RDX	.0829	U	0.0829	0.259
121-82-4	*RDX*				

Data File	EXP122922017.wiff	Acquisition Date	12/30/2022 1:26:29
Sample Name	604449002	Acquisition Method	explosivesFull2.dam
Batch|Dilution|Analyst	2358905|2|JLS|1	Result Table	12292022
Procedure Code	LCX30BWO_L	Sample Type	Unknown



Compound Name: 13-Dinitrobenzene-d4

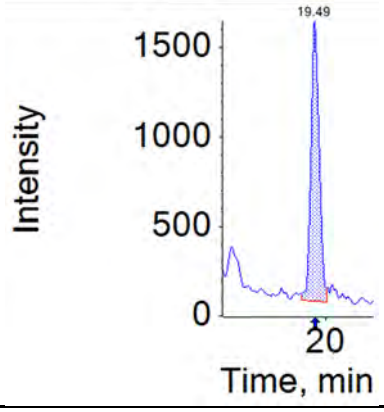
Expected RT: 13.42

Actual RT: 13.40

Area Counts: 34198.004

Integration Type: Valley

Amount: 10.0



Compound Name: 26-Dinitrotoluene-d3

Expected RT: 19.50

Actual RT: 19.49

Area Counts: 41099.707

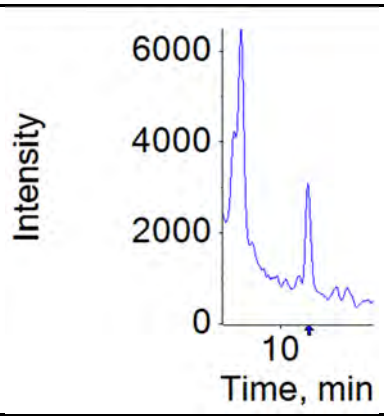
Integration Type: Valley

Amount: 10.0

Please refer to Form 8 of the data package for a complete list of Internal Standard Recoveries.

Relative Retention Time (RRT) is used by the laboratory to establish peak identity. The RRT of each target analyte is calculated using the retention time of the corresponding internal standard. The RRT of each analyte in a sample must be within 2.0 of the analyte's calculated RRT in the ICV.

EXP122922017.wiff
604449002

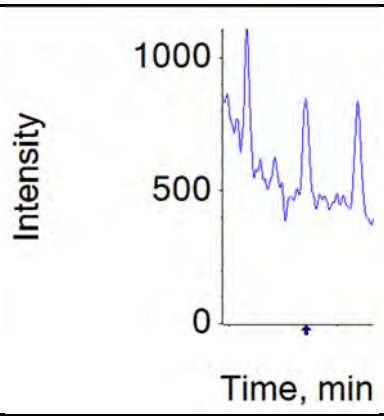


Compound Name: 135-Trinitrobenzene

Expected RT: 11.29
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922017.wiff
604449002

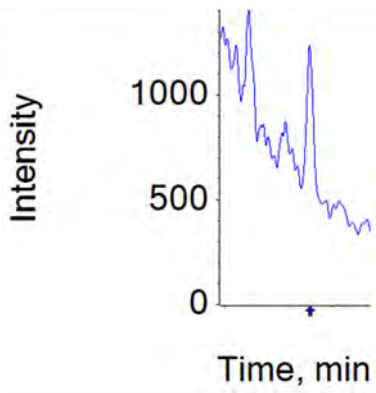


Compound Name: 13-Dinitrobenzene

Expected RT: 13.57
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922017.wiff
604449002

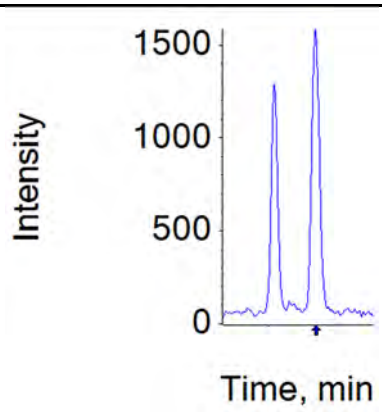


Compound Name: Tetryl

Expected RT: 14.00
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922017.wiff
604449002

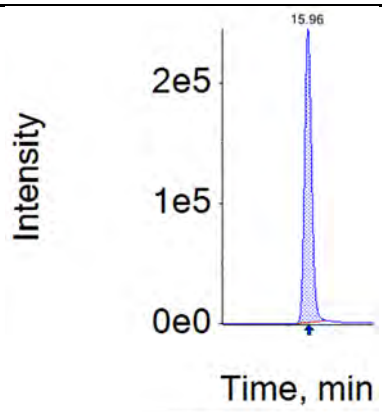


Compound Name: 246-Trinitrotoluene

Expected RT: 17.23
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922017.wiff
604449002



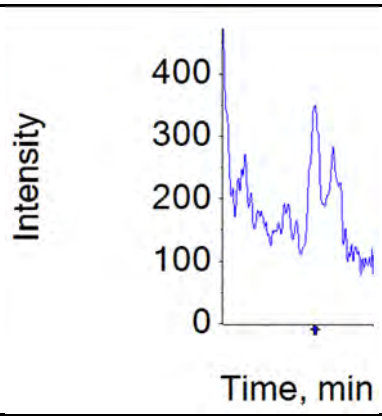
Compound Name: 34-dinitrotoluene

Expected RT: 15.99
Actual RT: 15.96
RRT: 0.82
Area Counts: 5505888.058
Integration Type:Baseline

Amount: 258.67
%Accuracy: N/A

EXP122922017.wiff

604449002

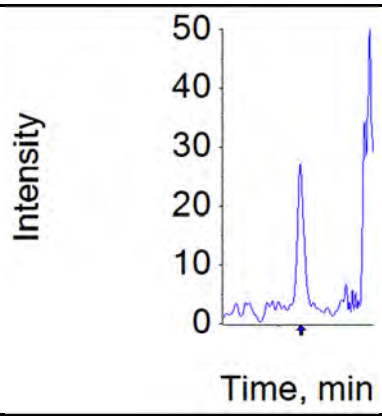


Compound Name: 4-Amino-26-dinitrotoluene

Expected RT: 17.28
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922017.wiff
604449002

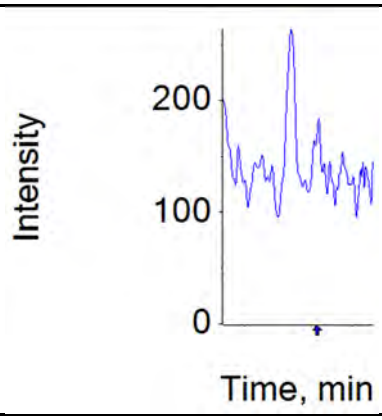


Compound Name: PETN

Expected RT: 26.02
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922017.wiff
604449002

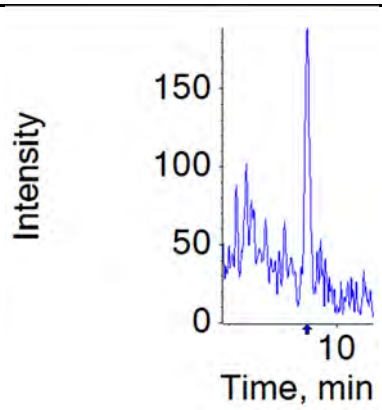


Compound Name: 2-Amino-46-dinitrotoluene

Expected RT: 18.37
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922017.wiff
604449002

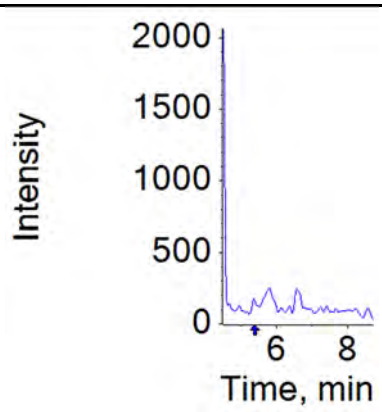


Compound Name: TATB

Expected RT: 8.63
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922017.wiff
604449002

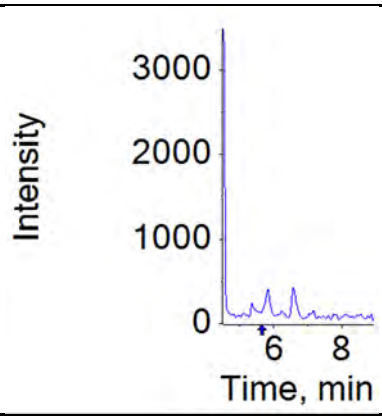


Compound Name: 26-Diamino-4-nitrotoluene

Expected RT: 5.38
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922017.wiff
604449002

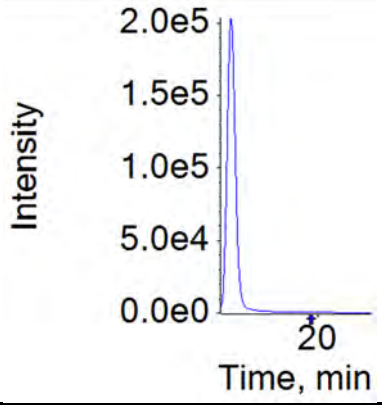


Compound Name: 24-Diamino-6-nitrotoluene

Expected RT: 5.64
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922017.wiff
604449002

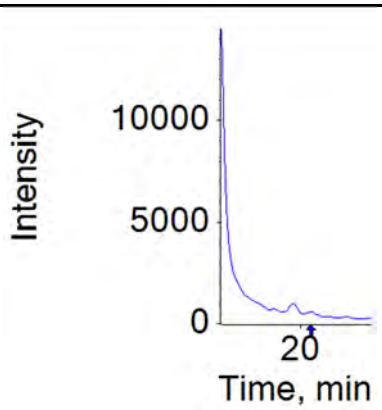


Compound Name: 26-dinitrotoluene

Expected RT: 19.69
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922017.wiff
604449002

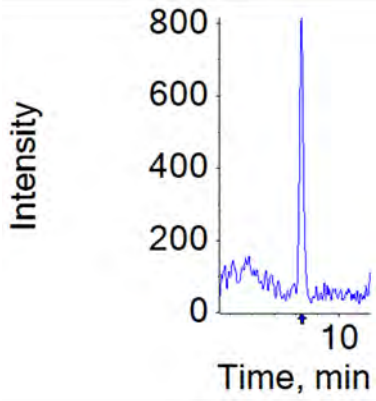


Compound Name: 24-dinitrotoluene

Expected RT: 20.48
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922017.wiff
604449002

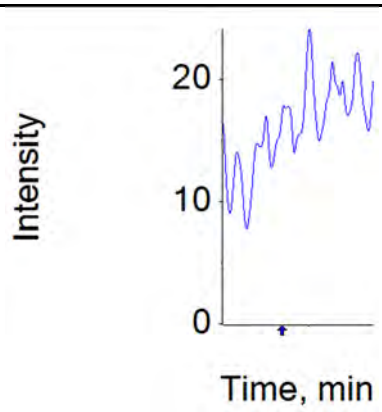


Compound Name: RDX

Expected RT: 8.26
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922017.wiff
604449002

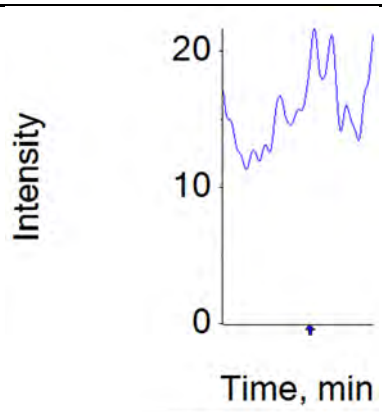


Compound Name: 2-Nitrotoluene

Expected RT: 23.75
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922017.wiff
604449002



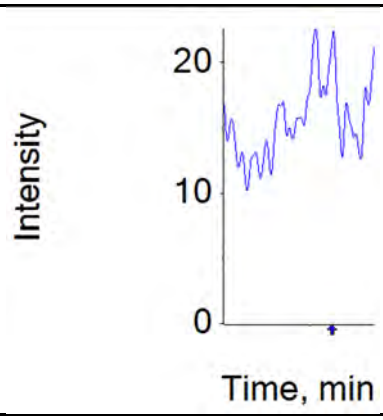
Compound Name: 4-Nitrotoluene

Expected RT: 25.04
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922017.wiff

604449002

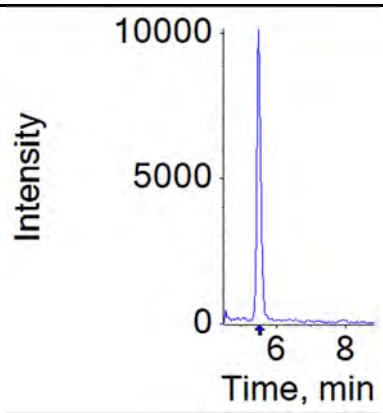


Compound Name: 3-Nitrotoluene

Expected RT: 26.01
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922017.wiff
604449002

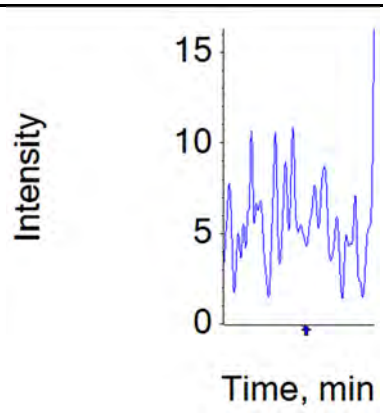


Compound Name: HMX

Expected RT: 5.51
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922017.wiff
604449002

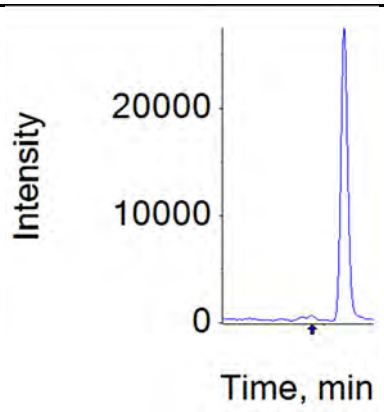


Compound Name: Nitrobenzene

Expected RT: 15.21
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922017.wiff
604449002

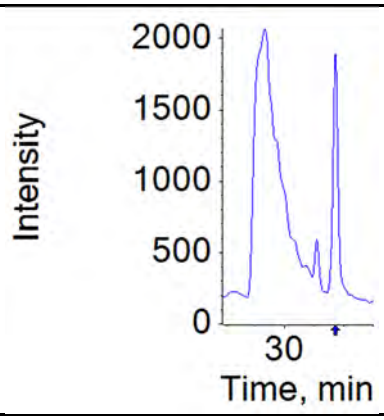


Compound Name: 35-Dinitroaniline

Expected RT: 14.45
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922017.wiff
604449002

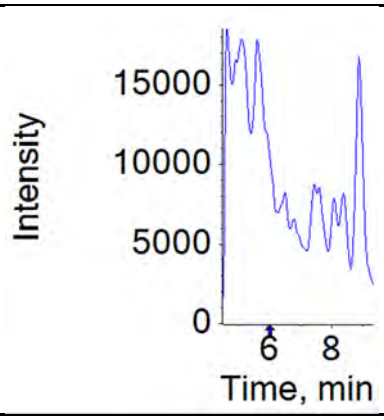


Compound Name: tris(o-cresyl)phosphate

Expected RT: 31.72
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922017.wiff
604449002

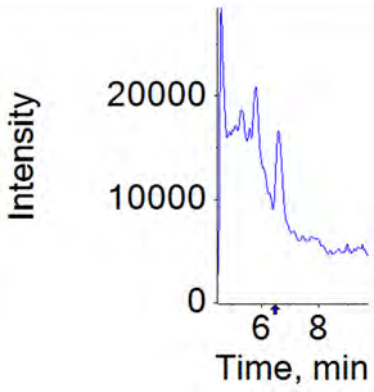


Compound Name: TNX

Expected RT: 5.99
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922017.wiff
604449002

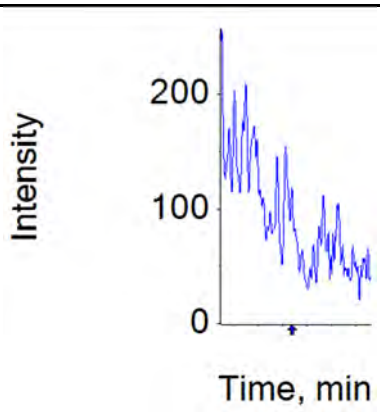


Compound Name: DNX

Expected RT: 6.48
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922017.wiff
604449002

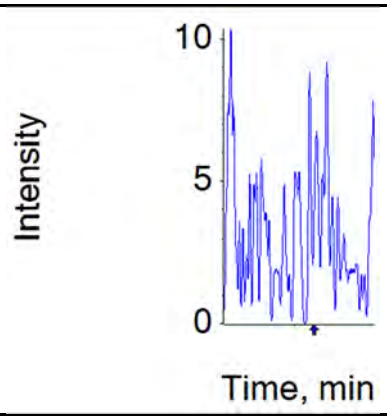


Compound Name: MNX

Expected RT: 7.38
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922017.wiff
604449002



Compound Name: Nitroglycerin

Expected RT: 15.88
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: SMEB02-23-265372

Lab Code: GEL

GEL Job No (SDG): 2023-289

Matrix: WATER

GEL Sample ID: 604449006

Sample Amount : 1010 mL

Date Received: 16-DEC-22

Moisture:

Extraction Batch ID: 2358904

Extraction Type: Sol Exchange

Date Extracted: 21-DEC-22

Concentrated Extract Volume (mL) 5

Injection Volume (uL):50

GEL data file: EXP122922018.wiff

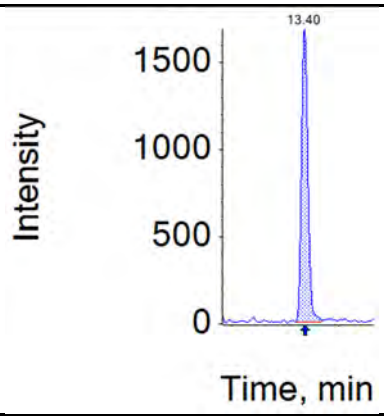
Date Analyzed: 30-DEC-22 02:02

Dilution Factor: 2

Concentration Units: ug/L

Cas No.	Compound	Concentration*	Q	MDL	PQL
121-82-4	RDX	.0793	U	0.0793	0.248
121-82-4	*RDX*				
2691-41-0	HMX	.0793	U	0.0793	0.248
2691-41-0	*HMX*				
118-96-7	2,4,6-Trinitrotoluene	.0793	U	0.0793	0.248
118-96-7	*2,4,6-Trinitrotoluene*				

Data File	EXP122922018.wiff	Acquisition Date	12/30/2022 2:02:08
Sample Name	604449006	Acquisition Method	explosivesFull2.dam
Batch|Dilution|Analyst	2358905|2|JLS|1	Result Table	12292022
Procedure Code	LCX30BWO_L	Sample Type	Unknown



Compound Name: 13-Dinitrobenzene-d4

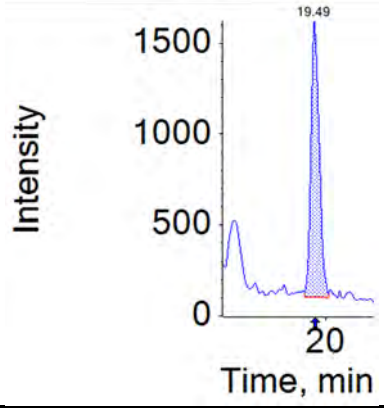
Expected RT: 13.42

Actual RT: 13.40

Area Counts: 34567.789

Integration Type: Valley

Amount: 10.0



Compound Name: 26-Dinitrotoluene-d3

Expected RT: 19.50

Actual RT: 19.49

Area Counts: 40257.276

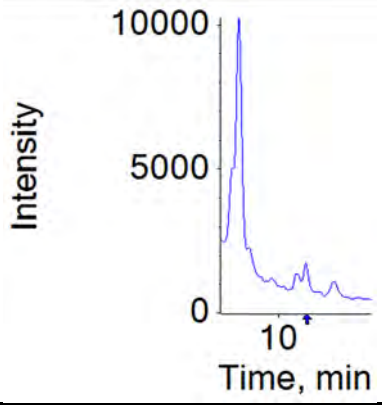
Integration Type: Valley

Amount: 10.0

Please refer to Form 8 of the data package for a complete list of Internal Standard Recoveries.

Relative Retention Time (RRT) is used by the laboratory to establish peak identity. The RRT of each target analyte is calculated using the retention time of the corresponding internal standard. The RRT of each analyte in a sample must be within 2.0 of the analyte's calculated RRT in the ICV.

EXP122922018.wiff
604449006

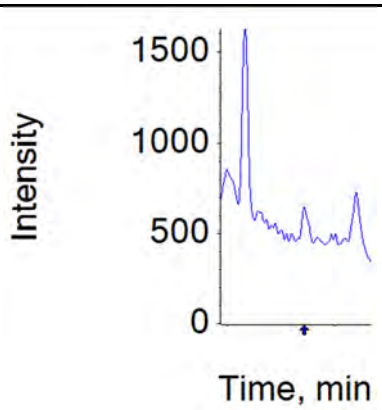


Compound Name: 135-Trinitrobenzene

Expected RT: 11.29
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922018.wiff
604449006

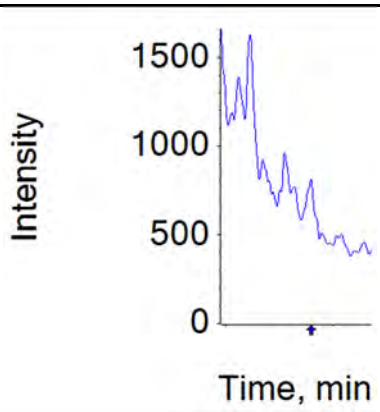


Compound Name: 13-Dinitrobenzene

Expected RT: 13.57
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922018.wiff
604449006

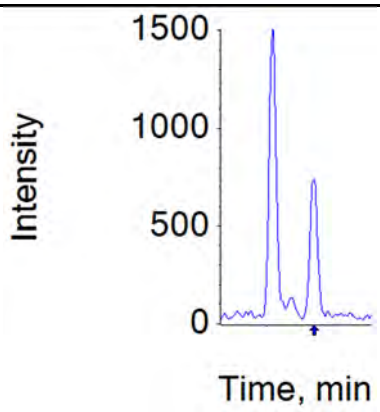


Compound Name: Tetryl

Expected RT: 14.00
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922018.wiff
604449006

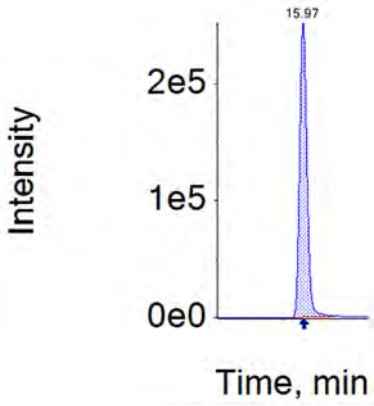


Compound Name: 246-Trinitrotoluene

Expected RT: 17.23
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922018.wiff
604449006



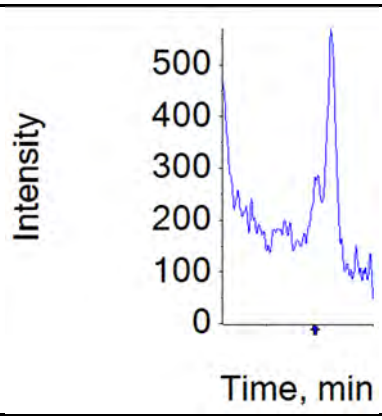
Compound Name: 34-dinitrotoluene

Expected RT: 15.99
Actual RT: 15.97
RRT: 0.82
Area Counts: 5915503.781
Integration Type:Baseline

Amount: 283.73
%Accuracy: N/A

EXP122922018.wiff

604449006

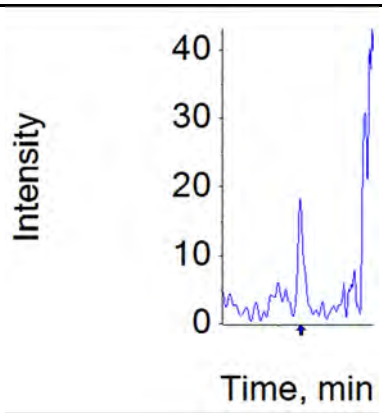


Compound Name: 4-Amino-26-dinitrotoluene

Expected RT: 17.28
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922018.wiff
604449006

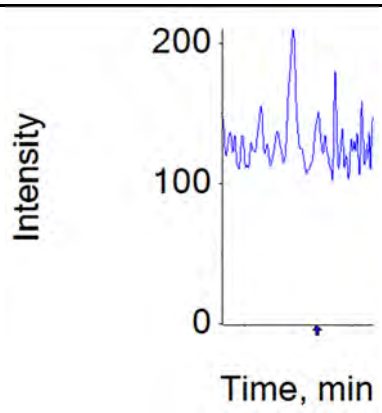


Compound Name: PETN

Expected RT: 26.02
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922018.wiff
604449006

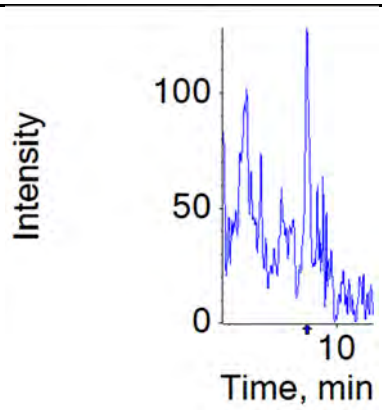


Compound Name: 2-Amino-46-dinitrotoluene

Expected RT: 18.37
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922018.wiff
604449006

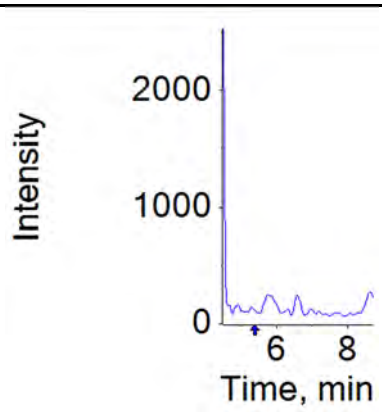


Compound Name: TATB

Expected RT: 8.63
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922018.wiff
604449006

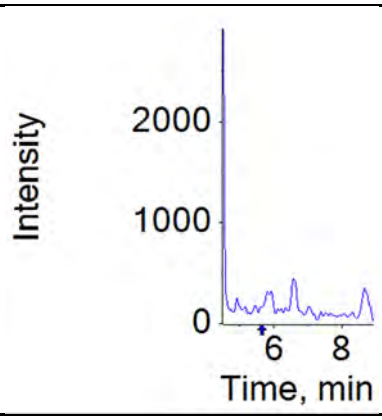


Compound Name: 26-Diamino-4-nitrotoluene

Expected RT: 5.38
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922018.wiff
604449006

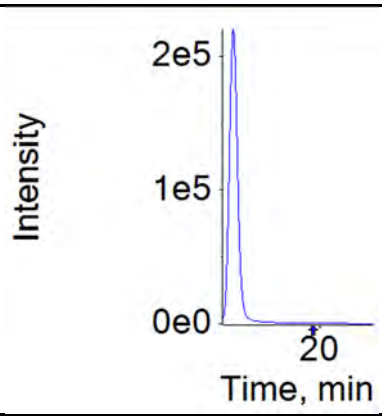


Compound Name: 24-Diamino-6-nitrotoluene

Expected RT: 5.64
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922018.wiff
604449006

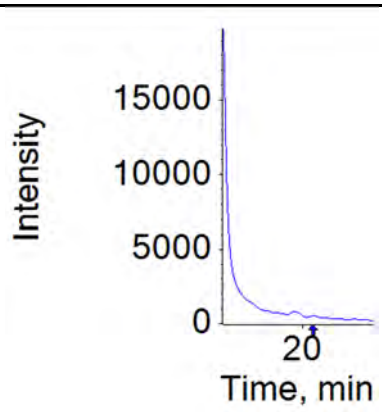


Compound Name: 26-dinitrotoluene

Expected RT: 19.69
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922018.wiff
604449006

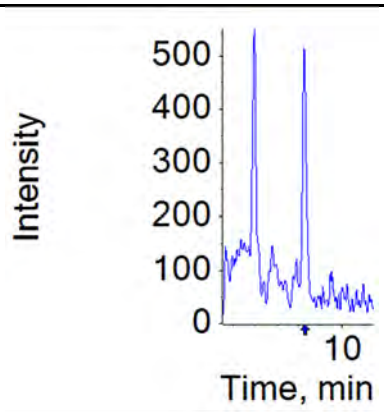


Compound Name: 24-dinitrotoluene

Expected RT: 20.48
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922018.wiff
604449006

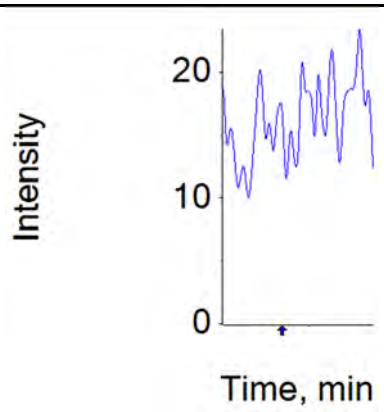


Compound Name: RDX

Expected RT: 8.26
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922018.wiff
604449006

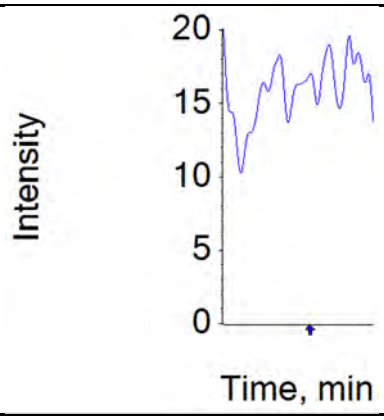


Compound Name: 2-Nitrotoluene

Expected RT: 23.75
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922018.wiff
604449006



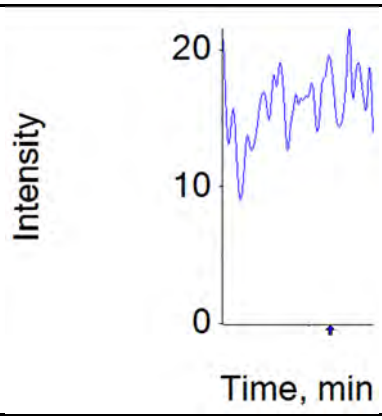
Compound Name: 4-Nitrotoluene

Expected RT: 25.04
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922018.wiff

604449006

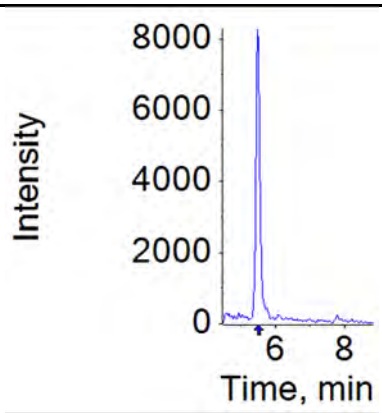


Compound Name: 3-Nitrotoluene

Expected RT: 26.01
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922018.wiff
604449006

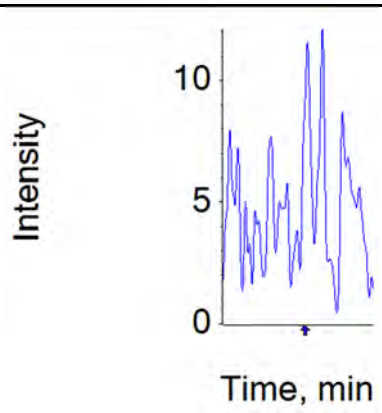


Compound Name: HMX

Expected RT: 5.51
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922018.wiff
604449006

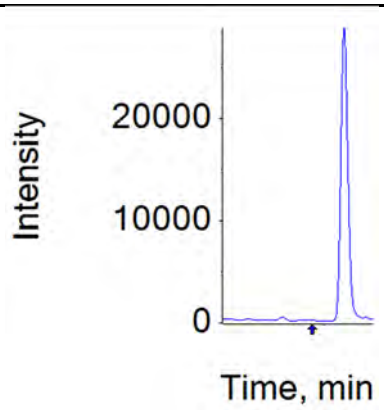


Compound Name: Nitrobenzene

Expected RT: 15.21
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922018.wiff
604449006

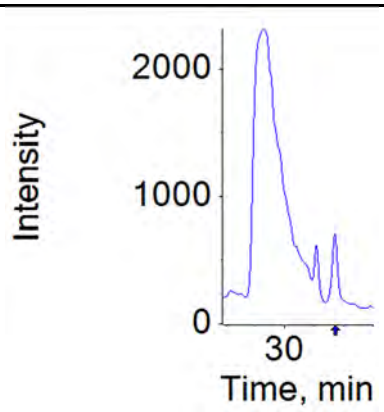


Compound Name: 35-Dinitroaniline

Expected RT: 14.45
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922018.wiff
604449006

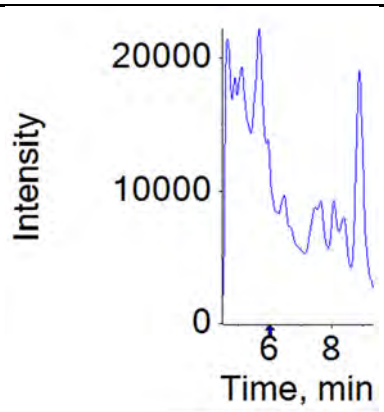


Compound Name: tris(o-cresyl)phosphate

Expected RT: 31.72
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922018.wiff
604449006

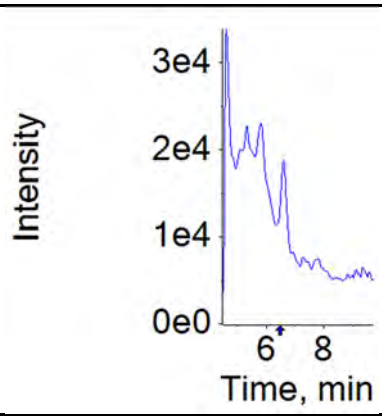


Compound Name: TNX

Expected RT: 5.99
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922018.wiff
604449006

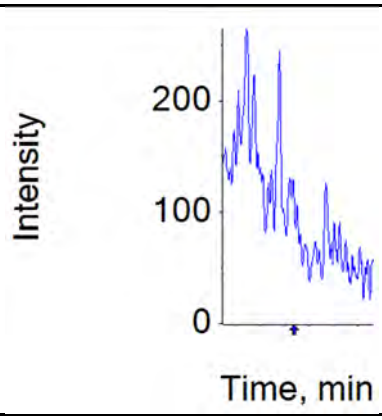


Compound Name: DNX

Expected RT: 6.48
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922018.wiff
604449006

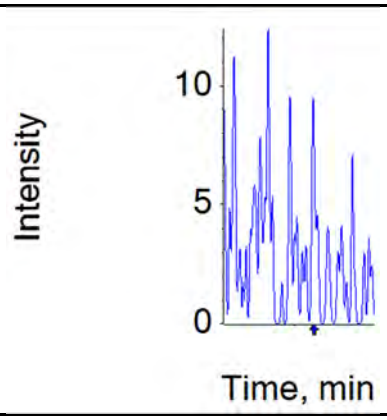


Compound Name: MNX

Expected RT: 7.38
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922018.wiff
604449006



Compound Name: Nitroglycerin

Expected RT: 15.88
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: SMEB03-23-265373

Lab Code: GEL

GEL Job No (SDG): 2023-289

Matrix: WATER

GEL Sample ID: 604449010

Sample Amount : 1100 mL

Date Received: 16-DEC-22

Moisture:

Extraction Batch ID: 2358904

Extraction Type: Sol Exchange

Date Extracted: 21-DEC-22

Concentrated Extract Volume (mL) 5

Injection Volume (uL):50

GEL data file: EXP122922019.wiff

Date Analyzed: 30-DEC-22 02:37

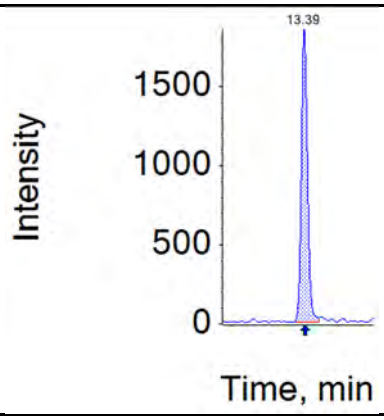
Dilution Factor: 2

Concentration Units: ug/L

Cas No.	Compound	Concentration*	Q	MDL	PQL
2691-41-0	HMX	.0726	U	0.0726	0.227
2691-41-0	*HMX*				
118-96-7	2,4,6-Trinitrotoluene	.0726	U	0.0726	0.227
118-96-7	*2,4,6-Trinitrotoluene*				
121-82-4	RDX	.0726	U	0.0726	0.227
121-82-4	*RDX*				

JISB MAE
01/01/2023 01/04/2023

Data File	EXP122922019.wiff	Acquisition Date	12/30/2022 2:37:47
Sample Name	604449010	Acquisition Method	explosivesFull2.dam
Batch|Dilution|Analyst	2358905|2|JLS|1	Result Table	12292022
Procedure Code	LCX30BWO_L	Sample Type	Unknown



Compound Name: 13-Dinitrobenzene-d4

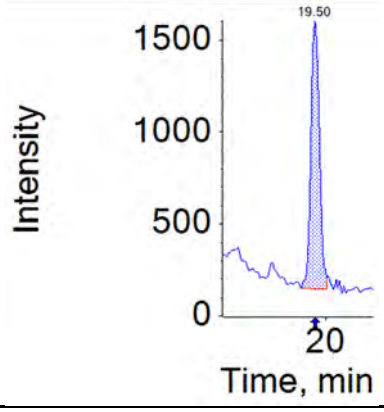
Expected RT: 13.42

Actual RT: 13.39

Area Counts: 36363.340

Integration Type: Valley

Amount: 10.0



Compound Name: 26-Dinitrotoluene-d3

Expected RT: 19.50

Actual RT: 19.50

Area Counts: 40217.747

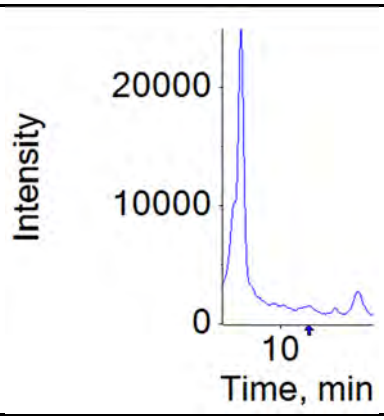
Integration Type: Valley

Amount: 10.0

Please refer to Form 8 of the data package for a complete list of Internal Standard Recoveries.

Relative Retention Time (RRT) is used by the laboratory to establish peak identity. The RRT of each target analyte is calculated using the retention time of the corresponding internal standard. The RRT of each analyte in a sample must be within 2.0 of the analyte's calculated RRT in the ICV.

EXP122922019.wiff
604449010

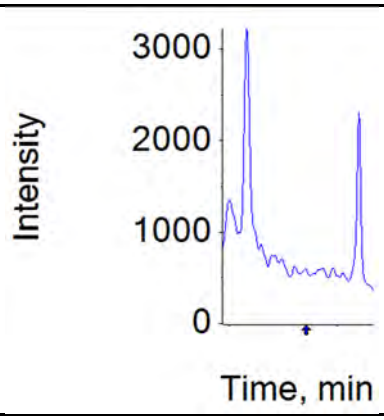


Compound Name: 135-Trinitrobenzene

Expected RT: 11.29
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922019.wiff
604449010

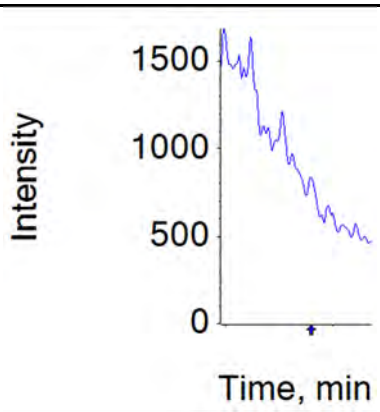


Compound Name: 13-Dinitrobenzene

Expected RT: 13.57
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922019.wiff
604449010

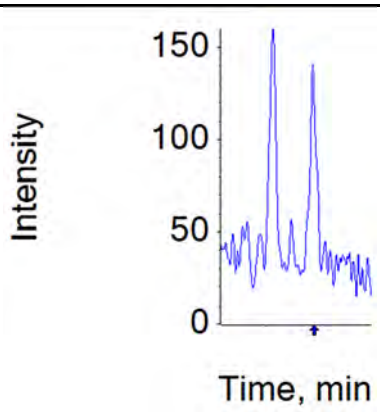


Compound Name: Tetryl

Expected RT: 14.00
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922019.wiff
604449010

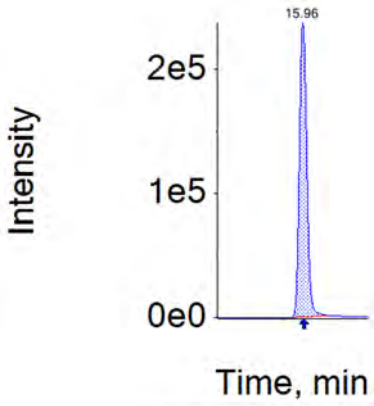


Compound Name: 246-Trinitrotoluene

Expected RT: 17.23
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922019.wiff
604449010



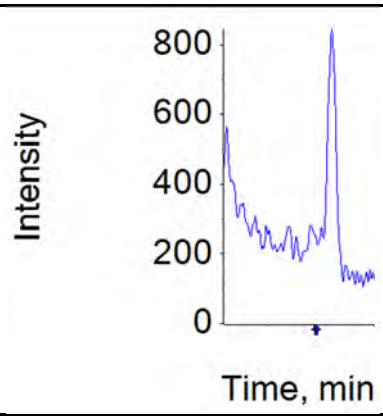
Compound Name: 34-dinitrotoluene

Expected RT: 15.99
Actual RT: 15.96
RRT: 0.82
Area Counts: 5590781.608
Integration Type:Baseline

Amount: 268.42
%Accuracy: N/A

EXP122922019.wiff

604449010

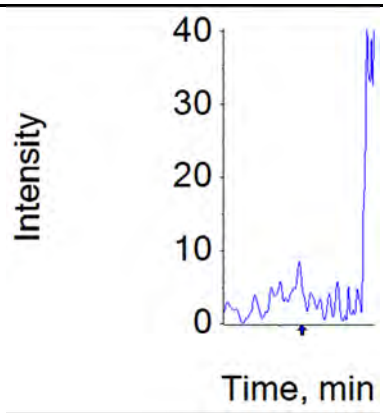


Compound Name: 4-Amino-26-dinitrotoluene

Expected RT: 17.28
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922019.wiff
604449010

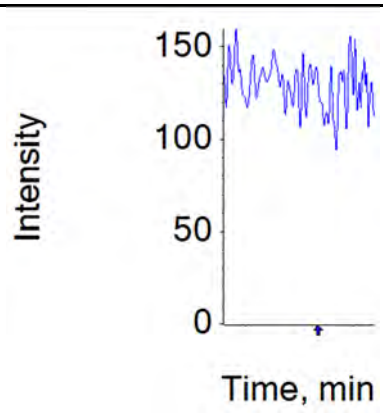


Compound Name: PETN

Expected RT: 26.02
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922019.wiff
604449010

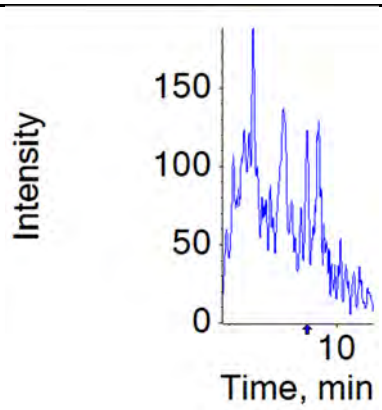


Compound Name: 2-Amino-46-dinitrotoluene

Expected RT: 18.37
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922019.wiff
604449010

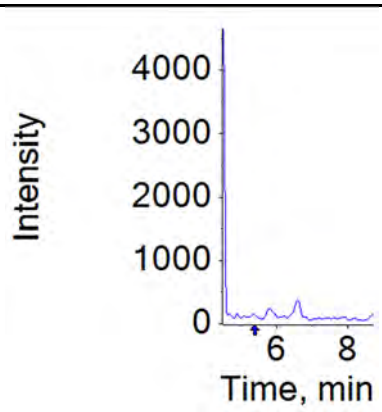


Compound Name: TATB

Expected RT: 8.63
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922019.wiff
604449010

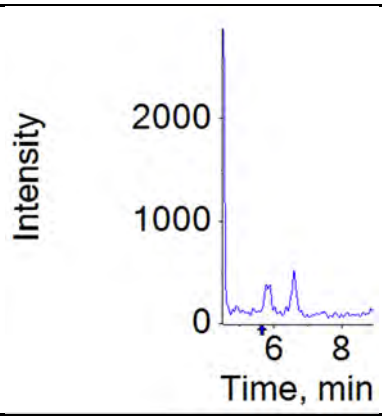


Compound Name: 26-Diamino-4-nitrotoluene

Expected RT: 5.38
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922019.wiff
604449010

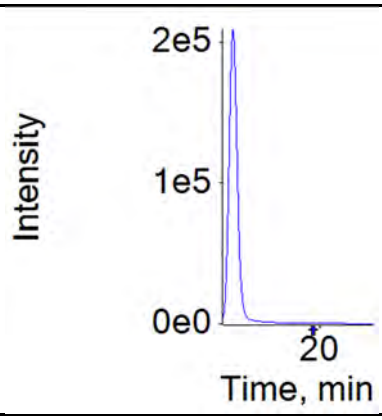


Compound Name: 24-Diamino-6-nitrotoluene

Expected RT: 5.64
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922019.wiff
604449010

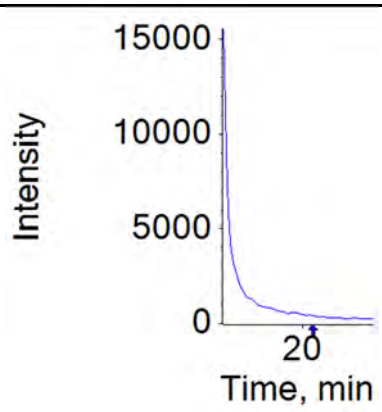


Compound Name: 26-dinitrotoluene

Expected RT: 19.69
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922019.wiff
604449010

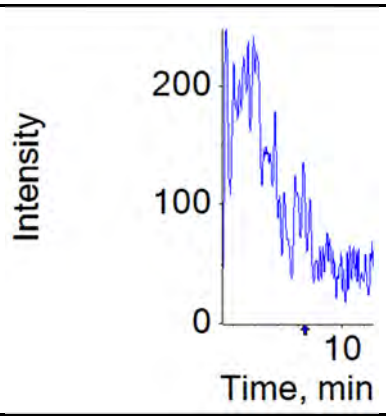


Compound Name: 24-dinitrotoluene

Expected RT: 20.48
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922019.wiff
604449010

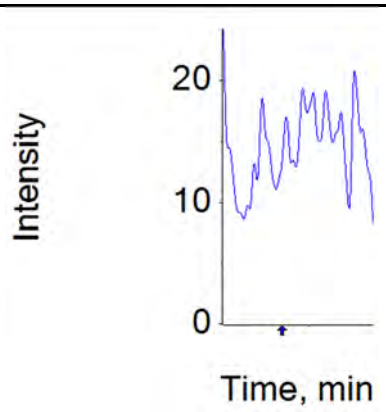


Compound Name: RDX

Expected RT: 8.26
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922019.wiff
604449010

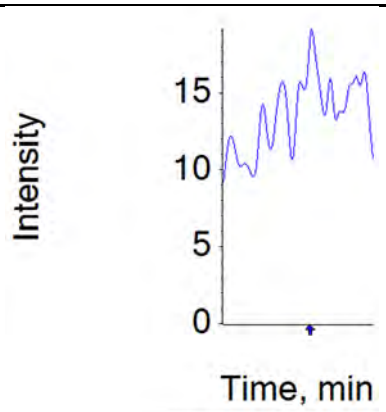


Compound Name: 2-Nitrotoluene

Expected RT: 23.75
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922019.wiff
604449010



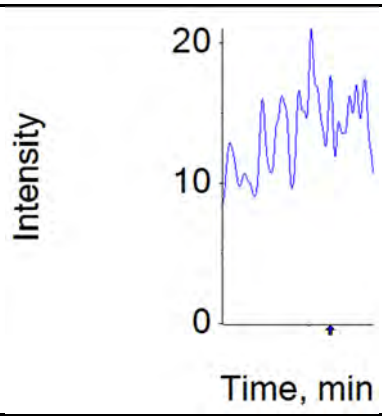
Compound Name: 4-Nitrotoluene

Expected RT: 25.04
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922019.wiff

604449010

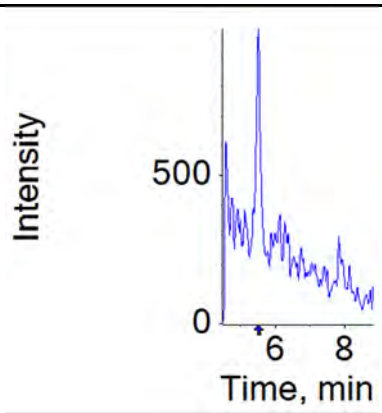


Compound Name: 3-Nitrotoluene

Expected RT: 26.01
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922019.wiff
604449010

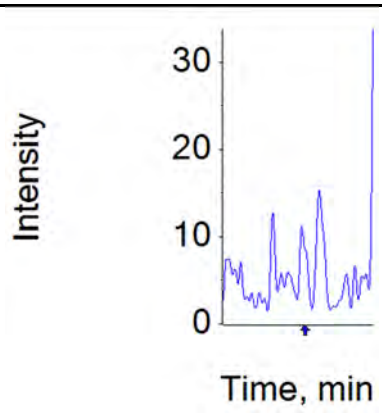


Compound Name: HMX

Expected RT: 5.51
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922019.wiff
604449010

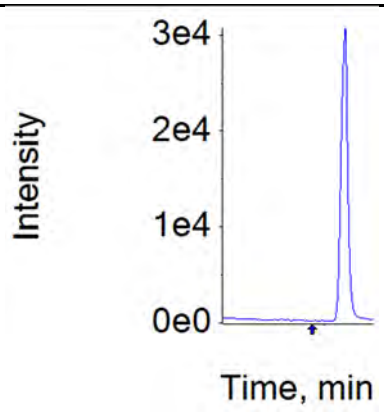


Compound Name: Nitrobenzene

Expected RT: 15.21
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922019.wiff
604449010

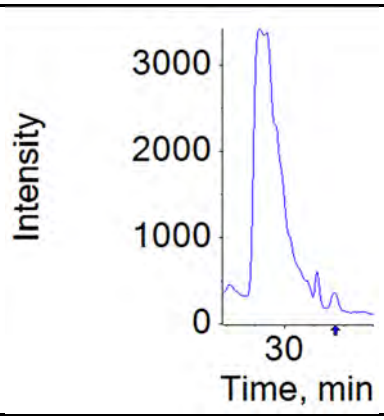


Compound Name: 35-Dinitroaniline

Expected RT: 14.45
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922019.wiff
604449010

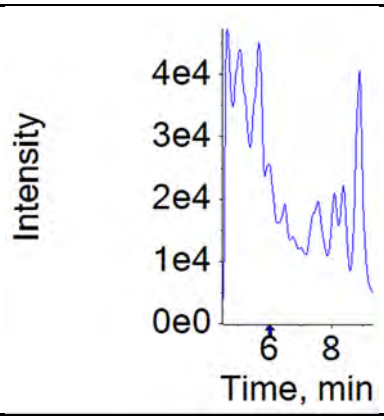


Compound Name: tris(o-cresyl)phosphate

Expected RT: 31.72
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922019.wiff
604449010

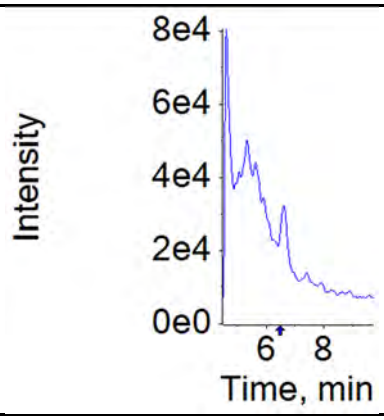


Compound Name: TNX

Expected RT: 5.99
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922019.wiff
604449010

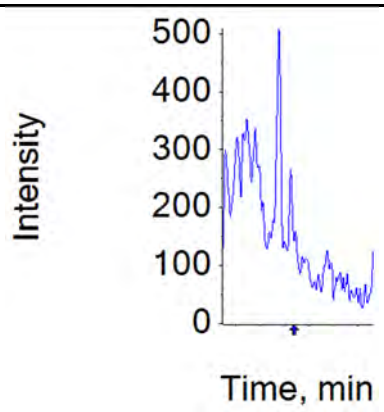


Compound Name: DNX

Expected RT: 6.48
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922019.wiff
604449010

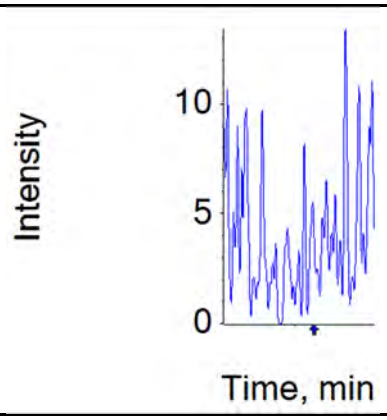


Compound Name: MNX

Expected RT: 7.38
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922019.wiff
604449010



Compound Name: Nitroglycerin

Expected RT: 15.88
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: SMEB04-23-265374

Lab Code: GEL

GEL Job No (SDG): 2023-289

Matrix: WATER

GEL Sample ID: 604449014

Sample Amount : 1020 mL

Date Received: 16-DEC-22

Moisture:

Extraction Batch ID: 2358904

Extraction Type: Sol Exchange

Date Extracted: 21-DEC-22

Concentrated Extract Volume (mL) 5

Injection Volume (uL):50

GEL data file: EXP122922020.wiff

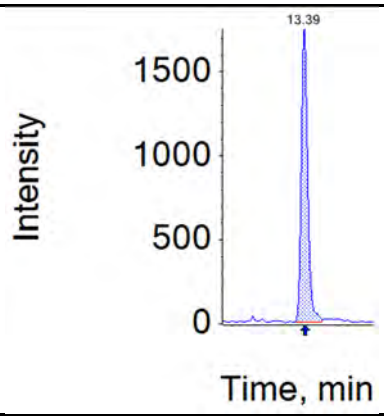
Date Analyzed: 30-DEC-22 03:13

Dilution Factor: 2

Concentration Units: ug/L

Cas No.	Compound	Concentration*	Q	MDL	PQL
118-96-7	2,4,6-Trinitrotoluene	.0788	U	0.0788	0.246
118-96-7	*2,4,6-Trinitrotoluene*				
2691-41-0	HMX	.0788	U	0.0788	0.246
2691-41-0	*HMX*				
121-82-4	RDX	.0788	U	0.0788	0.246
121-82-4	*RDX*				

Data File	EXP122922020.wiff	Acquisition Date	12/30/2022 3:13:26
Sample Name	604449014	Acquisition Method	explosivesFull2.dam
Batch|Dilution|Analyst	2358905|2|JLS|1	Result Table	12292022
Procedure Code	LCX30BWO_L	Sample Type	Unknown



Compound Name: 13-Dinitrobenzene-d4

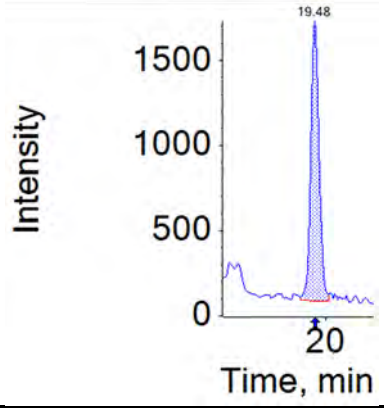
Expected RT: 13.42

Actual RT: 13.39

Area Counts: 35894.570

Integration Type: Valley

Amount: 10.0



Compound Name: 26-Dinitrotoluene-d3

Expected RT: 19.50

Actual RT: 19.48

Area Counts: 43893.826

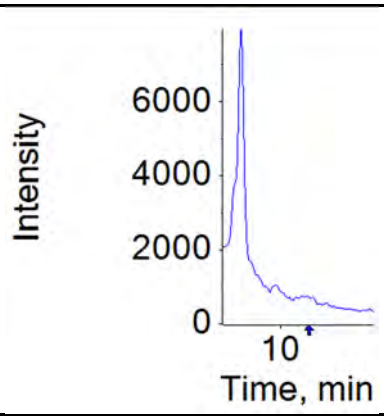
Integration Type: Valley

Amount: 10.0

Please refer to Form 8 of the data package for a complete list of Internal Standard Recoveries.

Relative Retention Time (RRT) is used by the laboratory to establish peak identity. The RRT of each target analyte is calculated using the retention time of the corresponding internal standard. The RRT of each analyte in a sample must be within 2.0 of the analyte's calculated RRT in the ICV.

EXP122922020.wiff
604449014

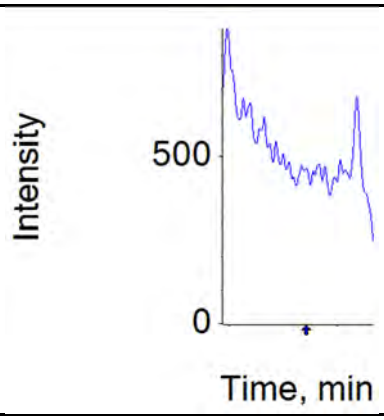


Compound Name: 135-Trinitrobenzene

Expected RT: 11.29
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922020.wiff
604449014

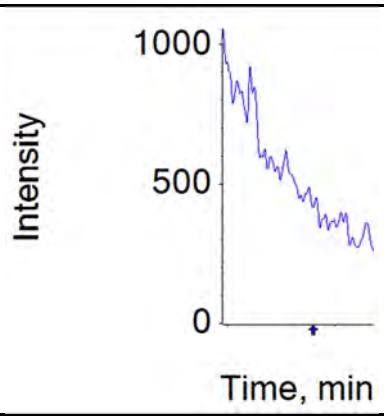


Compound Name: 13-Dinitrobenzene

Expected RT: 13.57
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922020.wiff
604449014

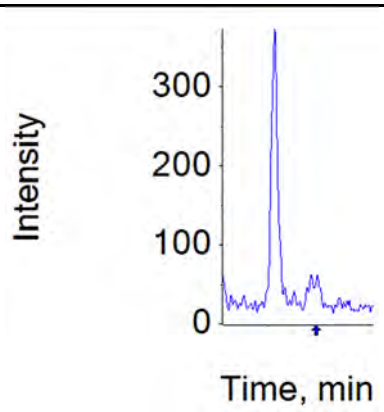


Compound Name: Tetryl

Expected RT: 14.00
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922020.wiff
604449014

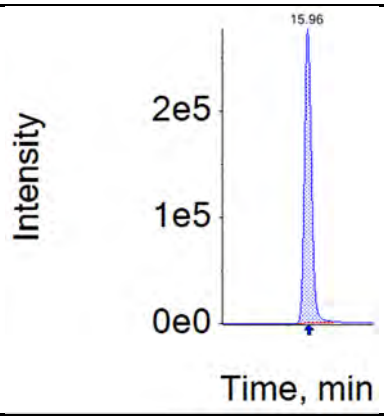


Compound Name: 246-Trinitrotoluene

Expected RT: 17.23
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922020.wiff
604449014



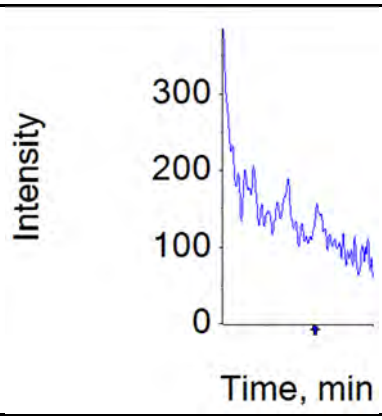
Compound Name: 34-dinitrotoluene

Expected RT: 15.99
Actual RT: 15.96
RRT: 0.82
Area Counts: 6278470.983
Integration Type:Baseline

Amount: 276.19
%Accuracy: N/A

EXP122922020.wiff

604449014

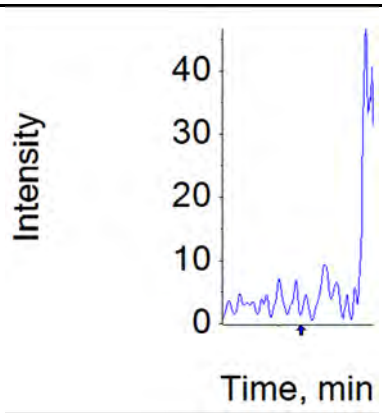


Compound Name: 4-Amino-26-dinitrotoluene

Expected RT: 17.28
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922020.wiff
604449014

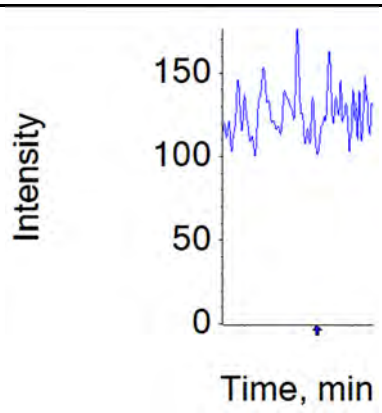


Compound Name: PETN

Expected RT: 26.02
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922020.wiff
604449014

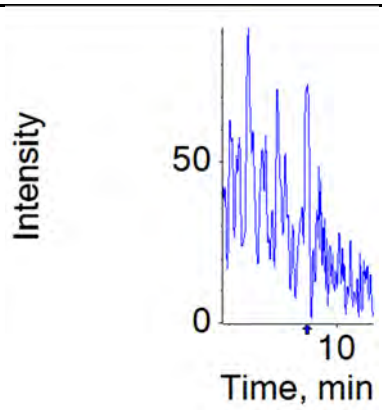


Compound Name: 2-Amino-46-dinitrotoluene

Expected RT: 18.37
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922020.wiff
604449014

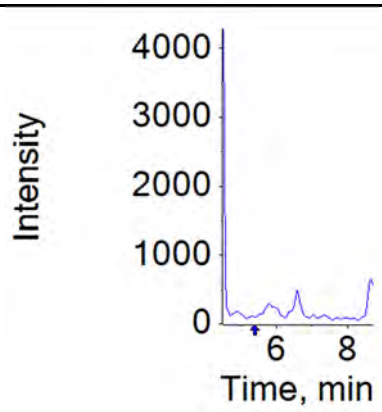


Compound Name: TATB

Expected RT: 8.63
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922020.wiff
604449014

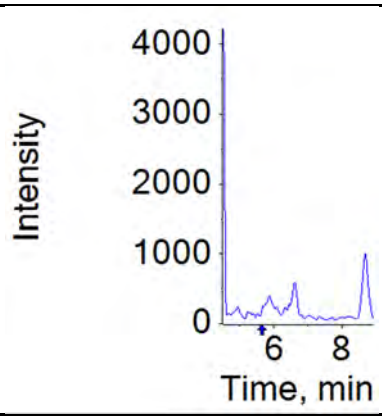


Compound Name: 26-Diamino-4-nitrotoluene

Expected RT: 5.38
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922020.wiff
604449014

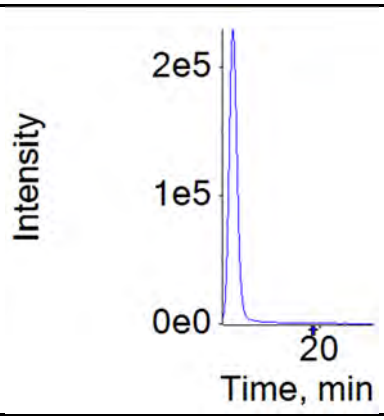


Compound Name: 24-Diamino-6-nitrotoluene

Expected RT: 5.64
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922020.wiff
604449014

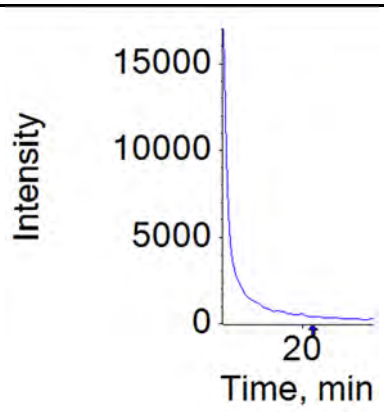


Compound Name: 26-dinitrotoluene

Expected RT: 19.69
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922020.wiff
604449014

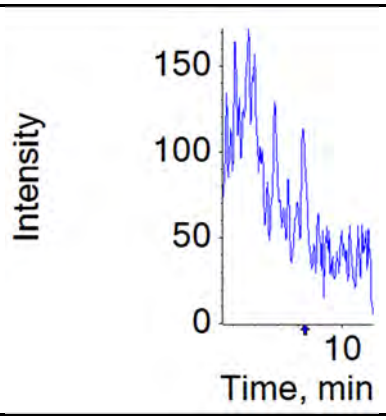


Compound Name: 24-dinitrotoluene

Expected RT: 20.48
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922020.wiff
604449014

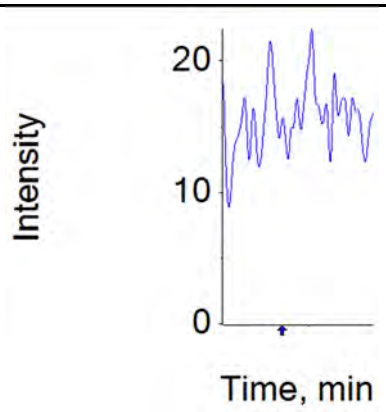


Compound Name: RDX

Expected RT: 8.26
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922020.wiff
604449014

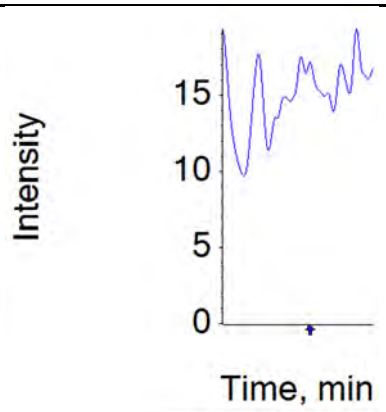


Compound Name: 2-Nitrotoluene

Expected RT: 23.75
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922020.wiff
604449014



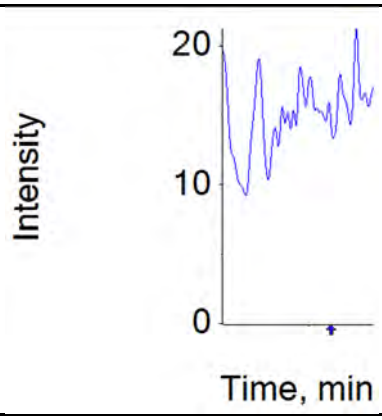
Compound Name: 4-Nitrotoluene

Expected RT: 25.04
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922020.wiff

604449014

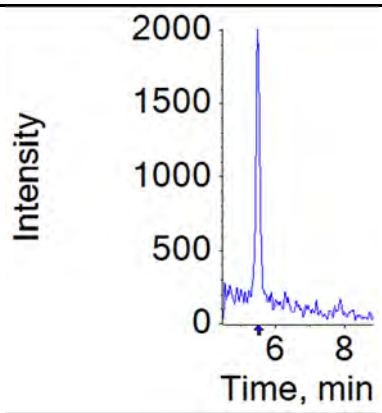


Compound Name: 3-Nitrotoluene

Expected RT: 26.01
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922020.wiff
604449014

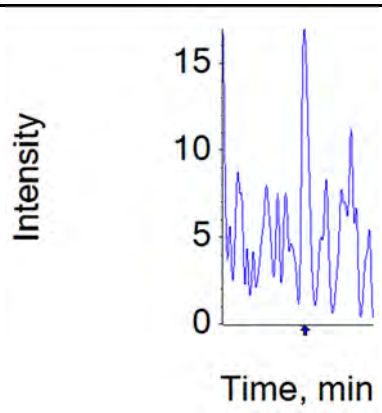


Compound Name: HMX

Expected RT: 5.51
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922020.wiff
604449014

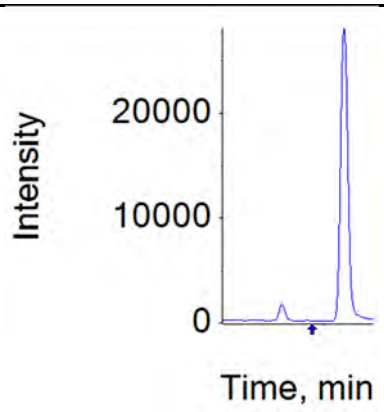


Compound Name: Nitrobenzene

Expected RT: 15.21
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922020.wiff
604449014

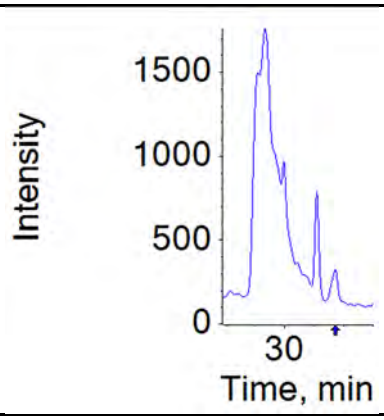


Compound Name: 35-Dinitroaniline

Expected RT: 14.45
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922020.wiff
604449014

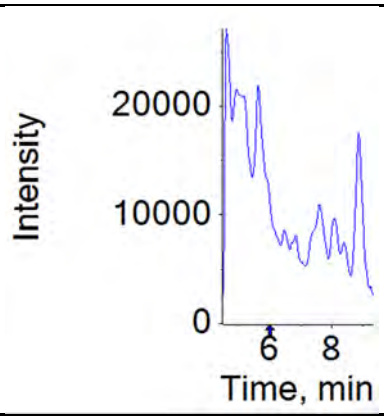


Compound Name: tris(o-cresyl)phosphate

Expected RT: 31.72
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922020.wiff
604449014

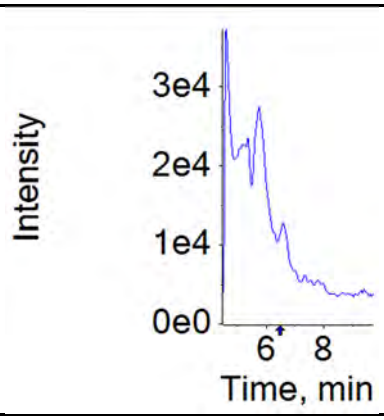


Compound Name: TNX

Expected RT: 5.99
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922020.wiff
604449014

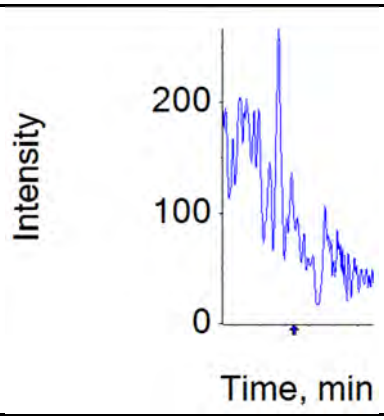


Compound Name: DNX

Expected RT: 6.48
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922020.wiff
604449014

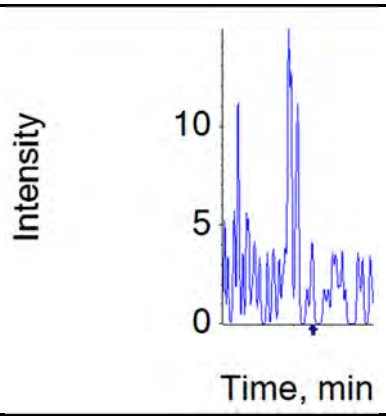


Compound Name: MNX

Expected RT: 7.38
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922020.wiff
604449014



Compound Name: Nitroglycerin

Expected RT: 15.88
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: SMEB05-23-265375

Lab Code: GEL

GEL Job No (SDG): 2023-289

Matrix: WATER

GEL Sample ID: 604449018

Sample Amount : 968 mL

Date Received: 16-DEC-22

Moisture:

Extraction Batch ID: 2358904

Extraction Type: Sol Exchange

Date Extracted: 21-DEC-22

Concentrated Extract Volume (mL) 5

Injection Volume (uL):50

GEL data file: EXP122922023.wiff

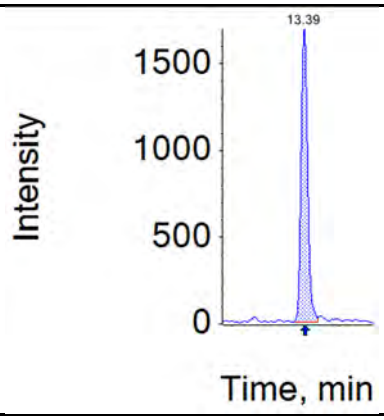
Date Analyzed: 30-DEC-22 05:00

Dilution Factor: 2

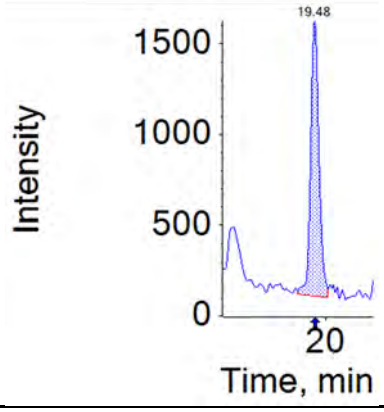
Concentration Units: ug/L

Cas No.	Compound	Concentration*	Q	MDL	PQL
2691-41-0	HMX	.0826	U	0.0826	0.258
2691-41-0	*HMX*				
121-82-4	RDX	.0826	U	0.0826	0.258
121-82-4	*RDX*				
118-96-7	2,4,6-Trinitrotoluene	.0826	U	0.0826	0.258
118-96-7	*2,4,6-Trinitrotoluene*				

Data File	EXP122922023.wiff	Acquisition Date	12/30/2022 5:00:23
Sample Name	604449018	Acquisition Method	explosivesFull2.dam
Batch|Dilution|Analyst	2358905|2|JLS|1	Result Table	12292022
Procedure Code	LCX30BWO_L	Sample Type	Unknown



Compound Name:	13-Dinitrobenzene-d4
Expected RT:	13.42
Actual RT:	13.39
Area Counts:	35670.530
Integration Type:	Valley
Amount:	10.0

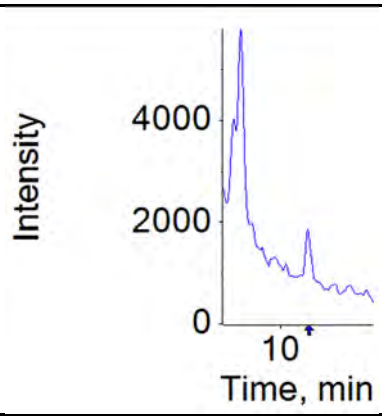


Compound Name:	26-Dinitrotoluene-d3
Expected RT:	19.50
Actual RT:	19.48
Area Counts:	40577.763
Integration Type:	Valley
Amount:	10.0

Please refer to Form 8 of the data package for a complete list of Internal Standard Recoveries.

Relative Retention Time (RRT) is used by the laboratory to establish peak identity. The RRT of each target analyte is calculated using the retention time of the corresponding internal standard. The RRT of each analyte in a sample must be within 2.0 of the analyte's calculated RRT in the ICV.

EXP122922023.wiff
604449018

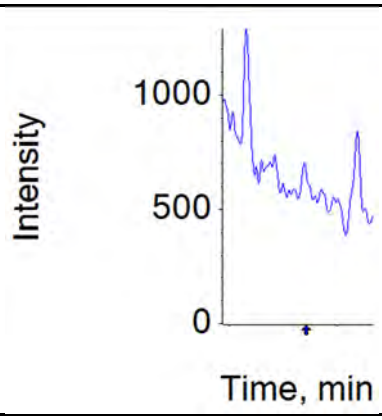


Compound Name: 135-Trinitrobenzene

Expected RT: 11.29
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922023.wiff
604449018

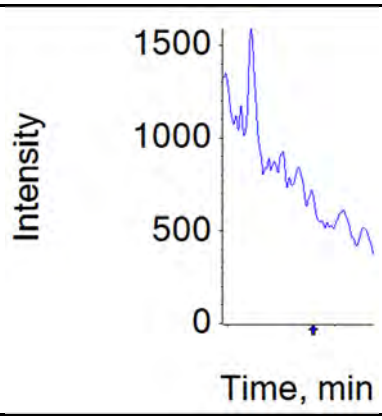


Compound Name: 13-Dinitrobenzene

Expected RT: 13.57
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922023.wiff
604449018

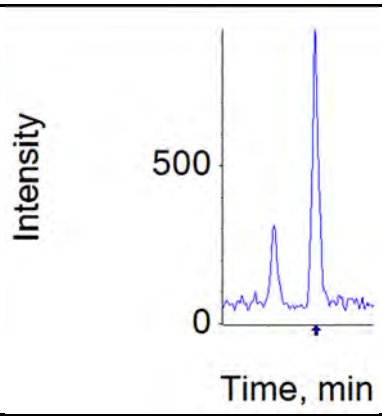


Compound Name: Tetryl

Expected RT: 14.00
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922023.wiff
604449018

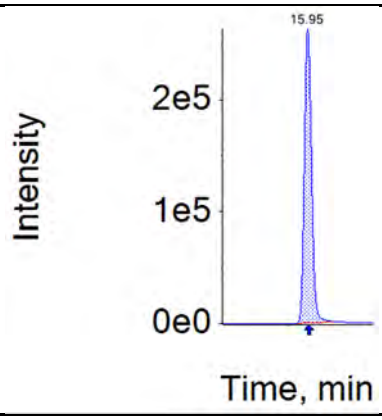


Compound Name: 246-Trinitrotoluene

Expected RT: 17.23
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922023.wiff
604449018



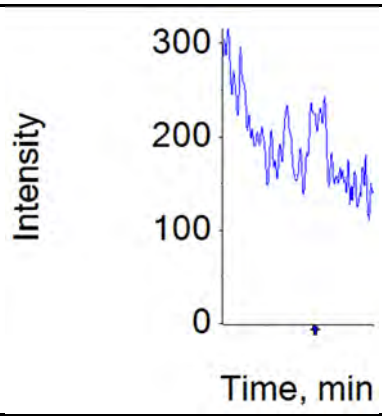
Compound Name: 34-dinitrotoluene

Expected RT: 15.99
Actual RT: 15.95
RRT: 0.82
Area Counts: 6086989.484
Integration Type:Baseline

Amount: 289.65
%Accuracy: N/A

EXP122922023.wiff

604449018

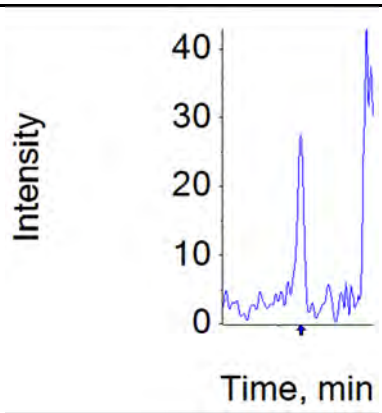


Compound Name: 4-Amino-26-dinitrotoluene

Expected RT: 17.28
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922023.wiff
604449018

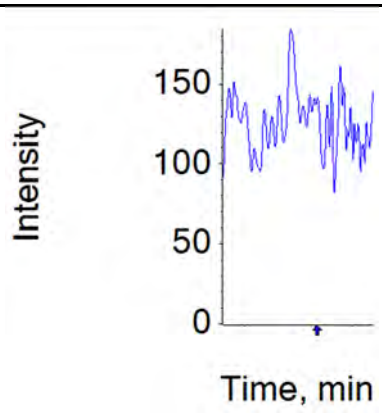


Compound Name: PETN

Expected RT: 26.02
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922023.wiff
604449018

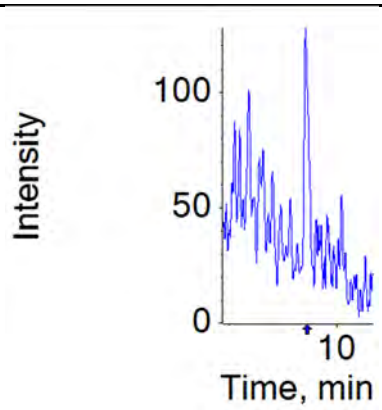


Compound Name: 2-Amino-46-dinitrotoluene

Expected RT: 18.37
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922023.wiff
604449018

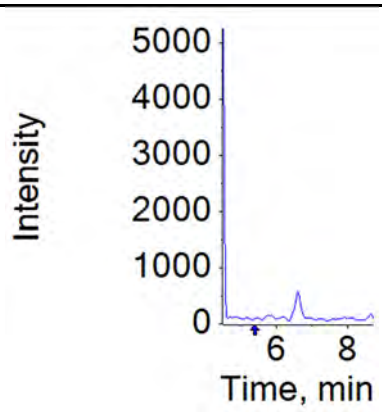


Compound Name: TATB

Expected RT: 8.63
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922023.wiff
604449018

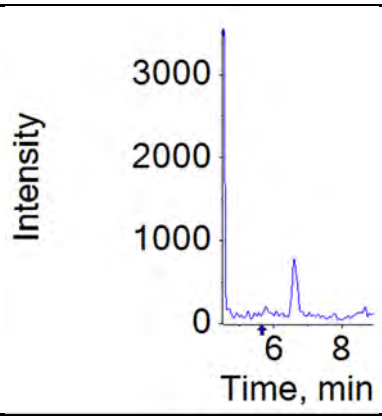


Compound Name: 26-Diamino-4-nitrotoluene

Expected RT: 5.38
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922023.wiff
604449018

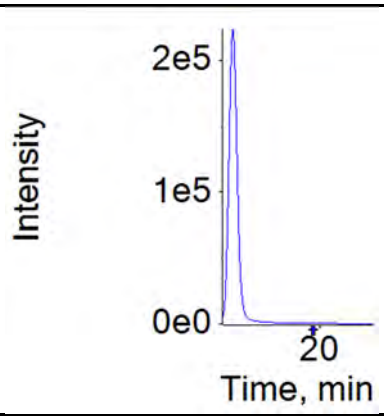


Compound Name: 24-Diamino-6-nitrotoluene

Expected RT: 5.64
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922023.wiff
604449018

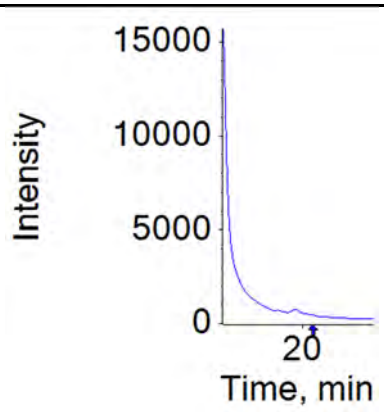


Compound Name: 26-dinitrotoluene

Expected RT: 19.69
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922023.wiff
604449018

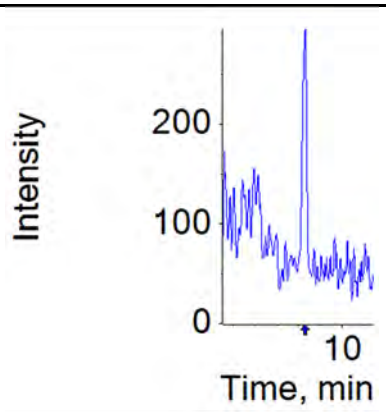


Compound Name: 24-dinitrotoluene

Expected RT: 20.48
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922023.wiff
604449018

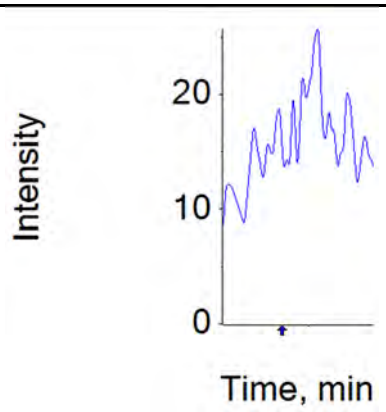


Compound Name: RDX

Expected RT: 8.26
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922023.wiff
604449018

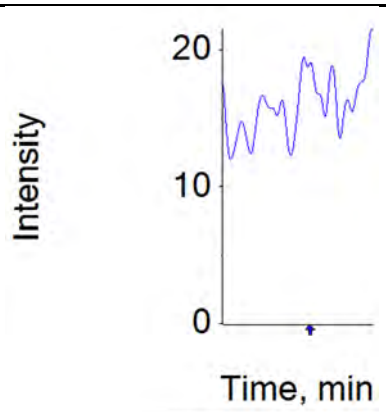


Compound Name: 2-Nitrotoluene

Expected RT: 23.75
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922023.wiff
604449018



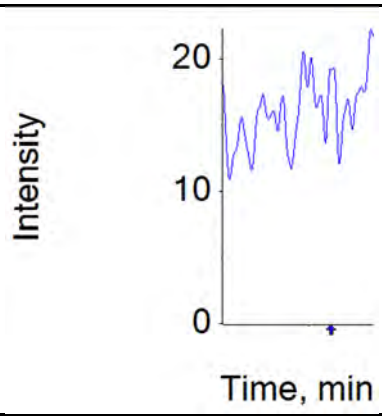
Compound Name: 4-Nitrotoluene

Expected RT: 25.04
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922023.wiff

604449018

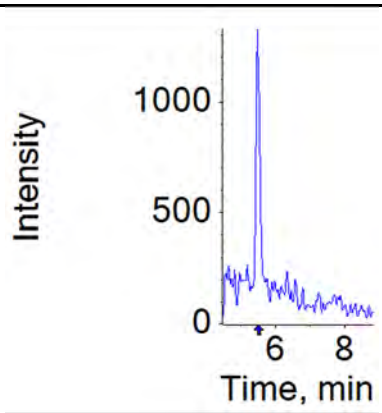


Compound Name: 3-Nitrotoluene

Expected RT: 26.01
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922023.wiff
604449018

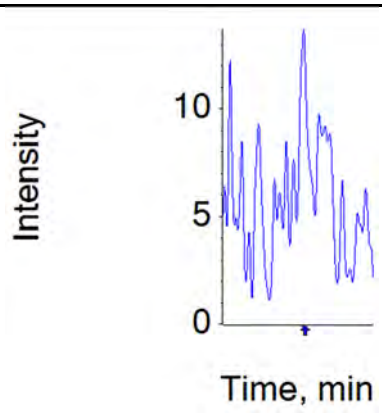


Compound Name: HMX

Expected RT: 5.51
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922023.wiff
604449018

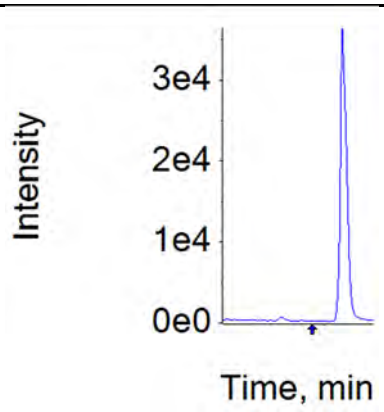


Compound Name: Nitrobenzene

Expected RT: 15.21
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922023.wiff
604449018

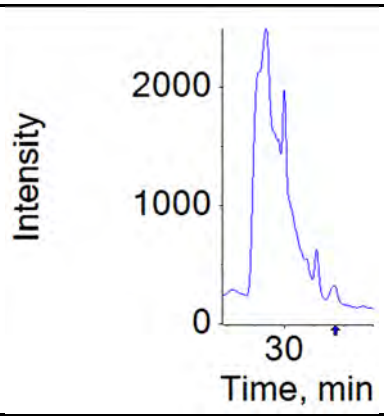


Compound Name: 35-Dinitroaniline

Expected RT: 14.45
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922023.wiff
604449018

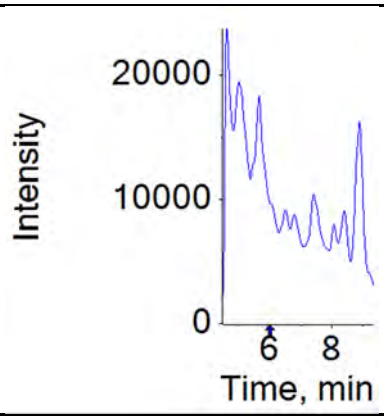


Compound Name: tris(o-cresyl)phosphate

Expected RT: 31.72
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922023.wiff
604449018

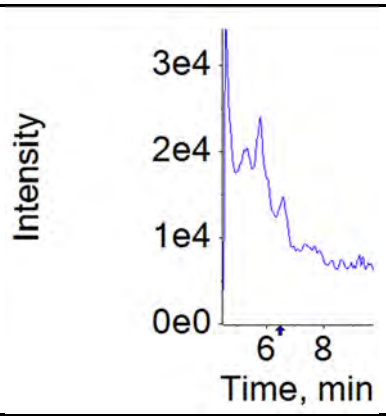


Compound Name: TNX

Expected RT: 5.99
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922023.wiff
604449018

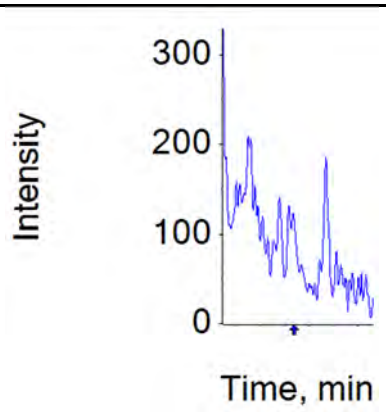


Compound Name: DNX

Expected RT: 6.48
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922023.wiff
604449018

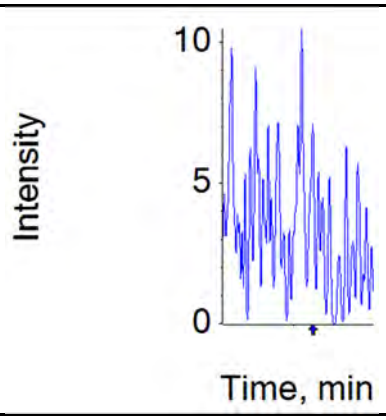


Compound Name: MNX

Expected RT: 7.38
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922023.wiff
604449018



Compound Name: Nitroglycerin

Expected RT: 15.88
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

Standards

Explosives Initial Calibration

Lab Name: *GEL Laboratories LLC*

GEL Job No: *2023-289*

Lab Code: *GEL*

Run Date: *29-DEC-22*

LCMSMS Instrument ID: *LCMSMS5*

Method: *SW846 3535A/8330B*

HPLC Column: *Ultracarb Phenomenex 5u ODS (20)*

Calibration Level:	1	2	3	4	5*	6	7
Parmname							
1,3,5-Trinitrobenzene	25	50	250	500	750	1000	2000
2,4,6-Trinitrotoluene	25	50	250	500	750	1000	2000
2,4-Diamino-6-nitrotoluene	25	50	250	500	750	1000	2000
2,4-Dinitrotoluene	25	50	250	500	750	1000	2000
2,6-Diamino-4-nitrotoluene	25	50	250	500	750	1000	2000
2,6-Dinitrotoluene	25	50	250	500	750	1000	2000
2-Amino-4,6-dinitrotoluene	25	50	250	500	750	1000	2000
3,4-Dinitrotoluene	25	50	250	500	750	1000	2000
3,5-Dinitroaniline	25	50	250	500	750	1000	2000
4-Amino-2,6-dinitrotoluene	25	50	250	500	750	1000	2000
DNX	25	50	250	500	750	1000	2000
HMX	25	50	250	500	750	1000	2000
MNX	25	50	250	500	750	1000	2000
Nitrobenzene	25	50	250	500	750	1000	2000
Nitroglycerin	50	100	250	500	750	1000	2000
PETN	25	50	250	500	750	1000	2000
RDX	25	50	250	500	750	1000	2000
TATB	25	50	250	500	750	1000	2000
TNX	25	50	250	500	750	1000	2000
Tetryl	25	50	250	500	750	1000	2000
m-Dinitrobenzene	25	50	250	500	750	1000	2000
m-Nitrotoluene	25	50	250	500	750	1000	2000
o-Nitrotoluene	25	50	250	500	750	1000	2000
p-Nitrotoluene	25	50	250	500	750	1000	2000
tris(o-cresyl) phosphate	25	50	250	500	750	1000	2000

All values are ug/L without the prep factor

* Denotes the concentration at which CCV is analyzed

Explosives Initial Calibration

Lab Name: *GEL Laboratories LLC*

GEL Job No: *2023-289*

Lab Code: *GEL*

Run Date: *29-DEC-22*

LCMSMS Instrument ID: *LCMSMS5*

Method: *SW846 3535A/8330B*

HPLC Column: *Ultracarb Phenomenex 5u ODS (20)*

Calibration Type: Average RF

Calibration Level:	1	2	3	4	5	6	7	Ave RF	RSD	Q
Data File:	EXP122922003	EXP122922004	EXP122922005	EXP122922006	EXP122922007	EXP122922008	EXP122922009			
Parmname										
1,3,5-Trinitrobenzene	10.885	9.817	10.146	10.829	9.9	9.774	9.611	10.137	5.105	
2,4,6-Trinitrotoluene	8.645	8.741	9.056	8.318	7.981	8.207	7.395	8.335	6.582	
2,4-Diamino-6-nitrotoluene	.278	.257	.257	.24	.27	.278	.257	.262	5.279	
2,4-Dinitrotoluene	1.316	1.365	1.517	1.358	1.361	1.353	1.259	1.361	5.759	
2,6-Dinitrotoluene	3.61	3.527	3.818	3.639	3.546	3.541	3.475	3.594	3.135	
2-Amino-4,6-dinitrotoluene	.345	.327	.349	.332	.337	.341	.325	.337	2.676	
3,4-Dinitrotoluene	5.228	4.938	5.5	5.296	5.047	5.054	5.19	5.179	3.614	
3,5-Dinitroaniline	2.304	2.104	2.407	2.282	2.232	2.224	2.331	2.269	4.216	
4-Amino-2,6-dinitrotoluene	1.44	1.367	1.467	1.37	1.353	1.362	1.331	1.384	3.589	
DNX	2.921	2.917	3.075	2.864	3.035	2.953	2.806	2.939	3.172	
MNX	4.273	4.238	4.128	4.565	4.065	4.234	4.05	4.222	4.146	
Nitrobenzene	.037	.035	.037	.038	.039	.039	.044	.038	7.275	
PETN	.111	.129	.123	.111	.114	.115	.119	.117	5.743	
RDX	2.895	2.895	2.983	2.869	2.828	2.711	2.631	2.83	4.254	
TNX	5.893	5.899	5.965	5.864	6.023	5.469	6.04	5.879	3.278	
Tetryl	4.509	4.312	4.161	3.857	4.062	3.503	2.786	3.884	14.987	
m-Dinitrobenzene	2.543	2.344	2.425	2.433	2.272	2.32	2.464	2.4	3.888	
m-Nitrotoluene	.015	.015	.017	.015	.016	.017	.015	.016	5.244	
o-Nitrotoluene	.016	.015	.018	.015	.015	.015	.017	.016	7.782	
p-Nitrotoluene	.019	.018	.02	.021	.021	.021	.021	.02	6.771	
tris(o-cresyl) phosphate	5.445	5.666	5.727	5.395	5.158	4.929	4.69	5.287	7.228	

Q column used to flag RSD value outside of Limit : (>20%)

* Value outside of QC Limit

Calibration Type: Linear

Calibration Level:	1	2	3	4	5	6	7	Slope	Intercept	COD	Q
Data File:	EXP122922003	EXP122922004	EXP122922005	EXP122922006	EXP122922007	EXP122922008	EXP122922009				
Parmname											
2,6-Diamino-4-nitrotoluene	19912.259	37183.882	205009.225	450614.667	600175.174	763493.706	1639435.735	.248	-.149	.9977	
HMX	433597.625	843221.721	3944721.848	8669528.05	11434382.919	15180613.113	26433173.018	4.466	1.057	.9983	
Nitroglycerin	4222.966	8369.37	21452.317	43009.292	55161.455	68716.173	134287.458	.016	.042	.9993	
TATB	89215.375	174421.987	870806.156	1774635.094	2622215.337	3220394.854	6345929.484	1.008	-.717	.9995	

COD is Coefficient of Determination

Explosives Initial Calibration

Lab Name: *GEL Laboratories LLC*

GEL Job No: *2023-289*

Lab Code: *GEL*

Run Date: *29-DEC-22*

LCMSMS Instrument ID: *LCMSMS5*

Method: *SW846 3535A/8330B*

HPLC Column: *Ultracarb Phenomenex 5u ODS (20)*

Linear fit : Y=mx +b
where b is Intercept and m is slope

Q column used to flag COD values outside of Limit (<0.990)
* Values outside of QC Limit

12292022

Peak Name: 13-Dinitrobenzene-d4
Use as Internal Standard
Extraction: 172.0 / 46.0
Peak Name: 26-Dinitrotoluene-d3
Use as Internal Standard
Extraction: 185.0 / 155.0

Peak Name: 135-Trinitrobenzene
Internal Standard: 13-Dinitrobenzene-d4
Extraction: 213.0 / 182.8

Fit Mean Response Factor Weighting None Iterate No
Factor 10.13743
Standard deviation 0.51748
%RSD 5.10461
Use Area

Peak Name: 13-Dinitrobenzene
Internal Standard: 13-Dinitrobenzene-d4
Extraction: 168.0 / 138.0

Fit Mean Response Factor Weighting None Iterate No
Factor 2.40004
Standard deviation 0.09332
%RSD 3.88840
Use Area

Peak Name: Tetryl
Internal Standard: 13-Dinitrobenzene-d4
Extraction: 241.0 / 213.0

Fit Mean Response Factor Weighting None Iterate No
Factor 3.88453
Standard deviation 0.58218
%RSD 14.98702
Use Area

Peak Name: 246-Trinitrotoluene
Internal Standard: 26-Dinitrotoluene-d3
Extraction: 227.0 / 209.8

Fit Mean Response Factor Weighting None Iterate No
Factor 8.33472
Standard deviation 0.54857
%RSD 6.58175
Use Area

Peak Name: 34-dinitrotoluene
Internal Standard: 26-Dinitrotoluene-d3
Extraction: 182.0 / 152.0

Fit Mean Response Factor Weighting None Iterate No
Factor 5.17898
Standard deviation 0.18716
%RSD 3.61383
Use Area

Peak Name: 4-Amino-26-dinitrotoluene
Internal Standard: 26-Dinitrotoluene-d3
Extraction: 197.0 / 167.0

Fit Mean Response Factor Weighting None Iterate No
Factor 1.38445
Standard deviation 0.04969

%RSD 3.58884
Use Area

Peak Name: PETN
Internal Standard: 26-Dinitrotoluene-d3
Extraction: 315.0 / 62.0

Fit Mean Response Factor Weighting None Iterate No
Factor 0.11769
Standard deviation 0.00676
%RSD 5.74277
Use Area

Peak Name: 2-Amino-46-dinitrotoluene
Internal Standard: 26-Dinitrotoluene-d3
Extraction: 197.0 / 180.0

Fit Mean Response Factor Weighting None Iterate No
Factor 0.33655
Standard deviation 0.00901
%RSD 2.67622
Use Area

Peak Name: TATB
Internal Standard: 13-Dinitrobenzene-d4
Extraction: 257.2 / 204.9

Fit Linear Weighting None Iterate No
Intercept -0.71702
Slope 1.00825
Correlation coefficient 0.99954
Use Area

Peak Name: 26-Diamino-4-nitrotoluene
Internal Standard: 13-Dinitrobenzene-d4
Extraction: 166.1 / 46.1

Fit Linear Weighting 1 / x Iterate No
Intercept -0.14850
Slope 0.24817
Correlation coefficient 0.99778
Use Area

Peak Name: 24-Diamino-6-nitrotoluene
Internal Standard: 13-Dinitrobenzene-d4
Extraction: 166.0 / 46.0

Fit Mean Response Factor Weighting None Iterate No
Factor 0.26229
Standard deviation 0.01385
%RSD 5.27942
Use Area

Peak Name: 26-dinitrotoluene
Internal Standard: 26-Dinitrotoluene-d3
Extraction: 182.1 / 152.0

Fit Mean Response Factor Weighting None Iterate No
Factor 3.59362
Standard deviation 0.11266
%RSD 3.13490
Use Area

Peak Name: 24-dinitrotoluene
Internal Standard: 26-Dinitrotoluene-d3
Extraction: 181.9 / 152.0

Fit Mean Response Factor Weighting None Iterate No
Factor 1.36139
Standard deviation 0.07840
%RSD 5.75879
Use Area

Peak Name: RDX
Internal Standard: 13-Dinitrobenzene-d4
Extraction: 267.0 / 46.0

Fit Mean Response Factor Weighting None Iterate No
Factor 2.83017
Standard deviation 0.12039
%RSD 4.25386
Use Area

Peak Name: 2-Nitrotoluene
Internal Standard: 26-Dinitrotoluene-d3
Extraction: 136.9 / 45.9

Fit Mean Response Factor Weighting None Iterate No
Factor 0.01568
Standard deviation 0.00122
%RSD 7.78233
Use Area

Peak Name: 4-Nitrotoluene
Internal Standard: 26-Dinitrotoluene-d3
Extraction: 137.0 / 46.0

Fit Mean Response Factor Weighting None Iterate No
Factor 0.02005
Standard deviation 0.00136
%RSD 6.77116
Use Area

Peak Name: 3-Nitrotoluene
Internal Standard: 26-Dinitrotoluene-d3
Extraction: 137.0 / 46.0

Fit Mean Response Factor Weighting None Iterate No
Factor 0.01556
Standard deviation 8.15885e-4
%RSD 5.24413
Use Area

Peak Name: HMX
Internal Standard: 13-Dinitrobenzene-d4
Extraction: 341.0 / 46.0

Fit Linear Weighting 1 / (x * x) Iterate No
Intercept 1.05660
Slope 4.46589
Correlation coefficient 0.99838
Use Area

Peak Name: Nitrobenzene
Internal Standard: 13-Dinitrobenzene-d4
Extraction: 123.0 / 46.0

Fit Mean Response Factor Weighting None Iterate No
Factor 0.03844
Standard deviation 0.00280
%RSD 7.27486
Use Area

Peak Name: 35-Dinitroaniline
Internal Standard: 26-Dinitrotoluene-d3
Extraction: 182.0 / 122.0

Fit Mean Response Factor Weighting None Iterate No
Factor 2.26912
Standard deviation 0.09566
%RSD 4.21557
Use Area

Peak Name: tris(o-cresyl)phosphate
Internal Standard: 26-Dinitrotoluene-d3
Extraction: 276.6 / 107.1

Fit Mean Response Factor Weighting None Iterate No
Factor 5.28729
Standard deviation 0.38215
%RSD 7.22779
Use Area

Peak Name: TNX
Internal Standard: 13-Dinitrobenzene-d4
Extraction: 219.0 / 45.0

Fit Mean Response Factor Weighting None Iterate No
Factor 5.87891
Standard deviation 0.19273
%RSD 3.27837
Use Area

Peak Name: DNX
Internal Standard: 13-Dinitrobenzene-d4
Extraction: 235.0 / 45.0

Fit Mean Response Factor Weighting None Iterate No
Factor 2.93868
Standard deviation 0.09321
%RSD 3.17184
Use Area

Peak Name: MNX
Internal Standard: 13-Dinitrobenzene-d4
Extraction: 251.0 / 46.0

Fit Mean Response Factor Weighting None Iterate No
Factor 4.22199
Standard deviation 0.17502
%RSD 4.14555
Use Area

Peak Name: Nitroglycerin
Internal Standard: 26-Dinitrotoluene-d3
Extraction: 227.1 / 62.0

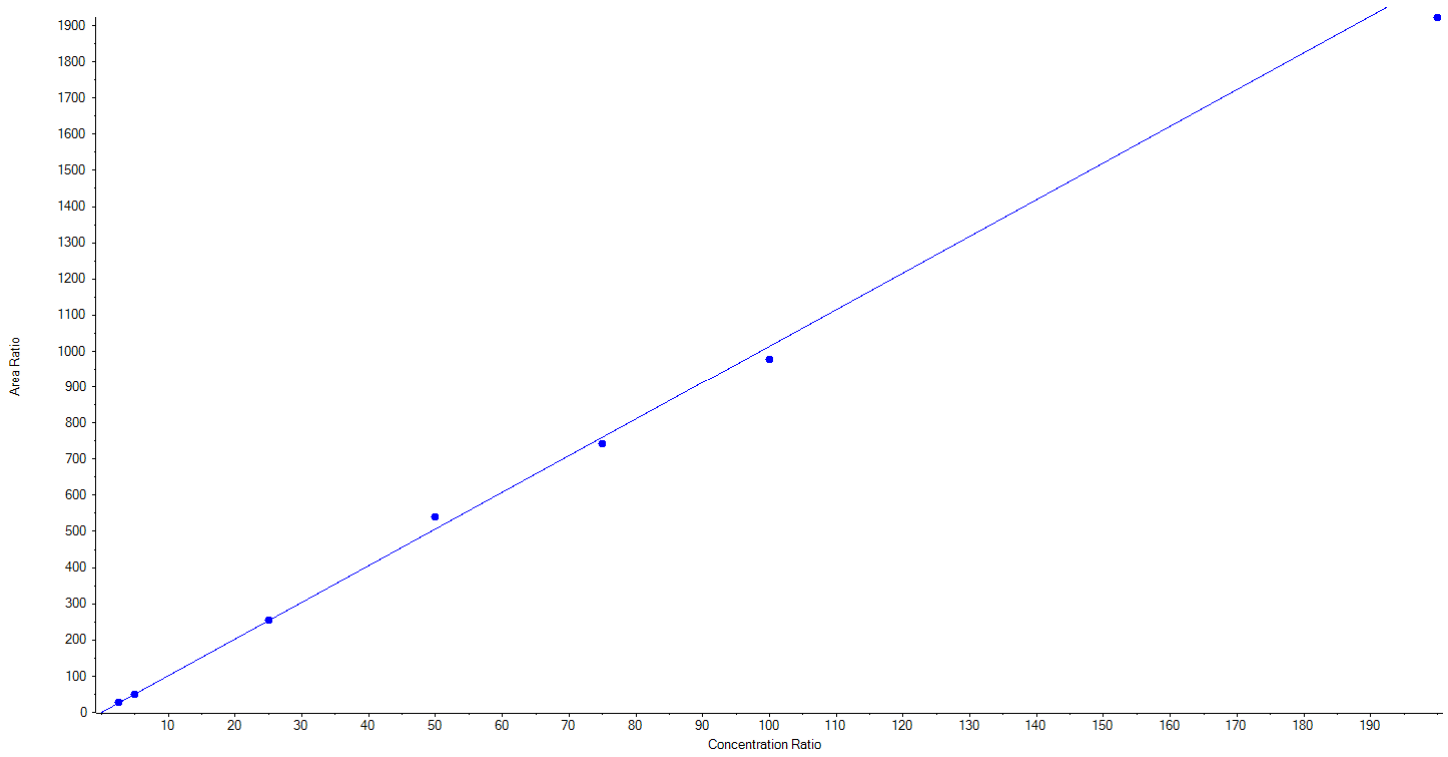
Fit Linear Weighting None Iterate No
Intercept 0.04150
Slope 0.01639
Correlation coefficient 0.99937
Use Area

12292022

Analyte Name: 135-Trinitrobenzene
Internal Standard: 13-Dinitrobenzene-d4

Regression Equation: y = 10.13743 x (std. dev. = 0.51748) (weighting: None)

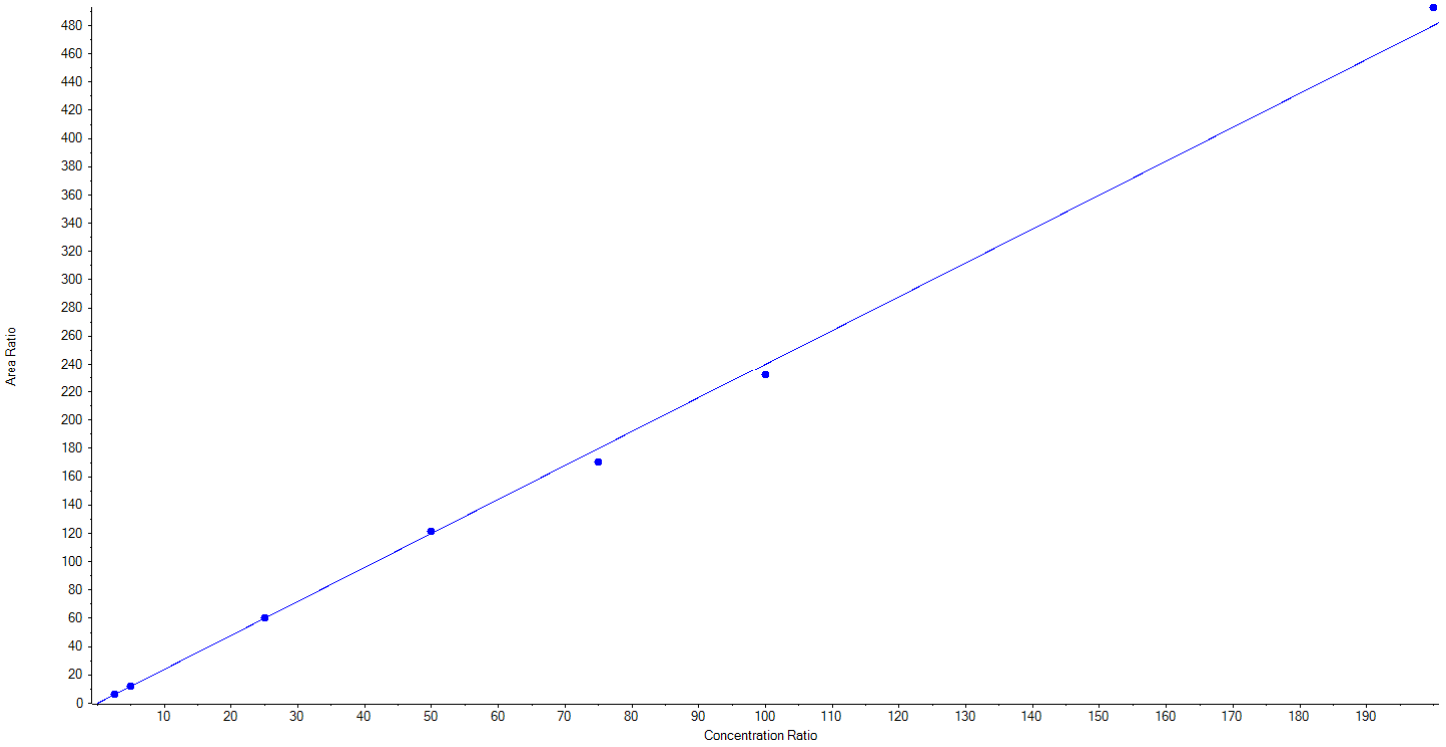
Expected Concentration	Calculated Concentration	% Accuracy
25.0	26.84	107.4
50.0	48.42	96.8
250.0	250.22	100.1
500.0	534.13	106.8
750.0	732.42	97.7
1000.0	964.15	96.4
2000.0	1896.08	94.8



Analyte Name: 13-Dinitrobenzene
Internal Standard: 13-Dinitrobenzene-d4

Regression Equation: y = 2.40004 x (std. dev. = 0.09332) (weighting: None)

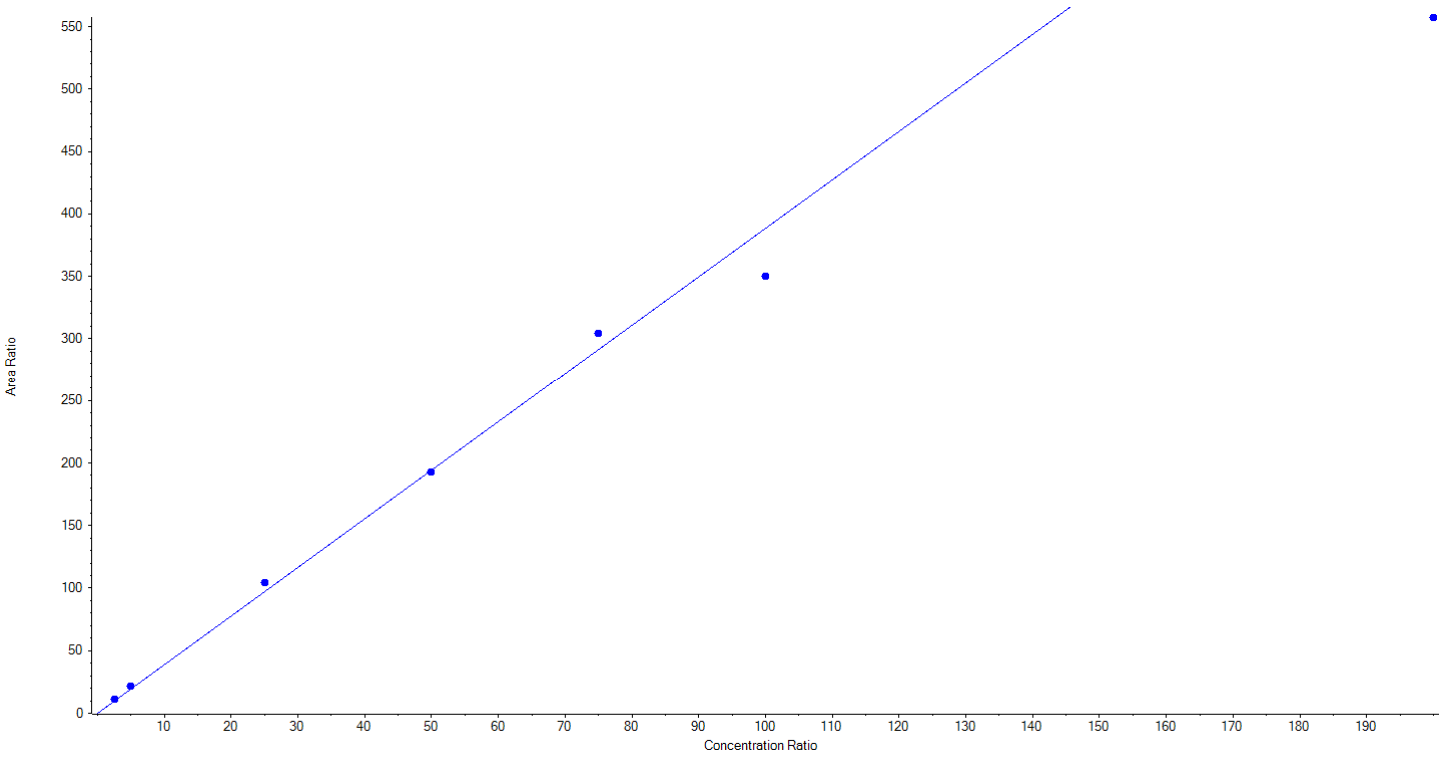
Expected Concentration	Calculated Concentration	% Accuracy
25.0	26.49	106.0
50.0	48.84	97.7
250.0	252.57	101.0
500.0	506.76	101.4
750.0	709.84	94.6
1000.0	966.76	96.7
2000.0	2053.17	102.7



Analyte Name: Tetryl
Internal Standard: 13-Dinitrobenzene-d4

Regression Equation: y = 3.88453 x (std. dev. = 0.58218) (weighting: None)

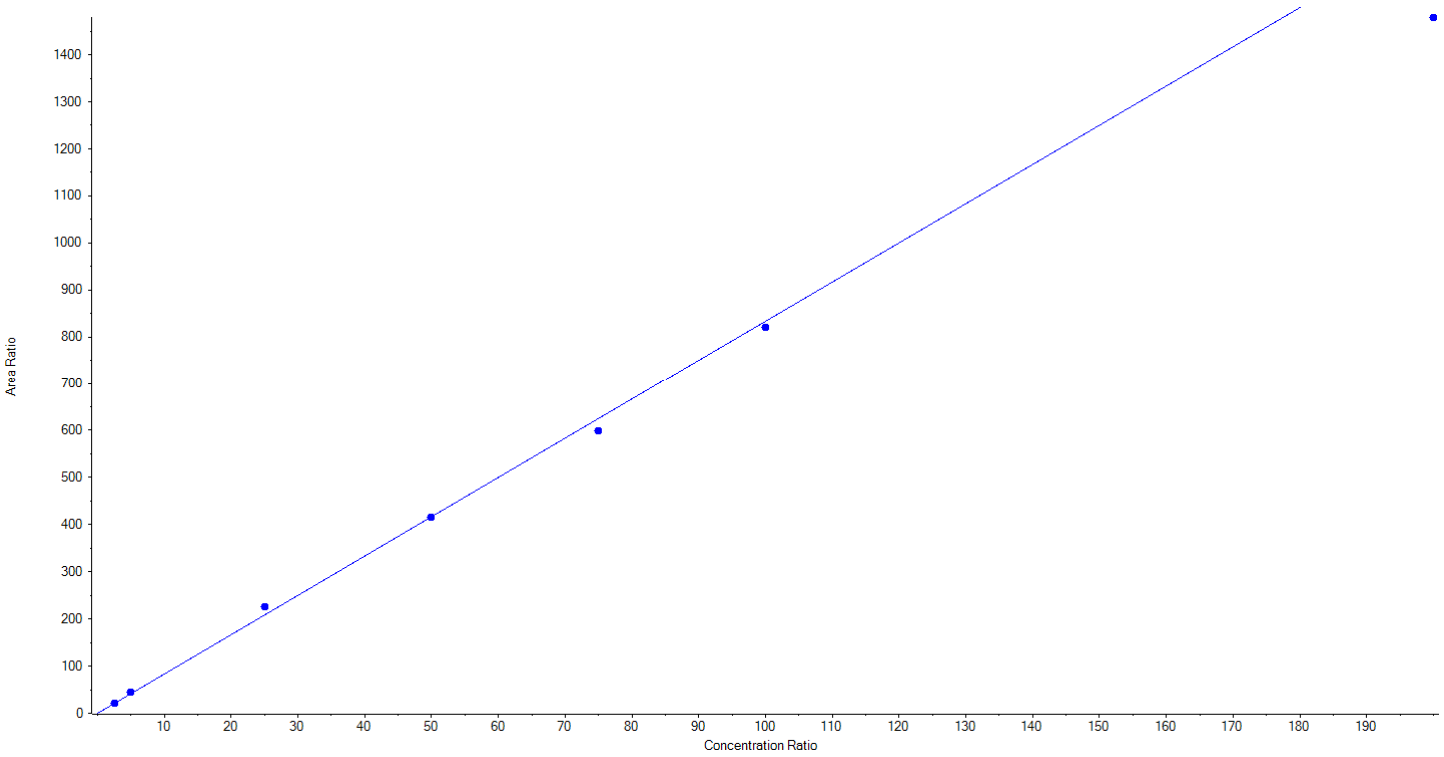
Expected Concentration	Calculated Concentration	% Accuracy
25.0	29.02	116.1
50.0	55.51	111.0
250.0	267.81	107.1
500.0	496.47	99.3
750.0	784.30	104.6
1000.0	901.84	90.2
2000.0	1434.60	71.7



Analyte Name: 246-Trinitrotoluene
Internal Standard: 26-Dinitrotoluene-d3

Regression Equation: y = 8.33472 x (std. dev. = 0.54857) (weighting: None)

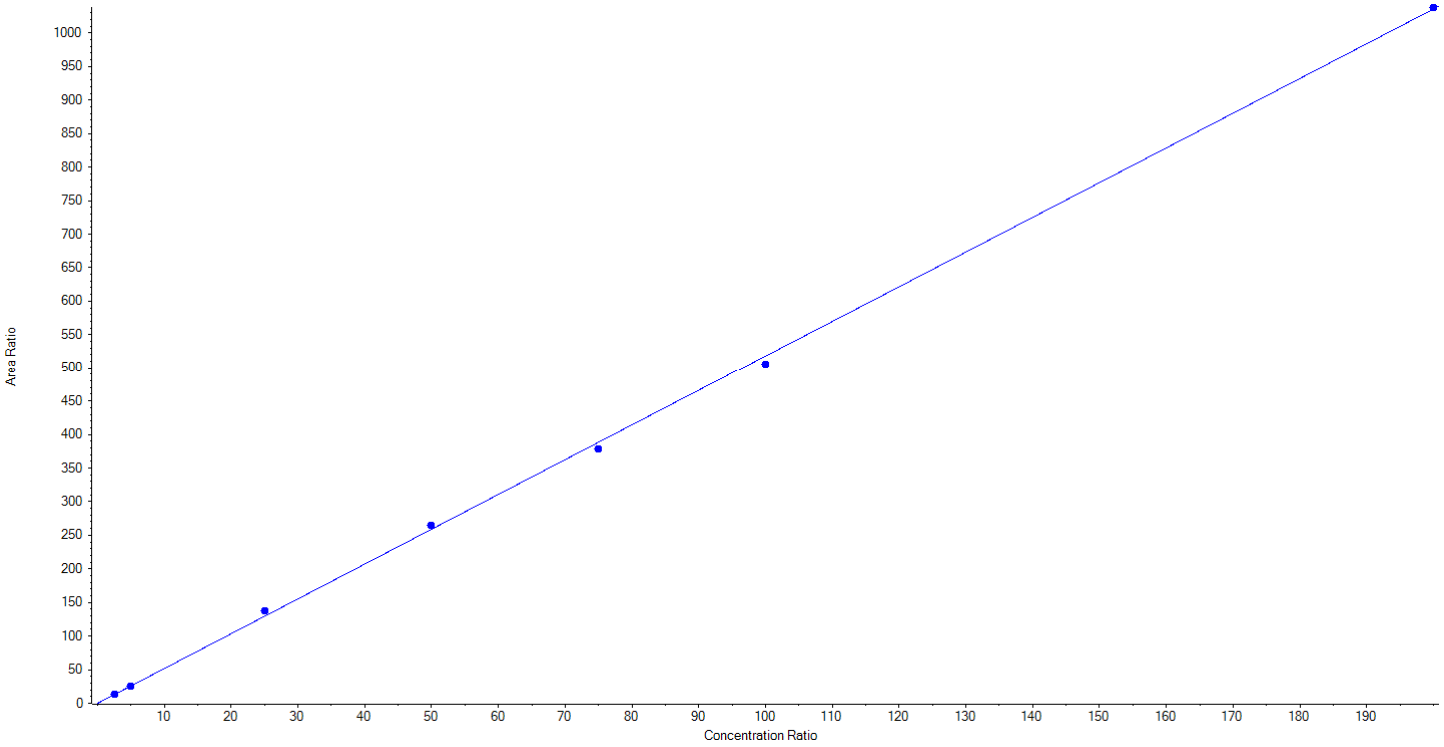
Expected Concentration	Calculated Concentration	% Accuracy
25.0	25.93	103.7
50.0	52.43	104.9
250.0	271.64	108.7
500.0	499.02	99.8
750.0	718.19	95.8
1000.0	984.63	98.5
2000.0	1774.59	88.7



Analyte Name: 34-dinitrotoluene
Internal Standard: 26-Dinitrotoluene-d3

Regression Equation: y = 5.17898 x (std. dev. = 0.18716) (weighting: None)

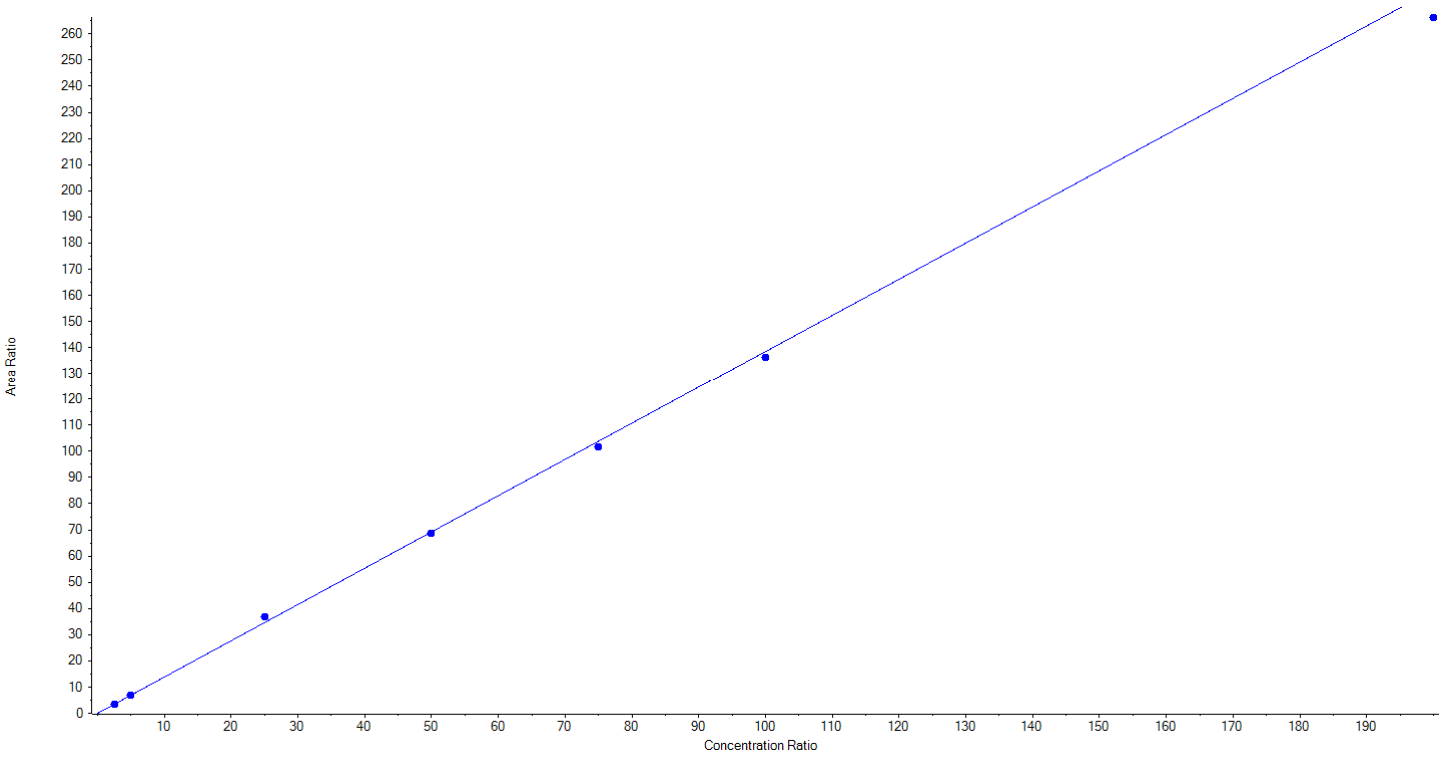
Expected Concentration	Calculated Concentration	% Accuracy
25.0	25.24	100.9
50.0	47.67	95.3
250.0	265.48	106.2
500.0	511.31	102.3
750.0	730.86	97.4
1000.0	975.95	97.6
2000.0	2004.27	100.2



Analyte Name: 4-Amino-26-dinitrotoluene
Internal Standard: 26-Dinitrotoluene-d3

Regression Equation: y = 1.38445 x (std. dev. = 0.04969) (weighting: None)

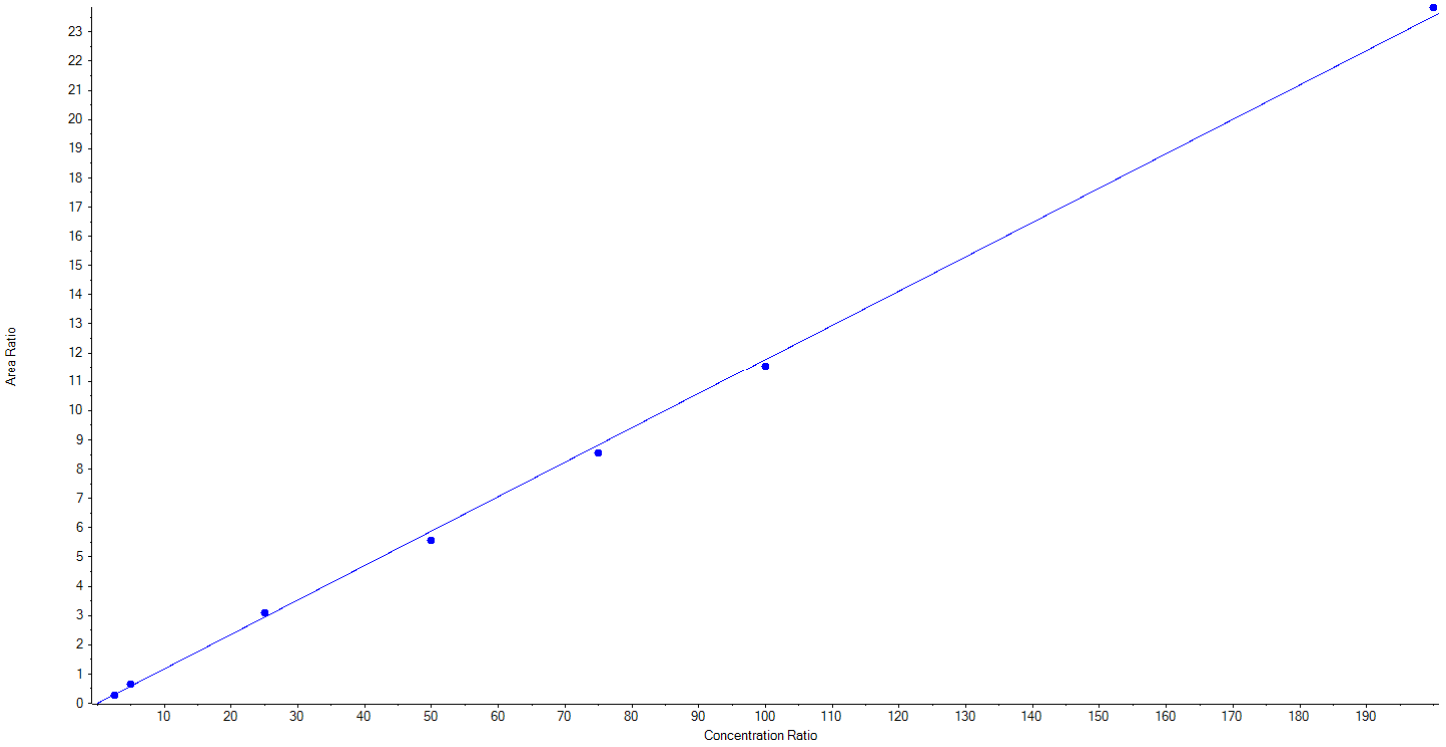
Expected Concentration	Calculated Concentration	% Accuracy
25.0	26.01	104.0
50.0	49.36	98.7
250.0	264.99	106.0
500.0	494.75	99.0
750.0	733.06	97.7
1000.0	983.95	98.4
2000.0	1923.24	96.2



Analyte Name: PETN
Internal Standard: 26-Dinitrotoluene-d3

Regression Equation: y = 0.11769 x (std. dev. = 0.00676) (weighting: None)

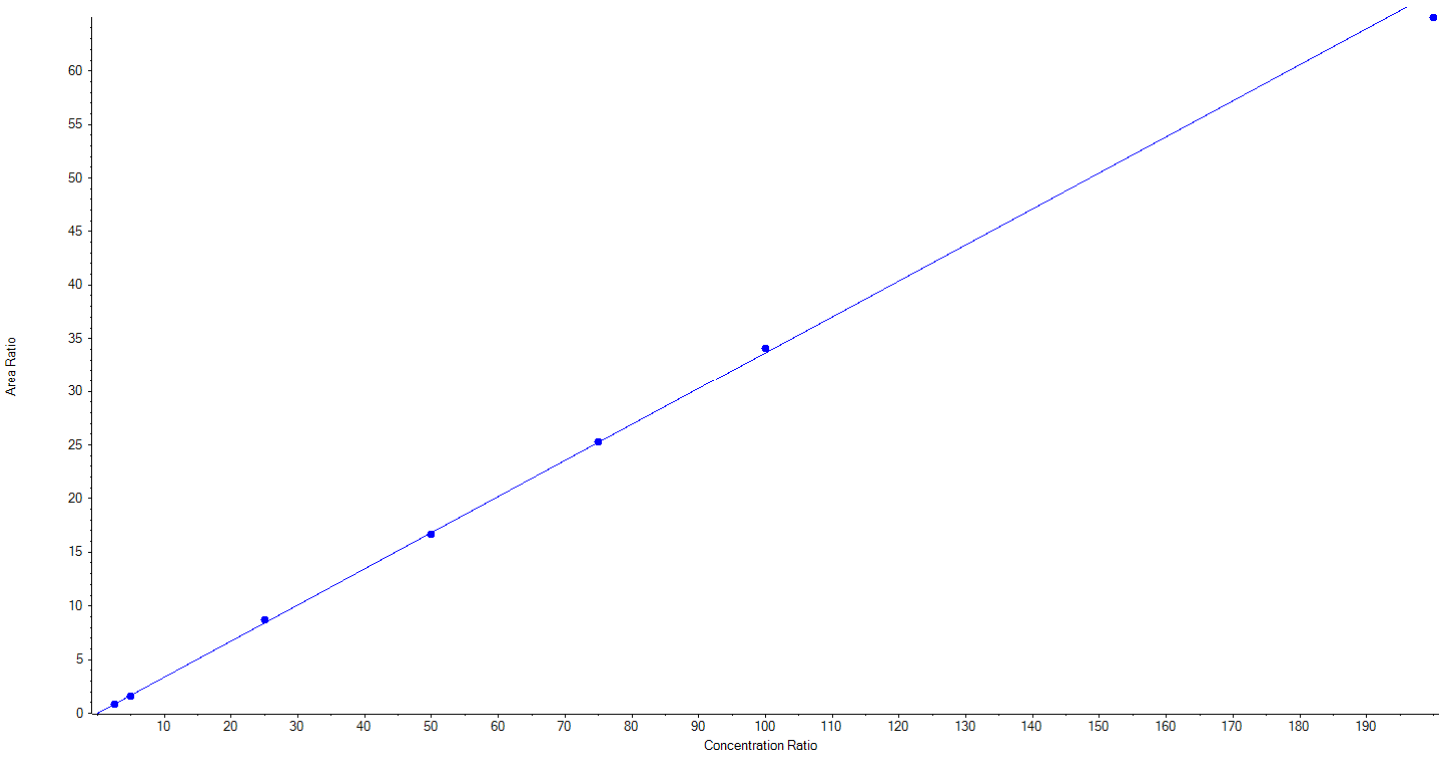
Expected Concentration	Calculated Concentration	% Accuracy
25.0	23.64	94.6
50.0	55.01	110.0
250.0	261.89	104.8
500.0	472.38	94.5
750.0	727.10	96.9
1000.0	979.66	98.0
2000.0	2025.19	101.3



Analyte Name: 2-Amino-46-dinitrotoluene
Internal Standard: 26-Dinitrotoluene-d3

Regression Equation: y = 0.33655 x (std. dev. = 0.00901) (weighting: None)

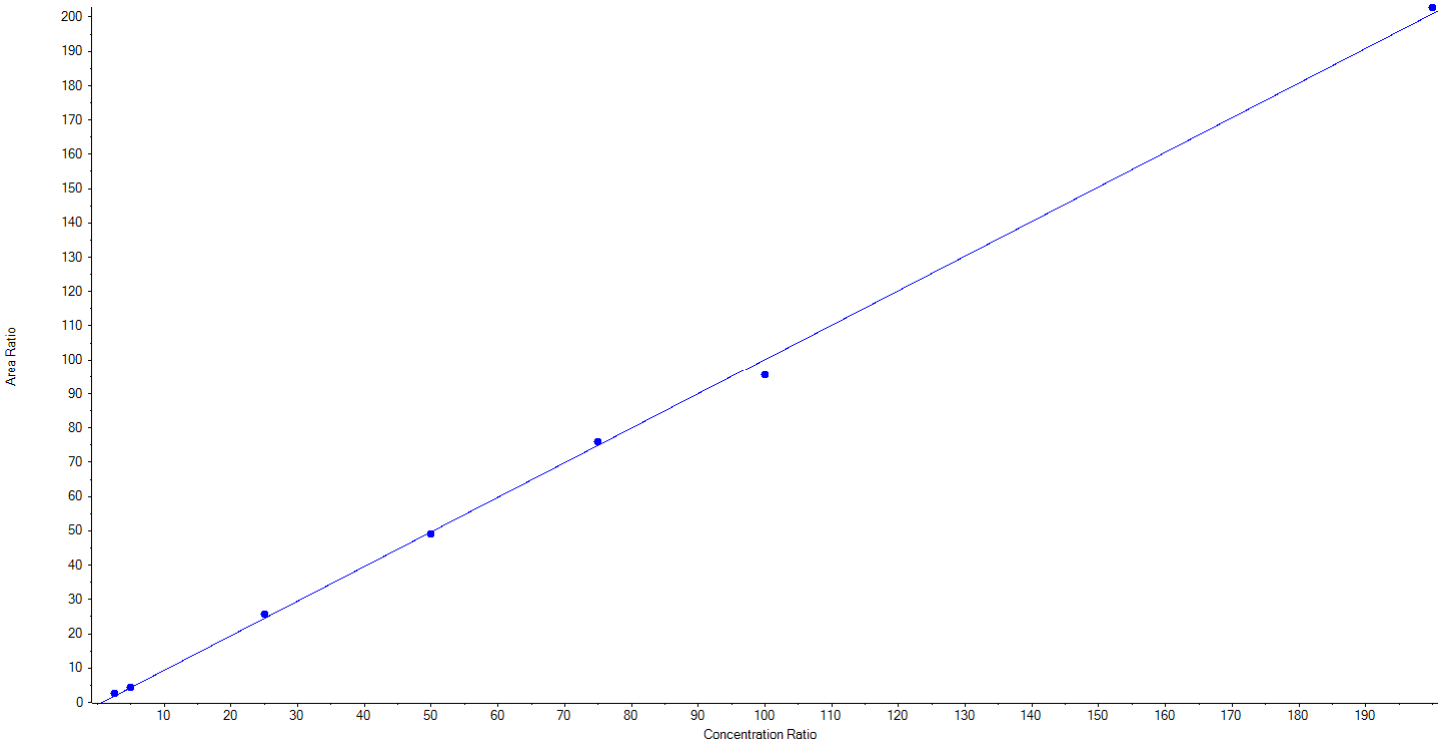
Expected Concentration	Calculated Concentration	% Accuracy
25.0	25.62	102.5
50.0	48.59	97.2
250.0	259.31	103.7
500.0	493.87	98.8
750.0	750.66	100.1
1000.0	1012.31	101.2
2000.0	1930.79	96.5



Analyte Name: TATB
Internal Standard: 13-Dinitrobenzene-d4

Regression Equation: y = 1.00825 x + -0.71702 (r = 0.99954) (weighting: None)

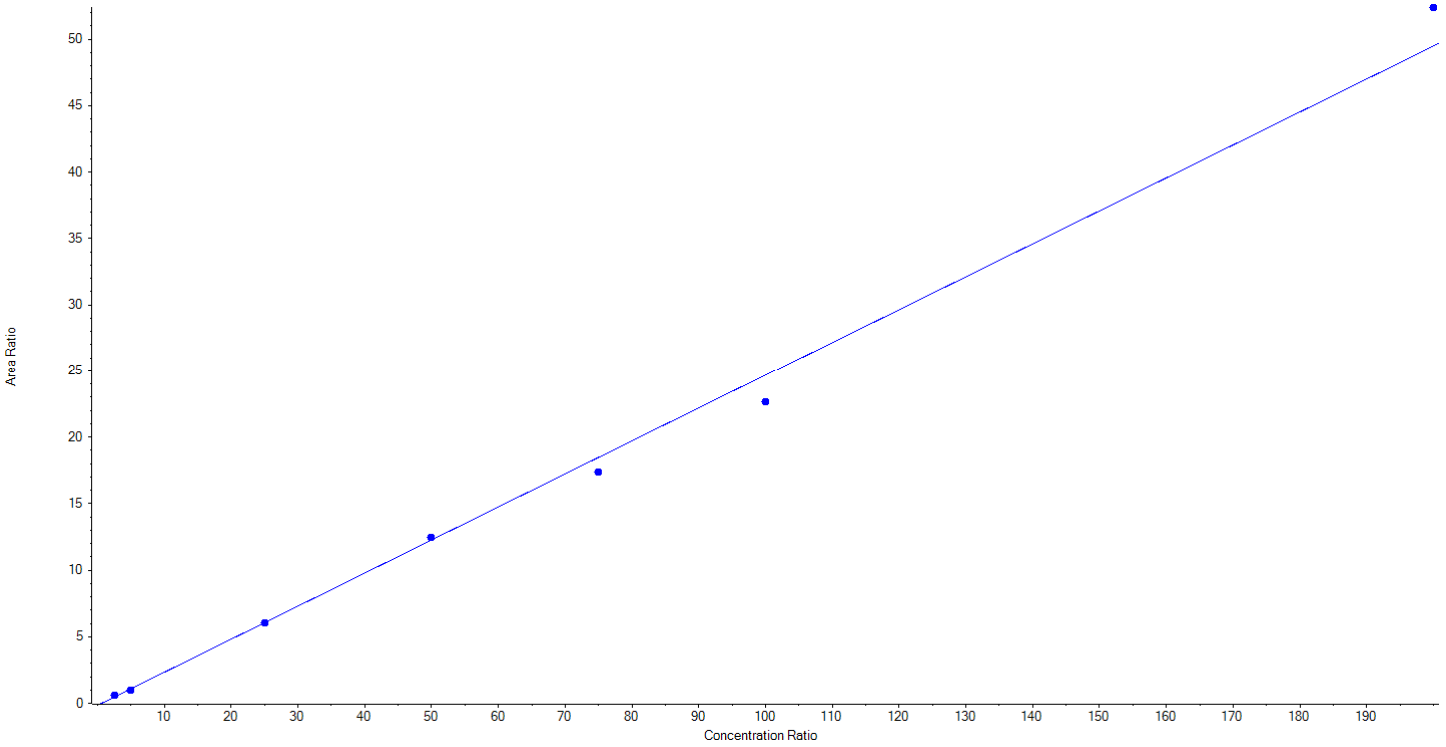
Expected Concentration	Calculated Concentration	% Accuracy
25.0	32.72	130.9
50.0	51.86	103.7
250.0	262.53	105.0
500.0	493.72	98.7
750.0	760.27	101.4
1000.0	955.77	95.6
2000.0	2018.12	100.9



Analyte Name: 26-Diamino-4-nitrotoluene
Internal Standard: 13-Dinitrobenzene-d4

Regression Equation: y = 0.24817 x + -0.14850 (r = 0.99778) (weighting: 1 / x)

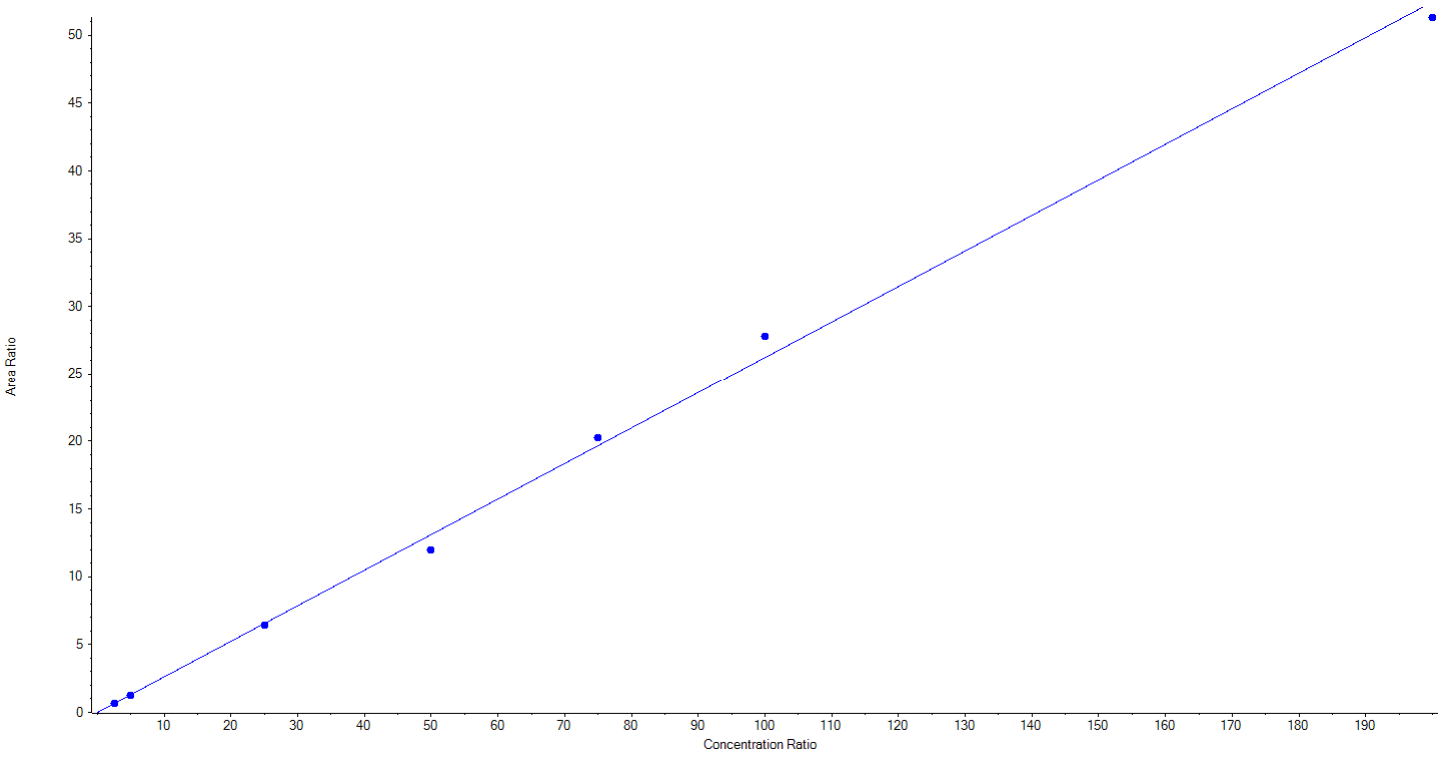
Expected Concentration	Calculated Concentration	% Accuracy
25.0	29.20	116.8
50.0	44.75	89.5
250.0	250.28	100.1
500.0	507.98	101.6
750.0	706.33	94.2
1000.0	919.74	92.0
2000.0	2116.72	105.8



Analyte Name: 24-Diamino-6-nitrotoluene
Internal Standard: 13-Dinitrobenzene-d4

Regression Equation: y = 0.26229 x (std. dev. = 0.01385) (weighting: None)

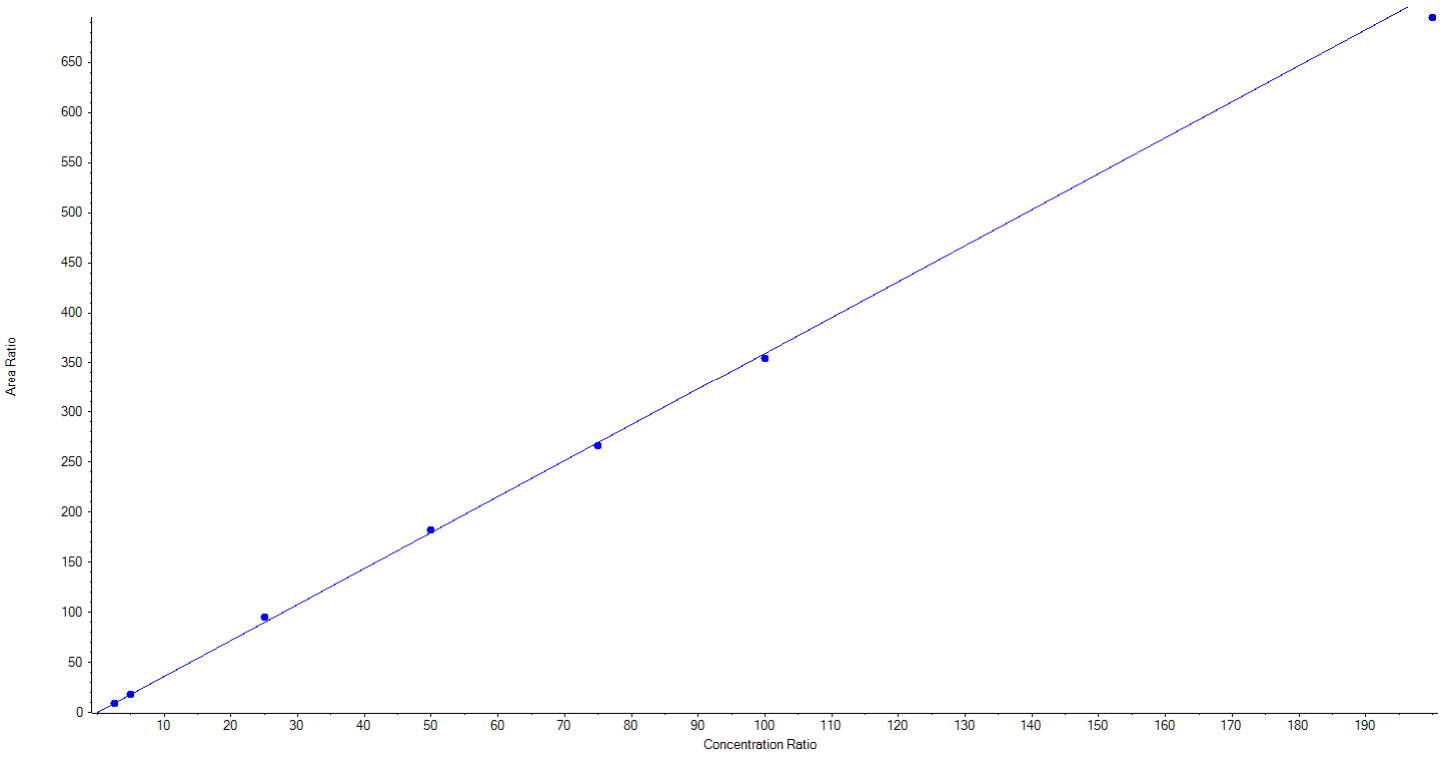
Expected Concentration	Calculated Concentration	% Accuracy
25.0	26.53	106.1
50.0	49.04	98.1
250.0	244.68	97.9
500.0	456.89	91.4
750.0	771.79	102.9
1000.0	1058.44	105.8
2000.0	1956.20	97.8



Analyte Name: 26-dinitrotoluene
Internal Standard: 26-Dinitrotoluene-d3

Regression Equation: y = 3.59362 x (std. dev. = 0.11266) (weighting: None)

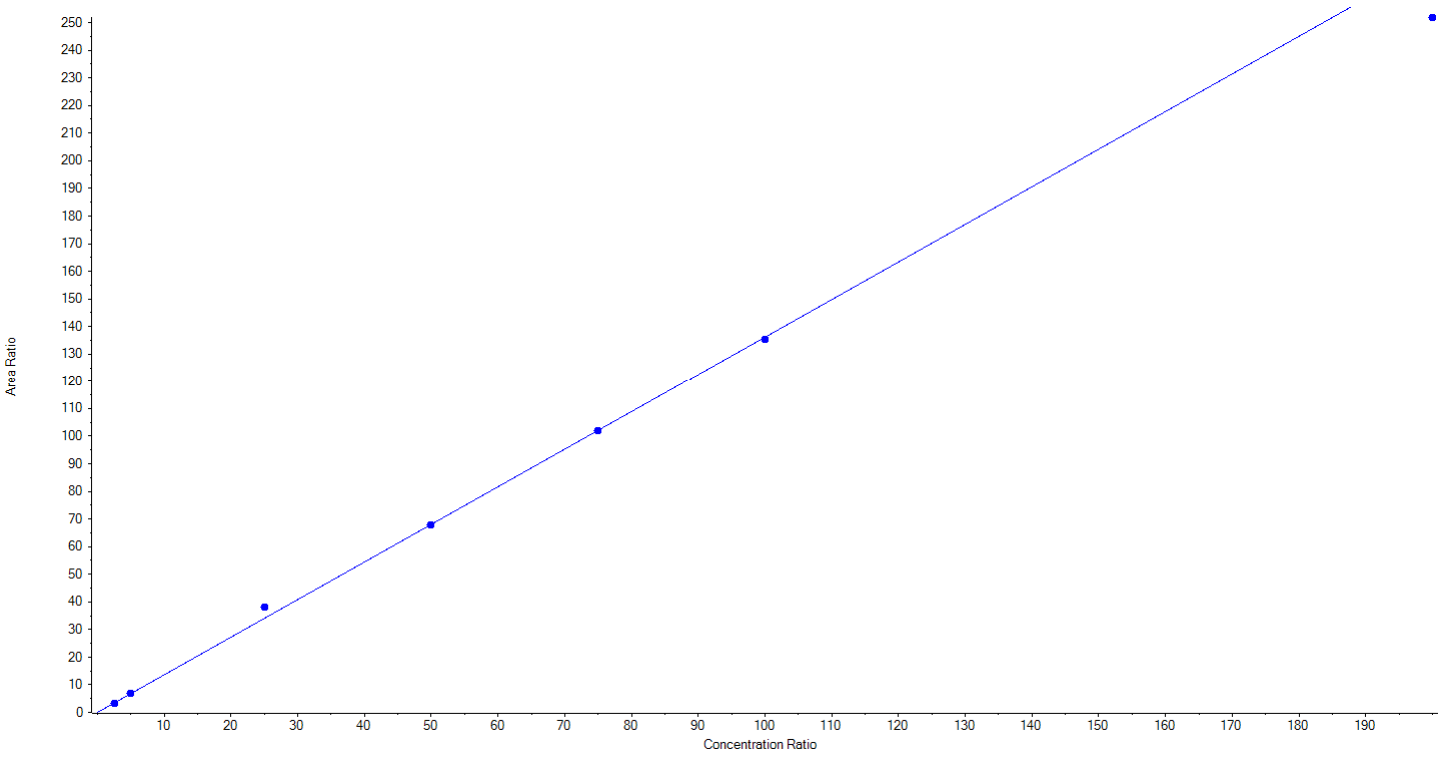
Expected Concentration	Calculated Concentration	% Accuracy
25.0	25.11	100.4
50.0	49.07	98.1
250.0	265.59	106.2
500.0	506.34	101.3
750.0	740.11	98.7
1000.0	985.36	98.5
2000.0	1933.80	96.7



Analyte Name: 24-dinitrotoluene
Internal Standard: 26-Dinitrotoluene-d3

Regression Equation: y = 1.36139 x (std. dev. = 0.07840) (weighting: None)

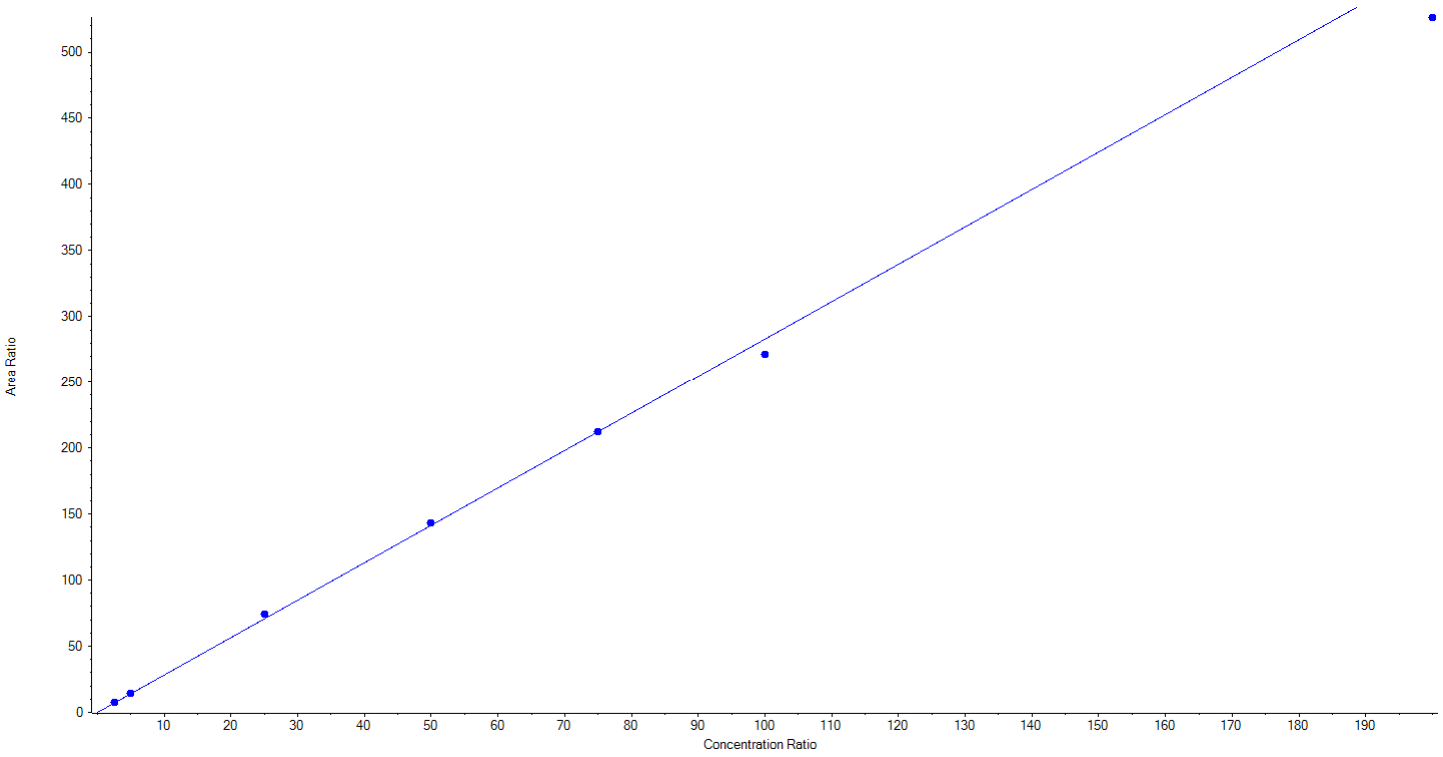
Expected Concentration	Calculated Concentration	% Accuracy
25.0	24.17	96.7
50.0	50.13	100.3
250.0	278.61	111.4
500.0	498.91	99.8
750.0	749.98	100.0
1000.0	993.59	99.4
2000.0	1849.80	92.5



Analyte Name: RDX
Internal Standard: 13-Dinitrobenzene-d4

Regression Equation: y = 2.83017 x (std. dev. = 0.12039) (weighting: None)

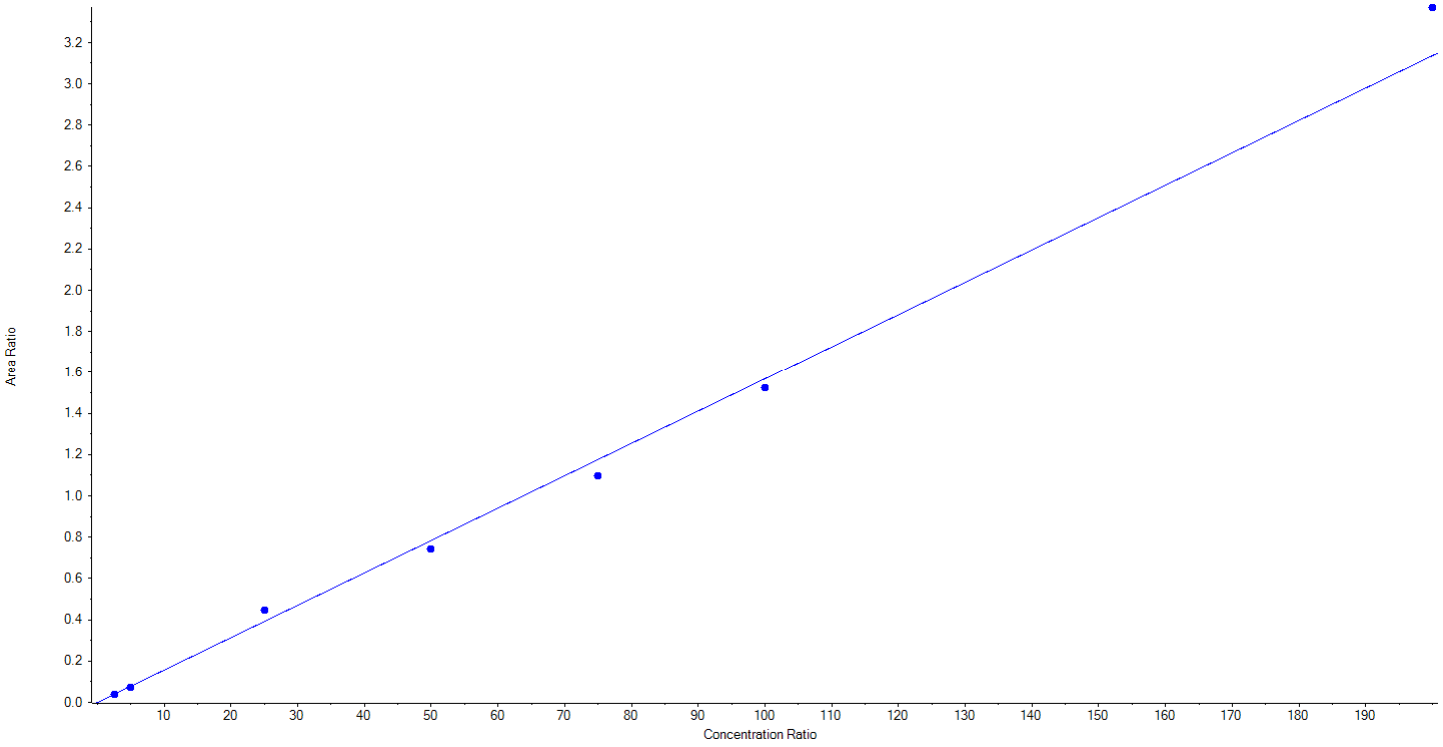
Expected Concentration	Calculated Concentration	% Accuracy
25.0	25.57	102.3
50.0	51.15	102.3
250.0	263.48	105.4
500.0	506.77	101.4
750.0	749.43	99.9
1000.0	957.98	95.8
2000.0	1859.23	93.0



Analyte Name: 2-Nitrotoluene
Internal Standard: 26-Dinitrotoluene-d3

Regression Equation: y = 0.01568 x (std. dev. = 0.00122) (weighting: None)

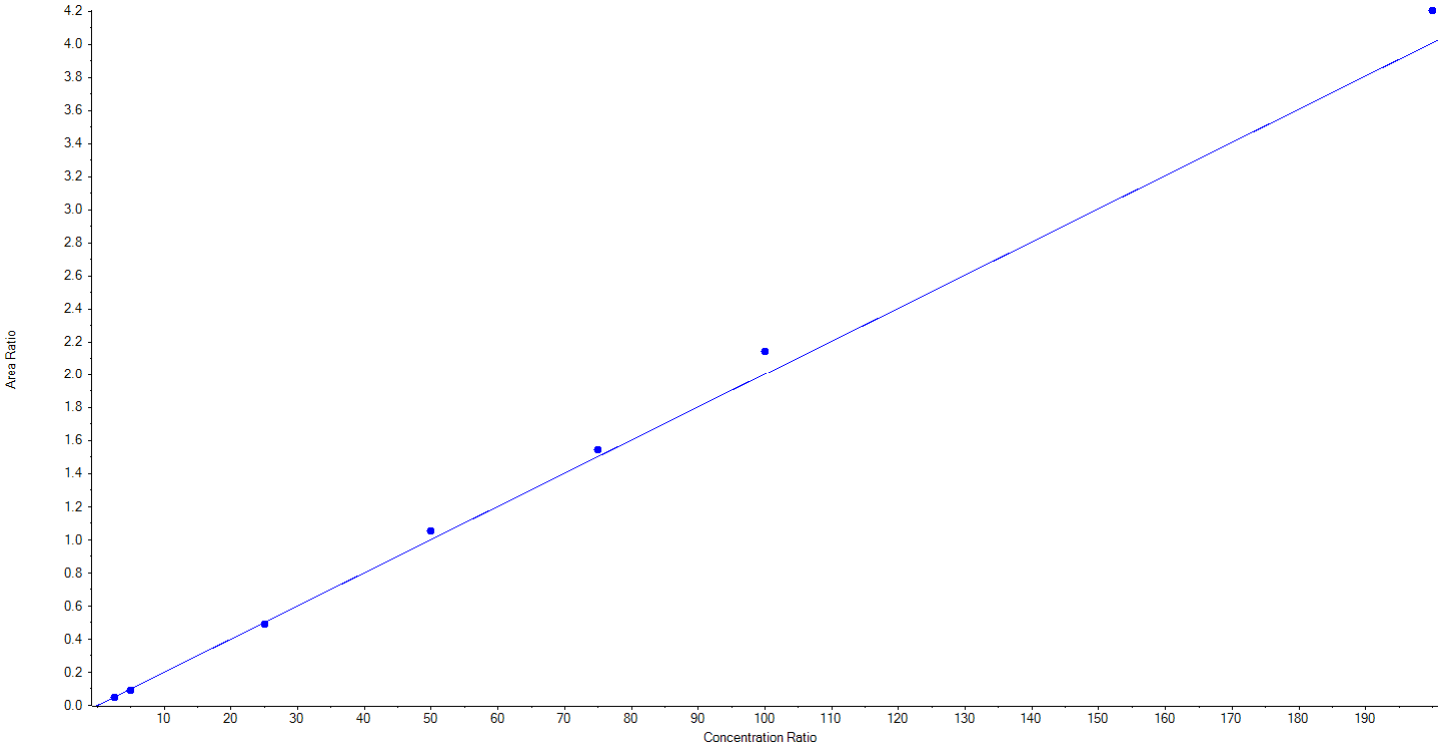
Expected Concentration	Calculated Concentration	% Accuracy
25.0	24.75	99.0
50.0	47.28	94.6
250.0	284.88	114.0
500.0	473.86	94.8
750.0	698.17	93.1
1000.0	971.95	97.2
2000.0	2148.48	107.4



Analyte Name: 4-Nitrotoluene
Internal Standard: 26-Dinitrotoluene-d3

Regression Equation: y = 0.02005 x (std. dev. = 0.00136) (weighting: None)

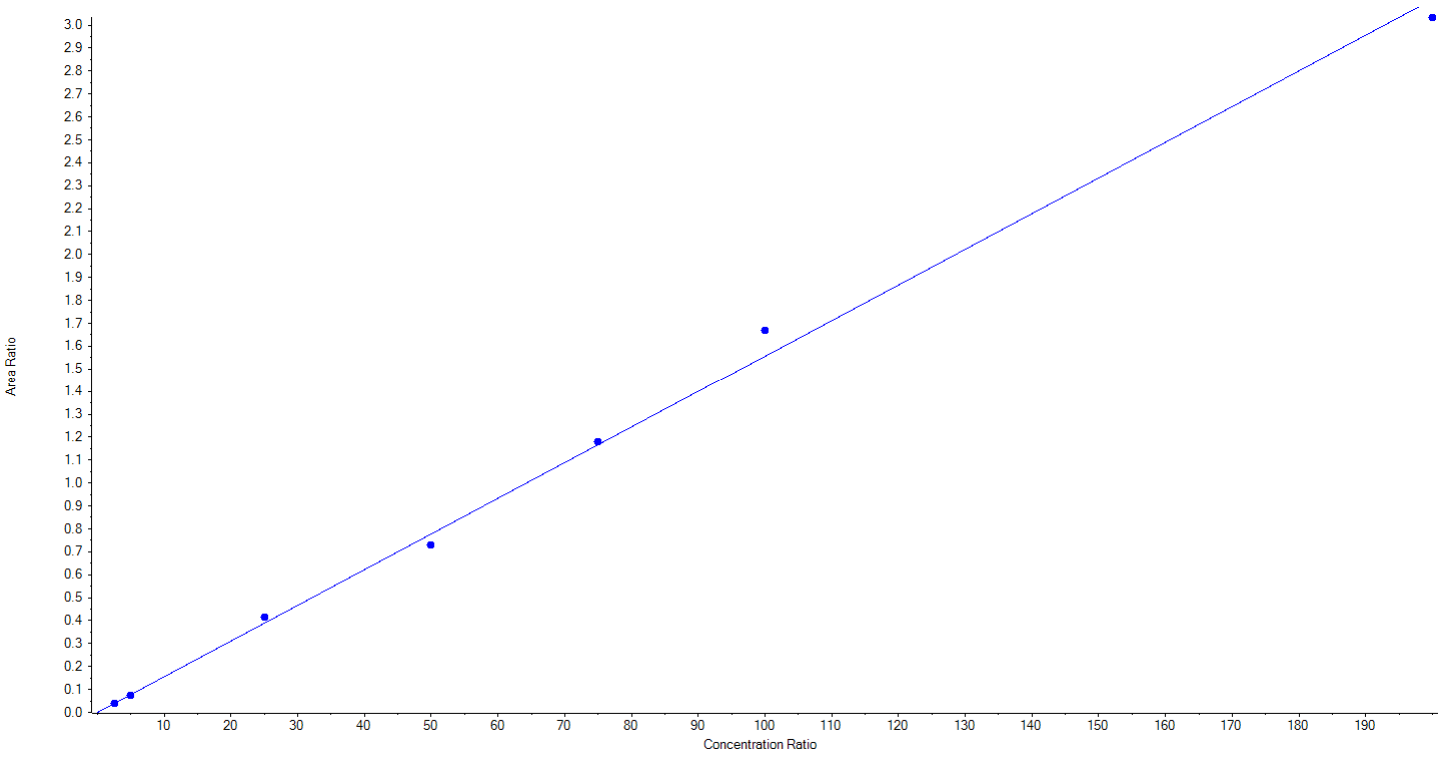
Expected Concentration	Calculated Concentration	% Accuracy
25.0	23.37	93.5
50.0	44.48	89.0
250.0	244.66	97.9
500.0	525.18	105.0
750.0	770.99	102.8
1000.0	1070.18	107.0
2000.0	2097.08	104.9



Analyte Name: 3-Nitrotoluene
Internal Standard: 26-Dinitrotoluene-d3

Regression Equation: y = 0.01556 x (std. dev. = 8.15885e-4) (weighting: None)

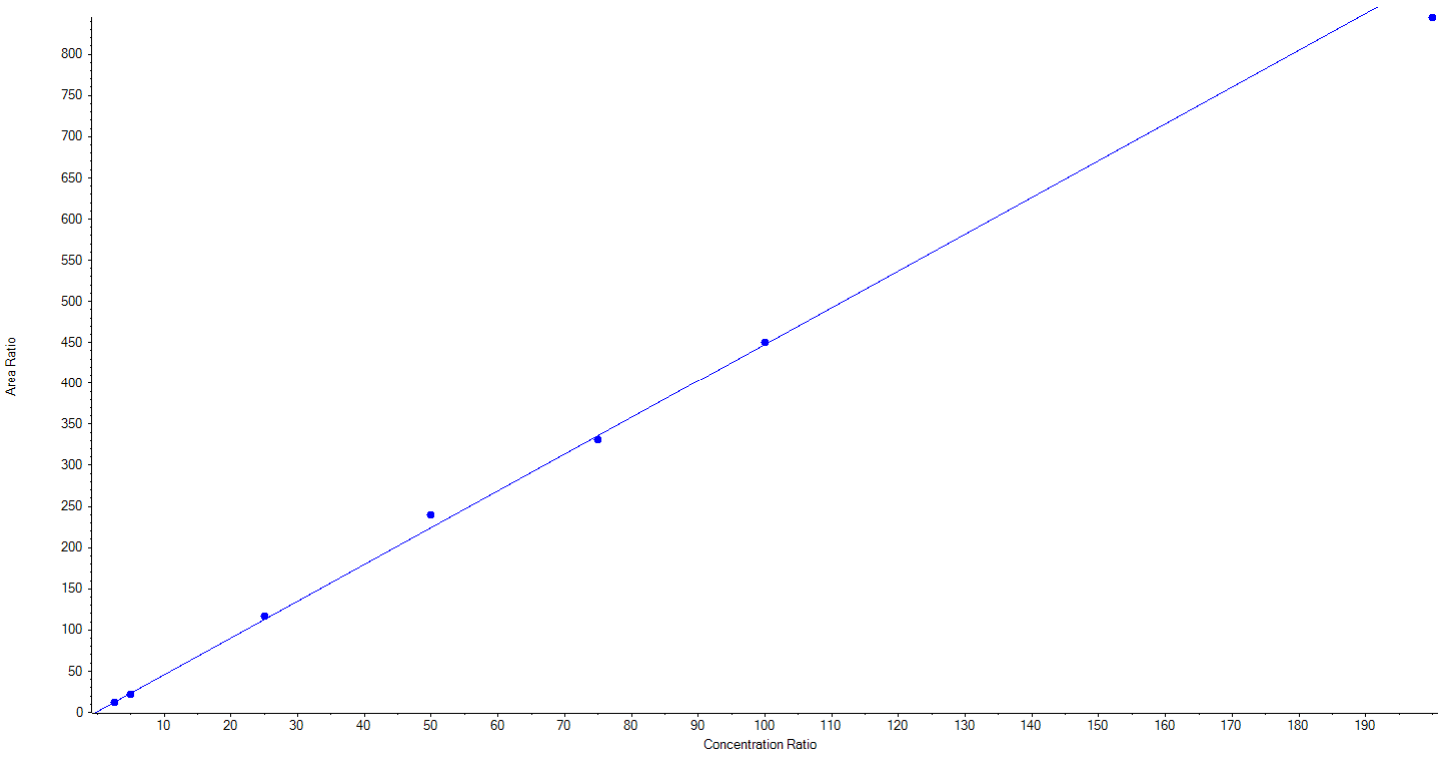
Expected Concentration	Calculated Concentration	% Accuracy
25.0	23.95	95.8
50.0	49.06	98.1
250.0	266.42	106.6
500.0	468.14	93.6
750.0	759.07	101.2
1000.0	1072.19	107.2
2000.0	1949.36	97.5



Analyte Name: HMX
Internal Standard: 13-Dinitrobenzene-d4

Regression Equation: y = 4.46589 x + 1.05660 (r = 0.99838) (weighting: 1 / x^2)

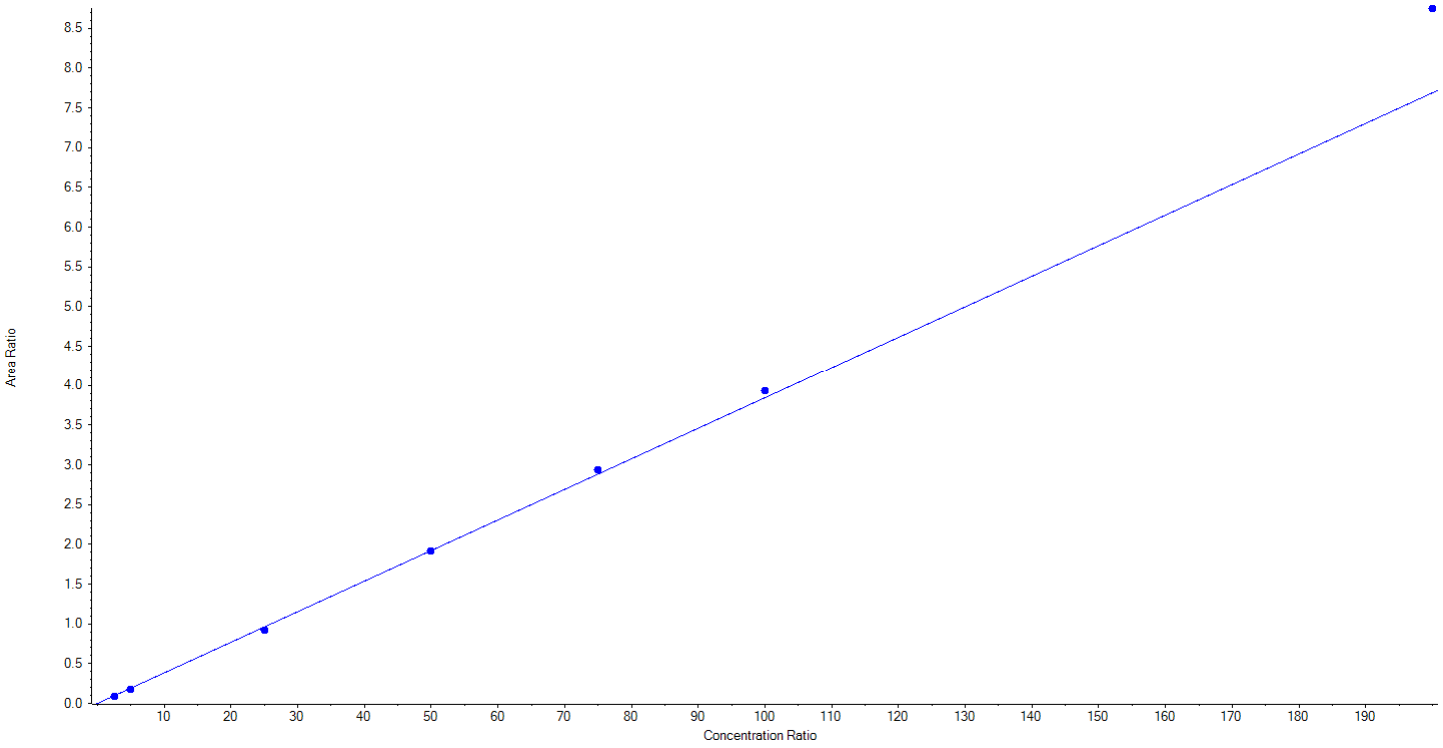
Expected Concentration	Calculated Concentration	% Accuracy
25.0	25.73	102.9
50.0	46.48	93.0
250.0	258.85	103.5
500.0	534.33	106.9
750.0	739.10	98.5
1000.0	1007.24	100.7
2000.0	1888.80	94.4



Analyte Name: Nitrobenzene
Internal Standard: 13-Dinitrobenzene-d4

Regression Equation: y = 0.03844 x (std. dev. = 0.00280) (weighting: None)

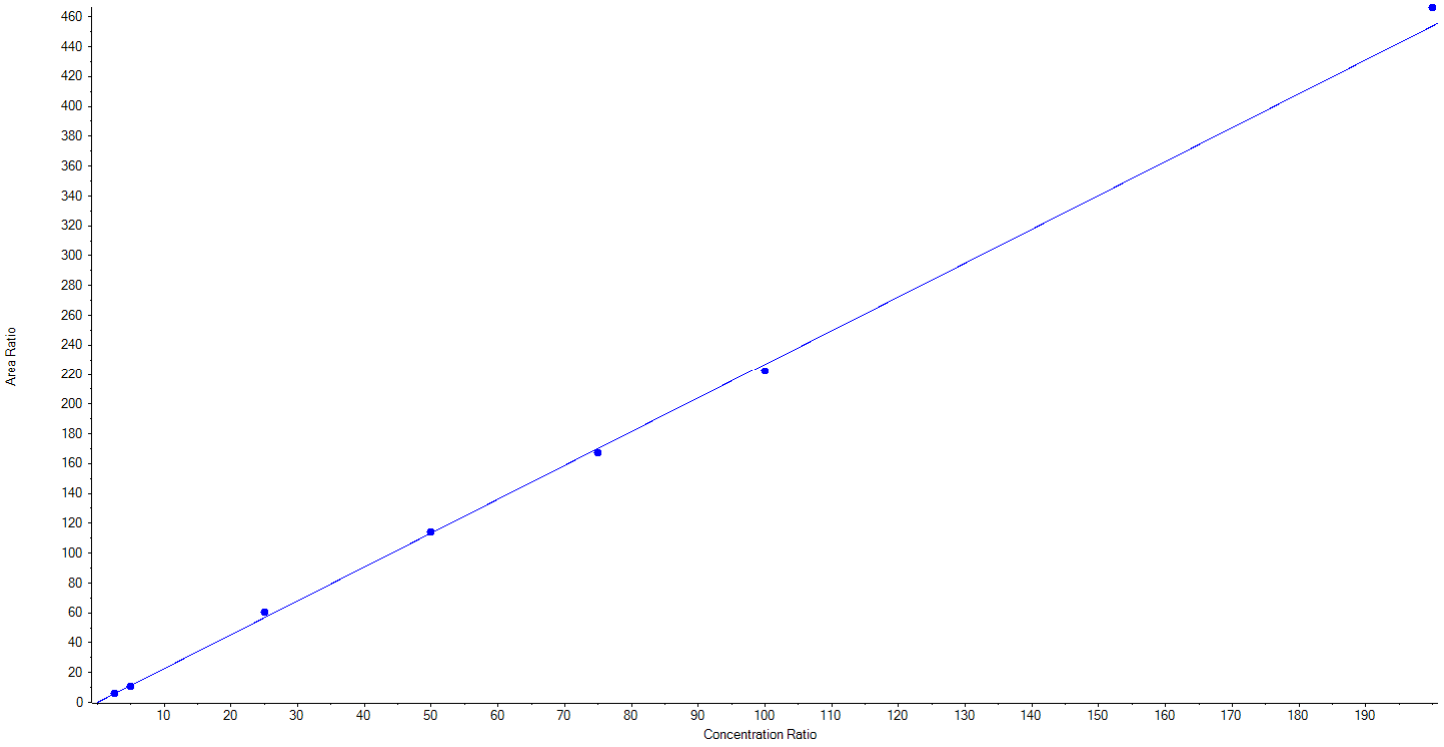
Expected Concentration	Calculated Concentration	% Accuracy
25.0	23.92	95.7
50.0	45.33	90.7
250.0	240.57	96.2
500.0	499.09	99.8
750.0	762.36	101.6
1000.0	1022.01	102.2
2000.0	2275.48	113.8



Analyte Name: 35-Dinitroaniline
Internal Standard: 26-Dinitrotoluene-d3

Regression Equation: y = 2.26912 x (std. dev. = 0.09566) (weighting: None)

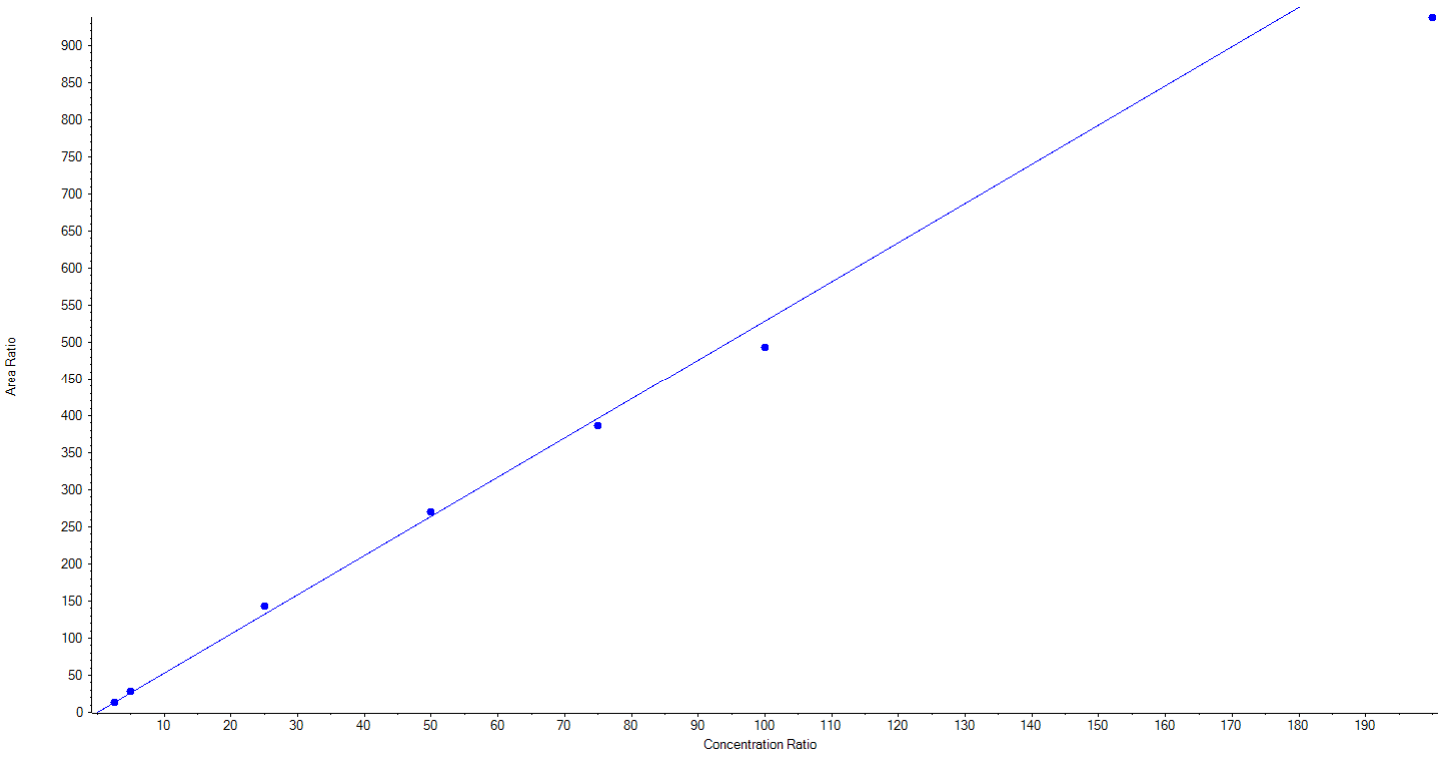
Expected Concentration	Calculated Concentration	% Accuracy
25.0	25.39	101.5
50.0	46.36	92.7
250.0	265.16	106.1
500.0	502.86	100.6
750.0	737.78	98.4
1000.0	979.94	98.0
2000.0	2054.64	102.7



Analyte Name: tris(o-cresyl)phosphate
Internal Standard: 26-Dinitrotoluene-d3

Regression Equation: y = 5.28729 x (std. dev. = 0.38215) (weighting: None)

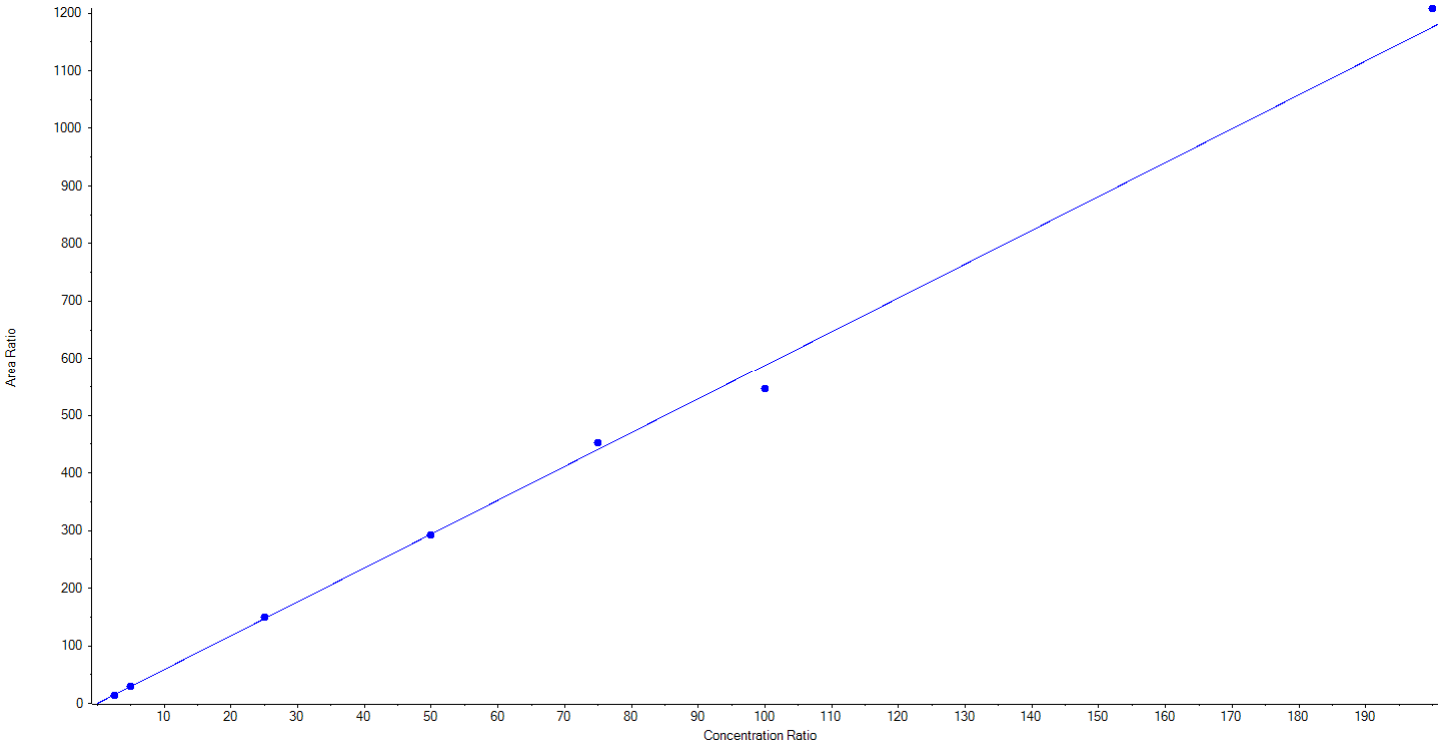
Expected Concentration	Calculated Concentration	% Accuracy
25.0	25.75	103.0
50.0	53.59	107.2
250.0	270.81	108.3
500.0	510.23	102.0
750.0	731.66	97.6
1000.0	932.21	93.2
2000.0	1773.97	88.7



Analyte Name: TNX
Internal Standard: 13-Dinitrobenzene-d4

Regression Equation: y = 5.87891 x (std. dev. = 0.19273) (weighting: None)

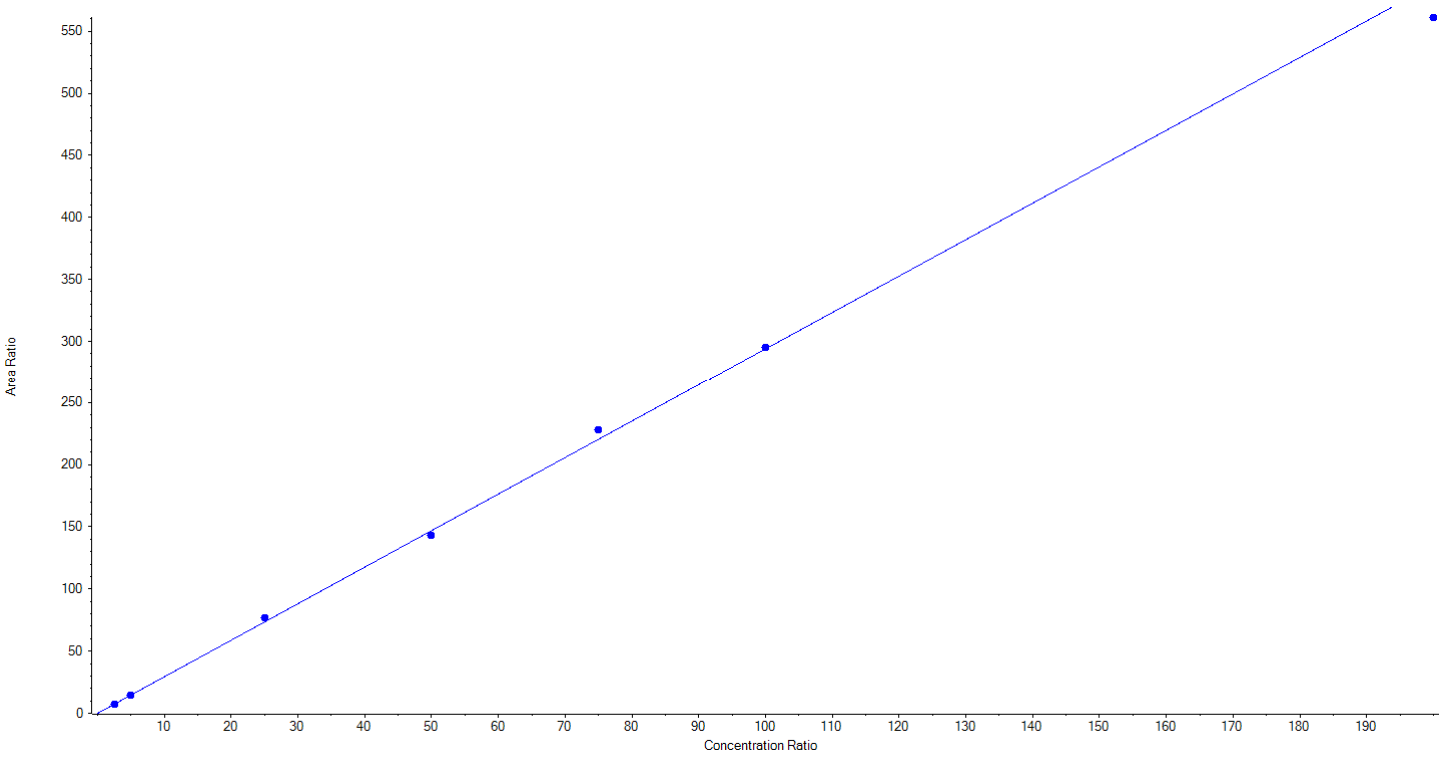
Expected Concentration	Calculated Concentration	% Accuracy
25.0	25.06	100.2
50.0	50.17	100.3
250.0	253.67	101.5
500.0	498.72	99.7
750.0	768.39	102.5
1000.0	930.29	93.0
2000.0	2054.77	102.7



Analyte Name: DNX
Internal Standard: 13-Dinitrobenzene-d4

Regression Equation: y = 2.93868 x (std. dev. = 0.09321) (weighting: None)

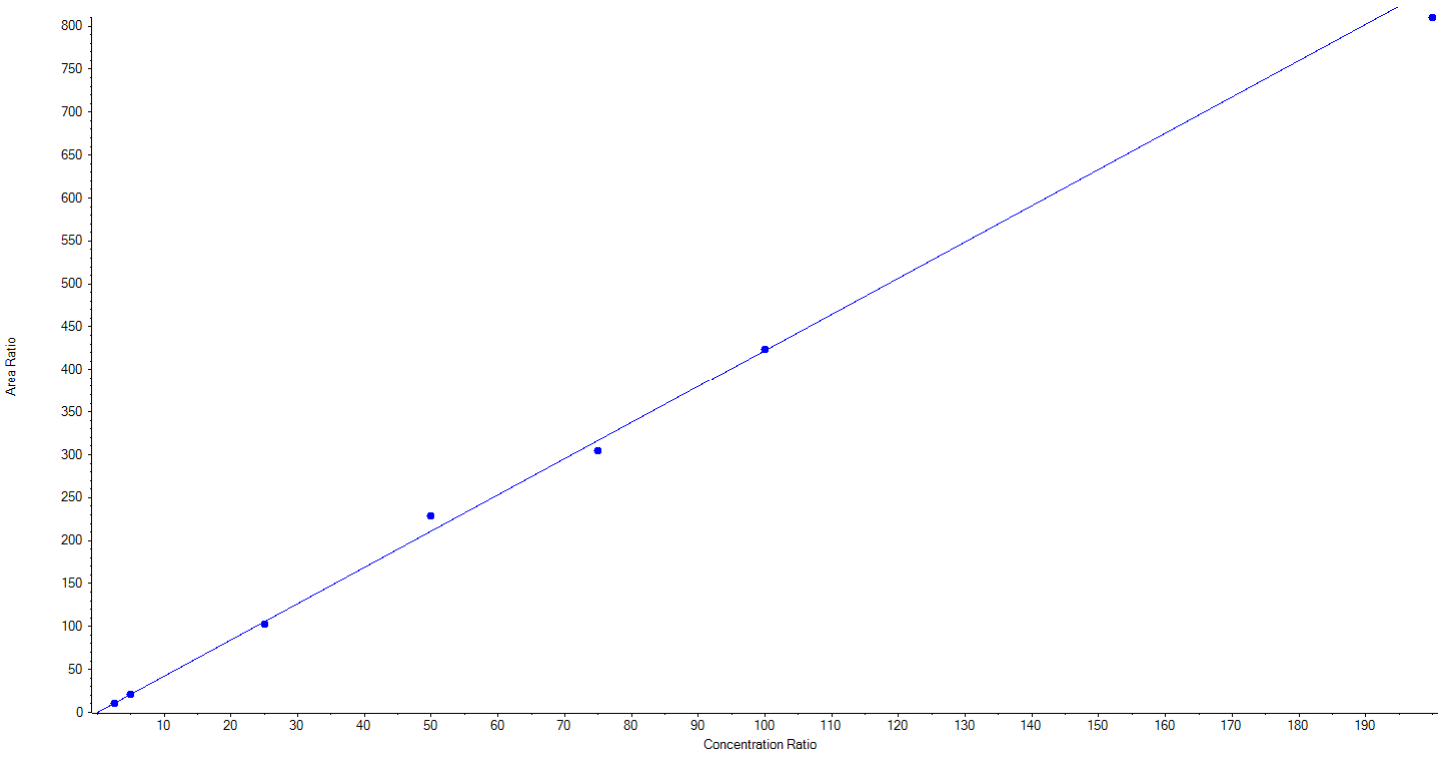
Expected Concentration	Calculated Concentration	% Accuracy
25.0	24.85	99.4
50.0	49.63	99.3
250.0	261.62	104.6
500.0	487.37	97.5
750.0	774.56	103.3
1000.0	1004.76	100.5
2000.0	1909.37	95.5



Analyte Name: MNX
Internal Standard: 13-Dinitrobenzene-d4

Regression Equation: y = 4.22199 x (std. dev. = 0.17502) (weighting: None)

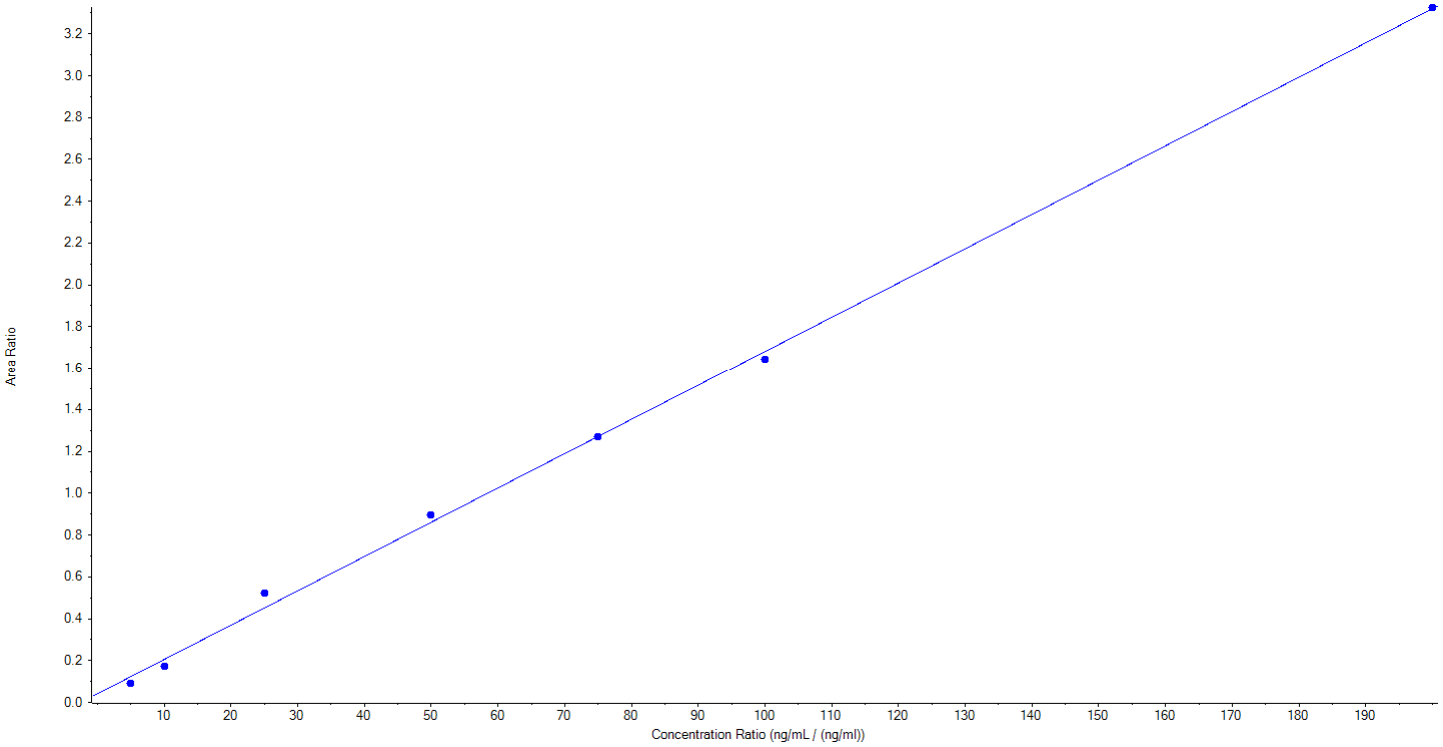
Expected Concentration	Calculated Concentration	% Accuracy
25.0	25.30	101.2
50.0	50.18	100.4
250.0	244.44	97.8
500.0	540.68	108.1
750.0	722.16	96.3
1000.0	1002.95	100.3
2000.0	1918.68	95.9



Analyte Name: Nitroglycerin
Internal Standard: 26-Dinitrotoluene-d3

Regression Equation: y = 0.01639 x + 0.04150 (r = 0.99937) (weighting: None)

Expected Concentration	Calculated Concentration	% Accuracy
50.0	29.75	59.5
100.0	79.07	79.1
250.0	291.91	116.8
500.0	520.34	104.1
750.0	747.99	99.7
1000.0	977.91	97.8
2000.0	2003.03	100.2



Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 2023-289

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File: EXP122922012.wiff

Analysis Date: 29-DEC-22 22:28

LCMSMS ID: 1805

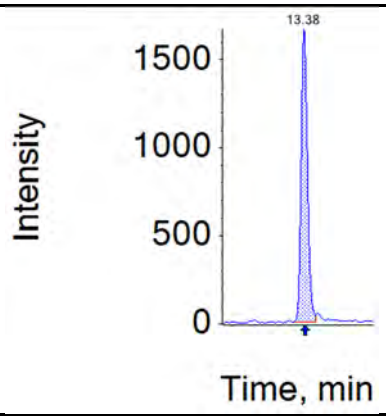
Column ID: Ultracarb Phenomenex 5u ODS (20)

Compound	True	Found	Recovery	Q
3,4-Dinitrotoluene	500	500	100.0	
RDX	500	517.08	103.4	
HMX	500	493.36	98.7	
2,4,6-Trinitrotoluene	500	464.89	93.0	

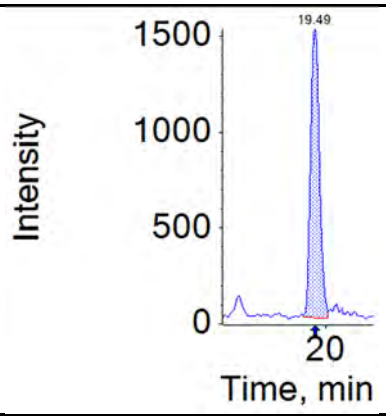
Recovery Limits = 85 - 115%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

JSB
01/01/2023

Data File	EXP122922012.wiff	Acquisition Date	12/29/2022 22:28:12
Sample Name	WXX221229-44ICV	Acquisition Method	explosivesFull2.dam
Batch|Dilution|Analyst	|1|JLS	Result Table	12292022
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



Compound Name:	13-Dinitrobenzene-d4
Expected RT:	13.42
Actual RT:	13.38
Area Counts:	33872.535
Integration Type:	Valley
Amount:	10.0

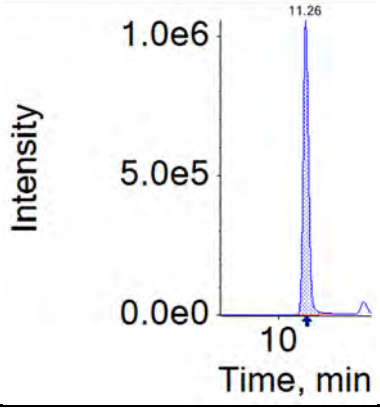


Compound Name:	26-Dinitrotoluene-d3
Expected RT:	19.50
Actual RT:	19.49
Area Counts:	43103.296
Integration Type:	Valley
Amount:	10.0

Please refer to Form 8 of the data package for a complete list of Internal Standard Recoveries.

Relative Retention Time (RRT) is used by the laboratory to establish peak identity. The RRT of each target analyte is calculated using the retention time of the corresponding internal standard. The RRT of each analyte in a sample must be within 2.0 of the analyte's calculated RRT in the ICV.

EXP122922012.wiff
WXX221229-44ICV

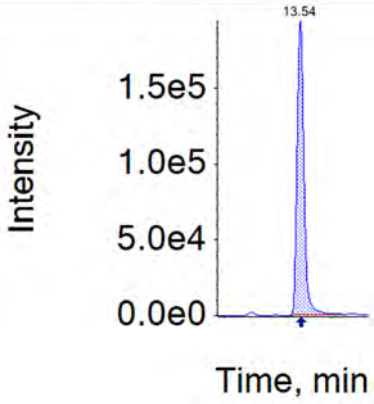


Compound Name: 135-Trinitrobenzene

Expected RT: 11.29
Actual RT: 11.26
RRT: 0.84
Area Counts: 18375280.020
Integration Type:Baseline

Amount: 535.13
%Accuracy: 107.0

EXP122922012.wiff
WXX221229-44ICV

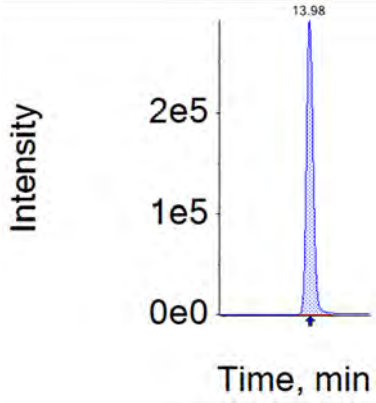


Compound Name: 13-Dinitrobenzene

Expected RT: 13.57
Actual RT: 13.54
RRT: 1.01
Area Counts: 4287483.629
Integration Type:Baseline

Amount: 527.40
%Accuracy: 105.5

EXP122922012.wiff
WXX221229-44ICV

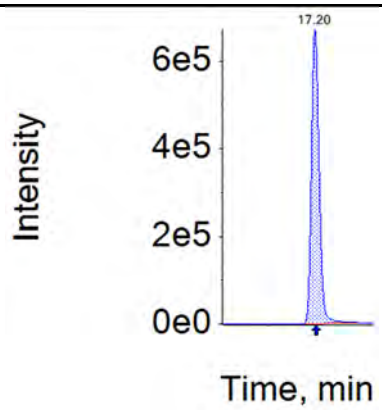


Compound Name: Tetryl

Expected RT: 14.00
Actual RT: 13.98
RRT: 1.04
Area Counts: 6355126.221
Integration Type:Baseline

Amount: 482.99
%Accuracy: 96.6

EXP122922012.wiff
WXX221229-44ICV

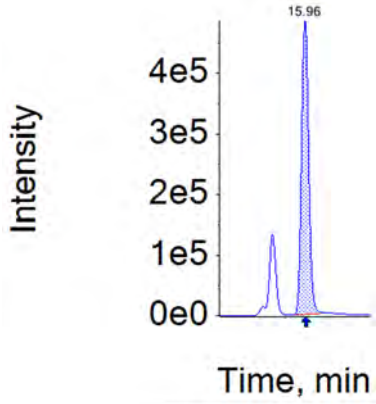


Compound Name: 246-Trinitrotoluene

Expected RT: 17.23
Actual RT: 17.20
RRT: 0.88
Area Counts: 16701246.018
Integration Type:Baseline

Amount: 464.89
%Accuracy: 93.0

EXP122922012.wiff
WXX221229-44ICV



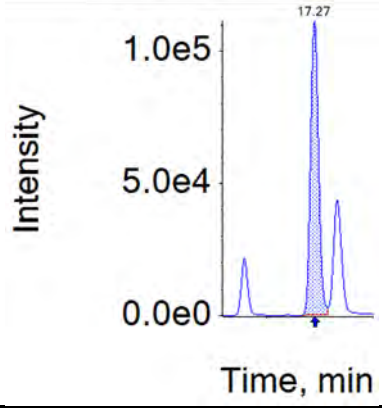
Compound Name: 34-dinitrotoluene

Expected RT: 15.99
Actual RT: 15.96
RRT: 0.82
Area Counts: 11161563.778
Integration Type:Baseline

Amount: 500.00
%Accuracy: 100.0

EXP122922012.wiff

WXX221229-44ICV

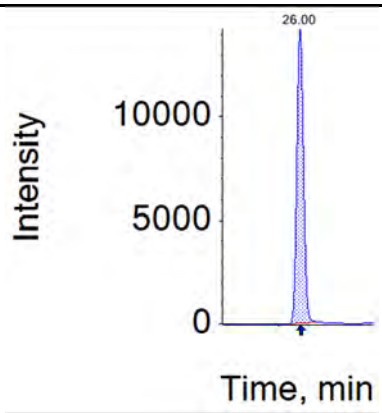


Compound Name: 4-Amino-26-dinitrotoluene

Expected RT: 17.28
Actual RT: 17.27
RRT: 0.89
Area Counts: 2870443.674
Integration Type:Valley

Amount: 481.02
%Accuracy: 96.2

EXP122922012.wiff
WXX221229-44ICV

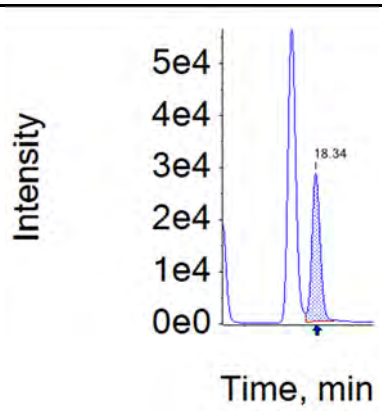


Compound Name: PETN

Expected RT: 26.02
Actual RT: 26.00
RRT: 1.33
Area Counts: 300668.755
Integration Type:Baseline

Amount: 592.69
%Accuracy: 118.5

EXP122922012.wiff
WXX221229-44ICV

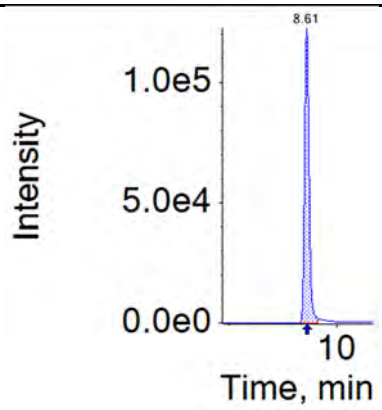


Compound Name: 2-Amino-46-dinitrotoluene

Expected RT: 18.37
Actual RT: 18.34
RRT: 0.94
Area Counts: 753156.015
Integration Type:Valley

Amount: 519.19
%Accuracy: 103.8

EXP122922012.wiff
WXX221229-44ICV

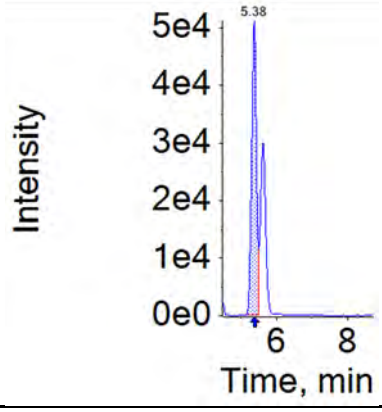


Compound Name: TATB

Expected RT: 8.63
Actual RT: 8.61
RRT: 0.64
Area Counts: 1761806.704
Integration Type:Valley

Amount: 522.98
%Accuracy: 104.6

EXP122922012.wiff
WXX221229-44ICV

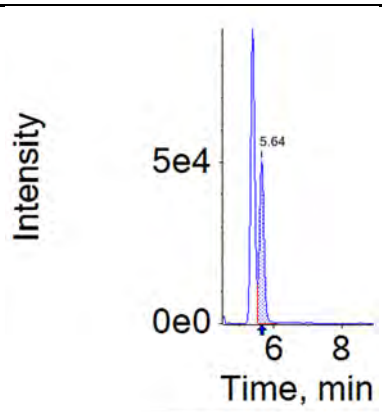


Compound Name: 26-Diamino-4-nitrotoluene

Expected RT: 5.38
Actual RT: 5.38
RRT: 0.40
Area Counts: 471372.407
Integration Type:Valley

Amount: 566.73
%Accuracy: 113.3

EXP122922012.wiff
WXX221229-44ICV

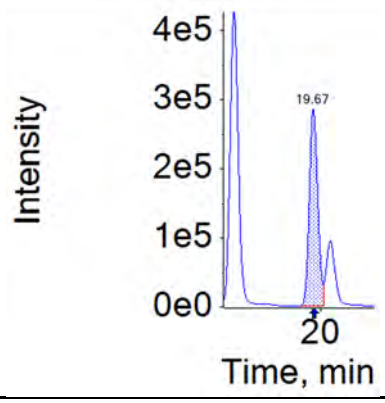


Compound Name: 24-Diamino-6-nitrotoluene

Expected RT: 5.64
Actual RT: 5.64
RRT: 0.42
Area Counts: 463752.837
Integration Type:Valley

Amount: 521.98
%Accuracy: 104.4

EXP122922012.wiff
WXX221229-44ICV

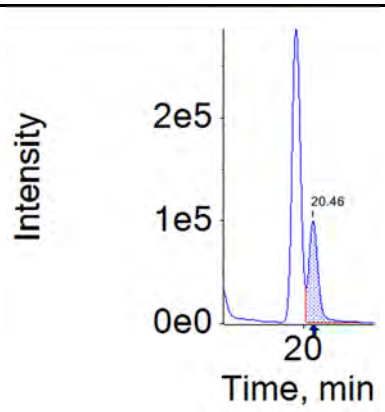


Compound Name: 26-dinitrotoluene

Expected RT: 19.69
Actual RT: 19.67
RRT: 1.01
Area Counts: 7779158.653
Integration Type:Valley

Amount: 502.21
%Accuracy: 100.4

EXP122922012.wiff
WXX221229-44ICV

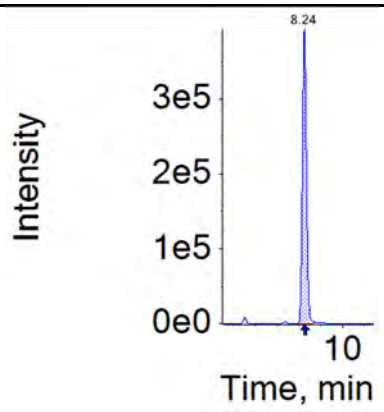


Compound Name: 24-dinitrotoluene

Expected RT: 20.48
Actual RT: 20.46
RRT: 1.05
Area Counts: 2983932.992
Integration Type:Valley

Amount: 508.51
%Accuracy: 101.7

EXP122922012.wiff
WXX221229-44ICV

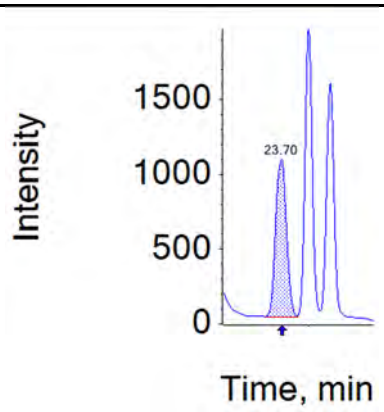


Compound Name: RDX

Expected RT: 8.26
Actual RT: 8.24
RRT: 0.62
Area Counts: 4956995.312
Integration Type:Baseline

Amount: 517.08
%Accuracy: 103.4

EXP122922012.wiff
WXX221229-44ICV

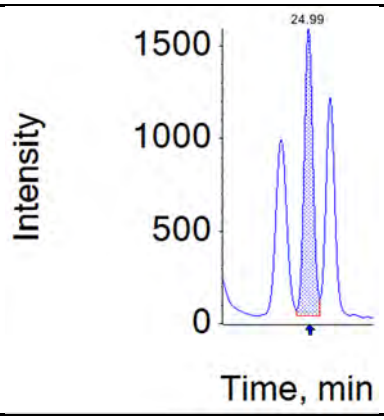


Compound Name: 2-Nitrotoluene

Expected RT: 23.75
Actual RT: 23.70
RRT: 1.22
Area Counts: 36979.339
Integration Type:Valley

Amount: 547.05
%Accuracy: 109.4

EXP122922012.wiff
WXX221229-44ICV



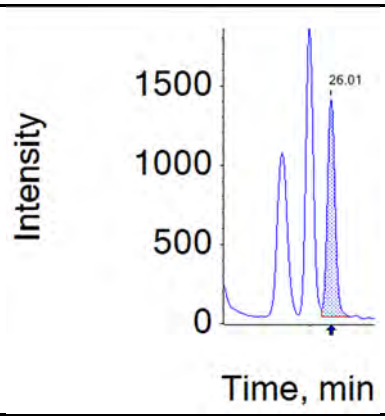
Compound Name: 4-Nitrotoluene

Expected RT: 25.04
Actual RT: 24.99
RRT: 1.28
Area Counts: 43822.343
Integration Type:Valley

Amount: 507.19
%Accuracy: 101.4

EXP122922012.wiff

WXX221229-44ICV

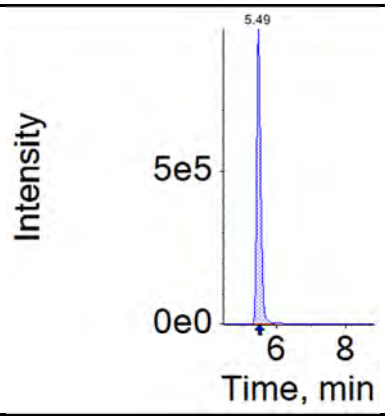


Compound Name: 3-Nitrotoluene

Expected RT: 26.01
Actual RT: 26.01
RRT: 1.33
Area Counts: 34002.321
Integration Type:Valley

Amount: 507.04
%Accuracy: 101.4

EXP122922012.wiff
WXX221229-44ICV

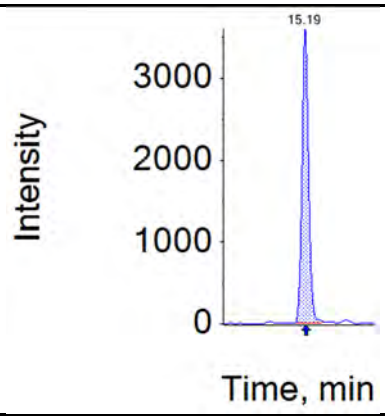


Compound Name: HMX

Expected RT: 5.51
Actual RT: 5.49
RRT: 0.41
Area Counts: 7498844.580
Integration Type:Valley

Amount: 493.36
%Accuracy: 98.7

EXP122922012.wiff
WXX221229-44ICV

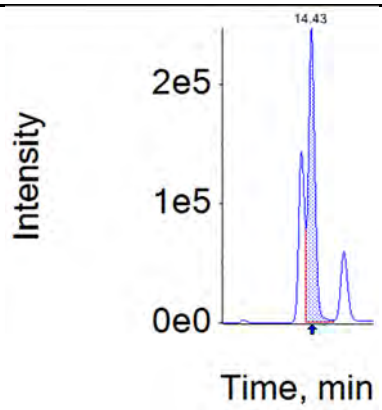


Compound Name: Nitrobenzene

Expected RT: 15.21
Actual RT: 15.19
RRT: 1.13
Area Counts: 75220.308
Integration Type:Baseline

Amount: 577.71
%Accuracy: 115.5

EXP122922012.wiff
WXX221229-44ICV

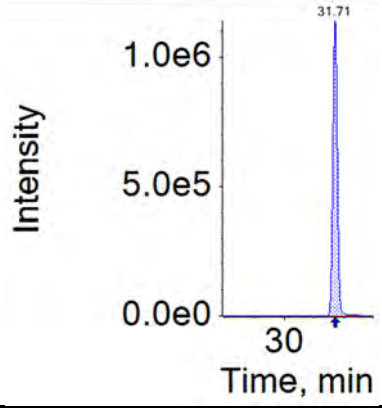


Compound Name: 35-Dinitroaniline

Expected RT: 14.45
Actual RT: 14.43
RRT: 0.74
Area Counts: 5189062.677
Integration Type:Valley

Amount: 530.54
%Accuracy: 106.1

EXP122922012.wiff
WXX221229-44ICV

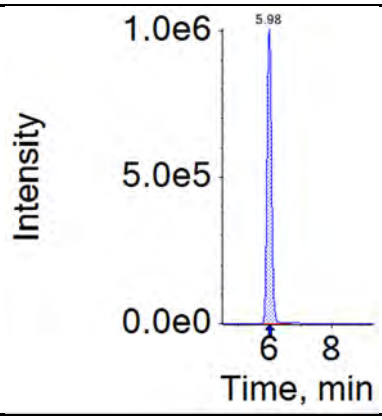


Compound Name: tris(o-cresyl)phosphate

Expected RT: 31.72
Actual RT: 31.71
RRT: 1.63
Area Counts: 11927983.782
Integration Type:Baseline

Amount: 523.39
%Accuracy: 104.7

EXP122922012.wiff
WXX221229-44ICV

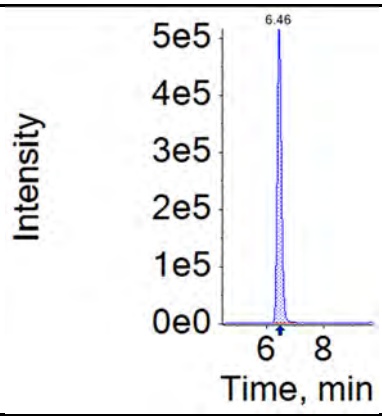


Compound Name: TNX

Expected RT: 5.99
Actual RT: 5.98
RRT: 0.45
Area Counts: 10077308.765
Integration Type:Baseline

Amount: 506.06
%Accuracy: 101.2

EXP122922012.wiff
WXX221229-44ICV

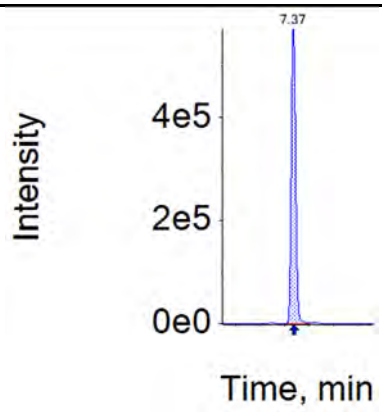


Compound Name: DNX

Expected RT: 6.48
Actual RT: 6.46
RRT: 0.48
Area Counts: 5144007.178
Integration Type:Baseline

Amount: 516.78
%Accuracy: 103.4

EXP122922012.wiff
WXX221229-44ICV

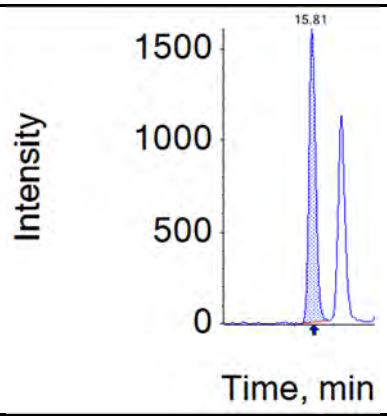


Compound Name: MNX

Expected RT: 7.38
Actual RT: 7.37
RRT: 0.55
Area Counts: 6975359.439
Integration Type:Valley

Amount: 487.76
%Accuracy: 97.6

EXP122922012.wiff
WXX221229-44ICV



Compound Name: Nitroglycerin

Expected RT: 15.88
Actual RT: 15.81
RRT: 0.81
Area Counts: 34526.571
Integration Type:Baseline

Amount: 463.28
%Accuracy: 92.7

7C
Explosives Low Level Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 2023-289

Lab Code: GEL

GEL Sample ID: WXXIRA

GEL Data File: EXP122922011.wiff

Analysis Date: 29-DEC-22 21:52

LCMSMS ID: 1805

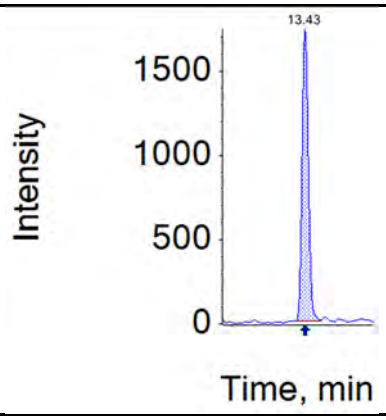
Column ID: Ultracarb Phenomenex 5u ODS (20)

Compound	True	Found	Recovery	Q
3,4-Dinitrotoluene	25	26.6	106.4	
RDX	25	26.18	104.7	
HMX	25	25.49	102.0	
2,4,6-Trinitrotoluene	25	27.74	111.0	

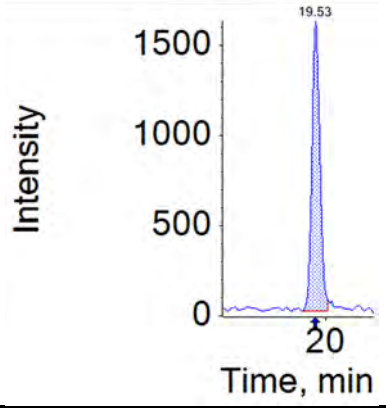
Recovery Limits = 85 - 115%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

JISB
01/01/2023

Data File	EXP122922011.wiff	Acquisition Date	12/29/2022 21:52:31
Sample Name	WXX221229-45IRA	Acquisition Method	explosivesFull2.dam
Batch|Dilution|Analyst	|1|JLS	Result Table	12292022
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



Compound Name:	13-Dinitrobenzene-d4
Expected RT:	13.42
Actual RT:	13.43
Area Counts:	35060.174
Integration Type:	Valley
Amount:	10.0

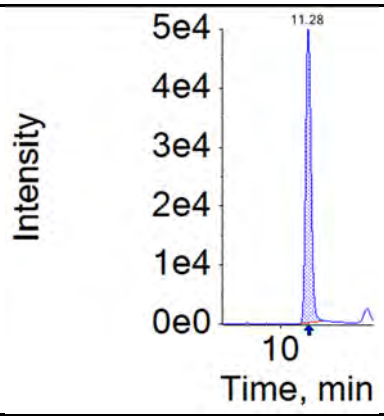


Compound Name:	26-Dinitrotoluene-d3
Expected RT:	19.50
Actual RT:	19.53
Area Counts:	41121.241
Integration Type:	Valley
Amount:	10.0

Please refer to Form 8 of the data package for a complete list of Internal Standard Recoveries.

Relative Retention Time (RRT) is used by the laboratory to establish peak identity. The RRT of each target analyte is calculated using the retention time of the corresponding internal standard. The RRT of each analyte in a sample must be within 2.0 of the analyte's calculated RRT in the ICV.

EXP122922011.wiff
WXX221229-45IRA

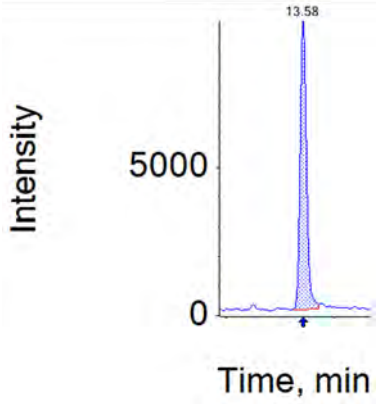


Compound Name: 135-Trinitrobenzene

Expected RT: 11.29
Actual RT: 11.28
RRT: 0.84
Area Counts: 866139.863
Integration Type:Baseline

Amount: 24.37
%Accuracy: 97.5

EXP122922011.wiff
WXX221229-45IRA

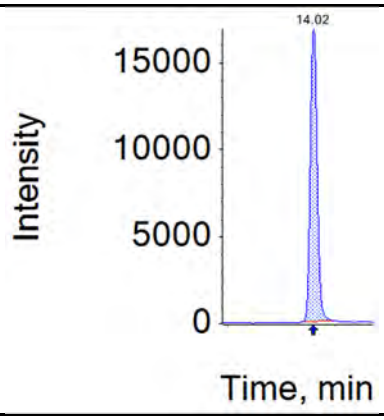


Compound Name: 13-Dinitrobenzene

Expected RT: 13.57
Actual RT: 13.58
RRT: 1.01
Area Counts: 200171.045
Integration Type:Valley

Amount: 23.79
%Accuracy: 95.2

EXP122922011.wiff
WXX221229-45IRA

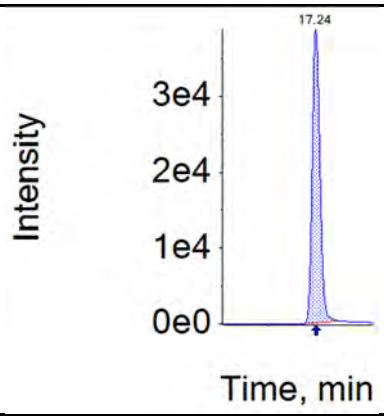


Compound Name: Tetryl

Expected RT: 14.00
Actual RT: 14.02
RRT: 1.04
Area Counts: 373499.790
Integration Type:Baseline

Amount: 27.42
%Accuracy: 109.7

EXP122922011.wiff
WXX221229-45IRA

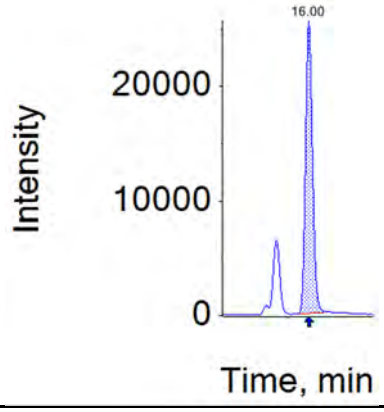


Compound Name: 246-Trinitrotoluene

Expected RT: 17.23
Actual RT: 17.24
RRT: 0.88
Area Counts: 950717.843
Integration Type:Baseline

Amount: 27.74
%Accuracy: 111.0

EXP122922011.wiff
WXX221229-45IRA



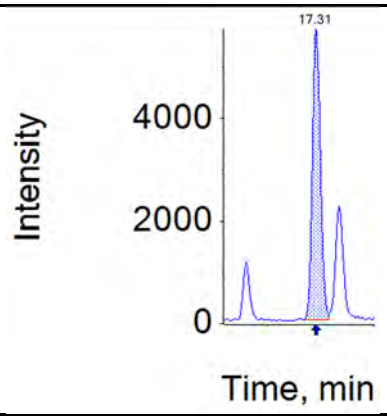
Compound Name: 34-dinitrotoluene

Expected RT: 15.99
Actual RT: 16.00
RRT: 0.82
Area Counts: 566548.713
Integration Type:Baseline

Amount: 26.60
%Accuracy: 106.4

EXP122922011.wiff

WXX221229-45IRA

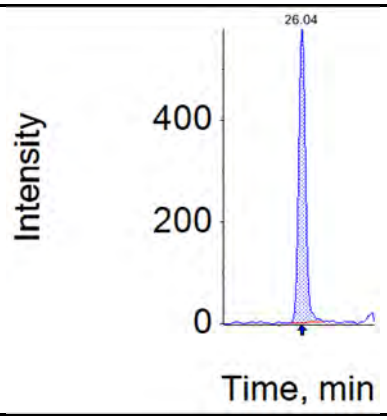


Compound Name: 4-Amino-26-dinitrotoluene

Expected RT: 17.28
Actual RT: 17.31
RRT: 0.89
Area Counts: 146388.252
Integration Type:Valley

Amount: 25.71
%Accuracy: 102.9

EXP122922011.wiff
WXX221229-45IRA

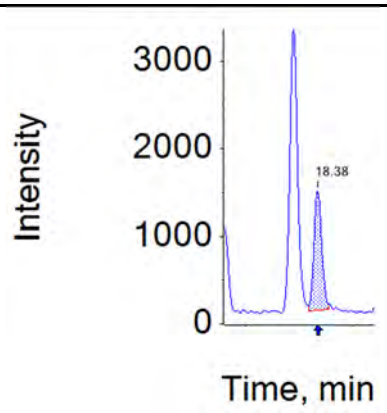


Compound Name: PETN

Expected RT: 26.02
Actual RT: 26.04
RRT: 1.33
Area Counts: 12779.827
Integration Type:Baseline

Amount: 26.41
%Accuracy: 105.6

EXP122922011.wiff
WXX221229-45IRA

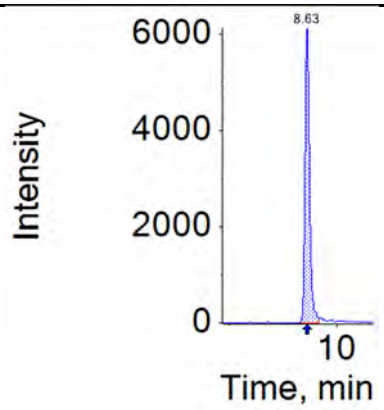


Compound Name: 2-Amino-46-dinitrotoluene

Expected RT: 18.37
Actual RT: 18.38
RRT: 0.94
Area Counts: 34321.997
Integration Type:Valley

Amount: 24.80
%Accuracy: 99.2

EXP122922011.wiff
WXX221229-45IRA

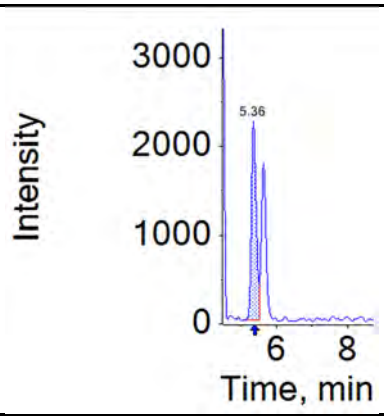


Compound Name: TATB

Expected RT: 8.63
Actual RT: 8.63
RRT: 0.64
Area Counts: 89247.016
Integration Type:Valley

Amount: 32.36
%Accuracy: 129.4

EXP122922011.wiff
WXX221229-45IRA

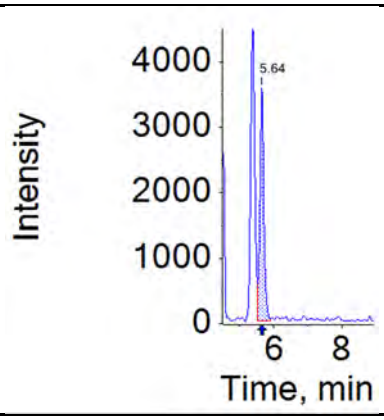


Compound Name: 26-Diamino-4-nitrotoluene

Expected RT: 5.38
Actual RT: 5.36
RRT: 0.40
Area Counts: 20903.755
Integration Type:Valley

Amount: 30.01
%Accuracy: 120.0

EXP122922011.wiff
WXX221229-45IRA

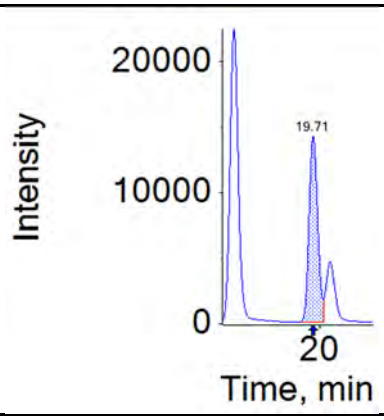


Compound Name: 24-Diamino-6-nitrotoluene

Expected RT: 5.64
Actual RT: 5.64
RRT: 0.42
Area Counts: 27760.912
Integration Type:Valley

Amount: 30.19
%Accuracy: 120.8

EXP122922011.wiff
WXX221229-45IRA

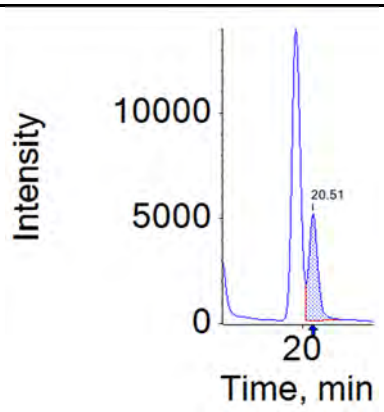


Compound Name: 26-dinitrotoluene

Expected RT: 19.69
Actual RT: 19.71
RRT: 1.01
Area Counts: 392887.372
Integration Type: Valley

Amount: 26.59
%Accuracy: 106.3

EXP122922011.wiff
WXX221229-45IRA

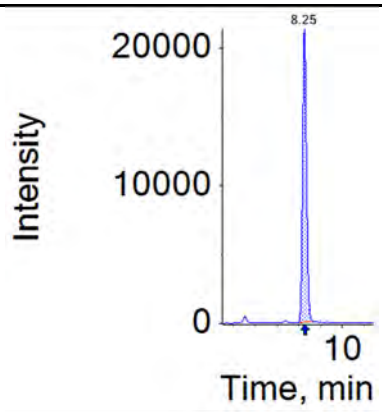


Compound Name: 24-dinitrotoluene

Expected RT: 20.48
Actual RT: 20.51
RRT: 1.05
Area Counts: 147437.587
Integration Type: Valley

Amount: 26.34
%Accuracy: 105.3

EXP122922011.wiff
WXX221229-45IRA

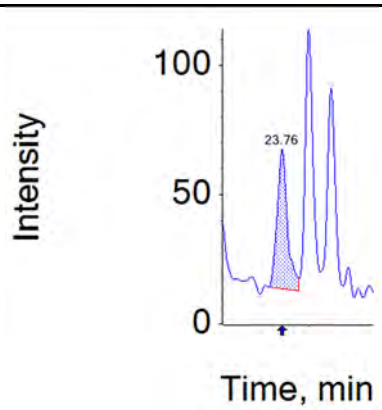


Compound Name: RDX

Expected RT: 8.26
Actual RT: 8.25
RRT: 0.61
Area Counts: 259771.913
Integration Type:Baseline

Amount: 26.18
%Accuracy: 104.7

EXP122922011.wiff
WXX221229-45IRA

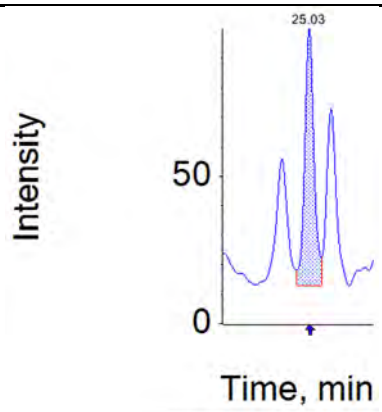


Compound Name: 2-Nitrotoluene

Expected RT: 23.75
Actual RT: 23.76
RRT: 1.22
Area Counts: 1788.795
Integration Type:Valley

Amount: 27.74
%Accuracy: 111.0

EXP122922011.wiff
WXX221229-45IRA



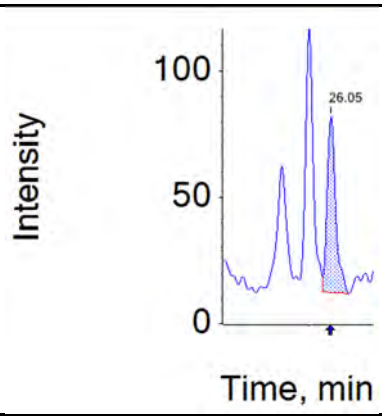
Compound Name: 4-Nitrotoluene

Expected RT: 25.04
Actual RT: 25.03
RRT: 1.28
Area Counts: 2605.174
Integration Type:Valley

Amount: 31.60
%Accuracy: 126.4

EXP122922011.wiff

WXX221229-45IRA

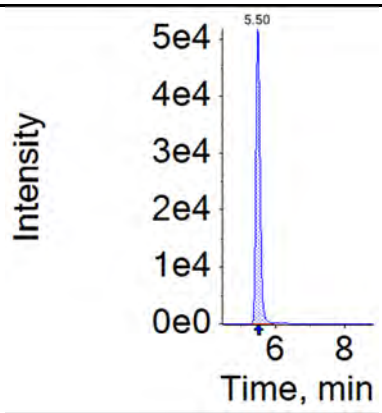


Compound Name: 3-Nitrotoluene

Expected RT: 26.01
Actual RT: 26.05
RRT: 1.33
Area Counts: 1925.355
Integration Type:Valley

Amount: 30.09
%Accuracy: 120.4

EXP122922011.wiff
WXX221229-45IRA

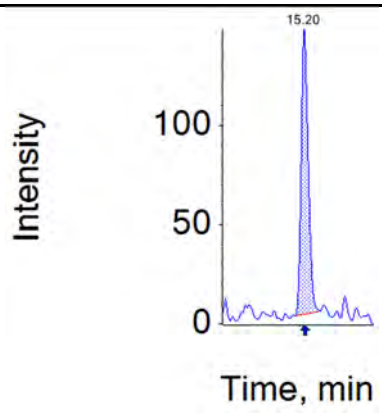


Compound Name: HMX

Expected RT: 5.51
Actual RT: 5.50
RRT: 0.41
Area Counts: 436151.355
Integration Type:Valley

Amount: 25.49
%Accuracy: 102.0

EXP122922011.wiff
WXX221229-45IRA

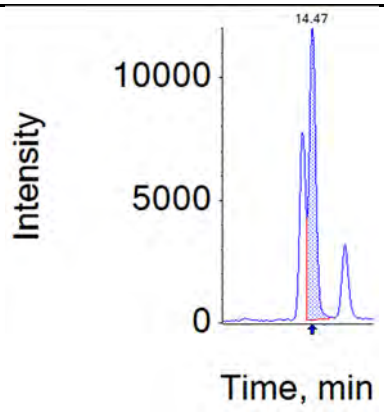


Compound Name: Nitrobenzene

Expected RT: 15.21
Actual RT: 15.20
RRT: 1.13
Area Counts: 3210.381
Integration Type:Baseline

Amount: 23.82
%Accuracy: 95.3

EXP122922011.wiff
WXX221229-45IRA

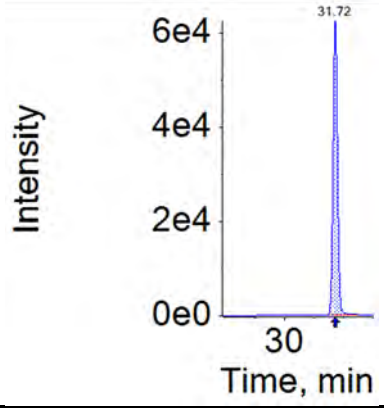


Compound Name: 35-Dinitroaniline

Expected RT: 14.45
Actual RT: 14.47
RRT: 0.74
Area Counts: 258699.858
Integration Type:Valley

Amount: 27.73
%Accuracy: 110.9

EXP122922011.wiff
WXX221229-45IRA

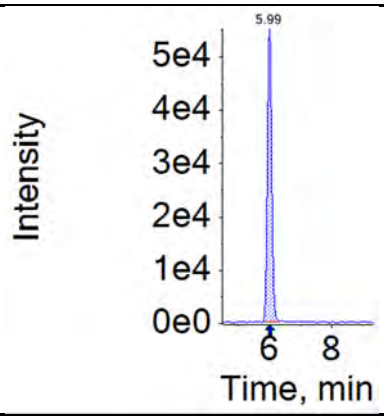


Compound Name: tris(o-cresyl)phosphate

Expected RT: 31.72
Actual RT: 31.72
RRT: 1.62
Area Counts: 650201.859
Integration Type:Baseline

Amount: 29.91
%Accuracy: 119.6

EXP122922011.wiff
WXX221229-45IRA

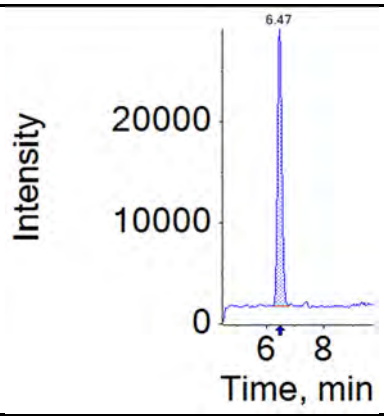


Compound Name: TNX

Expected RT: 5.99
Actual RT: 5.99
RRT: 0.45
Area Counts: 521601.598
Integration Type:Valley

Amount: 25.31
%Accuracy: 101.2

EXP122922011.wiff
WXX221229-45IRA

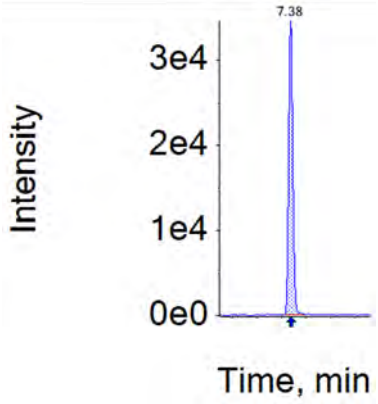


Compound Name: DNX

Expected RT: 6.48
Actual RT: 6.47
RRT: 0.48
Area Counts: 280522.707
Integration Type: Valley

Amount: 27.23
%Accuracy: 108.9

EXP122922011.wiff
WXX221229-45IRA

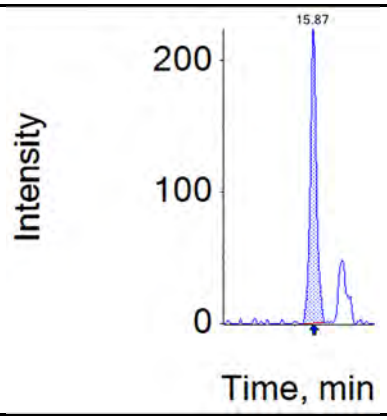


Compound Name: MNX

Expected RT: 7.38
Actual RT: 7.38
RRT: 0.55
Area Counts: 396017.600
Integration Type: Valley

Amount: 26.75
%Accuracy: 107.0

EXP122922011.wiff
WXX221229-45IRA



Compound Name: Nitroglycerin

Expected RT: 15.88
Actual RT: 15.87
RRT: 0.81
Area Counts: 4521.830
Integration Type:Baseline

Amount: 41.76
%Accuracy: 83.5

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 2023-289

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File: EXP122922014.wiff

Analysis Date: 29-DEC-22 23:39

LCMSMS ID: 1805

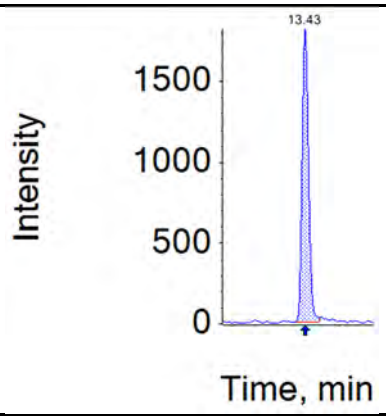
Column ID: Ultracarb Phenomenex 5u ODS (20)

Compound	True	Found	Recovery	Q
3,4-Dinitrotoluene	50	47.4	94.8	
RDX	50	53.03	106.1	
HMX	50	45.77	91.5	
2,4,6-Trinitrotoluene	50	51.16	102.3	

Recovery Limits = 70 - 130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

JSB
01/01/2023

Data File	EXP122922014.wiff	Acquisition Date	12/29/2022 23:39:30
Sample Name	WXX221229-08CRI	Acquisition Method	explosivesFull2.dam
Batch|Dilution|Analyst	|1|JLS	Result Table	12292022
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



Compound Name: 13-Dinitrobenzene-d4

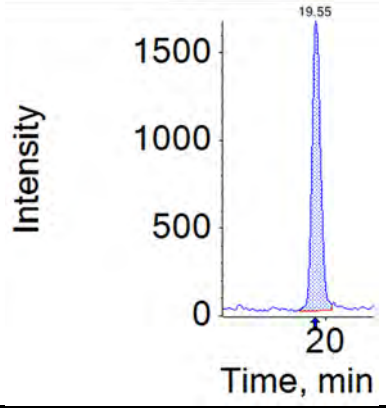
Expected RT: 13.42

Actual RT: 13.43

Area Counts: 37264.977

Integration Type: Valley

Amount: 10.0



Compound Name: 26-Dinitrotoluene-d3

Expected RT: 19.50

Actual RT: 19.55

Area Counts: 45670.137

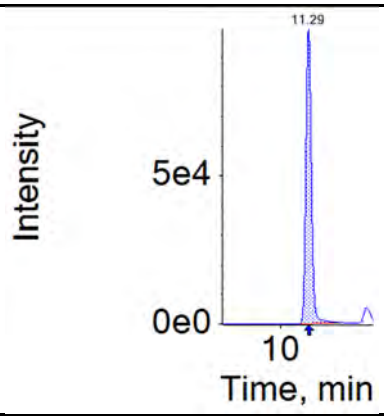
Integration Type: Valley

Amount: 10.0

Please refer to Form 8 of the data package for a complete list of Internal Standard Recoveries.

Relative Retention Time (RRT) is used by the laboratory to establish peak identity. The RRT of each target analyte is calculated using the retention time of the corresponding internal standard. The RRT of each analyte in a sample must be within 2.0 of the analyte's calculated RRT in the ICV.

EXP122922014.wiff
WXX221229-08CRI

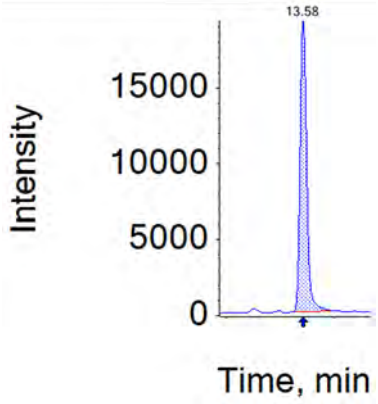


Compound Name: 135-Trinitrobenzene

Expected RT: 11.29
Actual RT: 11.29
RRT: 0.84
Area Counts: 1752256.591
Integration Type:Baseline

Amount: 46.38
%Accuracy: 92.8

EXP122922014.wiff
WXX221229-08CRI

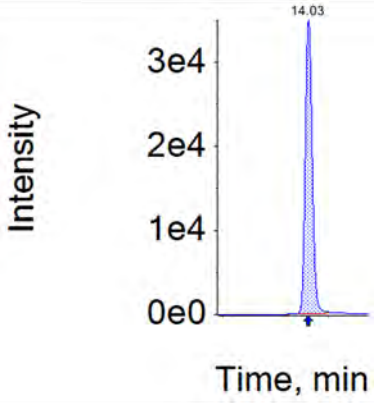


Compound Name: 13-Dinitrobenzene

Expected RT: 13.57
Actual RT: 13.58
RRT: 1.01
Area Counts: 413513.736
Integration Type:Valley

Amount: 46.24
%Accuracy: 92.5

EXP122922014.wiff
WXX221229-08CRI

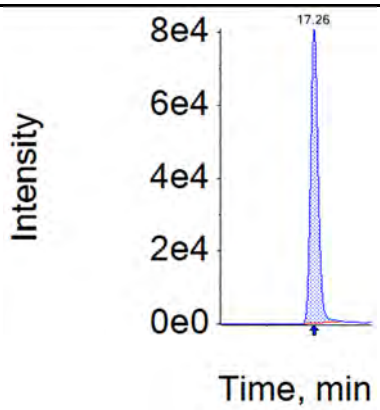


Compound Name: Tetryl

Expected RT: 14.00
Actual RT: 14.03
RRT: 1.04
Area Counts: 780760.844
Integration Type:Baseline

Amount: 53.94
%Accuracy: 107.9

EXP122922014.wiff
WXX221229-08CRI

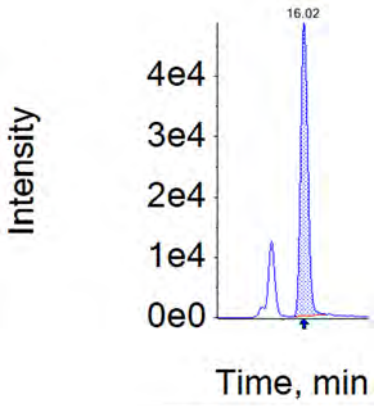


Compound Name: 246-Trinitrotoluene

Expected RT: 17.23
Actual RT: 17.26
RRT: 0.88
Area Counts: 1947410.737
Integration Type:Baseline

Amount: 51.16
%Accuracy: 102.3

EXP122922014.wiff
WXX221229-08CRI



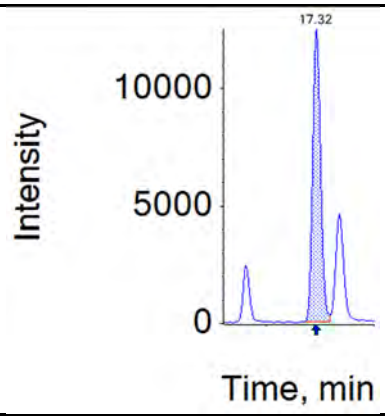
Compound Name: 34-dinitrotoluene

Expected RT: 15.99
Actual RT: 16.02
RRT: 0.82
Area Counts: 1121072.768
Integration Type:Baseline

Amount: 47.40
%Accuracy: 94.8

EXP122922014.wiff

WXX221229-08CRI

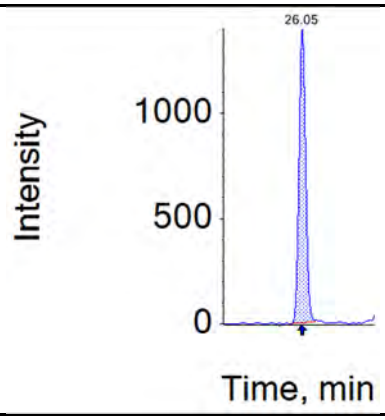


Compound Name: 4-Amino-26-dinitrotoluene

Expected RT: 17.28
Actual RT: 17.32
RRT: 0.89
Area Counts: 315964.022
Integration Type:Valley

Amount: 49.97
%Accuracy: 99.9

EXP122922014.wiff
WXX221229-08CRI

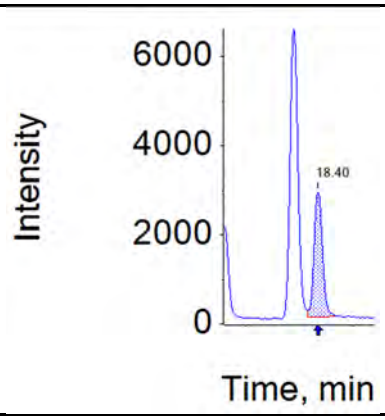


Compound Name: PETN

Expected RT: 26.02
Actual RT: 26.05
RRT: 1.33
Area Counts: 29624.555
Integration Type:Valley

Amount: 55.11
%Accuracy: 110.2

EXP122922014.wiff
WXX221229-08CRI

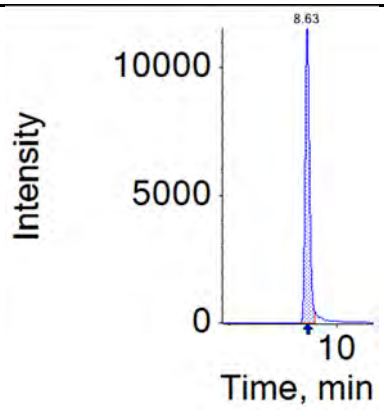


Compound Name: 2-Amino-46-dinitrotoluene

Expected RT: 18.37
Actual RT: 18.40
RRT: 0.94
Area Counts: 77100.079
Integration Type:Valley

Amount: 50.16
%Accuracy: 100.3

EXP122922014.wiff
WXX221229-08CRI

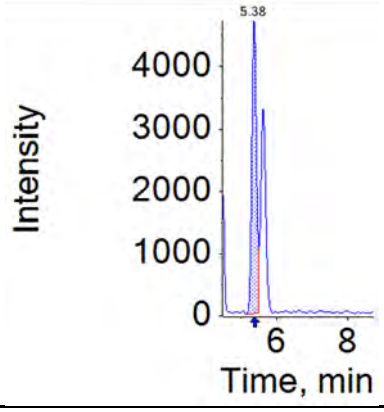


Compound Name: TATB

Expected RT: 8.63
Actual RT: 8.63
RRT: 0.64
Area Counts: 163530.338
Integration Type:Valley

Amount: 50.64
%Accuracy: 101.3

EXP122922014.wiff
WXX221229-08CRI

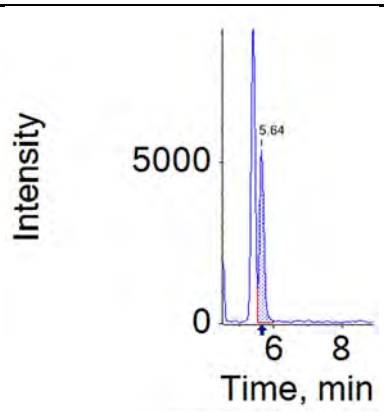


Compound Name: 26-Diamino-4-nitrotoluene

Expected RT: 5.38
Actual RT: 5.38
RRT: 0.40
Area Counts: 42221.059
Integration Type:Valley

Amount: 51.64
%Accuracy: 103.3

EXP122922014.wiff
WXX221229-08CRI

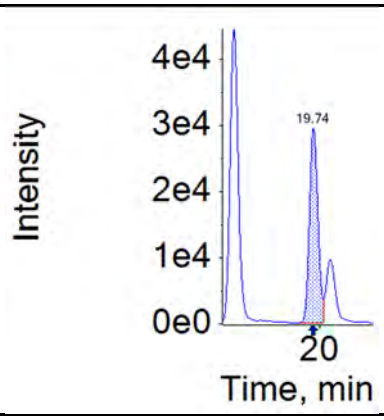


Compound Name: 24-Diamino-6-nitrotoluene

Expected RT: 5.64
Actual RT: 5.64
RRT: 0.42
Area Counts: 48014.937
Integration Type:Valley

Amount: 49.12
%Accuracy: 98.2

EXP122922014.wiff
WXX221229-08CRI

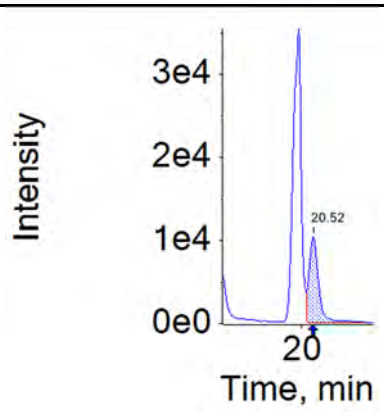


Compound Name: 26-dinitrotoluene

Expected RT: 19.69
Actual RT: 19.74
RRT: 1.01
Area Counts: 799639.946
Integration Type: Valley

Amount: 48.72
%Accuracy: 97.4

EXP122922014.wiff
WXX221229-08CRI

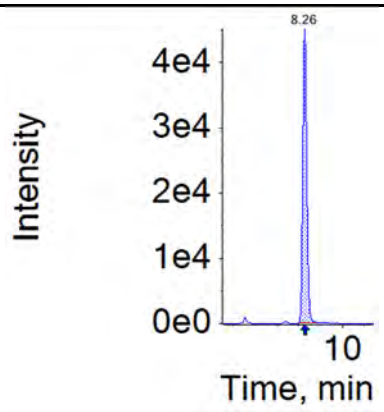


Compound Name: 24-dinitrotoluene

Expected RT: 20.48
Actual RT: 20.52
RRT: 1.05
Area Counts: 313944.397
Integration Type: Valley

Amount: 50.49
%Accuracy: 101.0

EXP122922014.wiff
WXX221229-08CRI

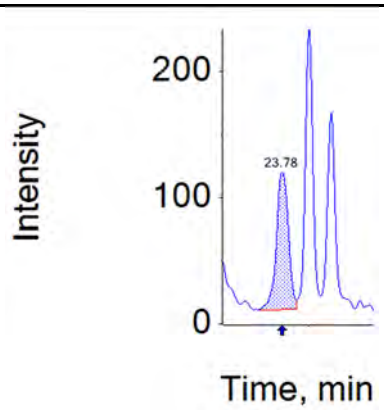


Compound Name: RDX

Expected RT: 8.26
Actual RT: 8.26
RRT: 0.62
Area Counts: 559263.910
Integration Type:Baseline

Amount: 53.03
%Accuracy: 106.1

EXP122922014.wiff
WXX221229-08CRI

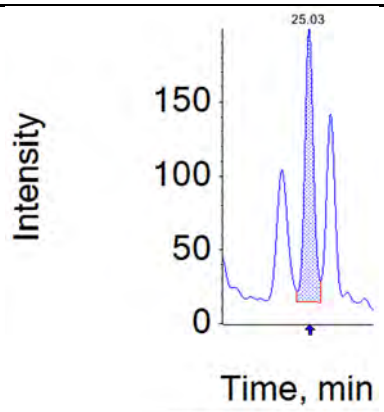


Compound Name: 2-Nitrotoluene

Expected RT: 23.75
Actual RT: 23.78
RRT: 1.22
Area Counts: 4237.461
Integration Type:Valley

Amount: 59.16
%Accuracy: 118.3

EXP122922014.wiff
WXX221229-08CRI



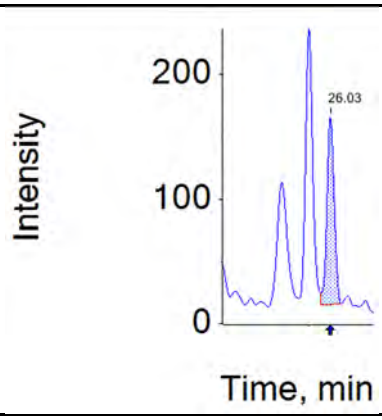
Compound Name: 4-Nitrotoluene

Expected RT: 25.04
Actual RT: 25.03
RRT: 1.28
Area Counts: 5227.749
Integration Type:Valley

Amount: 57.10
%Accuracy: 114.2

EXP122922014.wiff

WXX221229-08CRI

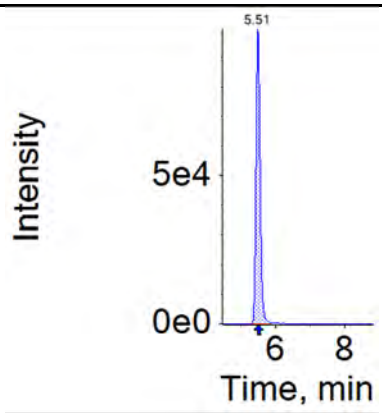


Compound Name: 3-Nitrotoluene

Expected RT: 26.01
Actual RT: 26.03
RRT: 1.33
Area Counts: 3524.819
Integration Type:Valley

Amount: 49.61
%Accuracy: 99.2

EXP122922014.wiff
WXX221229-08CRI

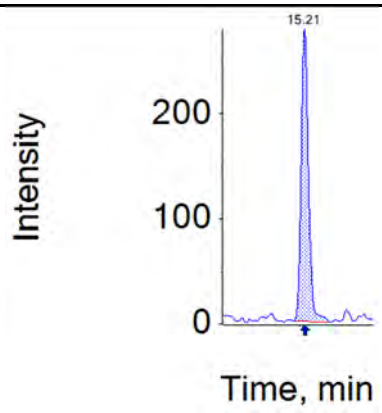


Compound Name: HMX

Expected RT: 5.51
Actual RT: 5.51
RRT: 0.41
Area Counts: 801010.935
Integration Type:Valley

Amount: 45.77
%Accuracy: 91.5

EXP122922014.wiff
WXX221229-08CRI

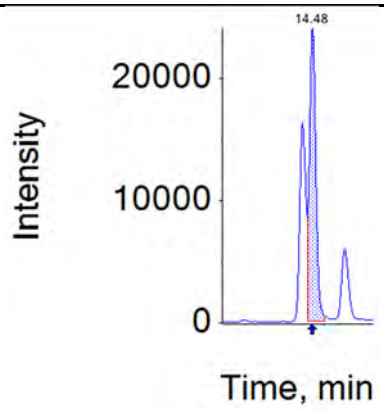


Compound Name: Nitrobenzene

Expected RT: 15.21
Actual RT: 15.21
RRT: 1.13
Area Counts: 6515.131
Integration Type:Baseline

Amount: 45.48
%Accuracy: 91.0

EXP122922014.wiff
WXX221229-08CRI

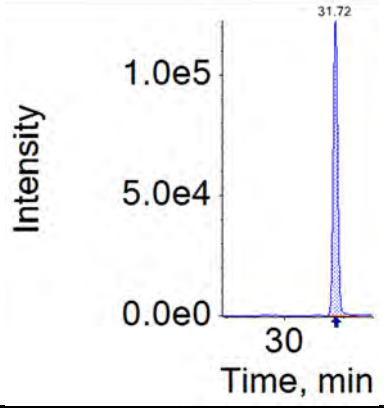


Compound Name: 35-Dinitroaniline

Expected RT: 14.45
Actual RT: 14.48
RRT: 0.74
Area Counts: 494551.735
Integration Type:Valley

Amount: 47.72
%Accuracy: 95.4

EXP122922014.wiff
WXX221229-08CRI

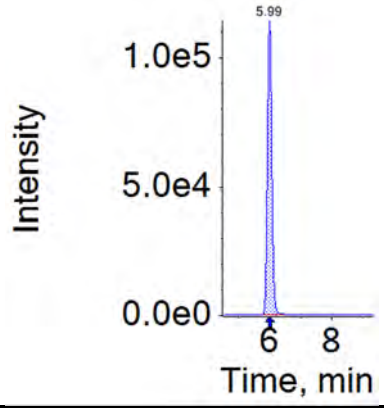


Compound Name: tris(o-cresyl)phosphate

Expected RT: 31.72
Actual RT: 31.72
RRT: 1.62
Area Counts: 1282195.392
Integration Type:Baseline

Amount: 53.10
%Accuracy: 106.2

EXP122922014.wiff
WXX221229-08CRI

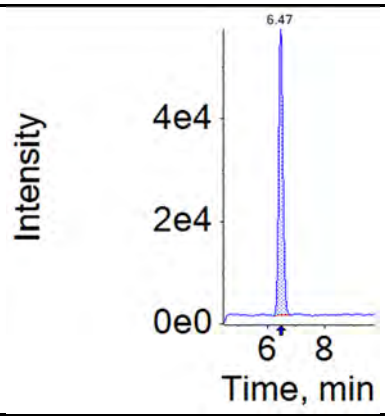


Compound Name: TNX

Expected RT: 5.99
Actual RT: 5.99
RRT: 0.45
Area Counts: 1096521.881
Integration Type:Valley

Amount: 50.05
%Accuracy: 100.1

EXP122922014.wiff
WXX221229-08CRI

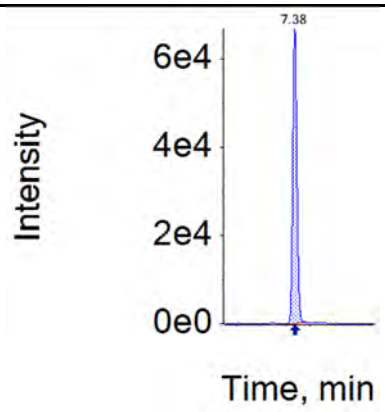


Compound Name: DNX

Expected RT: 6.48
Actual RT: 6.47
RRT: 0.48
Area Counts: 562309.764
Integration Type:Baseline

Amount: 51.35
%Accuracy: 102.7

EXP122922014.wiff
WXX221229-08CRI

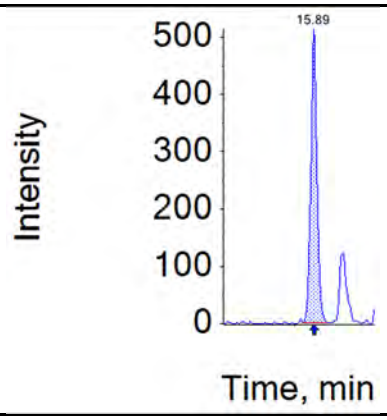


Compound Name: MNX

Expected RT: 7.38
Actual RT: 7.38
RRT: 0.55
Area Counts: 766897.573
Integration Type:Valley

Amount: 48.74
%Accuracy: 97.5

EXP122922014.wiff
WXX221229-08CRI



Compound Name: Nitroglycerin

Expected RT: 15.88
Actual RT: 15.89
RRT: 0.81
Area Counts: 9993.938
Integration Type:Baseline

Amount: 108.16
%Accuracy: 108.2

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 2023-289

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File: EXP122922025.wiff

Analysis Date: 30-DEC-22 06:11

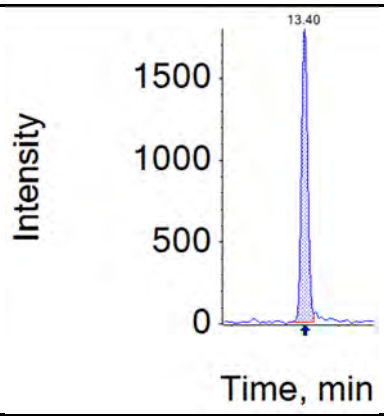
LCMSMS ID: 1805

Column ID: Ultracarb Phenomenex 5u ODS (20)

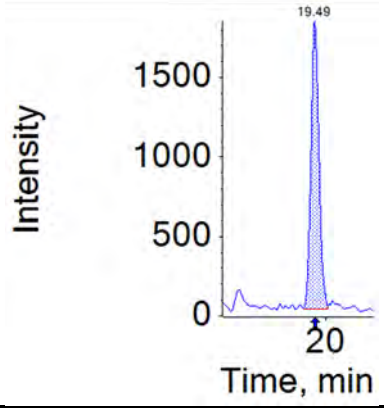
Compound	True	Found	Recovery	Q
3,4-Dinitrotoluene	500	485.24	97.0	
RDX	500	445.41	89.1	
HMX	500	333.59	66.7	*
2,4,6-Trinitrotoluene	500	450.99	90.2	

Recovery Limits = 85 - 115%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Data File	EXP122922025.wiff	Acquisition Date	12/30/2022 6:11:40
Sample Name	WXX221229-44CCV	Acquisition Method	explosivesFull2.dam
Batch|Dilution|Analyst	|1|CWW	Result Table	12292022
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



Compound Name:	13-Dinitrobenzene-d4
Expected RT:	13.42
Actual RT:	13.40
Area Counts:	36008.722
Integration Type:	Valley
Amount:	10.0

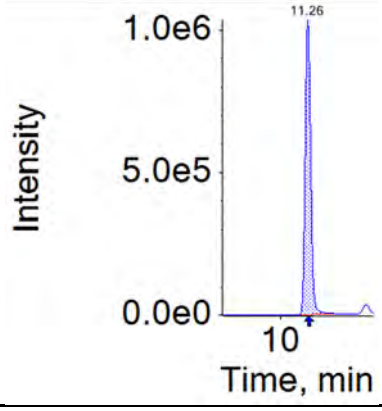


Compound Name:	26-Dinitrotoluene-d3
Expected RT:	19.50
Actual RT:	19.49
Area Counts:	46119.315
Integration Type:	Valley
Amount:	10.0

Please refer to Form 8 of the data package for a complete list of Internal Standard Recoveries.

Relative Retention Time (RRT) is used by the laboratory to establish peak identity. The RRT of each target analyte is calculated using the retention time of the corresponding internal standard. The RRT of each analyte in a sample must be within 2.0 of the analyte's calculated RRT in the ICV.

EXP122922025.wiff
WXX221229-44CCV

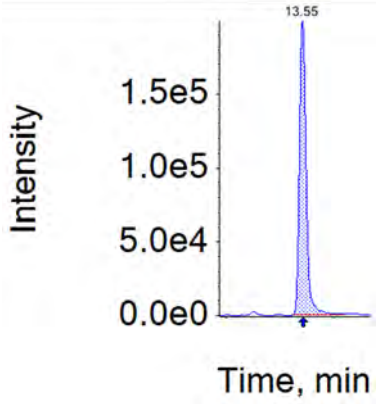


Compound Name: 135-Trinitrobenzene

Expected RT: 11.29
Actual RT: 11.26
RRT: 0.84
Area Counts: 18197350.901
Integration Type:Baseline

Amount: 498.51
%Accuracy: 99.7

EXP122922025.wiff
WXX221229-44CCV

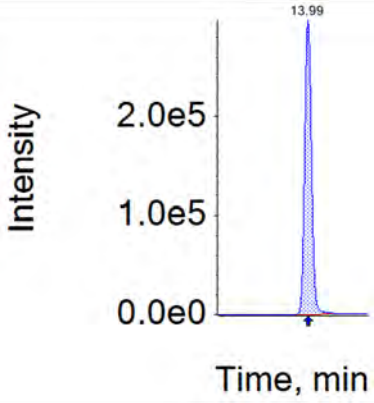


Compound Name: 13-Dinitrobenzene

Expected RT: 13.57
Actual RT: 13.55
RRT: 1.01
Area Counts: 4315589.197
Integration Type:Baseline

Amount: 499.36
%Accuracy: 99.9

EXP122922025.wiff
WXX221229-44CCV

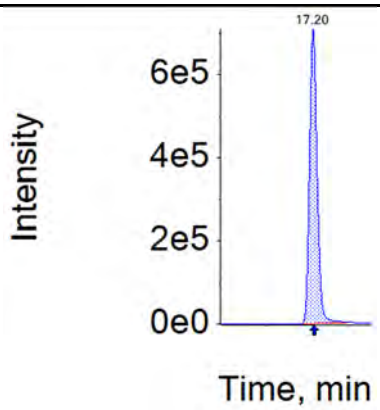


Compound Name: Tetryl

Expected RT: 14.00
Actual RT: 13.99
RRT: 1.04
Area Counts: 6586585.660
Integration Type:Baseline

Amount: 470.88
%Accuracy: 94.2

EXP122922025.wiff
WXX221229-44CCV

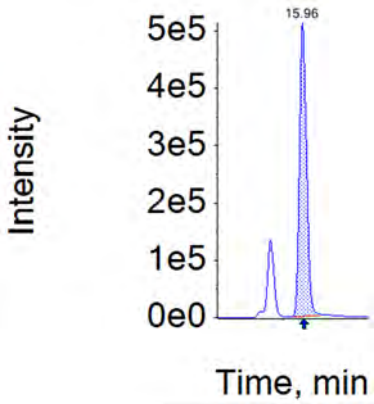


Compound Name: 246-Trinitrotoluene

Expected RT: 17.23
Actual RT: 17.20
RRT: 0.88
Area Counts: 17335570.200
Integration Type:Baseline

Amount: 450.99
%Accuracy: 90.2

EXP122922025.wiff
WXX221229-44CCV



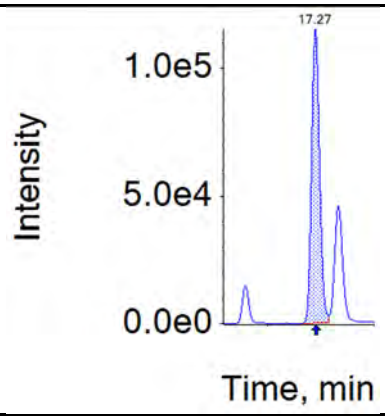
Compound Name: 34-dinitrotoluene

Expected RT: 15.99
Actual RT: 15.96
RRT: 0.82
Area Counts: 11589947.388
Integration Type:Baseline

Amount: 485.24
%Accuracy: 97.0

EXP122922025.wiff

WXX221229-44CCV

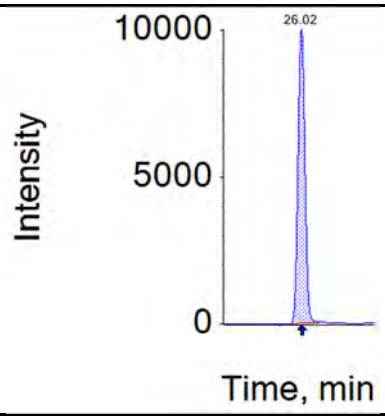


Compound Name: 4-Amino-26-dinitrotoluene

Expected RT: 17.28
Actual RT: 17.27
RRT: 0.89
Area Counts: 2979304.273
Integration Type:Valley

Amount: 466.61
%Accuracy: 93.3

EXP122922025.wiff
WXX221229-44CCV

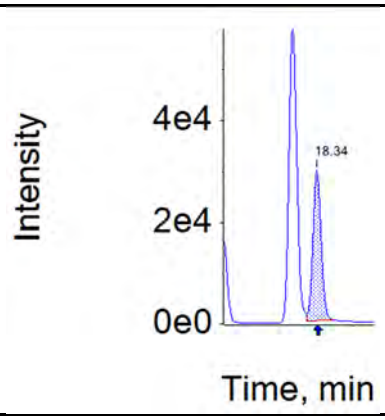


Compound Name: PETN

Expected RT: 26.02
Actual RT: 26.02
RRT: 1.33
Area Counts: 221502.324
Integration Type:Baseline

Amount: 408.08
%Accuracy: 81.6

EXP122922025.wiff
WXX221229-44CCV

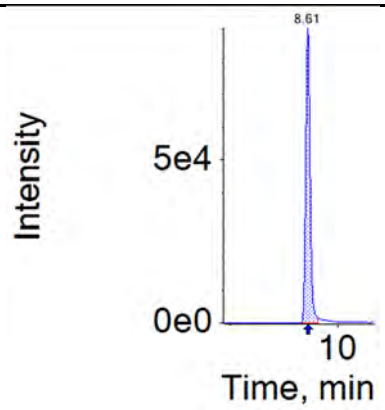


Compound Name: 2-Amino-46-dinitrotoluene

Expected RT: 18.37
Actual RT: 18.34
RRT: 0.94
Area Counts: 781965.655
Integration Type:Valley

Amount: 503.80
%Accuracy: 100.8

EXP122922025.wiff
WXX221229-44CCV

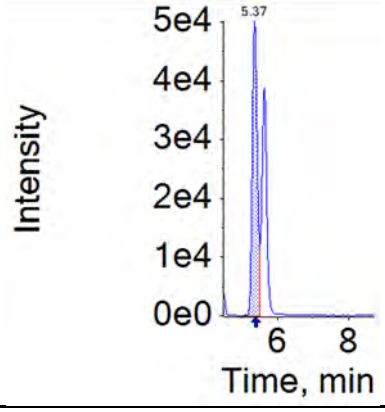


Compound Name: TATB

Expected RT: 8.63
Actual RT: 8.61
RRT: 0.64
Area Counts: 1261398.636
Integration Type:Valley

Amount: 354.55
%Accuracy: 70.9

EXP122922025.wiff
WXX221229-44CCV

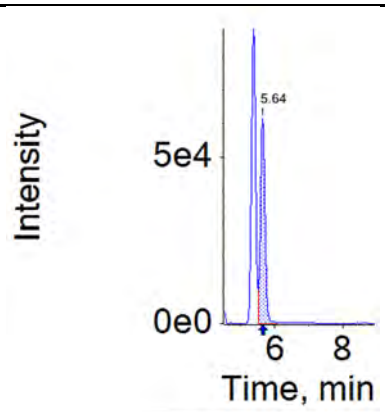


Compound Name: 26-Diamino-4-nitrotoluene

Expected RT: 5.38
Actual RT: 5.37
RRT: 0.40
Area Counts: 483359.175
Integration Type:Valley

Amount: 546.88
%Accuracy: 109.4

EXP122922025.wiff
WXX221229-44CCV

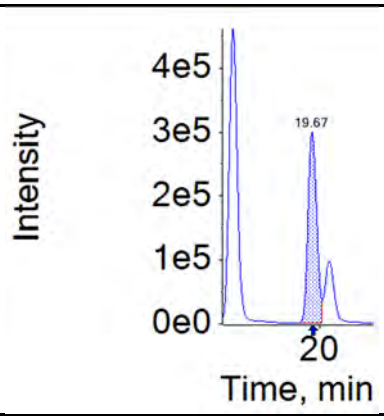


Compound Name: 24-Diamino-6-nitrotoluene

Expected RT: 5.64
Actual RT: 5.64
RRT: 0.42
Area Counts: 565906.595
Integration Type:Valley

Amount: 599.17
%Accuracy: 119.8

EXP122922025.wiff
WXX221229-44CCV

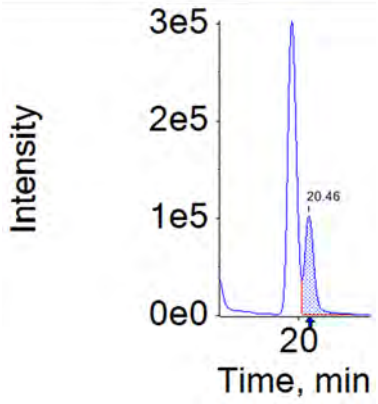


Compound Name: 26-dinitrotoluene

Expected RT: 19.69
Actual RT: 19.67
RRT: 1.01
Area Counts: 8381539.487
Integration Type:Valley

Amount: 505.72
%Accuracy: 101.1

EXP122922025.wiff
WXX221229-44CCV

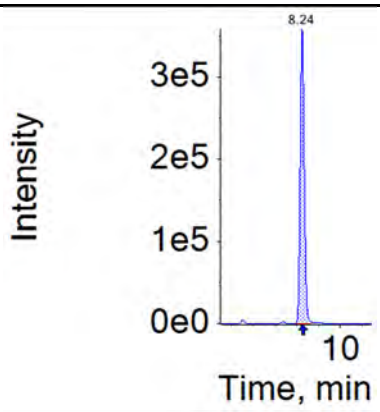


Compound Name: 24-dinitrotoluene

Expected RT: 20.48
Actual RT: 20.46
RRT: 1.05
Area Counts: 3114571.621
Integration Type:Valley

Amount: 496.06
%Accuracy: 99.2

EXP122922025.wiff
WXX221229-44CCV

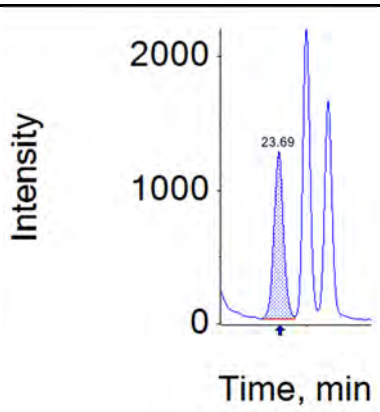


Compound Name: RDX

Expected RT: 8.26
Actual RT: 8.24
RRT: 0.61
Area Counts: 4539257.878
Integration Type:Baseline

Amount: 445.41
%Accuracy: 89.1

EXP122922025.wiff
WXX221229-44CCV

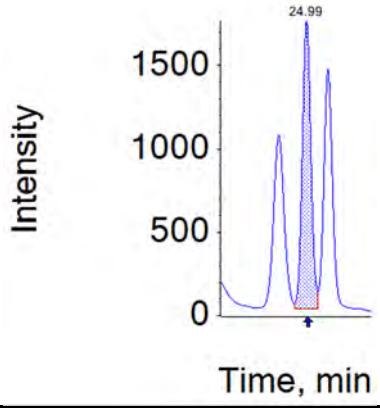


Compound Name: 2-Nitrotoluene

Expected RT: 23.75
Actual RT: 23.69
RRT: 1.22
Area Counts: 38269.984
Integration Type:Valley

Amount: 529.12
%Accuracy: 105.8

EXP122922025.wiff
WXX221229-44CCV



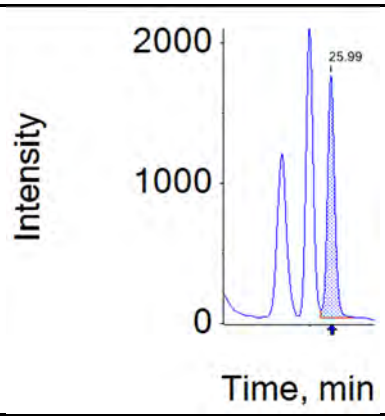
Compound Name: 4-Nitrotoluene

Expected RT: 25.04
Actual RT: 24.99
RRT: 1.28
Area Counts: 47678.118
Integration Type:Valley

Amount: 515.73
%Accuracy: 103.1

EXP122922025.wiff

WXX221229-44CCV

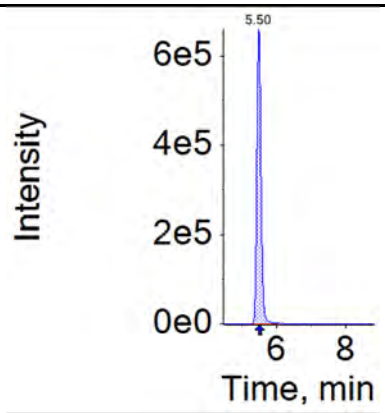


Compound Name: 3-Nitrotoluene

Expected RT: 26.01
Actual RT: 25.99
RRT: 1.33
Area Counts: 40161.787
Integration Type:Valley

Amount: 559.72
%Accuracy: 111.9

EXP122922025.wiff
WXX221229-44CCV

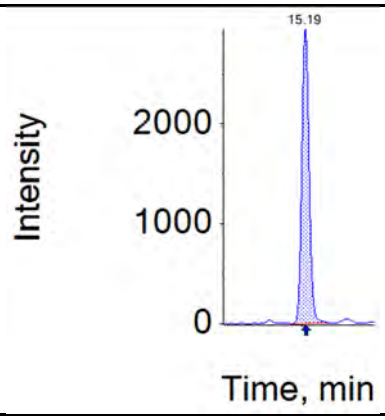


Compound Name: HMX

Expected RT: 5.51
Actual RT: 5.50
RRT: 0.41
Area Counts: 5402605.086
Integration Type:Valley

Amount: 333.59
%Accuracy: 66.7

EXP122922025.wiff
WXX221229-44CCV

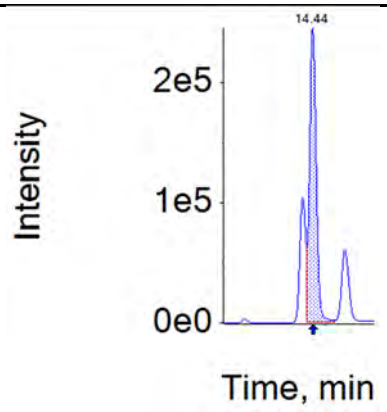


Compound Name: Nitrobenzene

Expected RT: 15.21
Actual RT: 15.19
RRT: 1.13
Area Counts: 69094.775
Integration Type:Baseline

Amount: 499.18
%Accuracy: 99.8

EXP122922025.wiff
WXX221229-44CCV

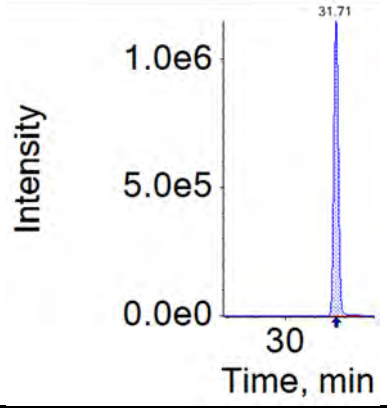


Compound Name: 35-Dinitroaniline

Expected RT: 14.45
Actual RT: 14.44
RRT: 0.74
Area Counts: 5321862.795
Integration Type:Valley

Amount: 508.54
%Accuracy: 101.7

EXP122922025.wiff
WXX221229-44CCV

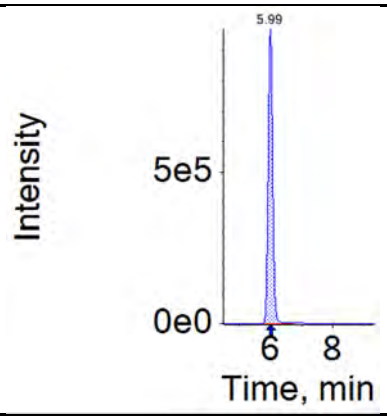


Compound Name: tris(o-cresyl)phosphate

Expected RT: 31.72
Actual RT: 31.71
RRT: 1.63
Area Counts: 12271312.038
Integration Type:Baseline

Amount: 503.24
%Accuracy: 100.6

EXP122922025.wiff
WXX221229-44CCV

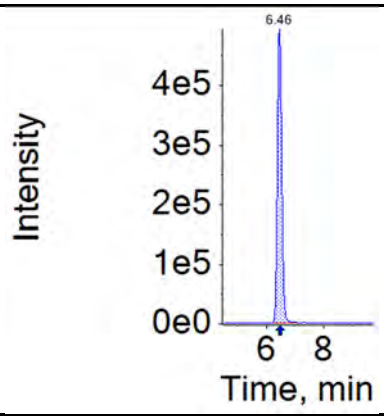


Compound Name: TNX

Expected RT: 5.99
Actual RT: 5.99
RRT: 0.45
Area Counts: 9553559.795
Integration Type:Valley

Amount: 451.30
%Accuracy: 90.3

EXP122922025.wiff
WXX221229-44CCV

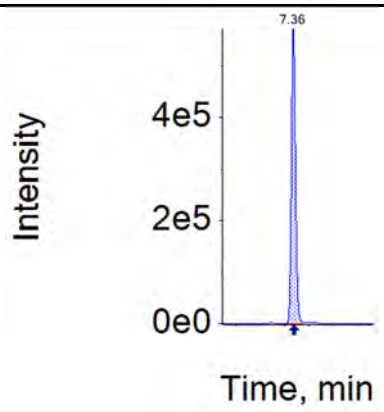


Compound Name: DNX

Expected RT: 6.48
Actual RT: 6.46
RRT: 0.48
Area Counts: 5054605.614
Integration Type:Baseline

Amount: 477.67
%Accuracy: 95.5

EXP122922025.wiff
WXX221229-44CCV

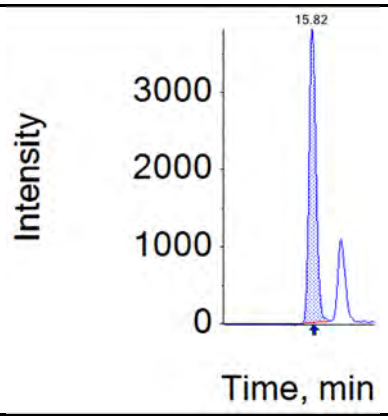


Compound Name: MNX

Expected RT: 7.38
Actual RT: 7.36
RRT: 0.55
Area Counts: 6431228.617
Integration Type:Baseline

Amount: 423.03
%Accuracy: 84.6

EXP122922025.wiff
WXX221229-44CCV



Compound Name: Nitroglycerin

Expected RT: 15.88
Actual RT: 15.82
RRT: 0.81
Area Counts: 85967.086
Integration Type:Baseline

Amount: 1111.68
%Accuracy: 222.3

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 2023-289

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File: EXP122922027.wiff

Analysis Date: 30-DEC-22 07:23

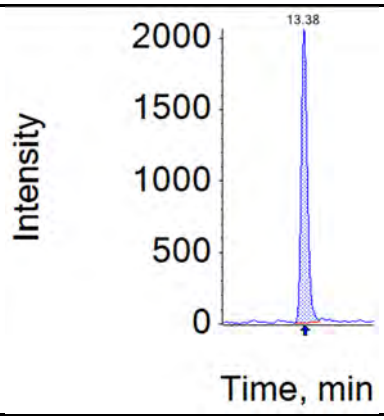
LCMSMS ID: 1805

Column ID: Ultracarb Phenomenex 5u ODS (20)

Compound	True	Found	Recovery	Q
3,4-Dinitrotoluene	50	47.76	95.5	
RDX	50	42.36	84.7	
HMX	50	32.86	65.7	*
2,4,6-Trinitrotoluene	50	50.88	101.8	

Recovery Limits = 70 - 130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Data File	EXP122922027.wiff	Acquisition Date	12/30/2022 7:23:00
Sample Name	WXX221229-08CRI	Acquisition Method	explosivesFull2.dam
Batch|Dilution|Analyst	|1|CWW	Result Table	12292022
Procedure Code	LCMSEXP_C	Sample Type	Quality Control



Compound Name: 13-Dinitrobenzene-d4

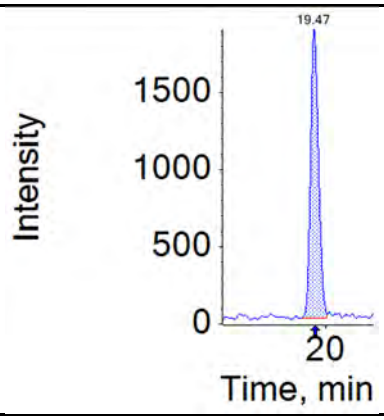
Expected RT: 13.42

Actual RT: 13.38

Area Counts: 40468.902

Integration Type: Valley

Amount: 10.0



Compound Name: 26-Dinitrotoluene-d3

Expected RT: 19.50

Actual RT: 19.47

Area Counts: 48023.552

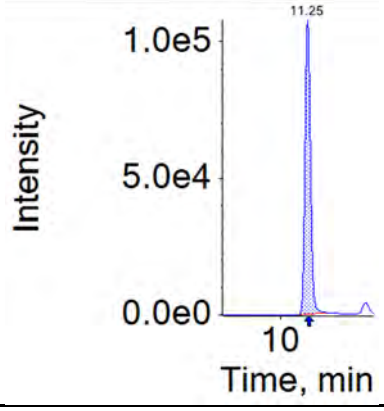
Integration Type: Valley

Amount: 10.0

Please refer to Form 8 of the data package for a complete list of Internal Standard Recoveries.

Relative Retention Time (RRT) is used by the laboratory to establish peak identity. The RRT of each target analyte is calculated using the retention time of the corresponding internal standard. The RRT of each analyte in a sample must be within 2.0 of the analyte's calculated RRT in the ICV.

EXP122922027.wiff
WXX221229-08CRI

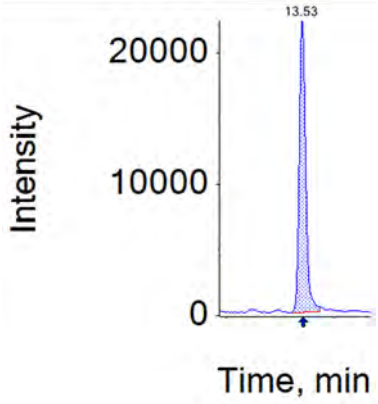


Compound Name: 135-Trinitrobenzene

Expected RT: 11.29
Actual RT: 11.25
RRT: 0.84
Area Counts: 1881245.396
Integration Type:Baseline

Amount: 45.86
%Accuracy: 91.7

EXP122922027.wiff
WXX221229-08CRI

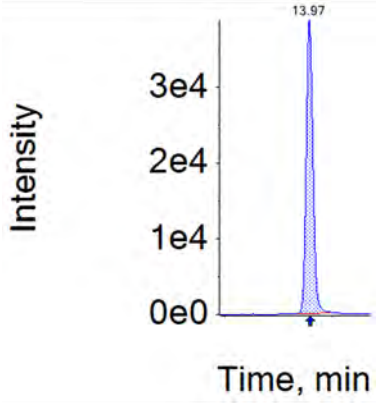


Compound Name: 13-Dinitrobenzene

Expected RT: 13.57
Actual RT: 13.53
RRT: 1.01
Area Counts: 459017.598
Integration Type:Valley

Amount: 47.26
%Accuracy: 94.5

EXP122922027.wiff
WXX221229-08CRI

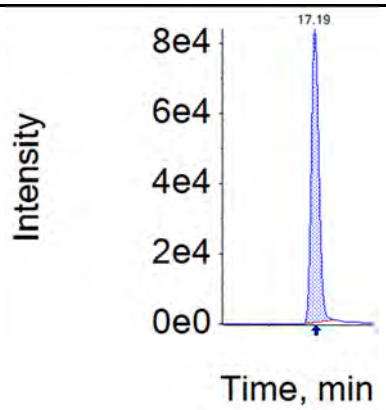


Compound Name: Tetryl

Expected RT: 14.00
Actual RT: 13.97
RRT: 1.04
Area Counts: 841738.153
Integration Type:Baseline

Amount: 53.54
%Accuracy: 107.1

EXP122922027.wiff
WXX221229-08CRI

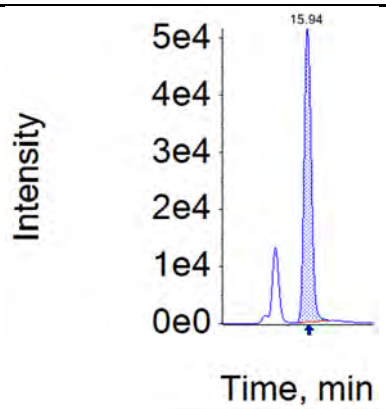


Compound Name: 246-Trinitrotoluene

Expected RT: 17.23
Actual RT: 17.19
RRT: 0.88
Area Counts: 2036440.892
Integration Type:Baseline

Amount: 50.88
%Accuracy: 101.8

EXP122922027.wiff
WXX221229-08CRI



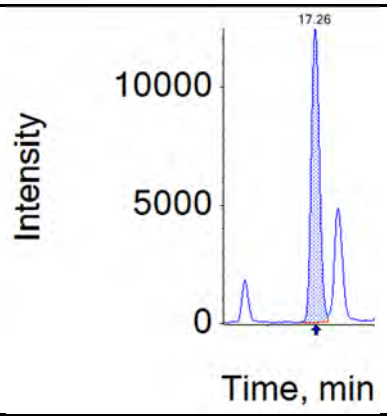
Compound Name: 34-dinitrotoluene

Expected RT: 15.99
Actual RT: 15.94
RRT: 0.82
Area Counts: 1187928.646
Integration Type:Baseline

Amount: 47.76
%Accuracy: 95.5

EXP122922027.wiff

WXX221229-08CRI

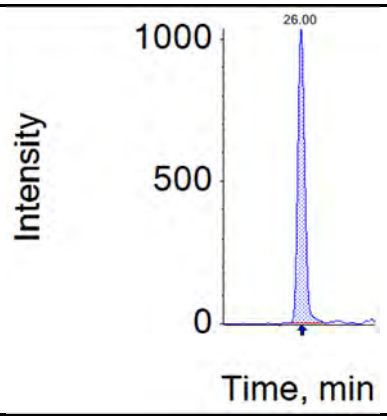


Compound Name: 4-Amino-26-dinitrotoluene

Expected RT: 17.28
Actual RT: 17.26
RRT: 0.89
Area Counts: 328136.959
Integration Type:Valley

Amount: 49.35
%Accuracy: 98.7

EXP122922027.wiff
WXX221229-08CRI

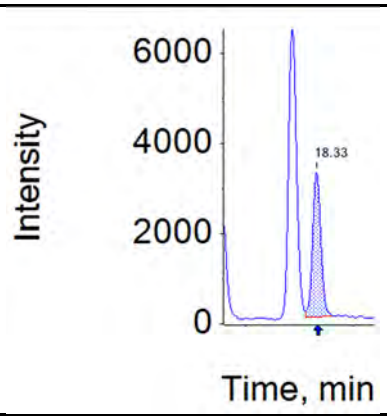


Compound Name: PETN

Expected RT: 26.02
Actual RT: 26.00
RRT: 1.34
Area Counts: 23056.686
Integration Type:Baseline

Amount: 40.79
%Accuracy: 81.6

EXP122922027.wiff
WXX221229-08CRI

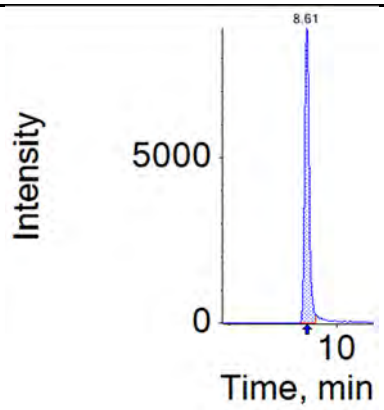


Compound Name: 2-Amino-46-dinitrotoluene

Expected RT: 18.37
Actual RT: 18.33
RRT: 0.94
Area Counts: 85970.106
Integration Type:Valley

Amount: 53.19
%Accuracy: 106.4

EXP122922027.wiff
WXX221229-08CRI

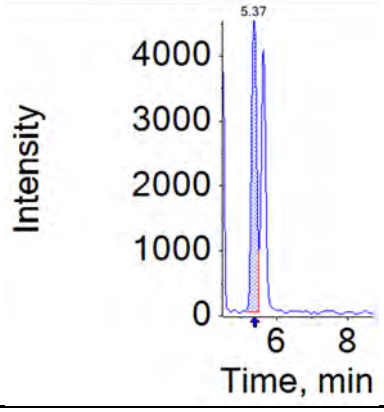


Compound Name: TATB

Expected RT: 8.63
Actual RT: 8.61
RRT: 0.64
Area Counts: 132301.549
Integration Type: Valley

Amount: 39.54
%Accuracy: 79.1

EXP122922027.wiff
WXX221229-08CRI

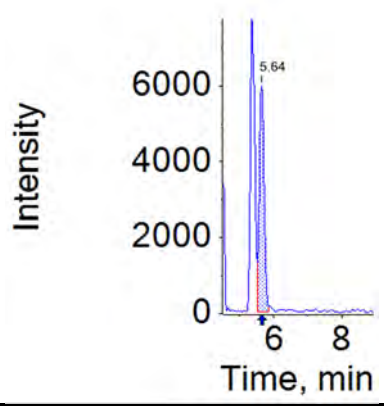


Compound Name: 26-Diamino-4-nitrotoluene

Expected RT: 5.38
Actual RT: 5.37
RRT: 0.40
Area Counts: 45025.349
Integration Type: Valley

Amount: 50.82
%Accuracy: 101.6

EXP122922027.wiff
WXX221229-08CRI

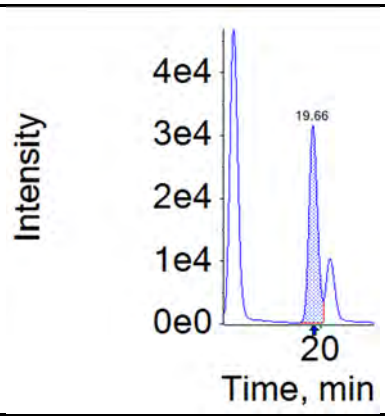


Compound Name: 24-Diamino-6-nitrotoluene

Expected RT: 5.64
Actual RT: 5.64
RRT: 0.42
Area Counts: 58681.492
Integration Type: Valley

Amount: 55.28
%Accuracy: 110.6

EXP122922027.wiff
WXX221229-08CRI

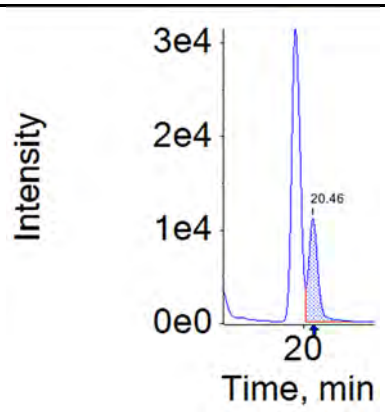


Compound Name: 26-dinitrotoluene

Expected RT: 19.69
Actual RT: 19.66
RRT: 1.01
Area Counts: 868048.123
Integration Type: Valley

Amount: 50.30
%Accuracy: 100.6

EXP122922027.wiff
WXX221229-08CRI

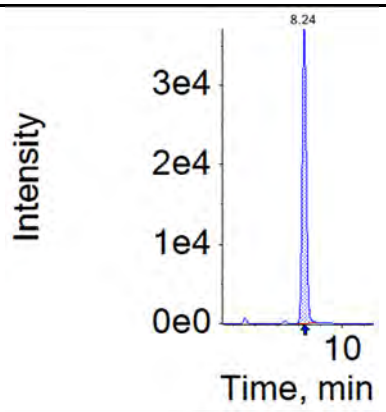


Compound Name: 24-dinitrotoluene

Expected RT: 20.48
Actual RT: 20.46
RRT: 1.05
Area Counts: 338565.052
Integration Type: Valley

Amount: 51.79
%Accuracy: 103.6

EXP122922027.wiff
WXX221229-08CRI

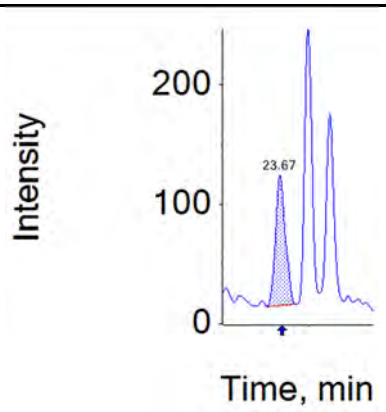


Compound Name: RDX

Expected RT: 8.26
Actual RT: 8.24
RRT: 0.62
Area Counts: 485165.474
Integration Type:Baseline

Amount: 42.36
%Accuracy: 84.7

EXP122922027.wiff
WXX221229-08CRI

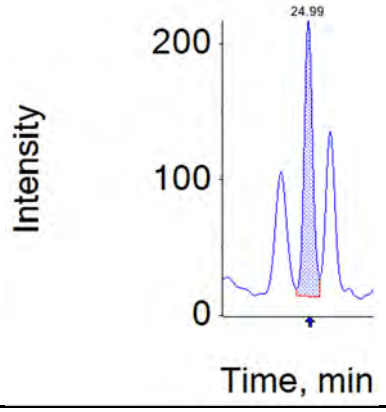


Compound Name: 2-Nitrotoluene

Expected RT: 23.75
Actual RT: 23.67
RRT: 1.22
Area Counts: 3444.682
Integration Type:Baseline

Amount: 45.74
%Accuracy: 91.5

EXP122922027.wiff
WXX221229-08CRI



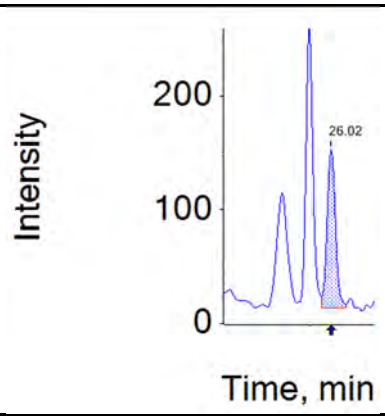
Compound Name: 4-Nitrotoluene

Expected RT: 25.04
Actual RT: 24.99
RRT: 1.28
Area Counts: 5601.809
Integration Type:Valley

Amount: 58.19
%Accuracy: 116.4

EXP122922027.wiff

WXX221229-08CRI

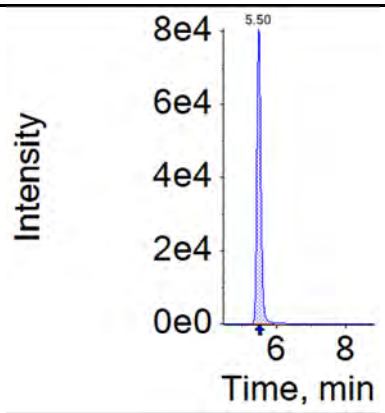


Compound Name: 3-Nitrotoluene

Expected RT: 26.01
Actual RT: 26.02
RRT: 1.34
Area Counts: 3736.690
Integration Type:Valley

Amount: 50.01
%Accuracy: 100.0

EXP122922027.wiff
WXX221229-08CRI

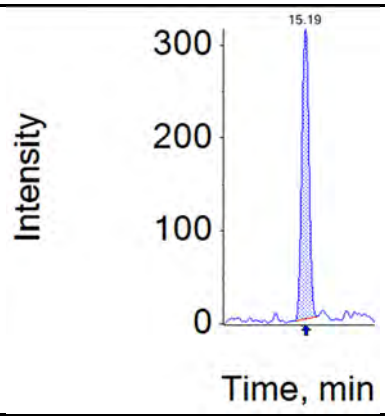


Compound Name: HMX

Expected RT: 5.51
Actual RT: 5.50
RRT: 0.41
Area Counts: 636588.372
Integration Type:Valley

Amount: 32.86
%Accuracy: 65.7

EXP122922027.wiff
WXX221229-08CRI

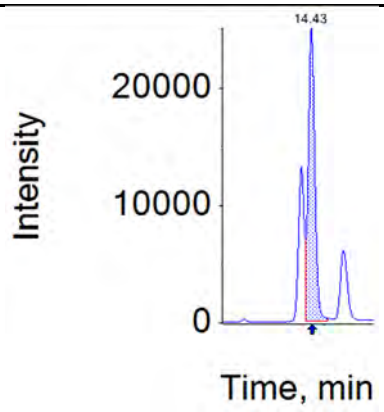


Compound Name: Nitrobenzene

Expected RT: 15.21
Actual RT: 15.19
RRT: 1.14
Area Counts: 7238.251
Integration Type:Baseline

Amount: 46.53
%Accuracy: 93.1

EXP122922027.wiff
WXX221229-08CRI

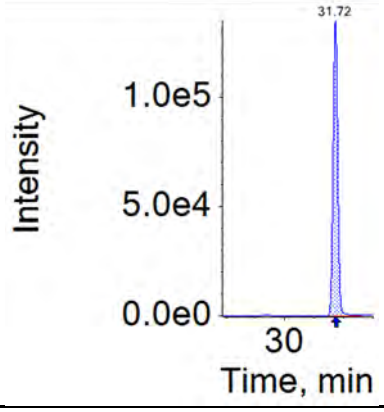


Compound Name: 35-Dinitroaniline

Expected RT: 14.45
Actual RT: 14.43
RRT: 0.74
Area Counts: 530907.789
Integration Type:Valley

Amount: 48.72
%Accuracy: 97.4

EXP122922027.wiff
WXX221229-08CRI

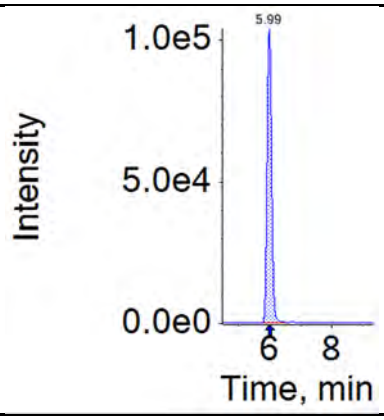


Compound Name: tris(o-cresyl)phosphate

Expected RT: 31.72
Actual RT: 31.72
RRT: 1.63
Area Counts: 1447590.228
Integration Type:Baseline

Amount: 57.01
%Accuracy: 114.0

EXP122922027.wiff
WXX221229-08CRI

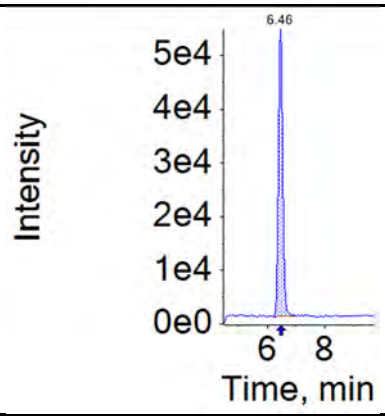


Compound Name: TNX

Expected RT: 5.99
Actual RT: 5.99
RRT: 0.45
Area Counts: 1044457.107
Integration Type:Valley

Amount: 43.90
%Accuracy: 87.8

EXP122922027.wiff
WXX221229-08CRI

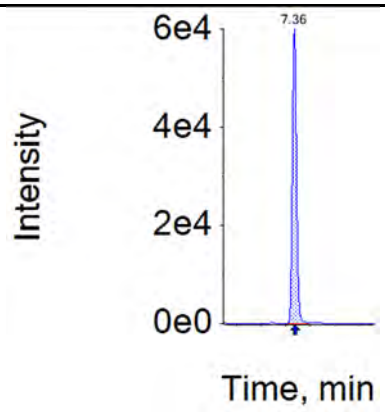


Compound Name: DNX

Expected RT: 6.48
Actual RT: 6.46
RRT: 0.48
Area Counts: 538584.708
Integration Type: Valley

Amount: 45.29
%Accuracy: 90.6

EXP122922027.wiff
WXX221229-08CRI

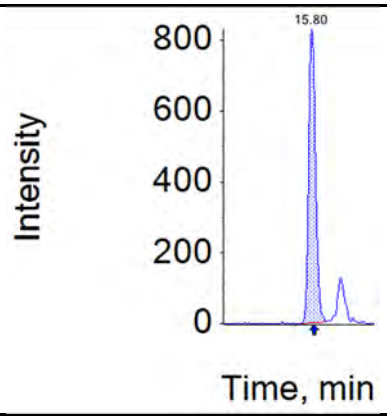


Compound Name: MNX

Expected RT: 7.38
Actual RT: 7.36
RRT: 0.55
Area Counts: 697837.263
Integration Type: Valley

Amount: 40.84
%Accuracy: 81.7

EXP122922027.wiff
WXX221229-08CRI



Compound Name: Nitroglycerin

Expected RT: 15.88
Actual RT: 15.80
RRT: 0.81
Area Counts: 18433.561
Integration Type:Baseline

Amount: 208.82
%Accuracy: 208.8

Quality Control Data

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 2358904

Lab Code: GEL

GEL Job No (SDG): 2023-289

Matrix: WATER

GEL Sample ID: 1205276411

Sample Amount : 1000 mL

Date Received: 16-DEC-22

Moisture:

Extraction Batch ID: 2358904

Extraction Type: Sol Exchange

Date Extracted: 21-DEC-22

Concentrated Extract Volume (mL) 5

Injection Volume (uL):50

GEL data file: EXP122922015.wiff

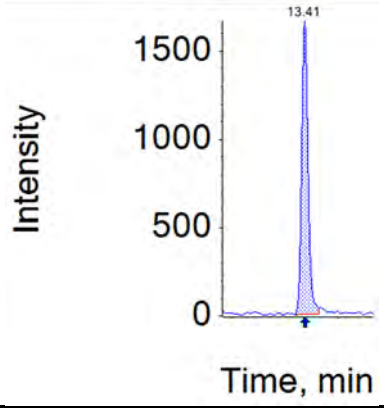
Date Analyzed: 30-DEC-22 00:15

Dilution Factor: 2

Concentration Units: ug/L

Cas No.	Compound	Concentration*	Q	MDL	PQL
118-96-7	2,4,6-Trinitrotoluene	.08	U	0.0800	0.250
118-96-7	*2,4,6-Trinitrotoluene*				
2691-41-0	HMX	.08	U	0.0800	0.250
2691-41-0	*HMX*				
121-82-4	RDX	.08	U	0.0800	0.250
121-82-4	*RDX*				

Data File	EXP122922015.wiff	Acquisition Date	12/30/2022 0:15:10
Sample Name	1205276411	Acquisition Method	explosivesFull2.dam
Batch|Dilution|Analyst	2358905|2|JLS|1	Result Table	12292022
Procedure Code	LCX30BWO_L	Sample Type	Unknown



Compound Name: 13-Dinitrobenzene-d4

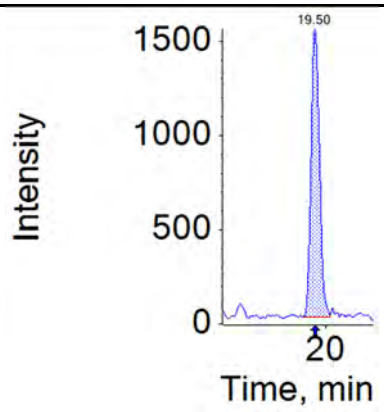
Expected RT: 13.42

Actual RT: 13.41

Area Counts: 33904.474

Integration Type: Valley

Amount: 10.0



Compound Name: 26-Dinitrotoluene-d3

Expected RT: 19.50

Actual RT: 19.50

Area Counts: 41566.435

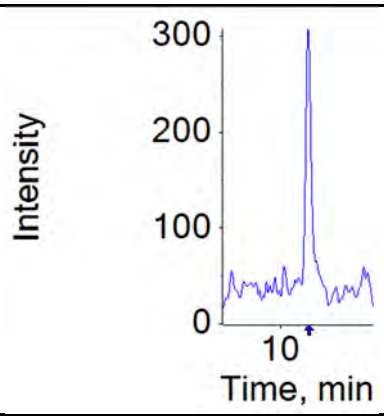
Integration Type: Valley

Amount: 10.0

Please refer to Form 8 of the data package for a complete list of Internal Standard Recoveries.

Relative Retention Time (RRT) is used by the laboratory to establish peak identity. The RRT of each target analyte is calculated using the retention time of the corresponding internal standard. The RRT of each analyte in a sample must be within 2.0 of the analyte's calculated RRT in the ICV.

EXP122922015.wiff
1205276411

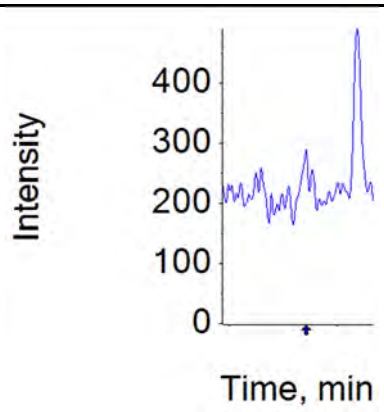


Compound Name: 135-Trinitrobenzene

Expected RT: 11.29
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922015.wiff
1205276411

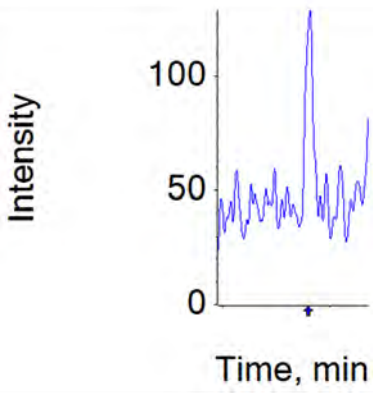


Compound Name: 13-Dinitrobenzene

Expected RT: 13.57
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922015.wiff
1205276411

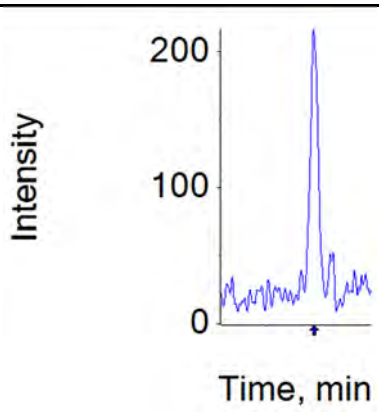


Compound Name: Tetryl

Expected RT: 14.00
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922015.wiff
1205276411

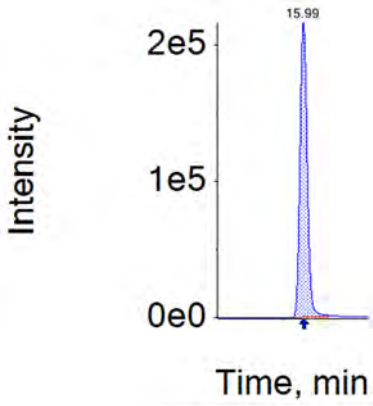


Compound Name: 246-Trinitrotoluene

Expected RT: 17.23
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922015.wiff
1205276411



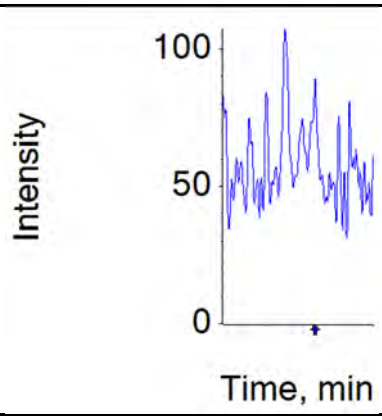
Compound Name: 34-dinitrotoluene

Expected RT: 15.99
Actual RT: 15.99
RRT: 0.82
Area Counts: 5021065.347
Integration Type:Baseline

Amount: 233.24
%Accuracy: N/A

EXP122922015.wiff

1205276411

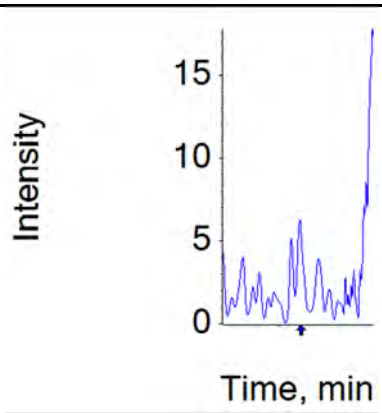


Compound Name: 4-Amino-26-dinitrotoluene

Expected RT: 17.28
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922015.wiff
1205276411

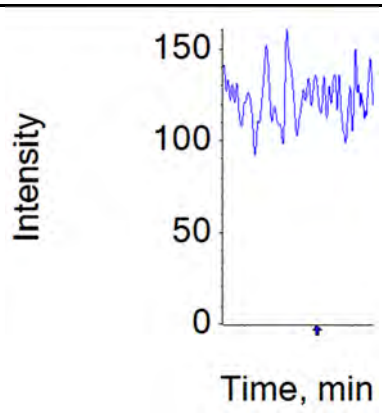


Compound Name: PETN

Expected RT: 26.02
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922015.wiff
1205276411

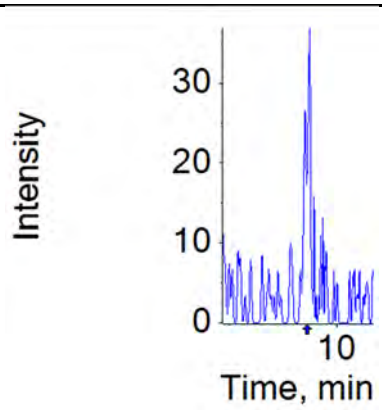


Compound Name: 2-Amino-46-dinitrotoluene

Expected RT: 18.37
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922015.wiff
1205276411

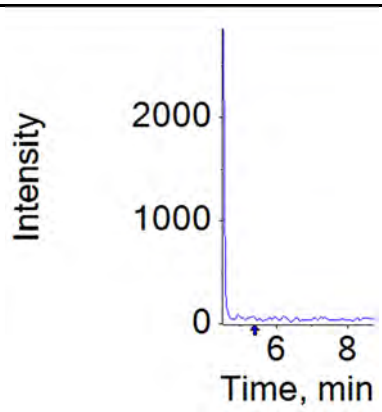


Compound Name: TATB

Expected RT: 8.63
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922015.wiff
1205276411

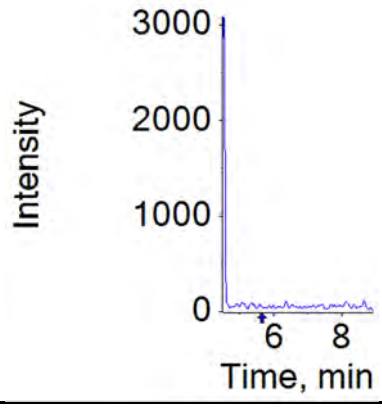


Compound Name: 26-Diamino-4-nitrotoluene

Expected RT: 5.38
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922015.wiff
1205276411

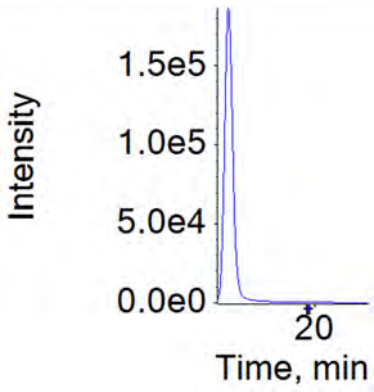


Compound Name: 24-Diamino-6-nitrotoluene

Expected RT: 5.64
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922015.wiff
1205276411

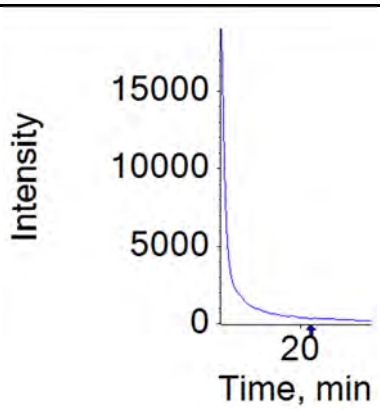


Compound Name: 26-dinitrotoluene

Expected RT: 19.69
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922015.wiff
1205276411

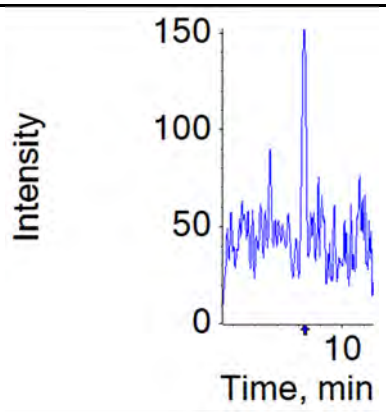


Compound Name: 24-dinitrotoluene

Expected RT: 20.48
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922015.wiff
1205276411

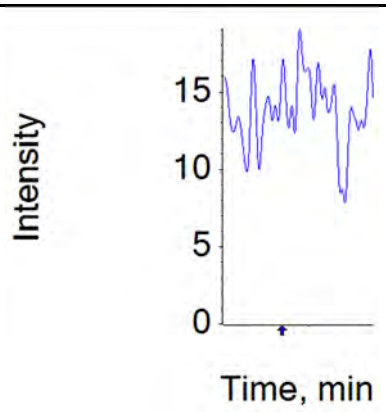


Compound Name: RDX

Expected RT: 8.26
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922015.wiff
1205276411

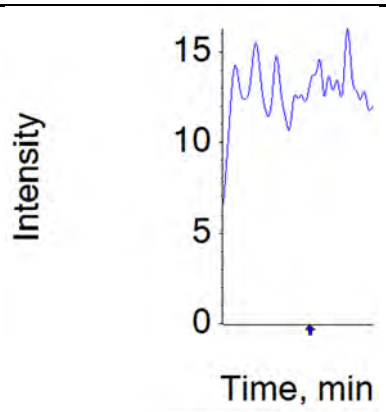


Compound Name: 2-Nitrotoluene

Expected RT: 23.75
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922015.wiff
1205276411



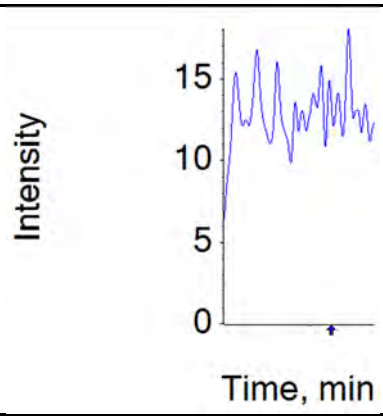
Compound Name: 4-Nitrotoluene

Expected RT: 25.04
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922015.wiff

1205276411

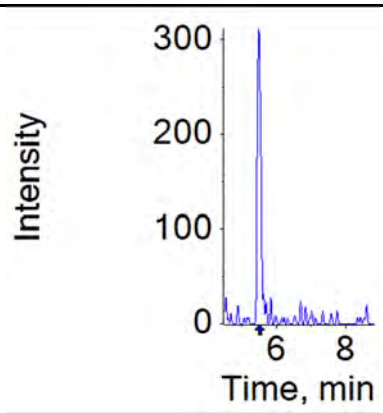


Compound Name: 3-Nitrotoluene

Expected RT: 26.01
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922015.wiff
1205276411

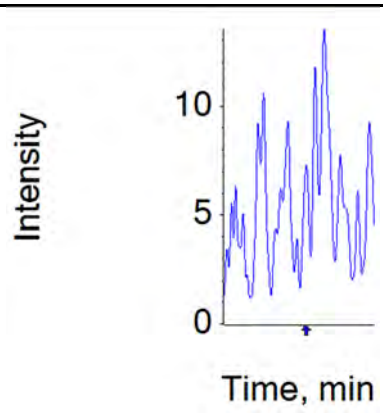


Compound Name: HMX

Expected RT: 5.51
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922015.wiff
1205276411

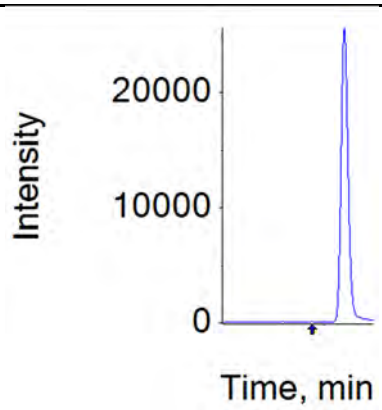


Compound Name: Nitrobenzene

Expected RT: 15.21
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922015.wiff
1205276411

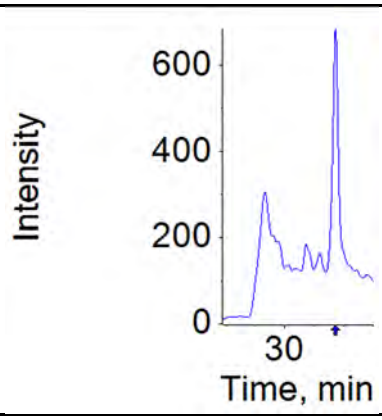


Compound Name: 35-Dinitroaniline

Expected RT: 14.45
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922015.wiff
1205276411

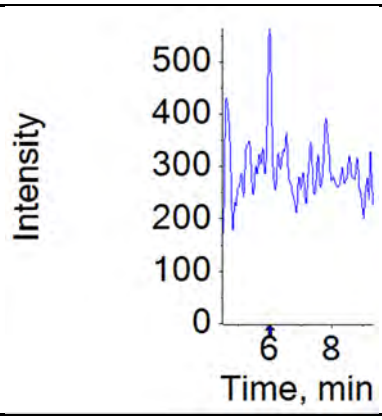


Compound Name: tris(o-cresyl)phosphate

Expected RT: 31.72
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922015.wiff
1205276411

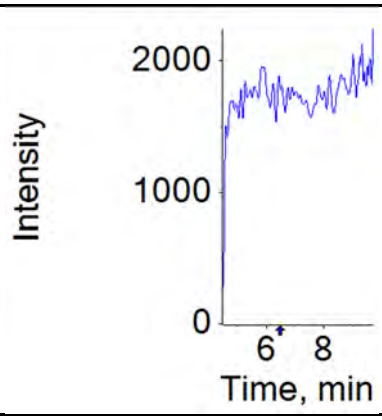


Compound Name: TNX

Expected RT: 5.99
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922015.wiff
1205276411

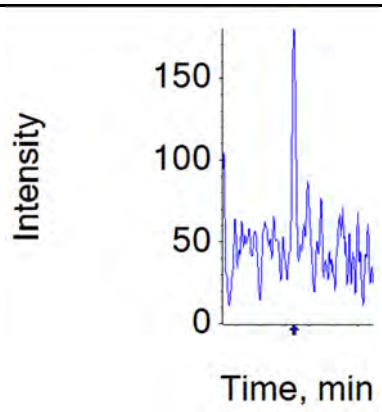


Compound Name: DNX

Expected RT: 6.48
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922015.wiff
1205276411

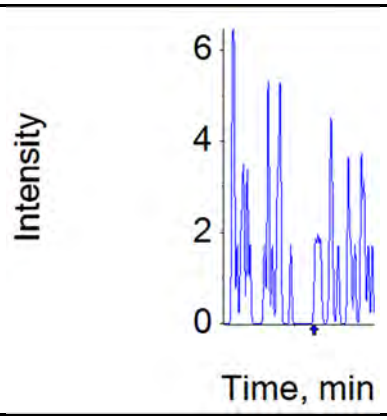


Compound Name: MNX

Expected RT: 7.38
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922015.wiff
1205276411



Compound Name: Nitroglycerin

Expected RT: 15.88
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 2358904

Lab Code: GEL

GEL Job No (SDG): 2023-289

Matrix: WATER

GEL Sample ID: 1205276412

Sample Amount : 1000 mL

Date Received: 16-DEC-22

Moisture:

Extraction Batch ID: 2358904

Extraction Type: Sol Exchange

Date Extracted: 21-DEC-22

Concentrated Extract Volume (mL) 5

Injection Volume (uL):50

GEL data file: EXP122922016.wiff

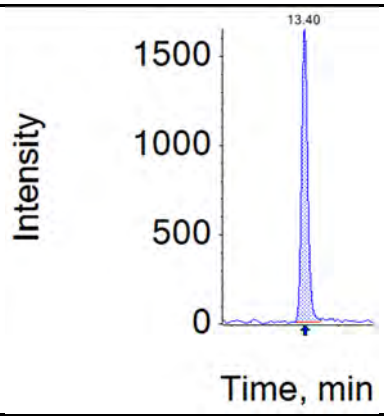
Date Analyzed: 30-DEC-22 00:50

Dilution Factor: 2

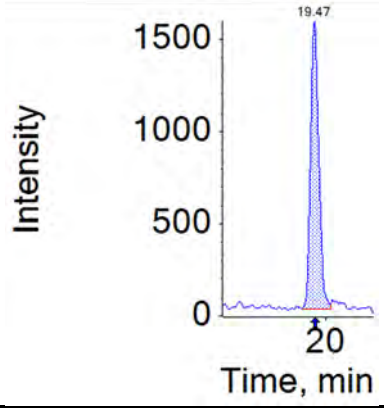
Concentration Units: ug/L

Cas No.	Compound	Concentration*	Q	MDL	PQL
118-96-7	2,4,6-Trinitrotoluene	5.06		0.0800	0.250
118-96-7	*2,4,6-Trinitrotoluene*				
2691-41-0	HMX	4.84		0.0800	0.250
2691-41-0	*HMX*				
121-82-4	RDX	5.05		0.0800	0.250
121-82-4	*RDX*				

Data File	EXP122922016.wiff	Acquisition Date	12/30/2022 0:50:49
Sample Name	1205276412	Acquisition Method	explosivesFull2.dam
Batch|Dilution|Analyst	2358905|2|JLS|1	Result Table	12292022
Procedure Code	LCX30BWO_L	Sample Type	Unknown



Compound Name:	13-Dinitrobenzene-d4
Expected RT:	13.42
Actual RT:	13.40
Area Counts:	32481.140
Integration Type:	Valley
Amount:	10.0

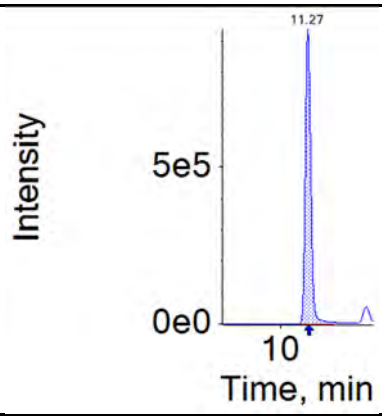


Compound Name:	26-Dinitrotoluene-d3
Expected RT:	19.50
Actual RT:	19.47
Area Counts:	41484.187
Integration Type:	Valley
Amount:	10.0

Please refer to Form 8 of the data package for a complete list of Internal Standard Recoveries.

Relative Retention Time (RRT) is used by the laboratory to establish peak identity. The RRT of each target analyte is calculated using the retention time of the corresponding internal standard. The RRT of each analyte in a sample must be within 2.0 of the analyte's calculated RRT in the ICV.

EXP122922016.wiff
1205276412

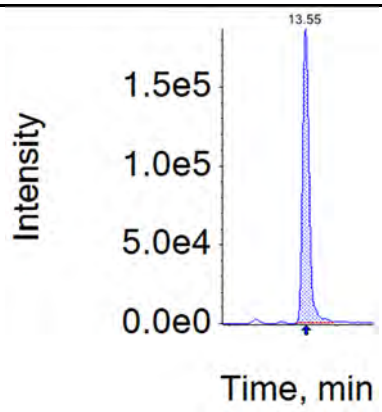


Compound Name: 135-Trinitrobenzene

Expected RT: 11.29
Actual RT: 11.27
RRT: 0.84
Area Counts: 16482072.570
Integration Type:Baseline

Amount: 500.56
%Accuracy: N/A

EXP122922016.wiff
1205276412

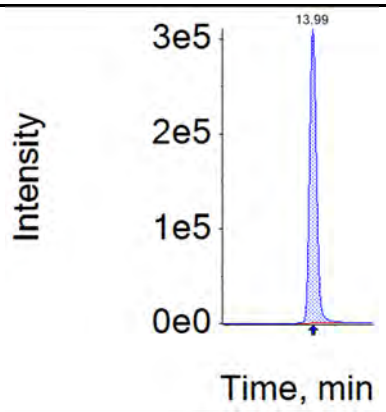


Compound Name: 13-Dinitrobenzene

Expected RT: 13.57
Actual RT: 13.55
RRT: 1.01
Area Counts: 3973265.179
Integration Type:Valley

Amount: 509.68
%Accuracy: N/A

EXP122922016.wiff
1205276412

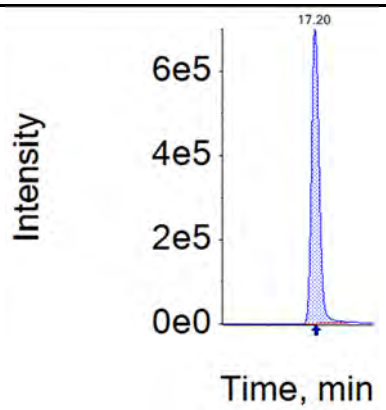


Compound Name: Tetryl

Expected RT: 14.00
Actual RT: 13.99
RRT: 1.04
Area Counts: 6983189.749
Integration Type:Baseline

Amount: 553.46
%Accuracy: N/A

EXP122922016.wiff
1205276412

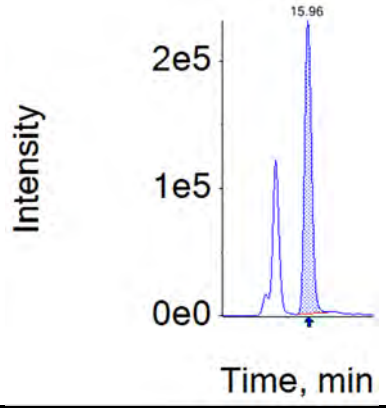


Compound Name: 246-Trinitrotoluene

Expected RT: 17.23
Actual RT: 17.20
RRT: 0.88
Area Counts: 17503638.768
Integration Type:Baseline

Amount: 506.24
%Accuracy: N/A

EXP122922016.wiff
1205276412



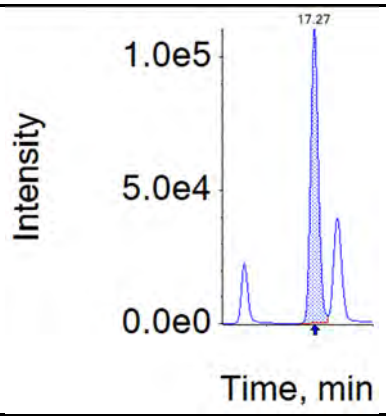
Compound Name: 34-dinitrotoluene

Expected RT: 15.99
Actual RT: 15.96
RRT: 0.82
Area Counts: 5246341.785
Integration Type:Baseline

Amount: 244.19
%Accuracy: N/A

EXP122922016.wiff

1205276412

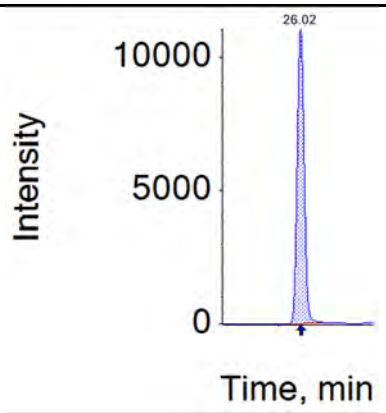


Compound Name: 4-Amino-26-dinitrotoluene

Expected RT: 17.28
Actual RT: 17.27
RRT: 0.89
Area Counts: 2758022.101
Integration Type:Valley

Amount: 480.22
%Accuracy: N/A

EXP122922016.wiff
1205276412

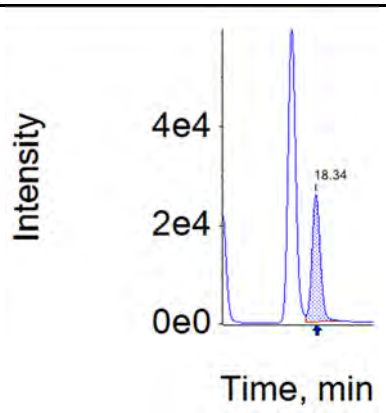


Compound Name: PETN

Expected RT: 26.02
Actual RT: 26.02
RRT: 1.34
Area Counts: 245621.867
Integration Type:Baseline

Amount: 503.08
%Accuracy: N/A

EXP122922016.wiff
1205276412

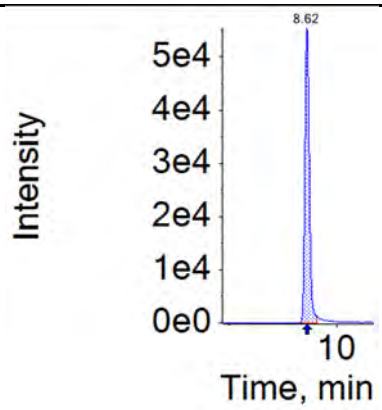


Compound Name: 2-Amino-46-dinitrotoluene

Expected RT: 18.37
Actual RT: 18.34
RRT: 0.94
Area Counts: 694684.535
Integration Type:Valley

Amount: 497.57
%Accuracy: N/A

EXP122922016.wiff
1205276412

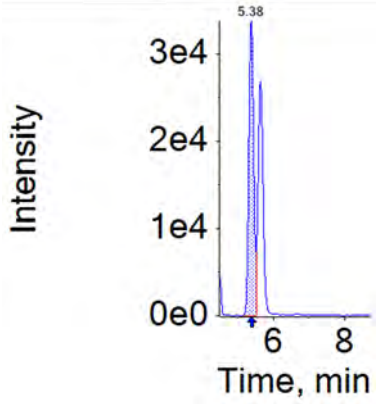


Compound Name: TATB

Expected RT: 8.63
Actual RT: 8.62
RRT: 0.64
Area Counts: 787310.641
Integration Type:Valley

Amount: 247.52
%Accuracy: N/A

EXP122922016.wiff
1205276412

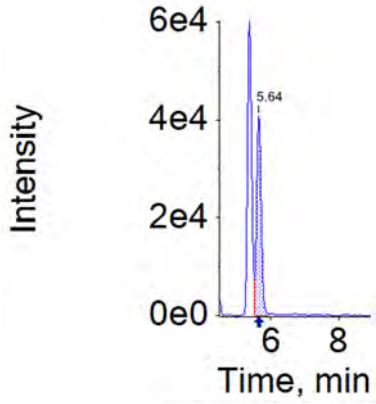


Compound Name: 26-Diamino-4-nitrotoluene

Expected RT: 5.38
Actual RT: 5.38
RRT: 0.40
Area Counts: 317999.709
Integration Type:Valley

Amount: 400.48
%Accuracy: N/A

EXP122922016.wiff
1205276412

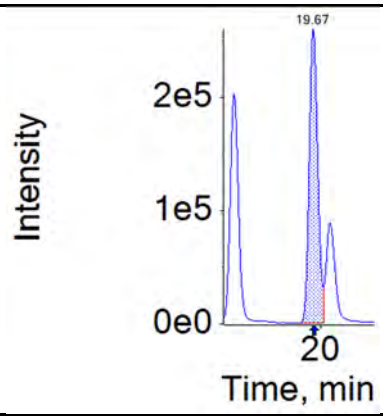


Compound Name: 24-Diamino-6-nitrotoluene

Expected RT: 5.64
Actual RT: 5.64
RRT: 0.42
Area Counts: 374269.886
Integration Type:Valley

Amount: 439.31
%Accuracy: N/A

EXP122922016.wiff
1205276412

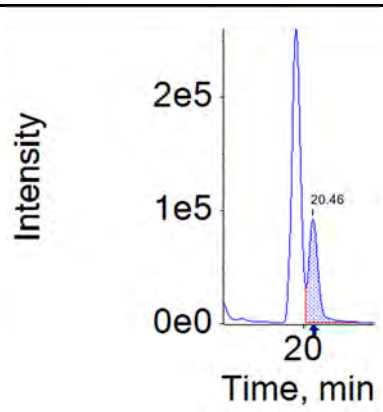


Compound Name: 26-dinitrotoluene

Expected RT: 19.69
Actual RT: 19.67
RRT: 1.01
Area Counts: 7119368.894
Integration Type: Valley

Amount: 477.56
%Accuracy: N/A

EXP122922016.wiff
1205276412

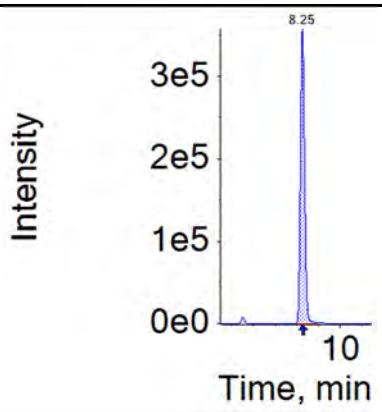


Compound Name: 24-dinitrotoluene

Expected RT: 20.48
Actual RT: 20.46
RRT: 1.05
Area Counts: 2849322.386
Integration Type: Valley

Amount: 504.52
%Accuracy: N/A

EXP122922016.wiff
1205276412

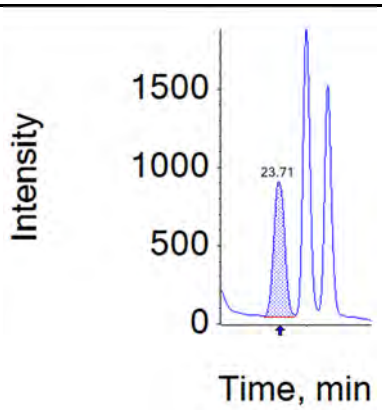


Compound Name: RDX

Expected RT: 8.26
Actual RT: 8.25
RRT: 0.62
Area Counts: 4639475.998
Integration Type:Baseline

Amount: 504.69
%Accuracy: N/A

EXP122922016.wiff
1205276412

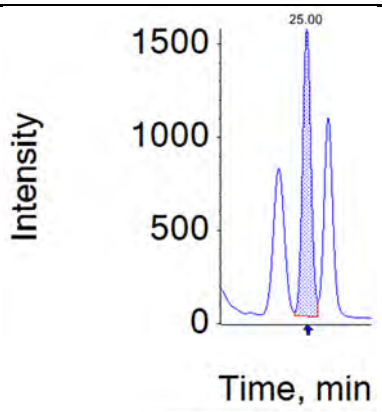


Compound Name: 2-Nitrotoluene

Expected RT: 23.75
Actual RT: 23.71
RRT: 1.22
Area Counts: 30461.823
Integration Type:Valley

Amount: 468.22
%Accuracy: N/A

EXP122922016.wiff
1205276412



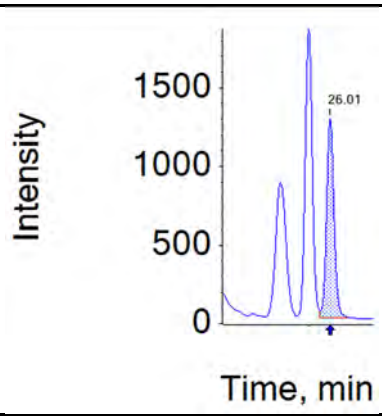
Compound Name: 4-Nitrotoluene

Expected RT: 25.04
Actual RT: 25.00
RRT: 1.28
Area Counts: 42166.413
Integration Type:Valley

Amount: 507.07
%Accuracy: N/A

EXP122922016.wiff

1205276412

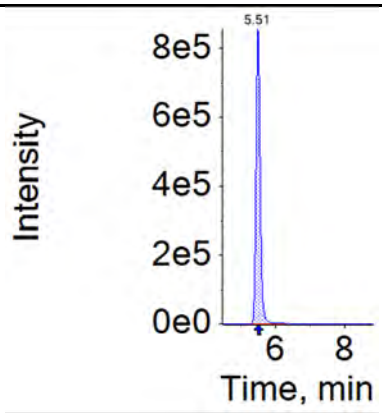


Compound Name: 3-Nitrotoluene

Expected RT: 26.01
Actual RT: 26.01
RRT: 1.34
Area Counts: 30514.150
Integration Type:Valley

Amount: 472.78
%Accuracy: N/A

EXP122922016.wiff
1205276412

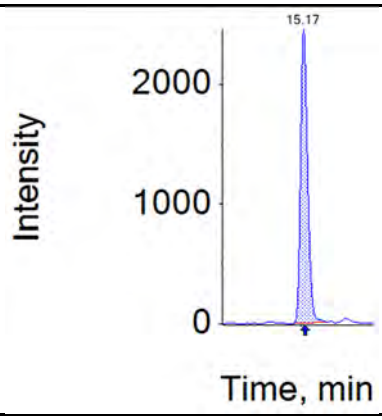


Compound Name: HMX

Expected RT: 5.51
Actual RT: 5.51
RRT: 0.41
Area Counts: 7060708.944
Integration Type:Valley

Amount: 484.39
%Accuracy: N/A

EXP122922016.wiff
1205276412

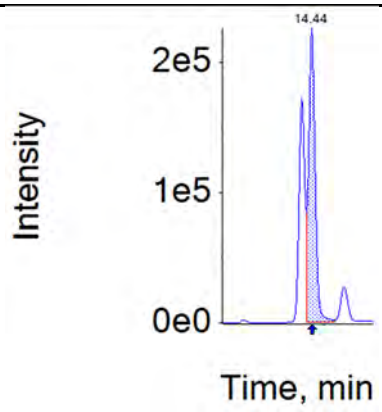


Compound Name: Nitrobenzene

Expected RT: 15.21
Actual RT: 15.17
RRT: 1.13
Area Counts: 55220.913
Integration Type:Baseline

Amount: 442.27
%Accuracy: N/A

EXP122922016.wiff
1205276412

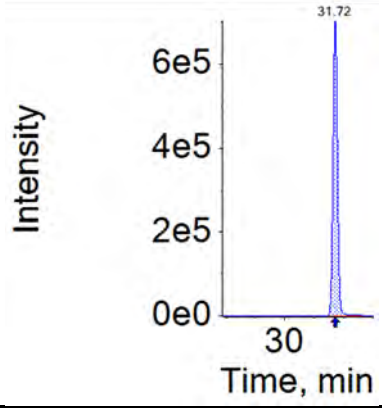


Compound Name: 35-Dinitroaniline

Expected RT: 14.45
Actual RT: 14.44
RRT: 0.74
Area Counts: 4685697.560
Integration Type:Valley

Amount: 497.78
%Accuracy: N/A

EXP122922016.wiff
1205276412

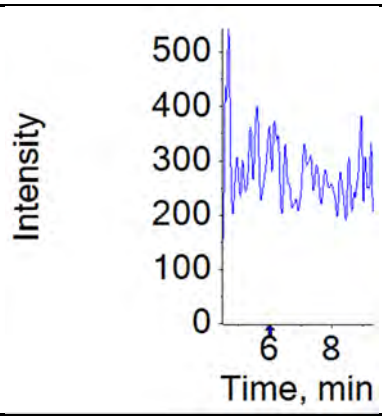


Compound Name: tris(o-cresyl)phosphate

Expected RT: 31.72
Actual RT: 31.72
RRT: 1.63
Area Counts: 7291874.600
Integration Type:Baseline

Amount: 332.45
%Accuracy: N/A

EXP122922016.wiff
1205276412

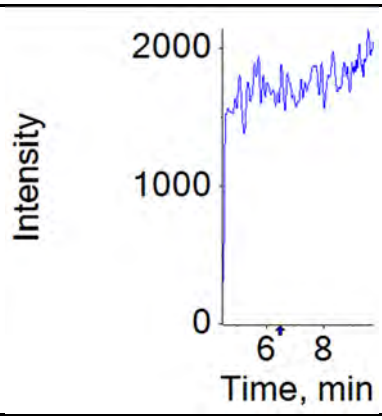


Compound Name: TNX

Expected RT: 5.99
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922016.wiff
1205276412

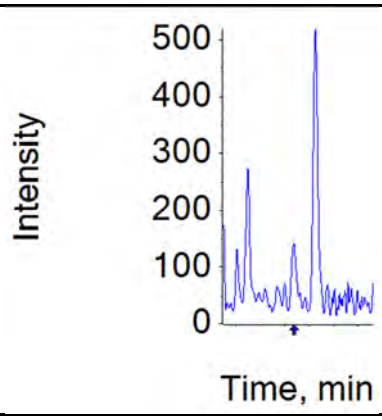


Compound Name: DNX

Expected RT: 6.48
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922016.wiff
1205276412

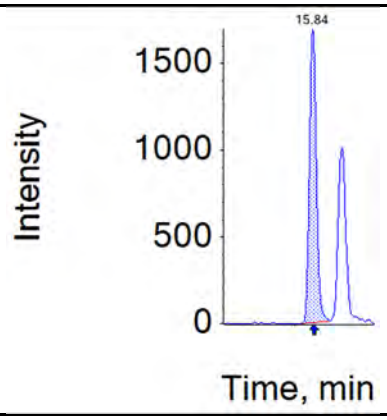


Compound Name: MNX

Expected RT: 7.38
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922016.wiff
1205276412



Compound Name: Nitroglycerin

Expected RT: 15.88
Actual RT: 15.84
RRT: 0.81
Area Counts: 38027.863
Integration Type:Baseline

Amount: 533.83
%Accuracy: N/A

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: SMEB04-23-265374(604449014MS)MS

Lab Code: GEL

GEL Job No (SDG): 2023-289

Matrix: WATER

GEL Sample ID: 1205276413

Sample Amount : 1050 mL

Date Received: 16-DEC-22

Moisture:

Extraction Batch ID: 2358904

Extraction Type: Sol Exchange

Date Extracted: 21-DEC-22

Concentrated Extract Volume (mL) 5

Injection Volume (uL):50

GEL data file: EXP122922021.wiff

Date Analyzed: 30-DEC-22 03:49

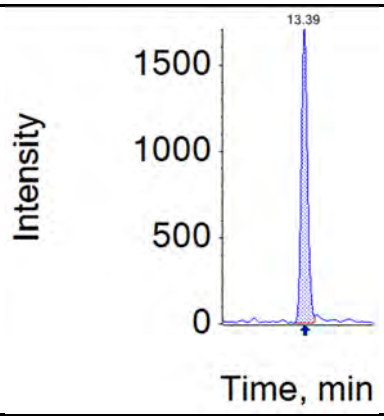
Dilution Factor: 2

Concentration Units: ug/L

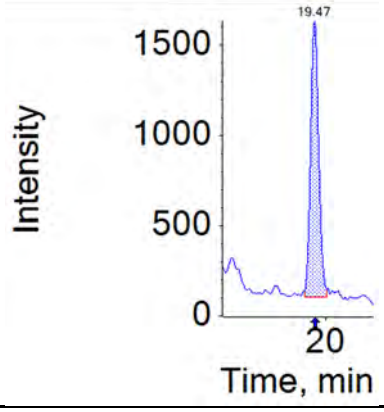
Cas No.	Compound	Concentration*	Q	MDL	PQL
2691-41-0	HMX	3.04		0.0760	0.237
2691-41-0	*HMX*				
121-82-4	RDX	3.71		0.0760	0.237
121-82-4	*RDX*				
118-96-7	2,4,6-Trinitrotoluene	4.41		0.0760	0.237
118-96-7	*2,4,6-Trinitrotoluene*				

JISB MAE
01/01/2023 01/04/2023

Data File	EXP122922021.wiff	Acquisition Date	12/30/2022 3:49:05
Sample Name	1205276413	Acquisition Method	explosivesFull2.dam
Batch|Dilution|Analyst	2358905|2|JLS|1	Result Table	12292022
Procedure Code	LCX30BWO_L	Sample Type	Unknown



Compound Name: 13-Dinitrobenzene-d4
Expected RT: 13.42
Actual RT: 13.39
Area Counts: 33955.858
Integration Type: Valley
Amount: 10.0

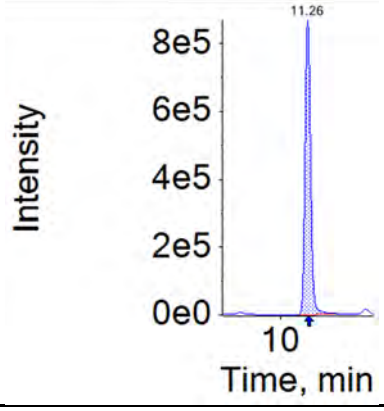


Compound Name: 26-Dinitrotoluene-d3
Expected RT: 19.50
Actual RT: 19.47
Area Counts: 39957.294
Integration Type: Valley
Amount: 10.0

Please refer to Form 8 of the data package for a complete list of Internal Standard Recoveries.

Relative Retention Time (RRT) is used by the laboratory to establish peak identity. The RRT of each target analyte is calculated using the retention time of the corresponding internal standard. The RRT of each analyte in a sample must be within 2.0 of the analyte's calculated RRT in the ICV.

EXP122922021.wiff
1205276413

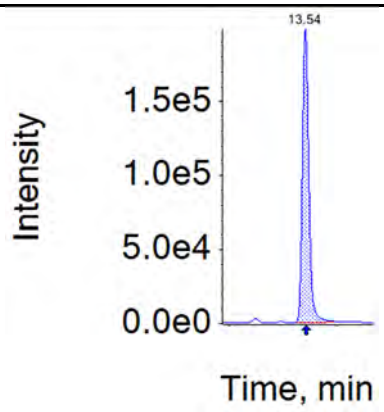


Compound Name: 135-Trinitrobenzene

Expected RT: 11.29
Actual RT: 11.26
RRT: 0.84
Area Counts: 15612769.293
Integration Type:Baseline

Amount: 453.56
%Accuracy: N/A

EXP122922021.wiff
1205276413

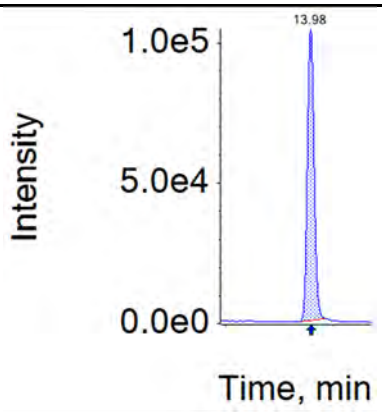


Compound Name: 13-Dinitrobenzene

Expected RT: 13.57
Actual RT: 13.54
RRT: 1.01
Area Counts: 4148917.529
Integration Type:Baseline

Amount: 509.10
%Accuracy: N/A

EXP122922021.wiff
1205276413

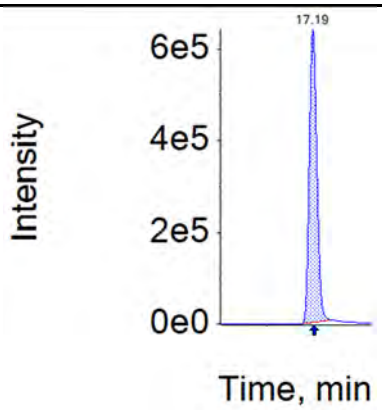


Compound Name: Tetryl

Expected RT: 14.00
Actual RT: 13.98
RRT: 1.04
Area Counts: 2254404.343
Integration Type:Baseline

Amount: 170.91
%Accuracy: N/A

EXP122922021.wiff
1205276413

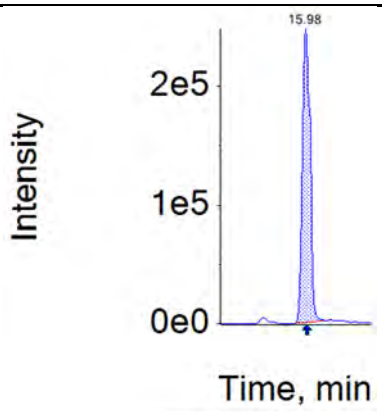


Compound Name: 246-Trinitrotoluene

Expected RT: 17.23
Actual RT: 17.19
RRT: 0.88
Area Counts: 15471933.862
Integration Type:Baseline

Amount: 464.58
%Accuracy: N/A

EXP122922021.wiff
1205276413



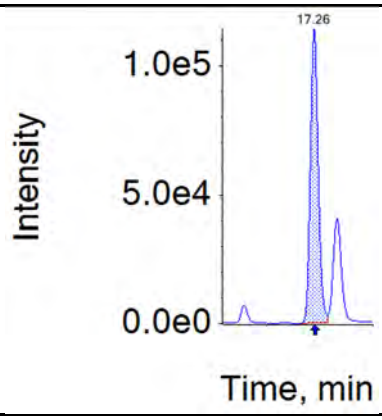
Compound Name: 34-dinitrotoluene

Expected RT: 15.99
Actual RT: 15.98
RRT: 0.82
Area Counts: 6164594.728
Integration Type:Baseline

Amount: 297.90
%Accuracy: N/A

EXP122922021.wiff

1205276413

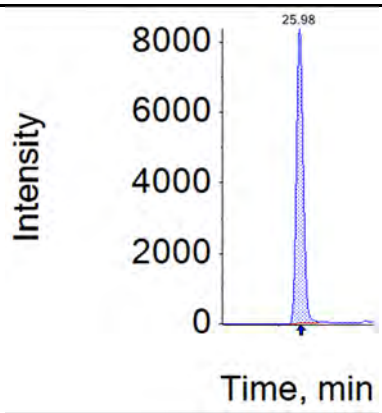


Compound Name: 4-Amino-26-dinitrotoluene

Expected RT: 17.28
Actual RT: 17.26
RRT: 0.89
Area Counts: 2903830.334
Integration Type:Valley

Amount: 524.92
%Accuracy: N/A

EXP122922021.wiff
1205276413

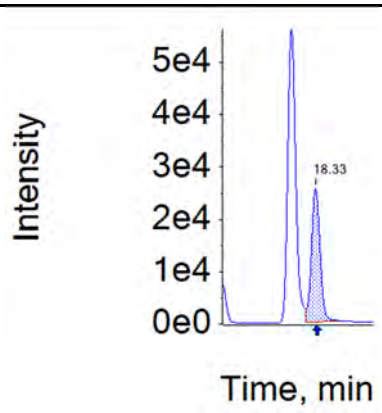


Compound Name: PETN

Expected RT: 26.02
Actual RT: 25.98
RRT: 1.33
Area Counts: 180864.540
Integration Type:Baseline

Amount: 384.60
%Accuracy: N/A

EXP122922021.wiff
1205276413

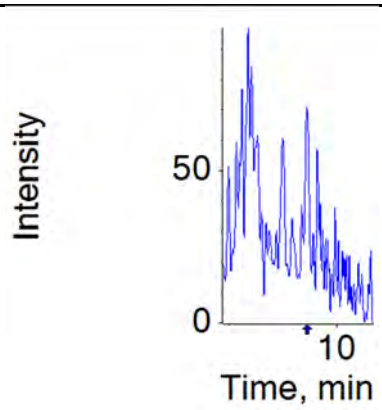


Compound Name: 2-Amino-46-dinitrotoluene

Expected RT: 18.37
Actual RT: 18.33
RRT: 0.94
Area Counts: 708847.275
Integration Type:Valley

Amount: 527.12
%Accuracy: N/A

EXP122922021.wiff
1205276413

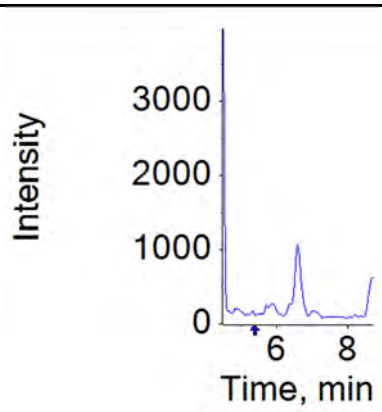


Compound Name: TATB

Expected RT: 8.63
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922021.wiff
1205276413

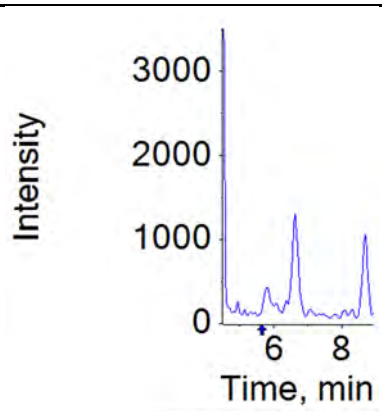


Compound Name: 26-Diamino-4-nitrotoluene

Expected RT: 5.38
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922021.wiff
1205276413

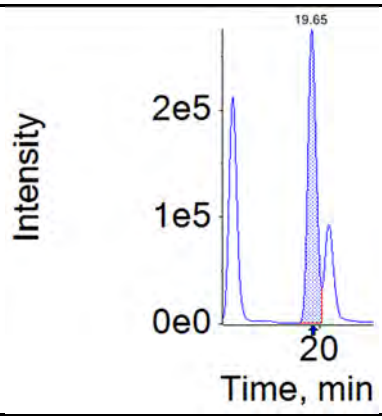


Compound Name: 24-Diamino-6-nitrotoluene

Expected RT: 5.64
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922021.wiff
1205276413

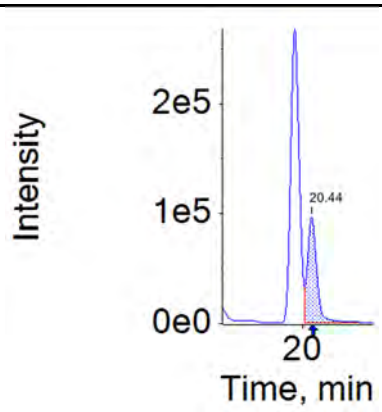


Compound Name: 26-dinitrotoluene

Expected RT: 19.69
Actual RT: 19.65
RRT: 1.01
Area Counts: 7492612.434
Integration Type: Valley

Amount: 521.80
%Accuracy: N/A

EXP122922021.wiff
1205276413

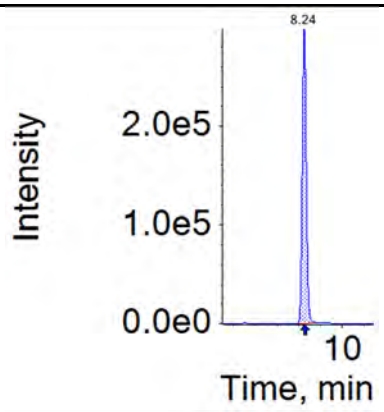


Compound Name: 24-dinitrotoluene

Expected RT: 20.48
Actual RT: 20.44
RRT: 1.05
Area Counts: 2923690.283
Integration Type: Valley

Amount: 537.47
%Accuracy: N/A

EXP122922021.wiff
1205276413

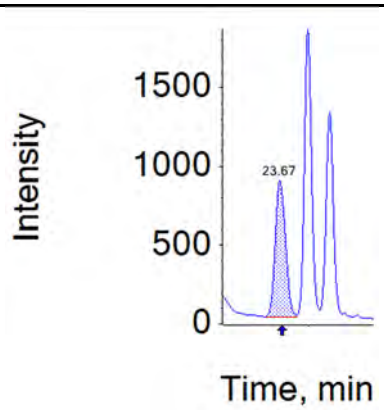


Compound Name: RDX

Expected RT: 8.26
Actual RT: 8.24
RRT: 0.62
Area Counts: 3751945.093
Integration Type:Baseline

Amount: 390.42
%Accuracy: N/A

EXP122922021.wiff
1205276413

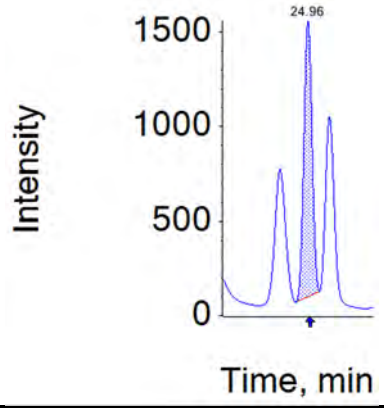


Compound Name: 2-Nitrotoluene

Expected RT: 23.75
Actual RT: 23.67
RRT: 1.22
Area Counts: 28422.198
Integration Type:Valley

Amount: 453.57
%Accuracy: N/A

EXP122922021.wiff
1205276413



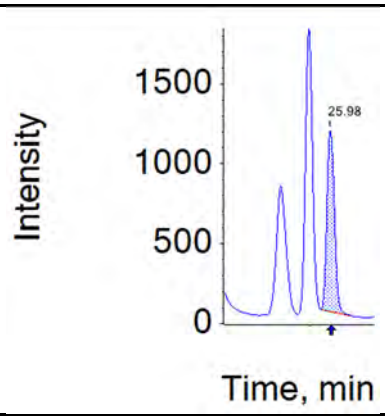
Compound Name: 4-Nitrotoluene

Expected RT: 25.04
Actual RT: 24.96
RRT: 1.28
Area Counts: 38294.801
Integration Type:Baseline

Amount: 478.11
%Accuracy: N/A

EXP122922021.wiff

1205276413

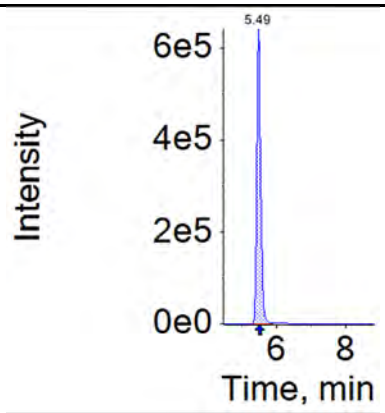


Compound Name: 3-Nitrotoluene

Expected RT: 26.01
Actual RT: 25.98
RRT: 1.33
Area Counts: 27512.301
Integration Type:Baseline

Amount: 442.56
%Accuracy: N/A

EXP122922021.wiff
1205276413

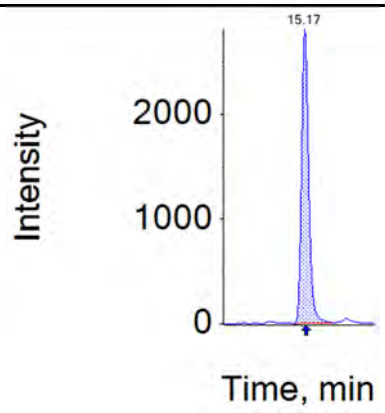


Compound Name: HMX

Expected RT: 5.51
Actual RT: 5.49
RRT: 0.41
Area Counts: 4893260.112
Integration Type:Valley

Amount: 320.32
%Accuracy: N/A

EXP122922021.wiff
1205276413

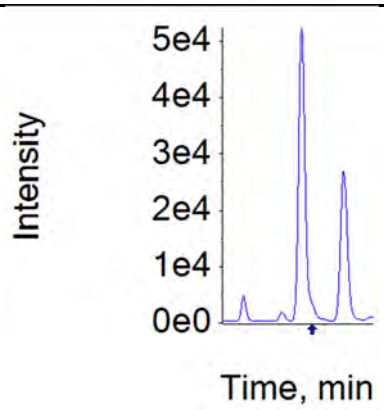


Compound Name: Nitrobenzene

Expected RT: 15.21
Actual RT: 15.17
RRT: 1.13
Area Counts: 63781.820
Integration Type:Baseline

Amount: 488.65
%Accuracy: N/A

EXP122922021.wiff
1205276413

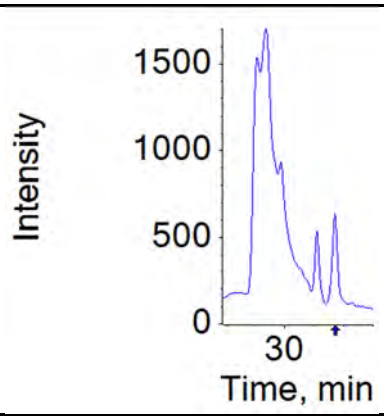


Compound Name: 35-Dinitroaniline

Expected RT: 14.45
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922021.wiff
1205276413

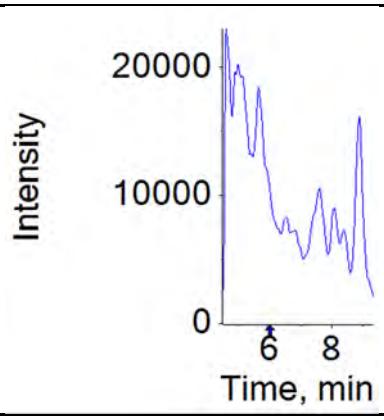


Compound Name: tris(o-cresyl)phosphate

Expected RT: 31.72
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922021.wiff
1205276413

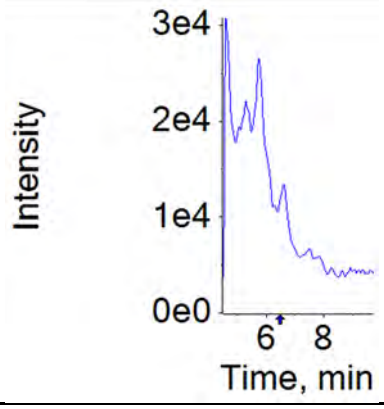


Compound Name: TNX

Expected RT: 5.99
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922021.wiff
1205276413

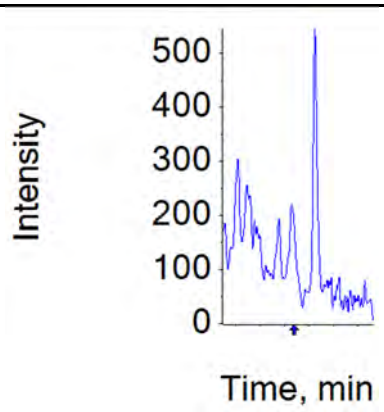


Compound Name: DNX

Expected RT: 6.48
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922021.wiff
1205276413

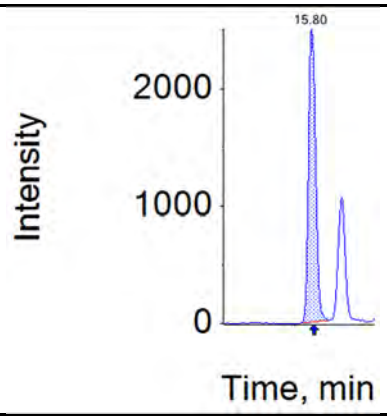


Compound Name: MNX

Expected RT: 7.38
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922021.wiff
1205276413



Compound Name: Nitroglycerin

Expected RT: 15.88
Actual RT: 15.80
RRT: 0.81
Area Counts: 57724.081
Integration Type:Baseline

Amount: 855.87
%Accuracy: N/A

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: SMEB04-23-265374(604449014MSD)MSD

Lab Code: GEL

GEL Job No (SDG): 2023-289

Matrix: WATER

GEL Sample ID: 1205276414

Sample Amount : 1030 mL

Date Received: 16-DEC-22

Moisture:

Extraction Batch ID: 2358904

Extraction Type: Sol Exchange

Date Extracted: 21-DEC-22

Concentrated Extract Volume (mL) 5

Injection Volume (uL):50

GEL data file: EXP122922022.wiff

Date Analyzed: 30-DEC-22 04:24

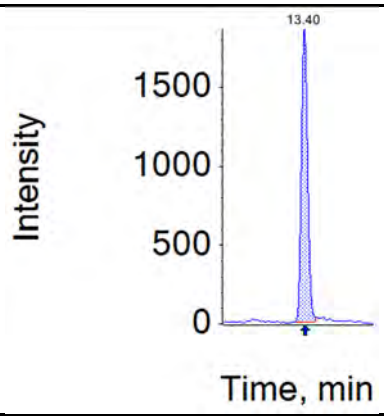
Dilution Factor: 2

Concentration Units: ug/L

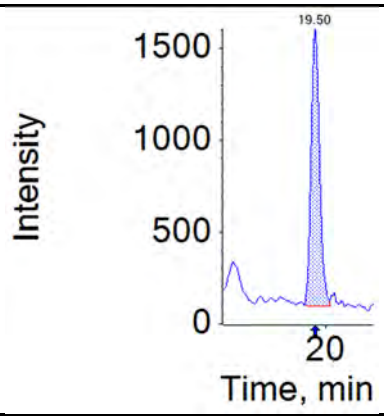
Cas No.	Compound	Concentration*	Q	MDL	PQL
118-96-7	2,4,6-Trinitrotoluene	4.35		0.0777	0.243
118-96-7	*2,4,6-Trinitrotoluene*				
121-82-4	RDX	3.38		0.0777	0.243
121-82-4	*RDX*				
2691-41-0	HMX	2.73		0.0777	0.243
2691-41-0	*HMX*				

JISB MAE
01/01/2023 01/04/2023

Data File	EXP122922022.wiff	Acquisition Date	12/30/2022 4:24:44
Sample Name	1205276414	Acquisition Method	explosivesFull2.dam
Batch|Dilution|Analyst	2358905|2|JLS|1	Result Table	12292022
Procedure Code	LCX30BWO_L	Sample Type	Unknown



Compound Name:	13-Dinitrobenzene-d4
Expected RT:	13.42
Actual RT:	13.40
Area Counts:	37353.340
Integration Type:	Valley
Amount:	10.0

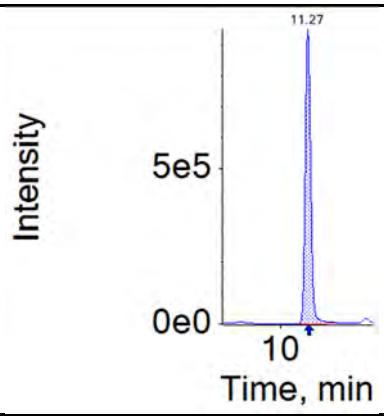


Compound Name:	26-Dinitrotoluene-d3
Expected RT:	19.50
Actual RT:	19.50
Area Counts:	41232.795
Integration Type:	Valley
Amount:	10.0

Please refer to Form 8 of the data package for a complete list of Internal Standard Recoveries.

Relative Retention Time (RRT) is used by the laboratory to establish peak identity. The RRT of each target analyte is calculated using the retention time of the corresponding internal standard. The RRT of each analyte in a sample must be within 2.0 of the analyte's calculated RRT in the ICV.

EXP122922022.wiff
1205276414

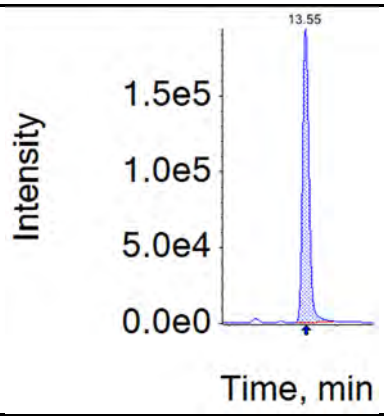


Compound Name: 135-Trinitrobenzene

Expected RT: 11.29
Actual RT: 11.27
RRT: 0.84
Area Counts: 16529915.838
Integration Type:Baseline

Amount: 436.53
%Accuracy: N/A

EXP122922022.wiff
1205276414

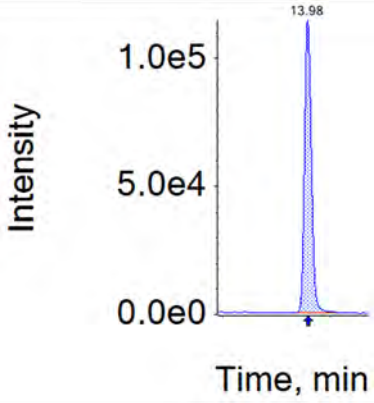


Compound Name: 13-Dinitrobenzene

Expected RT: 13.57
Actual RT: 13.55
RRT: 1.01
Area Counts: 4042625.334
Integration Type:Valley

Amount: 450.94
%Accuracy: N/A

EXP122922022.wiff
1205276414

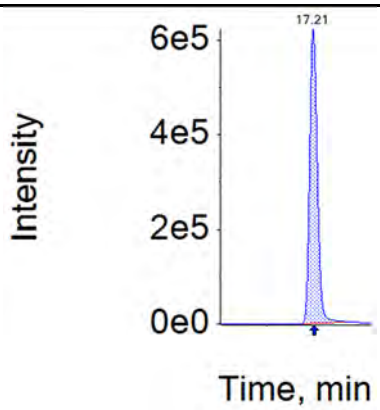


Compound Name: Tetryl

Expected RT: 14.00
Actual RT: 13.98
RRT: 1.04
Area Counts: 2560397.866
Integration Type:Baseline

Amount: 176.46
%Accuracy: N/A

EXP122922022.wiff
1205276414

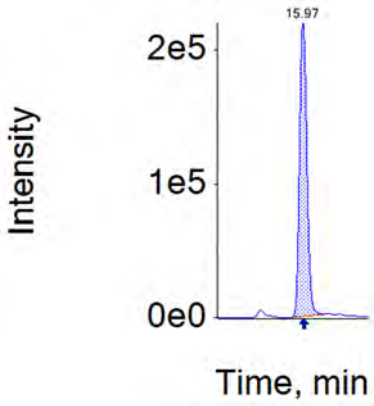


Compound Name: 246-Trinitrotoluene

Expected RT: 17.23
Actual RT: 17.21
RRT: 0.88
Area Counts: 15394004.137
Integration Type:Baseline

Amount: 447.94
%Accuracy: N/A

EXP122922022.wiff
1205276414



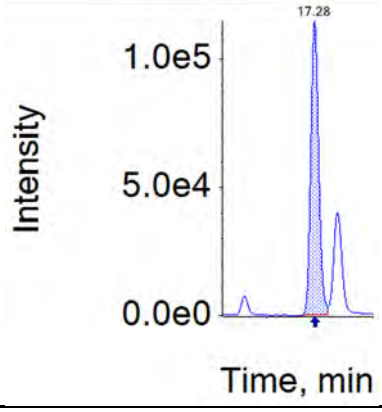
Compound Name: 34-dinitrotoluene

Expected RT: 15.99
Actual RT: 15.97
RRT: 0.82
Area Counts: 5204348.237
Integration Type:Baseline

Amount: 243.71
%Accuracy: N/A

EXP122922022.wiff

1205276414

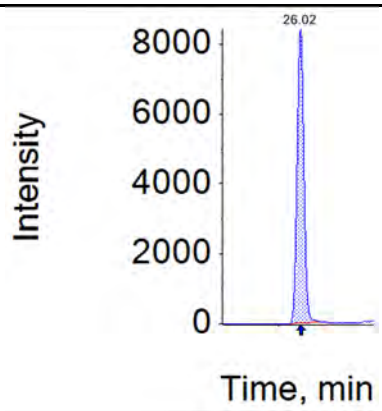


Compound Name: 4-Amino-26-dinitrotoluene

Expected RT: 17.28
Actual RT: 17.28
RRT: 0.89
Area Counts: 2917710.447
Integration Type:Valley

Amount: 511.12
%Accuracy: N/A

EXP122922022.wiff
1205276414

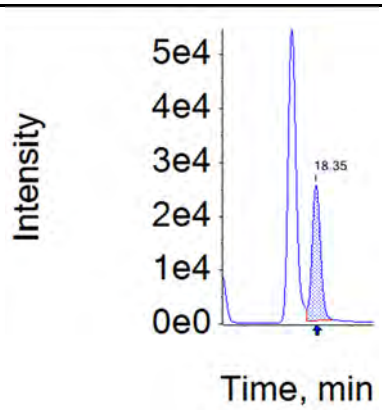


Compound Name: PETN

Expected RT: 26.02
Actual RT: 26.02
RRT: 1.33
Area Counts: 181515.754
Integration Type:Baseline

Amount: 374.04
%Accuracy: N/A

EXP122922022.wiff
1205276414

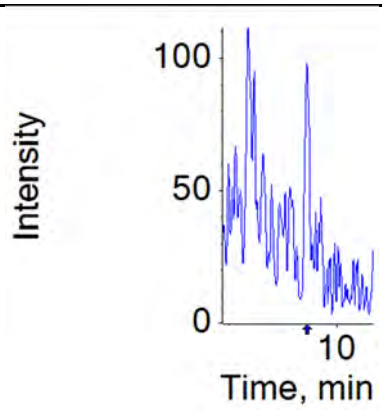


Compound Name: 2-Amino-46-dinitrotoluene

Expected RT: 18.37
Actual RT: 18.35
RRT: 0.94
Area Counts: 685041.957
Integration Type:Valley

Amount: 493.66
%Accuracy: N/A

EXP122922022.wiff
1205276414

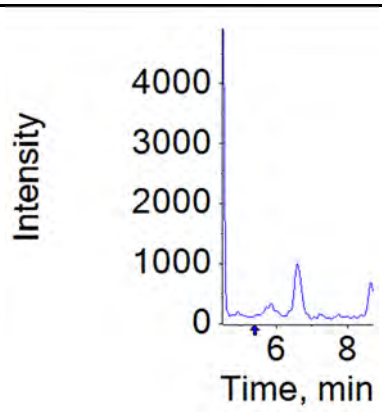


Compound Name: TATB

Expected RT: 8.63
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922022.wiff
1205276414

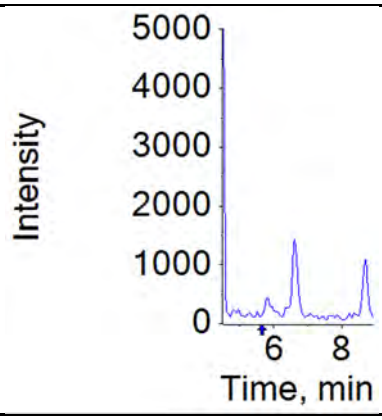


Compound Name: 26-Diamino-4-nitrotoluene

Expected RT: 5.38
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922022.wiff
1205276414

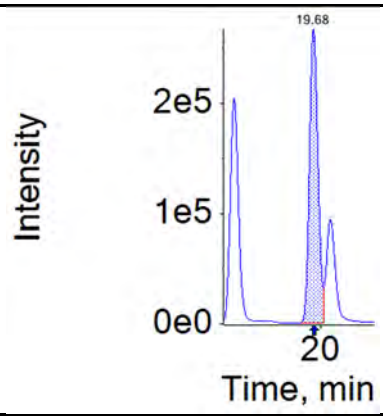


Compound Name: 24-Diamino-6-nitrotoluene

Expected RT: 5.64
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922022.wiff
1205276414

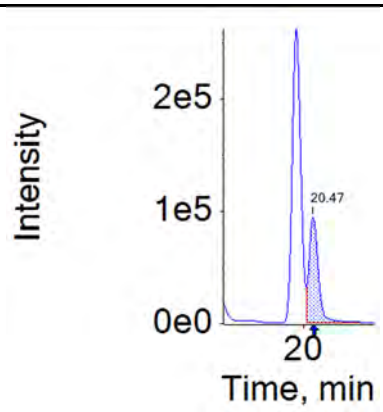


Compound Name: 26-dinitrotoluene

Expected RT: 19.69
Actual RT: 19.68
RRT: 1.01
Area Counts: 7342215.908
Integration Type: Valley

Amount: 495.51
%Accuracy: N/A

EXP122922022.wiff
1205276414

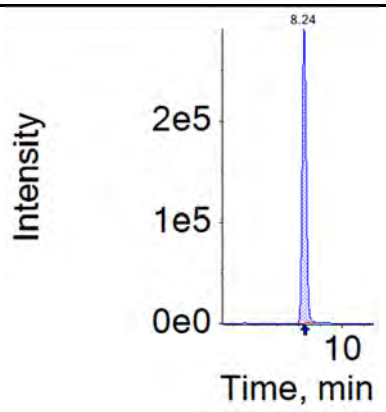


Compound Name: 24-dinitrotoluene

Expected RT: 20.48
Actual RT: 20.47
RRT: 1.05
Area Counts: 2877325.971
Integration Type: Valley

Amount: 512.58
%Accuracy: N/A

EXP122922022.wiff
1205276414

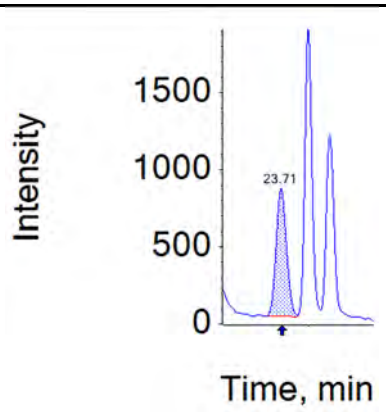


Compound Name: RDX

Expected RT: 8.26
Actual RT: 8.24
RRT: 0.62
Area Counts: 3682729.211
Integration Type:Baseline

Amount: 348.36
%Accuracy: N/A

EXP122922022.wiff
1205276414

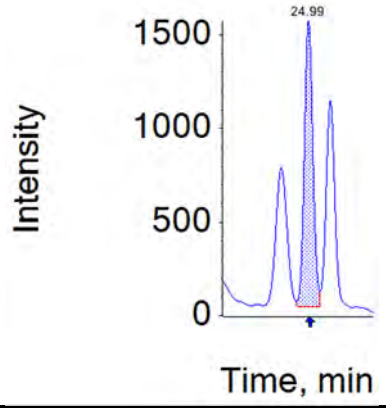


Compound Name: 2-Nitrotoluene

Expected RT: 23.75
Actual RT: 23.71
RRT: 1.22
Area Counts: 27647.021
Integration Type:Valley

Amount: 427.55
%Accuracy: N/A

EXP122922022.wiff
1205276414



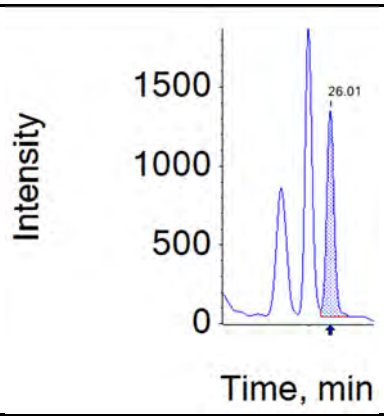
Compound Name: 4-Nitrotoluene

Expected RT: 25.04
Actual RT: 24.99
RRT: 1.28
Area Counts: 41964.061
Integration Type:Valley

Amount: 507.71
%Accuracy: N/A

EXP122922022.wiff

1205276414

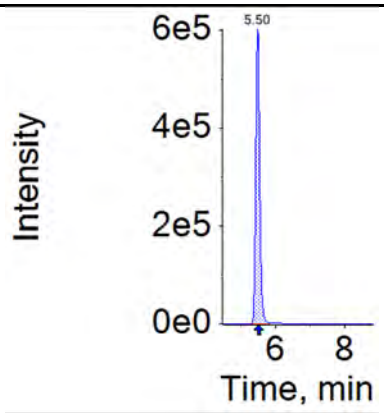


Compound Name: 3-Nitrotoluene

Expected RT: 26.01
Actual RT: 26.01
RRT: 1.33
Area Counts: 31326.702
Integration Type:Valley

Amount: 488.33
%Accuracy: N/A

EXP122922022.wiff
1205276414

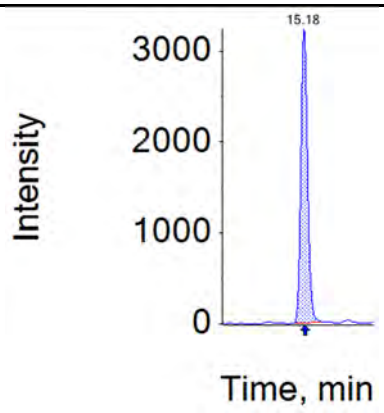


Compound Name: HMX

Expected RT: 5.51
Actual RT: 5.50
RRT: 0.41
Area Counts: 4726515.773
Integration Type:Valley

Amount: 280.97
%Accuracy: N/A

EXP122922022.wiff
1205276414

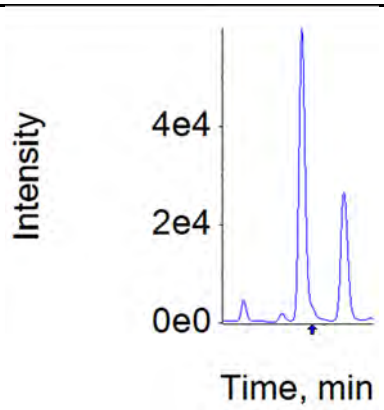


Compound Name: Nitrobenzene

Expected RT: 15.21
Actual RT: 15.18
RRT: 1.13
Area Counts: 69134.033
Integration Type:Baseline

Amount: 481.48
%Accuracy: N/A

EXP122922022.wiff
1205276414

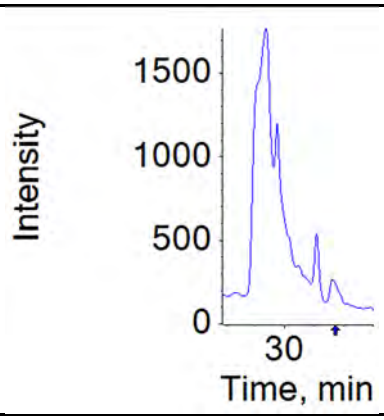


Compound Name: 35-Dinitroaniline

Expected RT: 14.45
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922022.wiff
1205276414

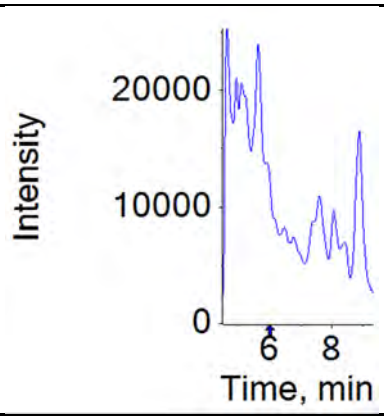


Compound Name: tris(o-cresyl)phosphate

Expected RT: 31.72
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922022.wiff
1205276414

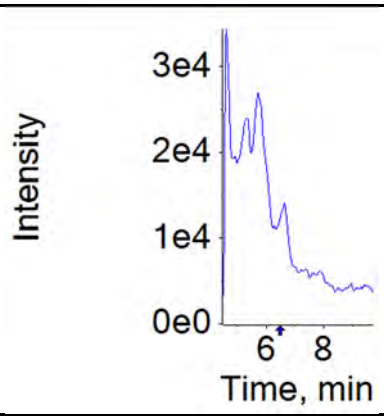


Compound Name: TNX

Expected RT: 5.99
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922022.wiff
1205276414

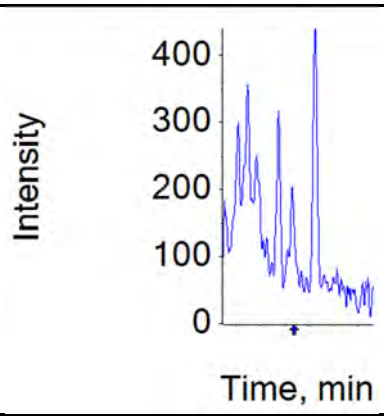


Compound Name: DNX

Expected RT: 6.48
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922022.wiff
1205276414

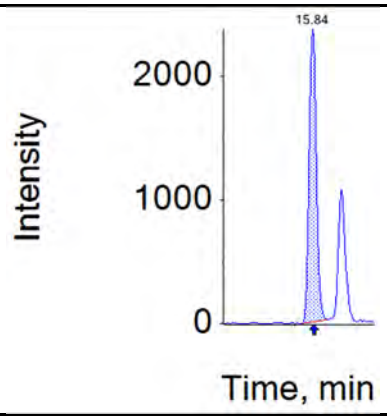


Compound Name: MNX

Expected RT: 7.38
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922022.wiff
1205276414



Compound Name: Nitroglycerin

Expected RT: 15.88
Actual RT: 15.84
RRT: 0.81
Area Counts: 55550.198
Integration Type:Baseline

Amount: 796.46
%Accuracy: N/A

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 2023-289

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 29-DEC-22 16:31

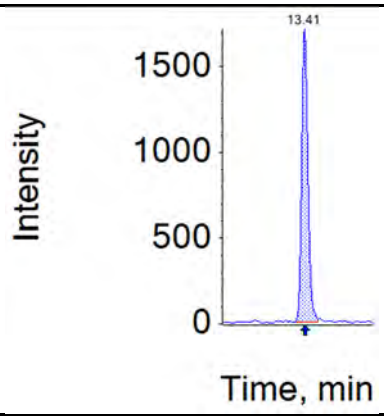
GEL Data File: EXP122922002.wiff

Instrument ID: LCMSMS5

Column: Ultracarb Phenomenex 5u ODS (20)

Compound	True	Found (ug/L)
2,4,6-Trinitrotoluene	0	0
3,4-Dinitrotoluene	0	0
RDX	0	0
HMX	0	0

Data File	EXP122922002.wiff	Acquisition Date	12/29/2022 16:31:29
Sample Name	XIBLK01	Acquisition Method	explosivesFull2.dam
Batch|Dilution|Analyst	|1|JLS	Result Table	12292022
Procedure Code	LCMSEXP_B	Sample Type	Unknown



Compound Name: 13-Dinitrobenzene-d4

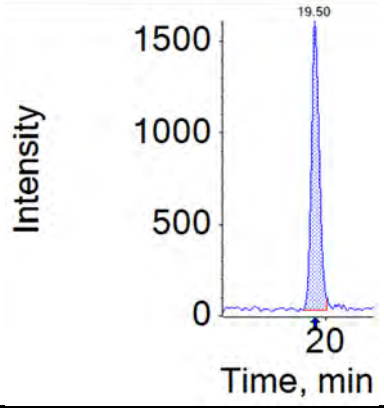
Expected RT: 13.42

Actual RT: 13.41

Area Counts: 34042.659

Integration Type: Valley

Amount: 10.0



Compound Name: 26-Dinitrotoluene-d3

Expected RT: 19.50

Actual RT: 19.50

Area Counts: 39809.212

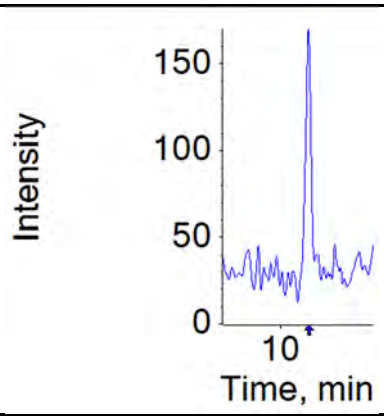
Integration Type: Valley

Amount: 10.0

Please refer to Form 8 of the data package for a complete list of Internal Standard Recoveries.

Relative Retention Time (RRT) is used by the laboratory to establish peak identity. The RRT of each target analyte is calculated using the retention time of the corresponding internal standard. The RRT of each analyte in a sample must be within 2.0 of the analyte's calculated RRT in the ICV.

EXP122922002.wiff
XIBLK01

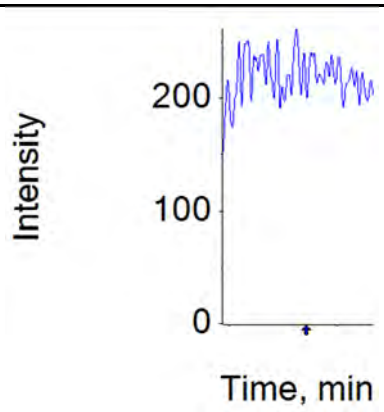


Compound Name: 135-Trinitrobenzene

Expected RT: 11.29
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922002.wiff
XIBLK01

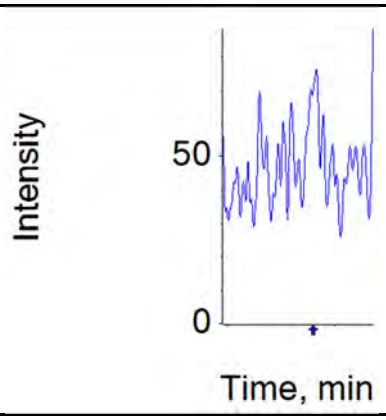


Compound Name: 13-Dinitrobenzene

Expected RT: 13.57
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922002.wiff
XIBLK01

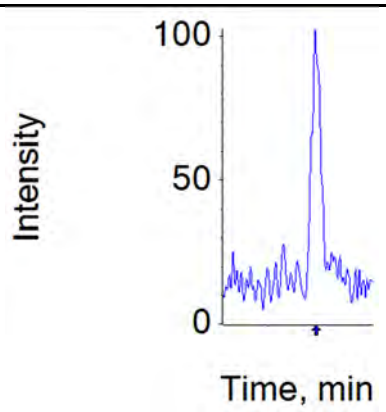


Compound Name: Tetryl

Expected RT: 14.00
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922002.wiff
XIBLK01

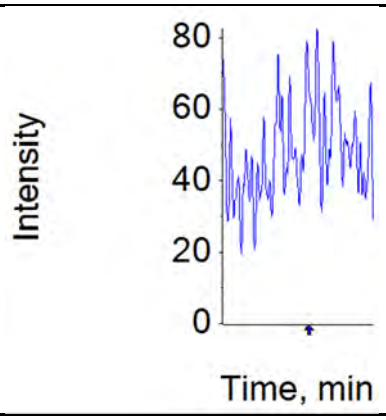


Compound Name: 246-Trinitrotoluene

Expected RT: 17.23
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922002.wiff
XIBLK01



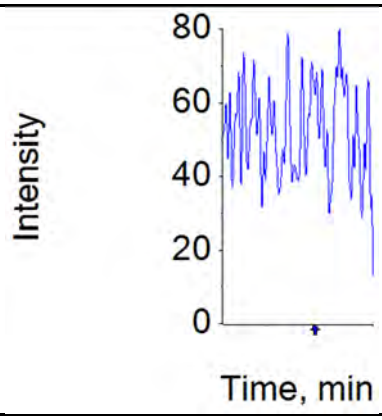
Compound Name: 34-dinitrotoluene

Expected RT: 15.99
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922002.wiff

XIBLK01

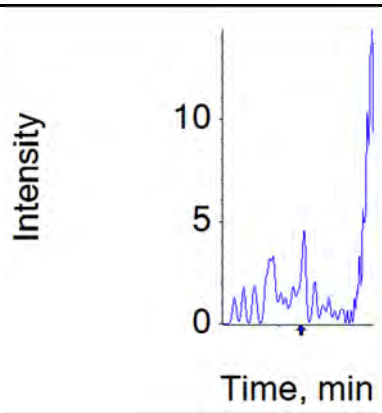


Compound Name: 4-Amino-26-dinitrotoluene

Expected RT: 17.28
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922002.wiff
XIBLK01

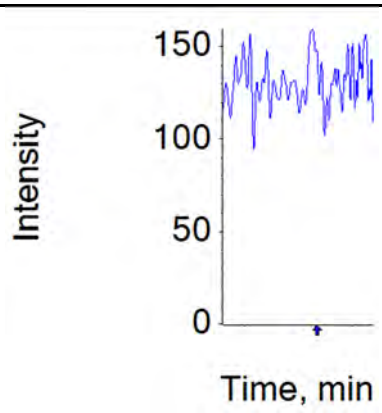


Compound Name: PETN

Expected RT: 26.02
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922002.wiff
XIBLK01

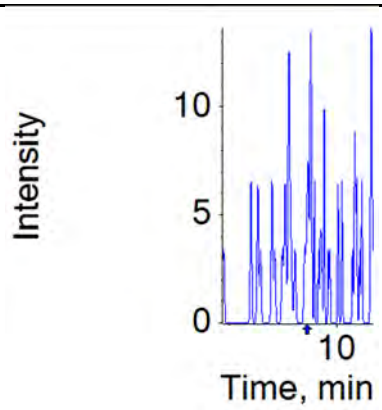


Compound Name: 2-Amino-46-dinitrotoluene

Expected RT: 18.37
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922002.wiff
XIBLK01

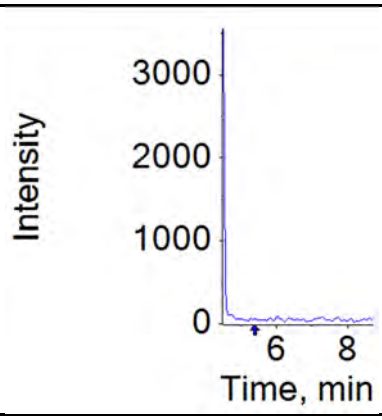


Compound Name: TATB

Expected RT: 8.63
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922002.wiff
XIBLK01

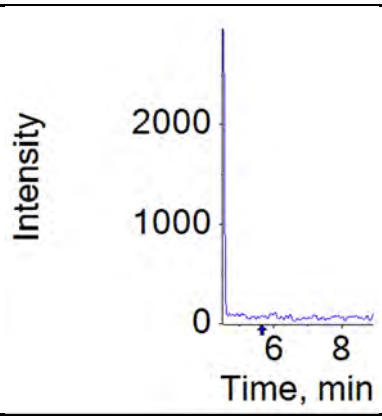


Compound Name: 26-Diamino-4-nitrotoluene

Expected RT: 5.38
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922002.wiff
XIBLK01

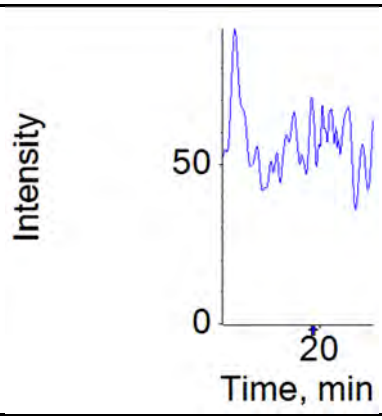


Compound Name: 24-Diamino-6-nitrotoluene

Expected RT: 5.64
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922002.wiff
XIBLK01

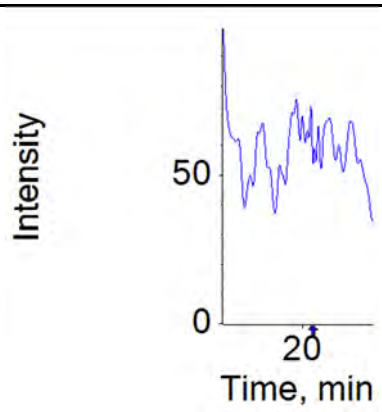


Compound Name: 26-dinitrotoluene

Expected RT: 19.69
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922002.wiff
XIBLK01

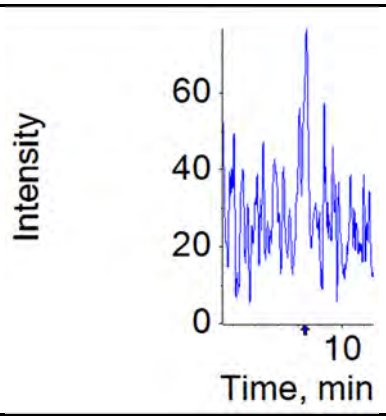


Compound Name: 24-dinitrotoluene

Expected RT: 20.48
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922002.wiff
XIBLK01

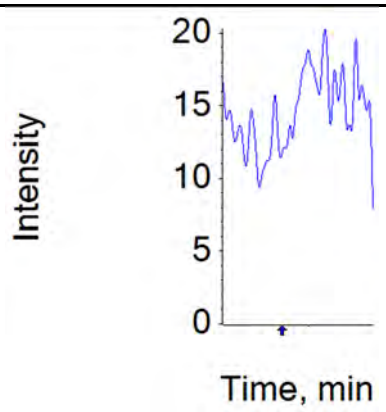


Compound Name: RDX

Expected RT: 8.26
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922002.wiff
XIBLK01

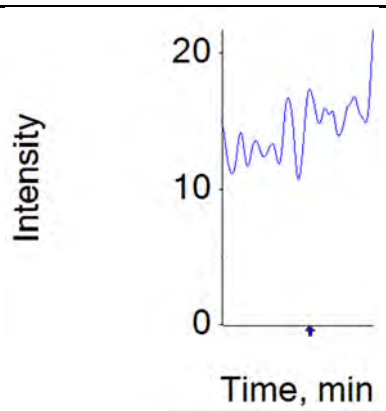


Compound Name: 2-Nitrotoluene

Expected RT: 23.75
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922002.wiff
XIBLK01



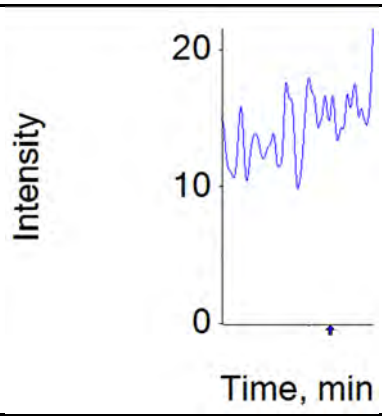
Compound Name: 4-Nitrotoluene

Expected RT: 25.04
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922002.wiff

XIBLK01

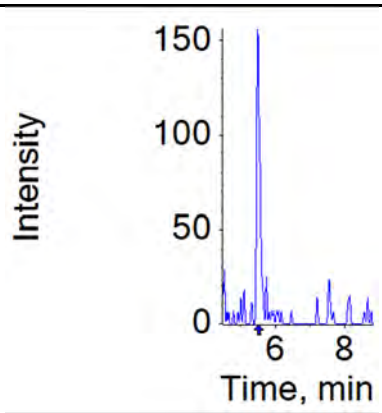


Compound Name: 3-Nitrotoluene

Expected RT: 26.01
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922002.wiff
XIBLK01

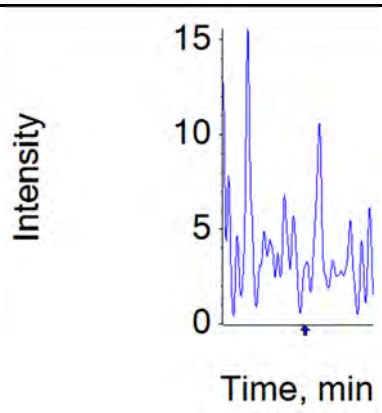


Compound Name: HMX

Expected RT: 5.51
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922002.wiff
XIBLK01

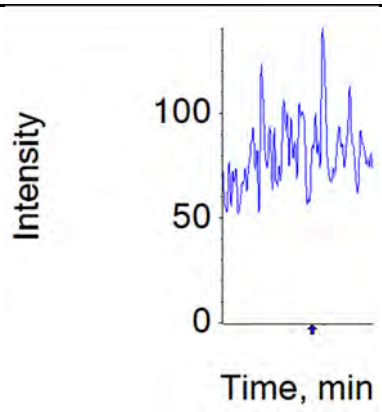


Compound Name: Nitrobenzene

Expected RT: 15.21
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922002.wiff
XIBLK01

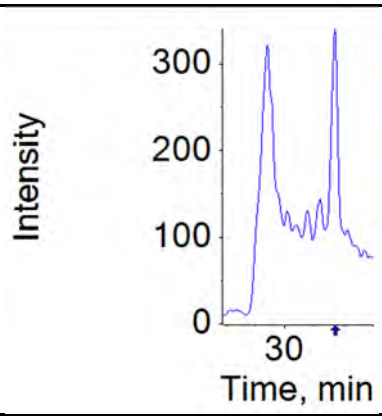


Compound Name: 35-Dinitroaniline

Expected RT: 14.45
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922002.wiff
XIBLK01

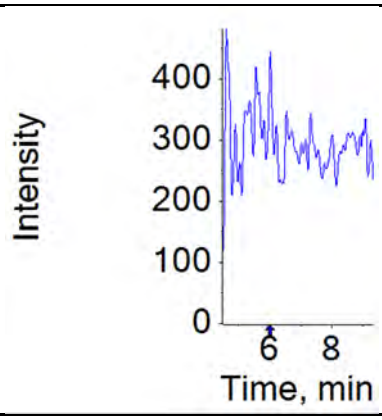


Compound Name: tris(o-cresyl)phosphate

Expected RT: 31.72
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922002.wiff
XIBLK01

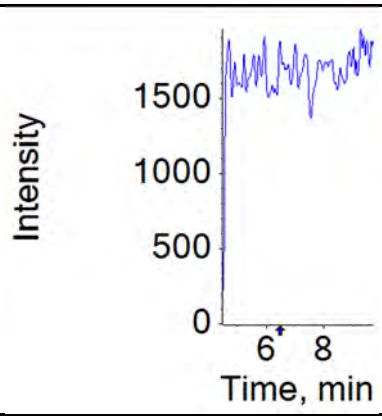


Compound Name: TNX

Expected RT: 5.99
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922002.wiff
XIBLK01

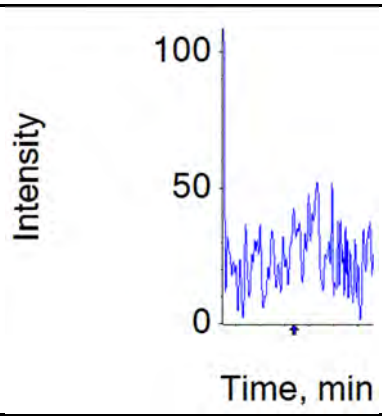


Compound Name: DNX

Expected RT: 6.48
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922002.wiff
XIBLK01

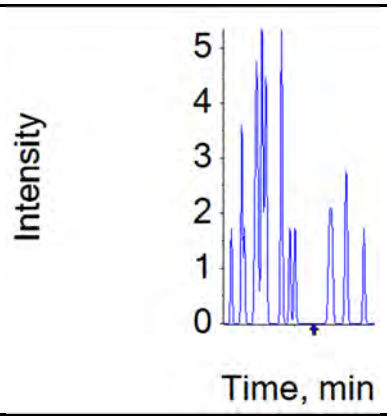


Compound Name: MNX

Expected RT: 7.38
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922002.wiff
XIBLK01



Compound Name: Nitroglycerin

Expected RT: 15.88
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC **GEL Job No(SDG):** 2023-289

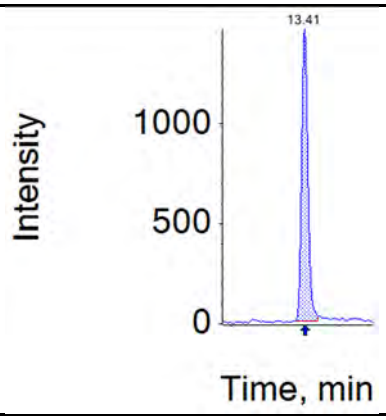
Lab Code: GEL **Lab Sample ID:** XIBLK02

Analysis Date: 29-DEC-22 21:16 **GEL Data File:** EXP122922010.wiff

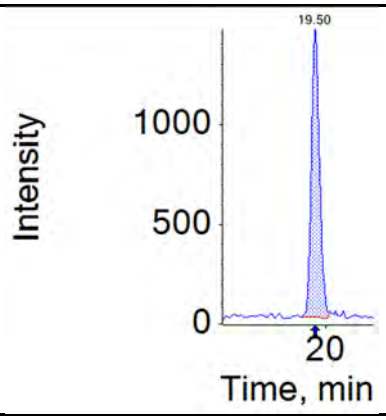
Instrument ID: LCMSMS5 **Column:** Ultracarb Phenomenex 5u ODS (20)

Compound	True	Found (ug/L)
2,4,6-Trinitrotoluene	0	0
3,4-Dinitrotoluene	0	2.17
RDX	0	0
HMX	0	0

Data File	EXP122922010.wiff	Acquisition Date	12/29/2022 21:16:47
Sample Name	XIBLK02	Acquisition Method	explosivesFull2.dam
Batch|Dilution|Analyst	|1|JLS	Result Table	12292022
Procedure Code	LCMSEXP_B	Sample Type	Unknown



Compound Name:	13-Dinitrobenzene-d4
Expected RT:	13.42
Actual RT:	13.41
Area Counts:	29313.088
Integration Type:	Valley
Amount:	10.0

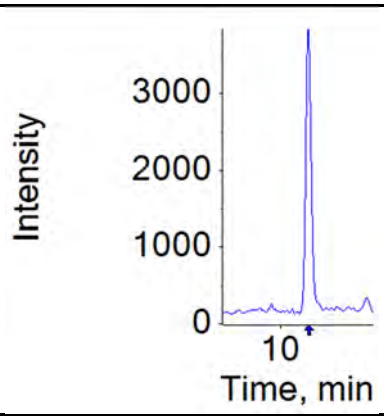


Compound Name:	26-Dinitrotoluene-d3
Expected RT:	19.50
Actual RT:	19.50
Area Counts:	37717.045
Integration Type:	Valley
Amount:	10.0

Please refer to Form 8 of the data package for a complete list of Internal Standard Recoveries.

Relative Retention Time (RRT) is used by the laboratory to establish peak identity. The RRT of each target analyte is calculated using the retention time of the corresponding internal standard. The RRT of each analyte in a sample must be within 2.0 of the analyte's calculated RRT in the ICV.

EXP122922010.wiff
XIBLK02

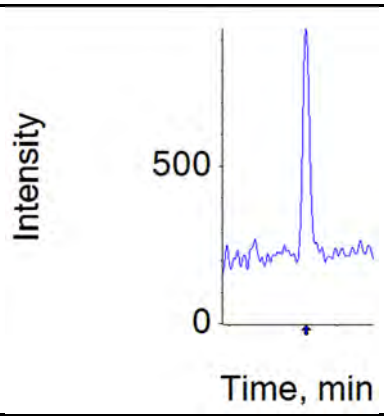


Compound Name: 135-Trinitrobenzene

Expected RT: 11.29
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922010.wiff
XIBLK02

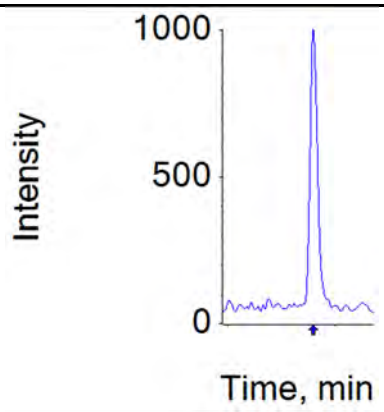


Compound Name: 13-Dinitrobenzene

Expected RT: 13.57
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922010.wiff
XIBLK02

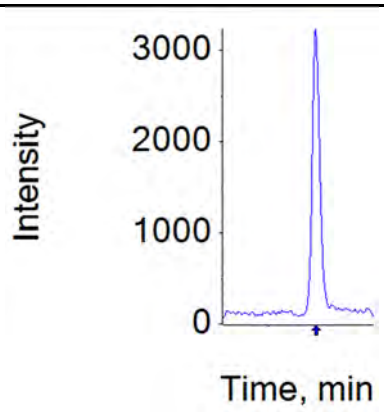


Compound Name: Tetryl

Expected RT: 14.00
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922010.wiff
XIBLK02

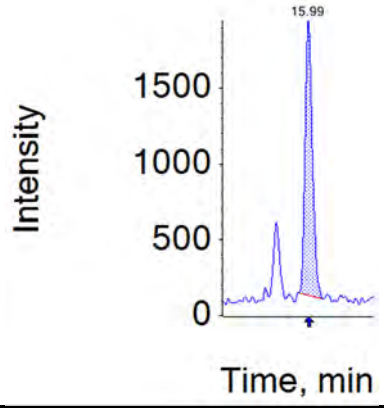


Compound Name: 246-Trinitrotoluene

Expected RT: 17.23
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922010.wiff
XIBLK02



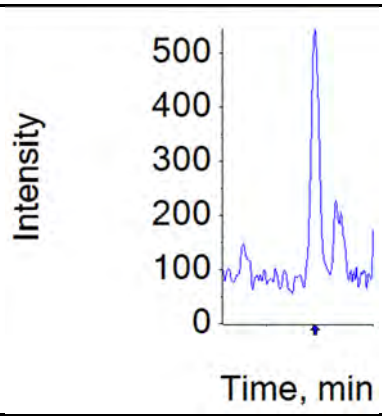
Compound Name: 34-dinitrotoluene

Expected RT: 15.99
Actual RT: 15.99
RRT: 0.82
Area Counts: 42354.334
Integration Type:Baseline

Amount: 2.17
%Accuracy: N/A

EXP122922010.wiff

XIBLK02

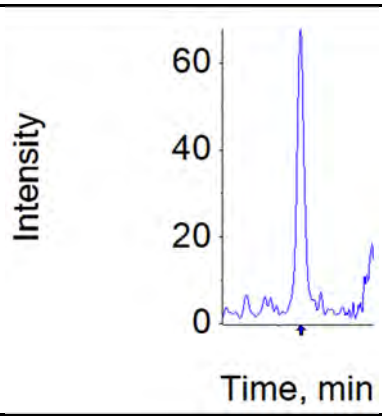


Compound Name: 4-Amino-26-dinitrotoluene

Expected RT: 17.28
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922010.wiff
XIBLK02

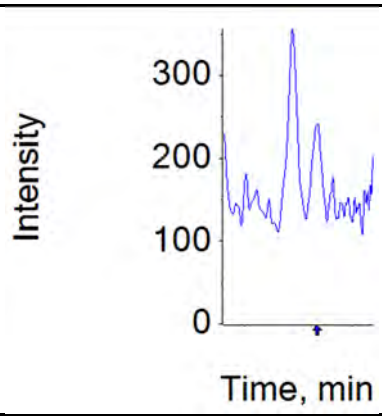


Compound Name: PETN

Expected RT: 26.02
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922010.wiff
XIBLK02

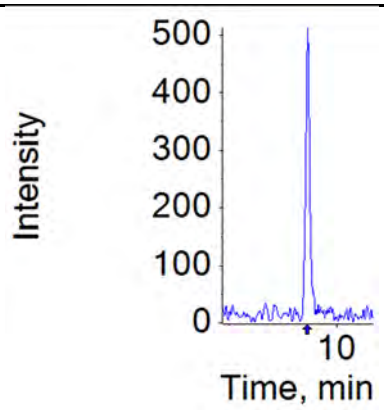


Compound Name: 2-Amino-46-dinitrotoluene

Expected RT: 18.37
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922010.wiff
XIBLK02

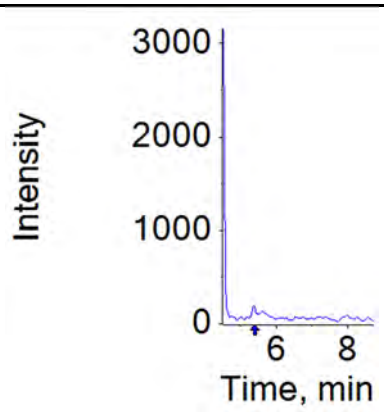


Compound Name: TATB

Expected RT: 8.63
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922010.wiff
XIBLK02

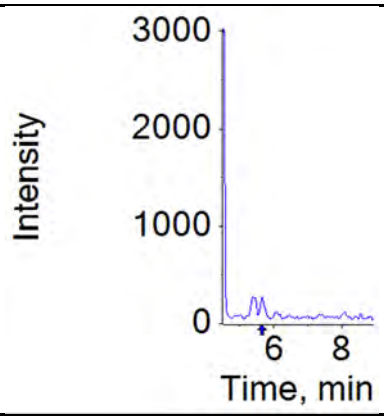


Compound Name: 26-Diamino-4-nitrotoluene

Expected RT: 5.38
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922010.wiff
XIBLK02

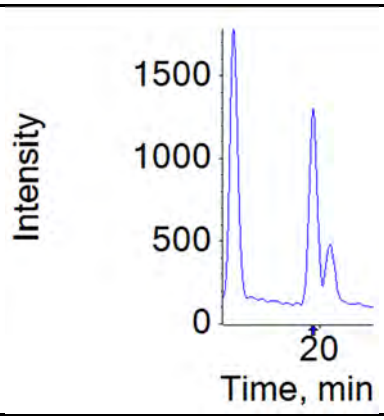


Compound Name: 24-Diamino-6-nitrotoluene

Expected RT: 5.64
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922010.wiff
XIBLK02

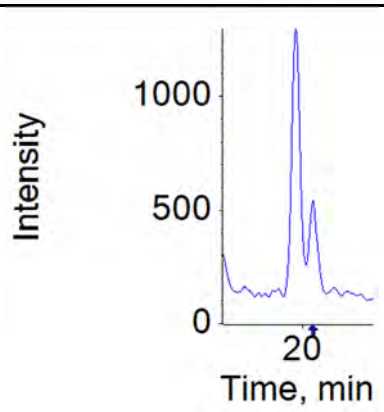


Compound Name: 26-dinitrotoluene

Expected RT: 19.69
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922010.wiff
XIBLK02

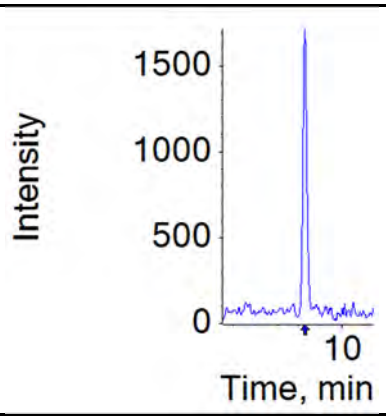


Compound Name: 24-dinitrotoluene

Expected RT: 20.48
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922010.wiff
XIBLK02

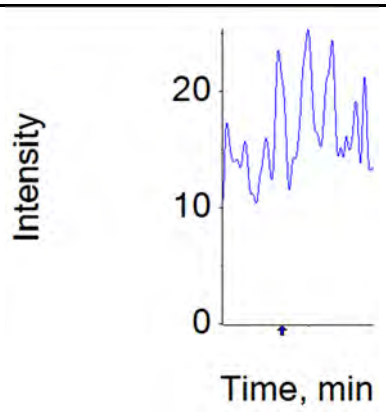


Compound Name: RDX

Expected RT: 8.26
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922010.wiff
XIBLK02

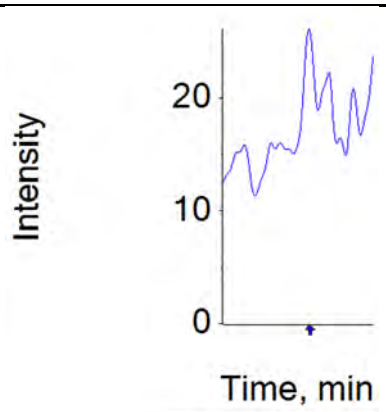


Compound Name: 2-Nitrotoluene

Expected RT: 23.75
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922010.wiff
XIBLK02



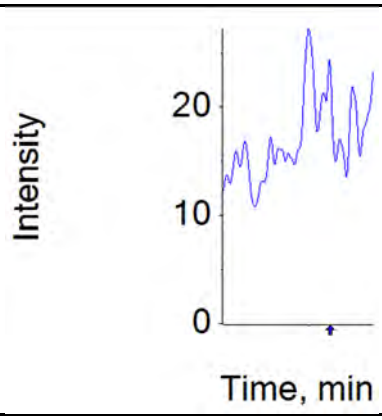
Compound Name: 4-Nitrotoluene

Expected RT: 25.04
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922010.wiff

XIBLK02

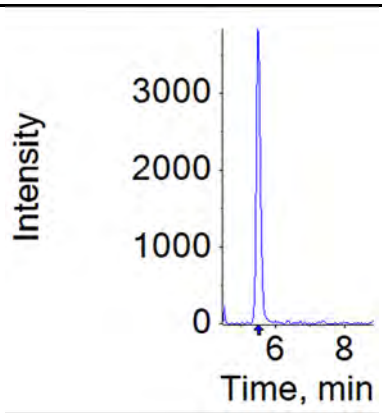


Compound Name: 3-Nitrotoluene

Expected RT: 26.01
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922010.wiff
XIBLK02

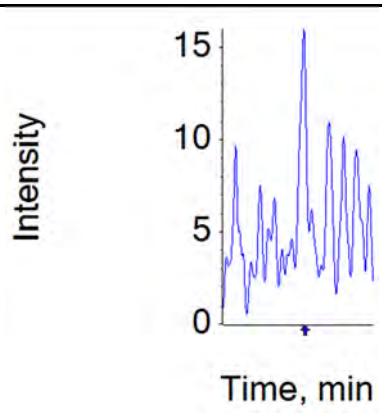


Compound Name: HMX

Expected RT: 5.51
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922010.wiff
XIBLK02

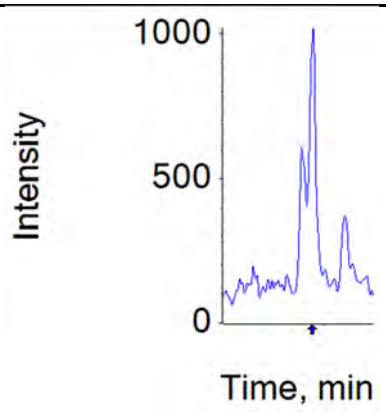


Compound Name: Nitrobenzene

Expected RT: 15.21
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922010.wiff
XIBLK02

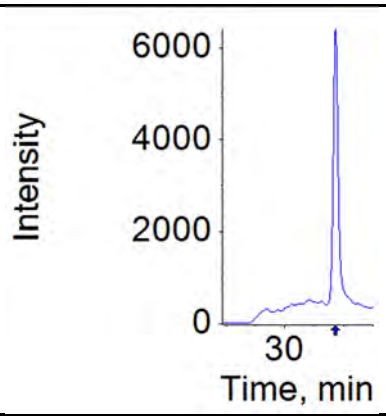


Compound Name: 35-Dinitroaniline

Expected RT: 14.45
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922010.wiff
XIBLK02

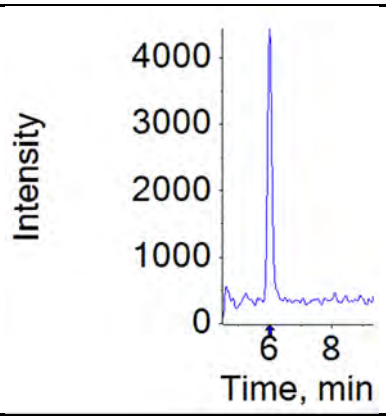


Compound Name: tris(o-cresyl)phosphate

Expected RT: 31.72
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922010.wiff
XIBLK02

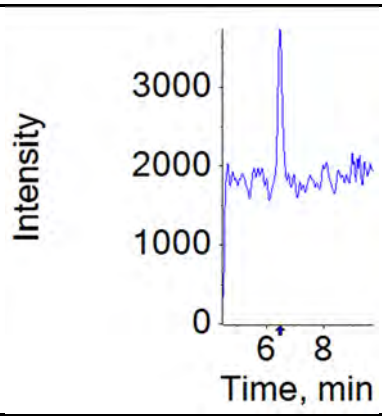


Compound Name: TNX

Expected RT: 5.99
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922010.wiff
XIBLK02

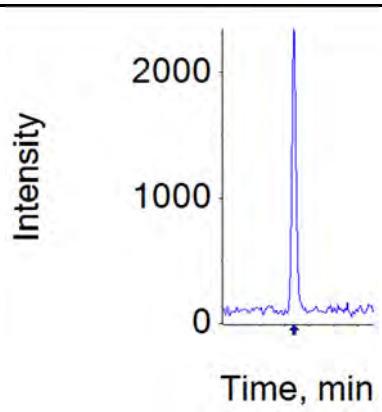


Compound Name: DNX

Expected RT: 6.48
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922010.wiff
XIBLK02

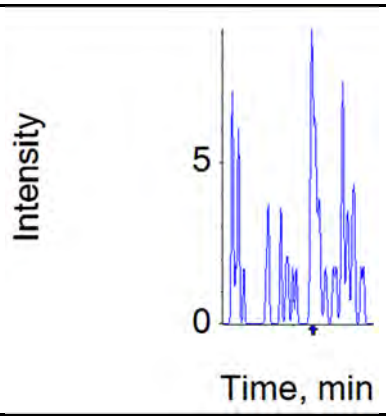


Compound Name: MNX

Expected RT: 7.38
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922010.wiff
XIBLK02



Compound Name: Nitroglycerin

Expected RT: 15.88
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC **GEL Job No(SDG):** 2023-289

Lab Code: GEL **Lab Sample ID:** XIBLK03

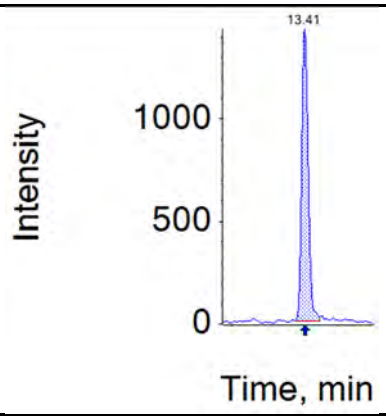
Analysis Date: 29-DEC-22 23:03 **GEL Data File:** EXP122922013.wiff

Instrument ID: LCMSMS5 **Column:** Ultracarb Phenomenex 5u ODS (20)

Compound	True	Found (ug/L)
2,4,6-Trinitrotoluene	0	0
3,4-Dinitrotoluene	0	0
RDX	0	0
HMX	0	0

JISB
01/01/2023

Data File	EXP122922013.wiff	Acquisition Date	12/29/2022 23:03:50
Sample Name	XIBLK03	Acquisition Method	explosivesFull2.dam
Batch|Dilution|Analyst	|1|JLS	Result Table	12292022
Procedure Code	LCMSEXP_B	Sample Type	Unknown



Compound Name: 13-Dinitrobenzene-d4

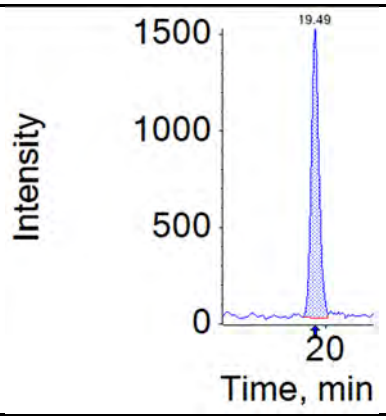
Expected RT: 13.42

Actual RT: 13.41

Area Counts: 29529.524

Integration Type: Valley

Amount: 10.0



Compound Name: 26-Dinitrotoluene-d3

Expected RT: 19.50

Actual RT: 19.49

Area Counts: 37157.494

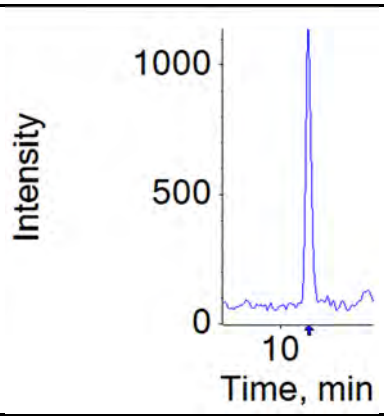
Integration Type: Valley

Amount: 10.0

Please refer to Form 8 of the data package for a complete list of Internal Standard Recoveries.

Relative Retention Time (RRT) is used by the laboratory to establish peak identity. The RRT of each target analyte is calculated using the retention time of the corresponding internal standard. The RRT of each analyte in a sample must be within 2.0 of the analyte's calculated RRT in the ICV.

EXP122922013.wiff
XIBLK03

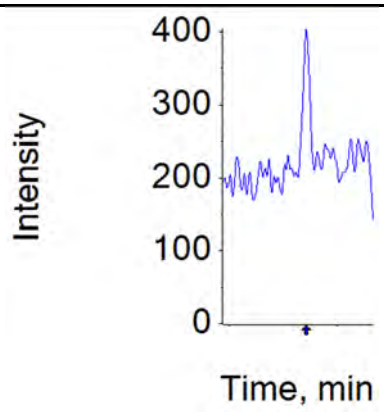


Compound Name: 135-Trinitrobenzene

Expected RT: 11.29
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922013.wiff
XIBLK03

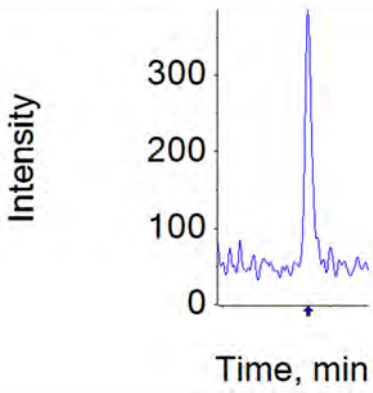


Compound Name: 13-Dinitrobenzene

Expected RT: 13.57
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922013.wiff
XIBLK03

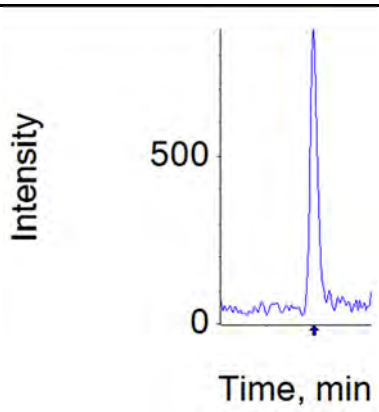


Compound Name: Tetryl

Expected RT: 14.00
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922013.wiff
XIBLK03

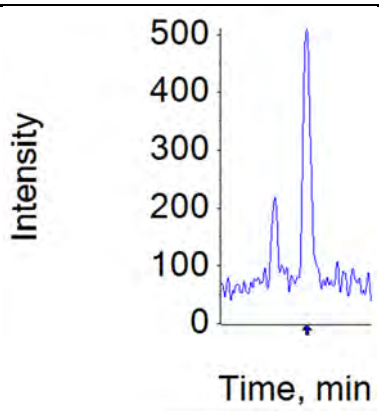


Compound Name: 246-Trinitrotoluene

Expected RT: 17.23
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922013.wiff
XIBLK03



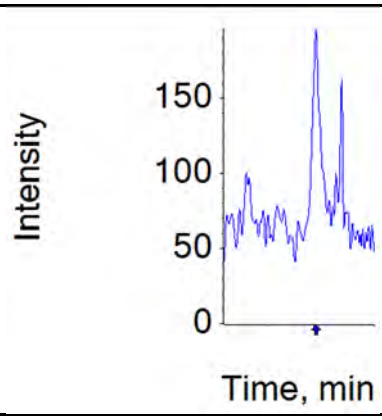
Compound Name: 34-dinitrotoluene

Expected RT: 15.99
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922013.wiff

XIBLK03

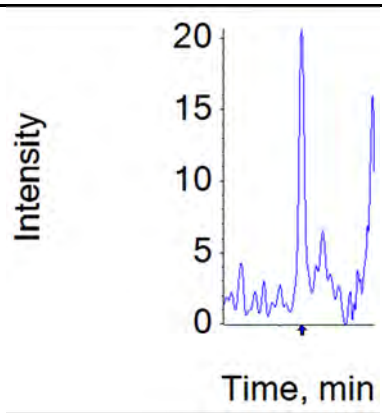


Compound Name: 4-Amino-26-dinitrotoluene

Expected RT: 17.28
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922013.wiff
XIBLK03

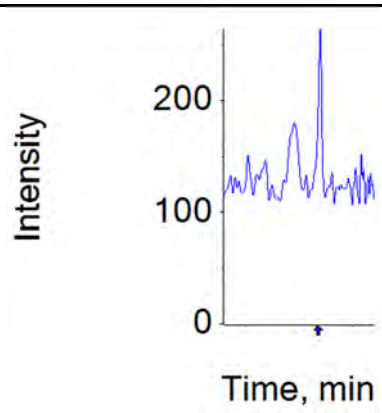


Compound Name: PETN

Expected RT: 26.02
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922013.wiff
XIBLK03

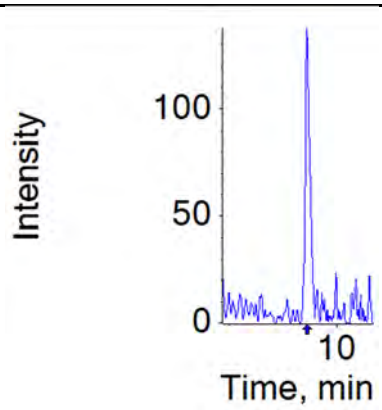


Compound Name: 2-Amino-46-dinitrotoluene

Expected RT: 18.37
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922013.wiff
XIBLK03

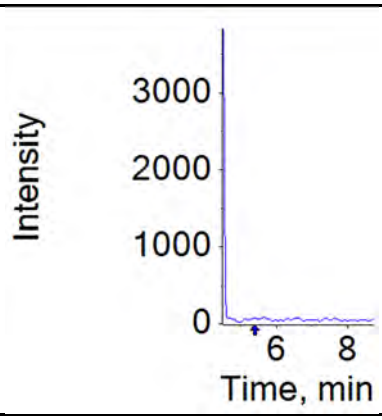


Compound Name: TATB

Expected RT: 8.63
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922013.wiff
XIBLK03

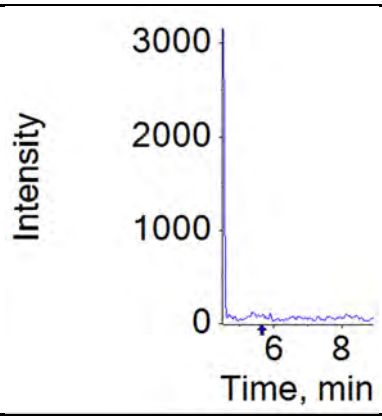


Compound Name: 26-Diamino-4-nitrotoluene

Expected RT: 5.38
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922013.wiff
XIBLK03

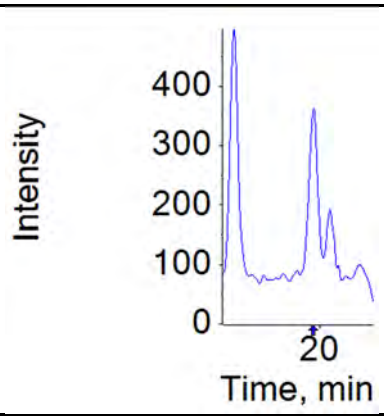


Compound Name: 24-Diamino-6-nitrotoluene

Expected RT: 5.64
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922013.wiff
XIBLK03

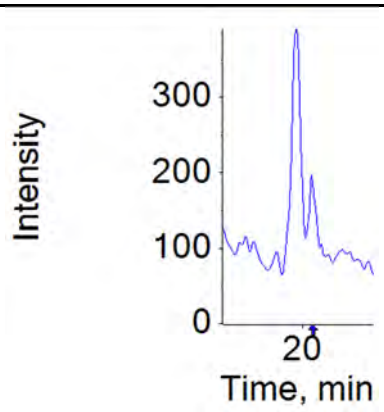


Compound Name: 26-dinitrotoluene

Expected RT: 19.69
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922013.wiff
XIBLK03

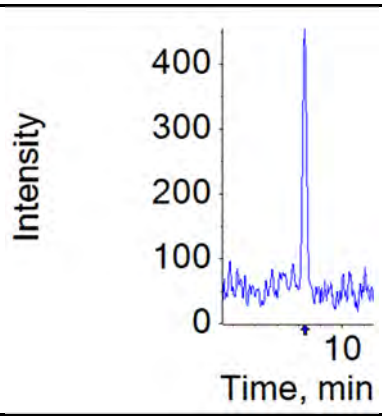


Compound Name: 24-dinitrotoluene

Expected RT: 20.48
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922013.wiff
XIBLK03

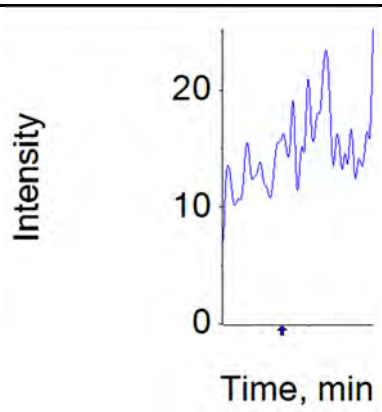


Compound Name: RDX

Expected RT: 8.26
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922013.wiff
XIBLK03

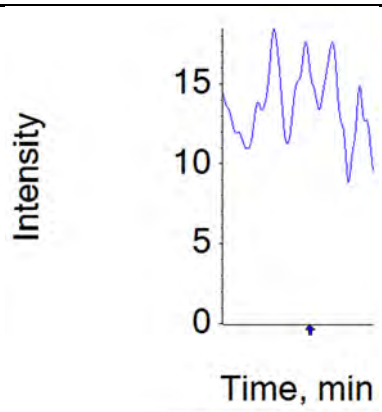


Compound Name: 2-Nitrotoluene

Expected RT: 23.75
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922013.wiff
XIBLK03



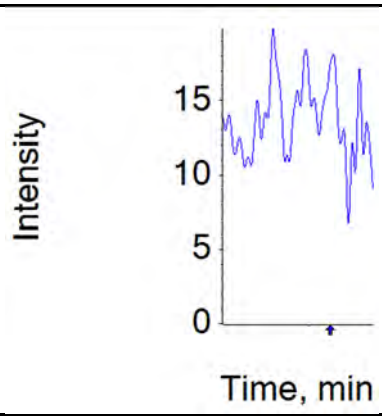
Compound Name: 4-Nitrotoluene

Expected RT: 25.04
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922013.wiff

XIBLK03

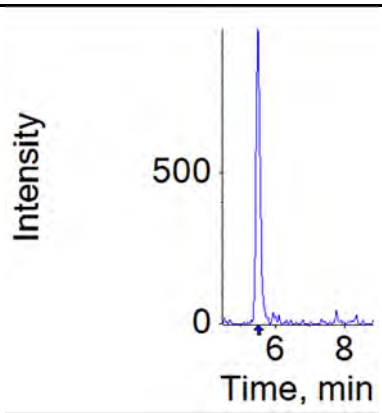


Compound Name: 3-Nitrotoluene

Expected RT: 26.01
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922013.wiff
XIBLK03

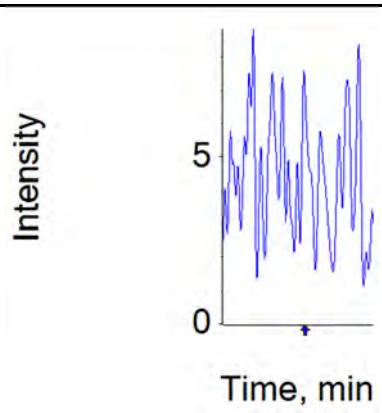


Compound Name: HMX

Expected RT: 5.51
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922013.wiff
XIBLK03

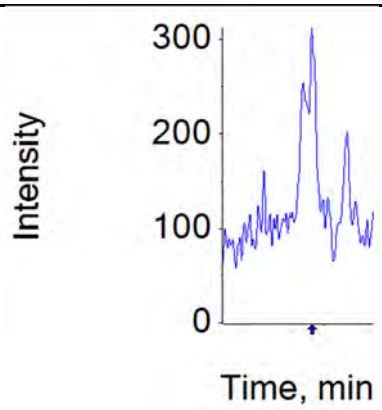


Compound Name: Nitrobenzene

Expected RT: 15.21
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922013.wiff
XIBLK03

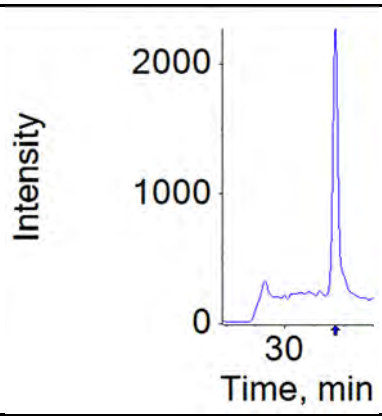


Compound Name: 35-Dinitroaniline

Expected RT: 14.45
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922013.wiff
XIBLK03

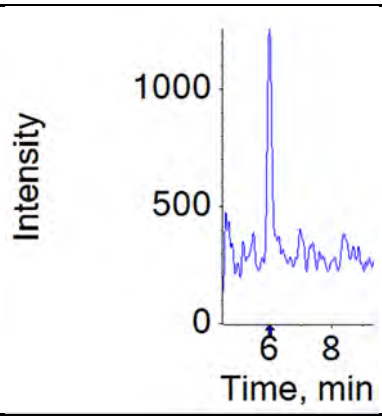


Compound Name: tris(o-cresyl)phosphate

Expected RT: 31.72
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922013.wiff
XIBLK03

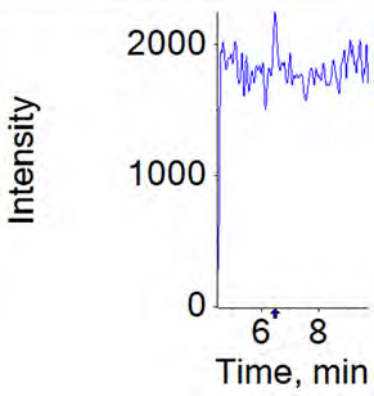


Compound Name: TNX

Expected RT: 5.99
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922013.wiff
XIBLK03

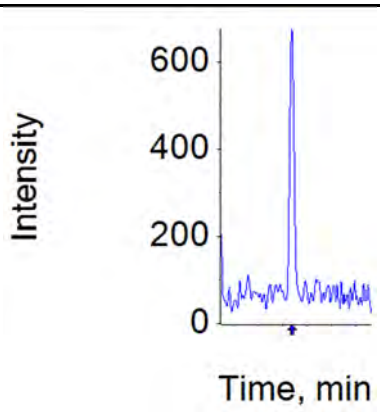


Compound Name: DNX

Expected RT: 6.48
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922013.wiff
XIBLK03

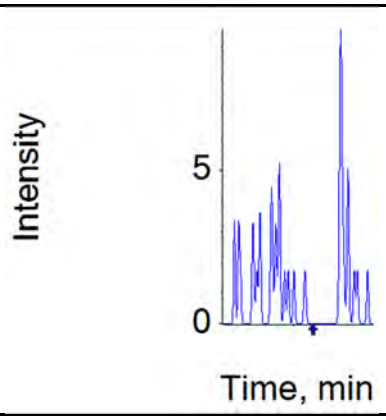


Compound Name: MNX

Expected RT: 7.38
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922013.wiff
XIBLK03



Compound Name: Nitroglycerin

Expected RT: 15.88
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC **GEL Job No(SDG):** 2023-289

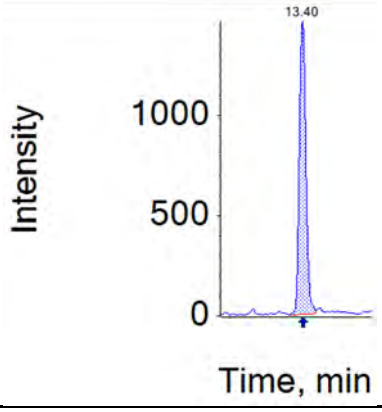
Lab Code: GEL **Lab Sample ID:** XIBLK04

Analysis Date: 30-DEC-22 06:47 **GEL Data File:** EXP122922026.wiff

Instrument ID: LCMSMS5 **Column:** Ultracarb Phenomenex 5u ODS (20)

Compound	True	Found (ug/L)
2,4,6-Trinitrotoluene	0	0
3,4-Dinitrotoluene	0	0
RDX	0	0
HMX	0	0

Data File	EXP122922026.wiff	Acquisition Date	12/30/2022 6:47:19
Sample Name	XIBLK04	Acquisition Method	explosivesFull2.dam
Batch|Dilution|Analyst	|1|CWW	Result Table	12292022
Procedure Code	LCMSEXP_B	Sample Type	Unknown



Compound Name: 13-Dinitrobenzene-d4

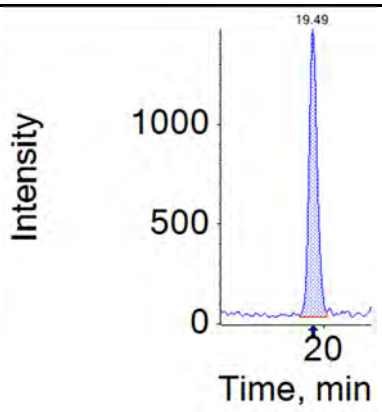
Expected RT: 13.42

Actual RT: 13.40

Area Counts: 30848.621

Integration Type: Valley

Amount: 10.0



Compound Name: 26-Dinitrotoluene-d3

Expected RT: 19.50

Actual RT: 19.49

Area Counts: 37984.308

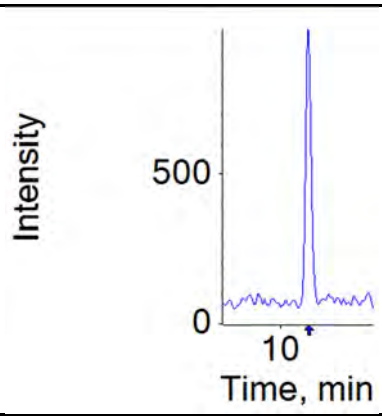
Integration Type: Valley

Amount: 10.0

Please refer to Form 8 of the data package for a complete list of Internal Standard Recoveries.

Relative Retention Time (RRT) is used by the laboratory to establish peak identity. The RRT of each target analyte is calculated using the retention time of the corresponding internal standard. The RRT of each analyte in a sample must be within 2.0 of the analyte's calculated RRT in the ICV.

EXP122922026.wiff
XIBLK04

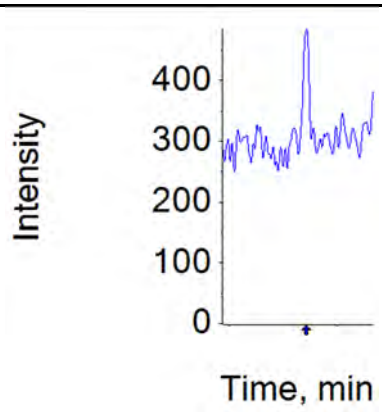


Compound Name: 135-Trinitrobenzene

Expected RT: 11.29
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922026.wiff
XIBLK04

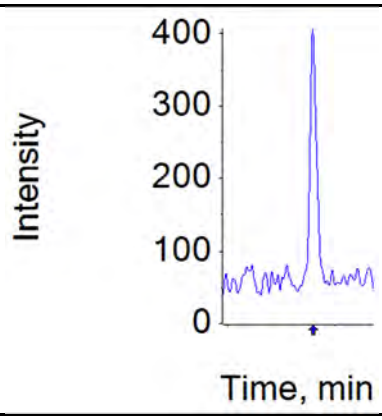


Compound Name: 13-Dinitrobenzene

Expected RT: 13.57
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922026.wiff
XIBLK04

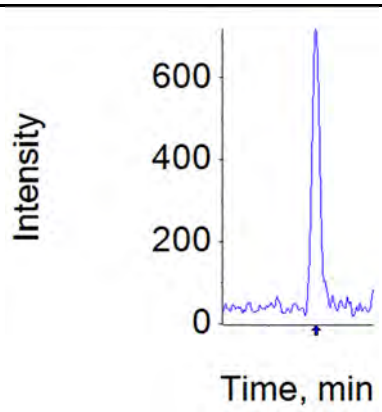


Compound Name: Tetryl

Expected RT: 14.00
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922026.wiff
XIBLK04

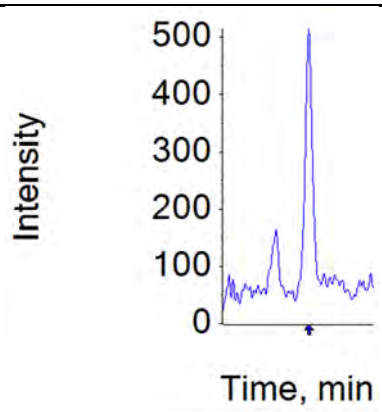


Compound Name: 246-Trinitrotoluene

Expected RT: 17.23
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922026.wiff
XIBLK04



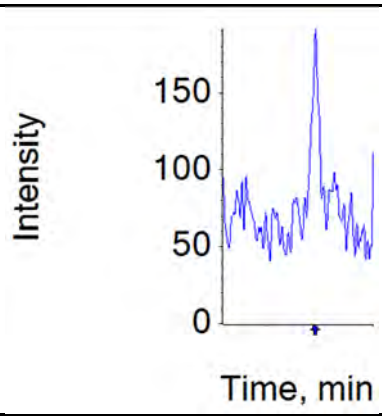
Compound Name: 34-dinitrotoluene

Expected RT: 15.99
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922026.wiff

XIBLK04

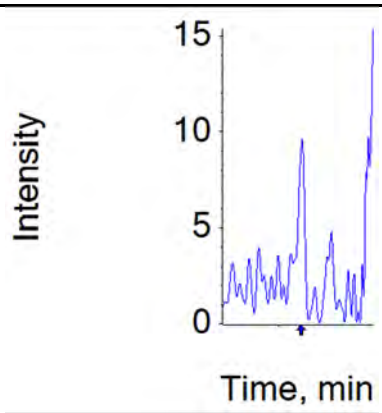


Compound Name: 4-Amino-26-dinitrotoluene

Expected RT: 17.28
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922026.wiff
XIBLK04

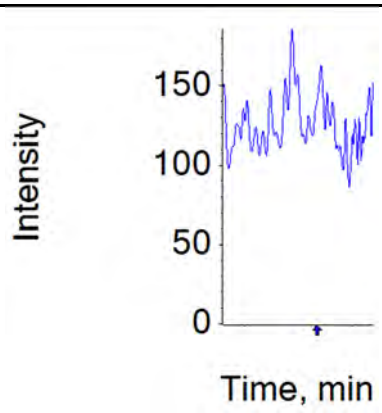


Compound Name: PETN

Expected RT: 26.02
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922026.wiff
XIBLK04

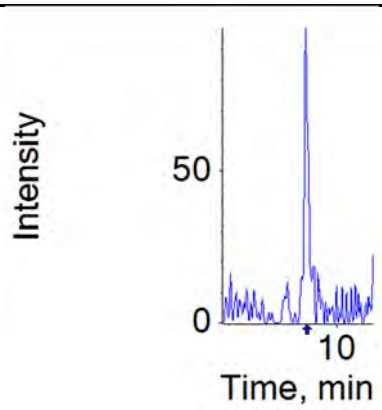


Compound Name: 2-Amino-46-dinitrotoluene

Expected RT: 18.37
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922026.wiff
XIBLK04

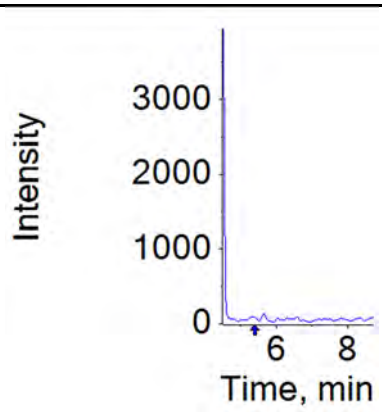


Compound Name: TATB

Expected RT: 8.63
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922026.wiff
XIBLK04

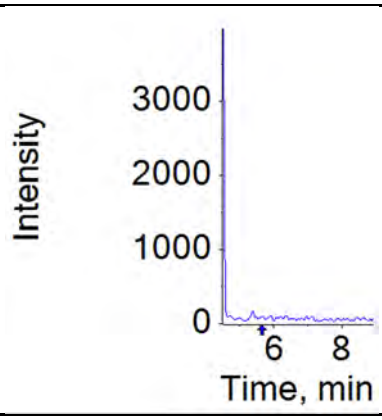


Compound Name: 26-Diamino-4-nitrotoluene

Expected RT: 5.38
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922026.wiff
XIBLK04

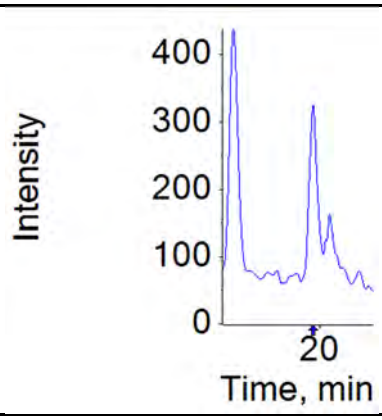


Compound Name: 24-Diamino-6-nitrotoluene

Expected RT: 5.64
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922026.wiff
XIBLK04

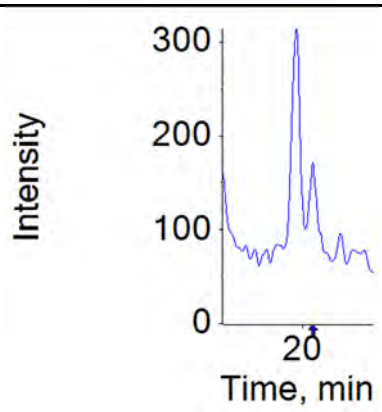


Compound Name: 26-dinitrotoluene

Expected RT: 19.69
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922026.wiff
XIBLK04

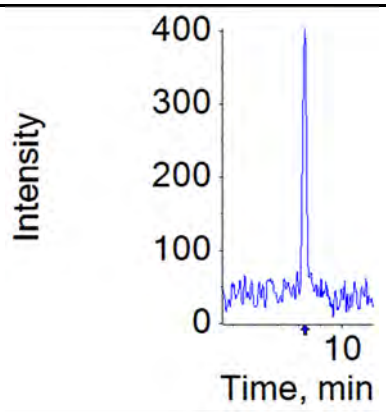


Compound Name: 24-dinitrotoluene

Expected RT: 20.48
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922026.wiff
XIBLK04

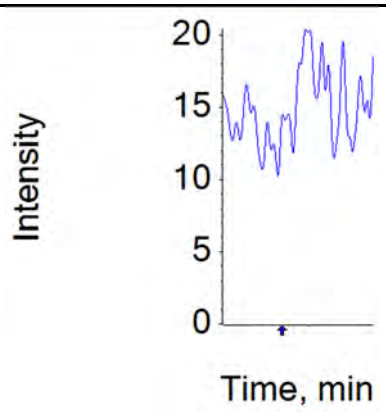


Compound Name: RDX

Expected RT: 8.26
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922026.wiff
XIBLK04

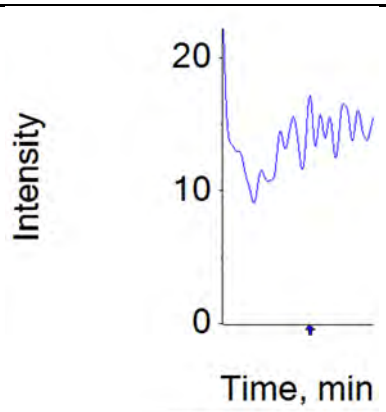


Compound Name: 2-Nitrotoluene

Expected RT: 23.75
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922026.wiff
XIBLK04



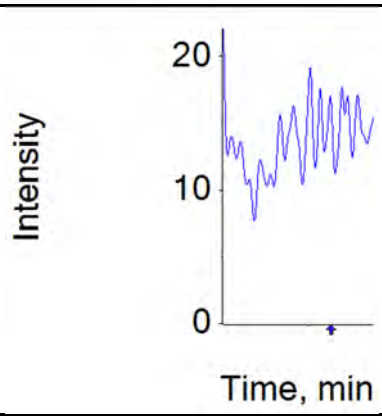
Compound Name: 4-Nitrotoluene

Expected RT: 25.04
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922026.wiff

XIBLK04

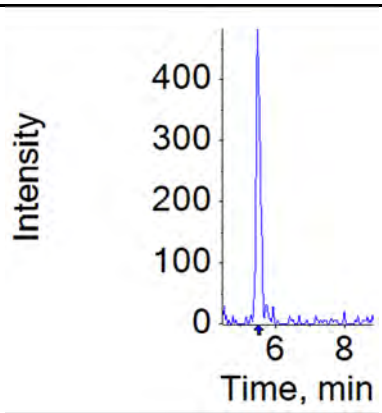


Compound Name: 3-Nitrotoluene

Expected RT: 26.01
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922026.wiff
XIBLK04

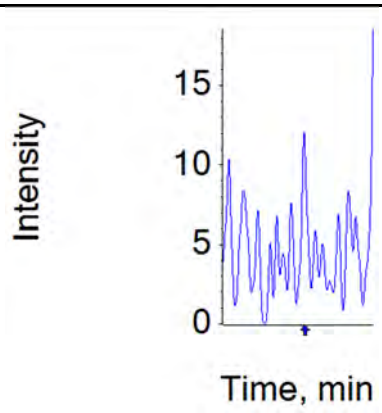


Compound Name: HMX

Expected RT: 5.51
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922026.wiff
XIBLK04

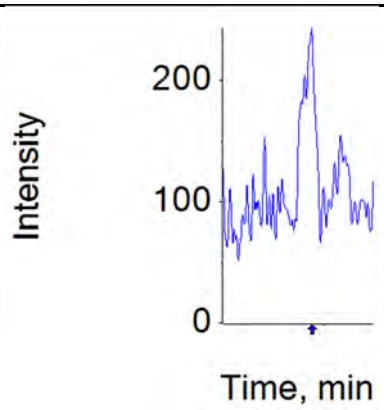


Compound Name: Nitrobenzene

Expected RT: 15.21
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922026.wiff
XIBLK04

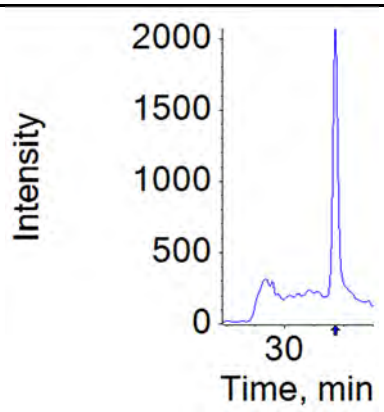


Compound Name: 35-Dinitroaniline

Expected RT: 14.45
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922026.wiff
XIBLK04

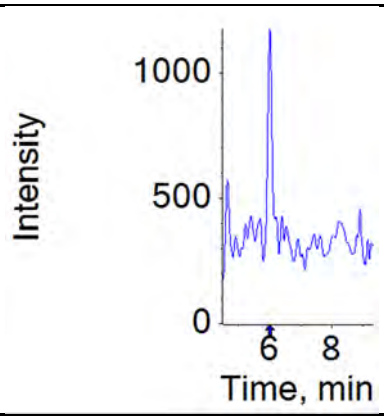


Compound Name: tris(o-cresyl)phosphate

Expected RT: 31.72
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922026.wiff
XIBLK04

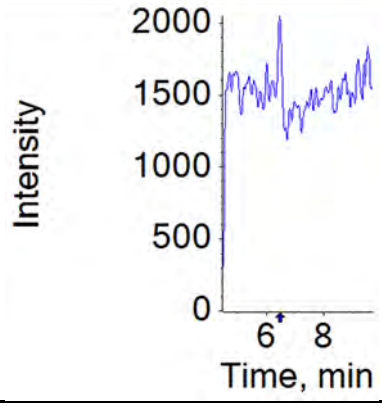


Compound Name: TNX

Expected RT: 5.99
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922026.wiff
XIBLK04

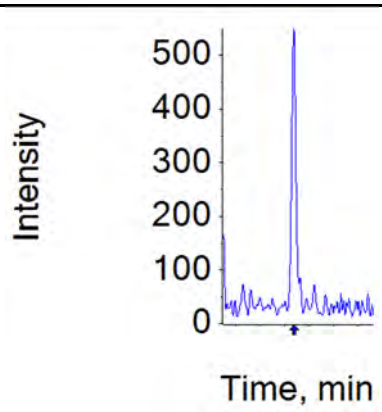


Compound Name: DNX

Expected RT: 6.48
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922026.wiff
XIBLK04

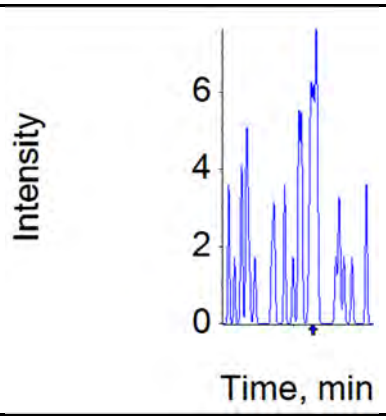


Compound Name: MNX

Expected RT: 7.38
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

EXP122922026.wiff
XIBLK04



Compound Name: Nitroglycerin

Expected RT: 15.88
Actual RT: N/A
RRT: N/A
Area Counts: N/A
Integration Type:N/A

Amount: N/A
%Accuracy: N/A

Miscellaneous

Prep Logbook

Nitroaromatics and Nitramines by High Performance Liquid Chromatography (HPLC)

Batch ID: 2358904 **Verified by:** _____
Analyst: Joshua Burnett
Method: SW846 3535A

Lab SOP: GL-OA-E-033 REV# 25
Instrument: LCMSMS Manual Instrument

Sample ID	Prep Date	Initial Wt (g)	Final Wt (g)	Initial Volume (mL)	Final Volume (mL)	Prepped Factor (mL/mL)
1205276411 MB	21-DEC-2022 07:42:00	1433.22	433.22	1000	5	0.005
1205276412 LCS	21-DEC-2022 07:42:00	1433.96	433.96	1000	5	0.005
604449002	21-DEC-2022 07:42:00	1413.71	448.34	965.37	5	0.00518
604449006	21-DEC-2022 07:42:00	1459.97	450.79	1009.18	5	0.00495
604449010	21-DEC-2022 07:42:00	1550.74	449.25	1101.49	5	0.00454
604449014	21-DEC-2022 07:42:00	1465.13	449.48	1015.65	5	0.00492
1205276413 MS (604449014)	21-DEC-2022 07:42:00	1502.1	448.93	1053.17	5	0.00475
1205276414 MSD (604449014)	21-DEC-2022 07:42:00	1480	450.65	1029.35	5	0.00486
604449018	21-DEC-2022 07:42:00	1419.44	451.19	968.25	5	0.00516
604463003	21-DEC-2022 07:42:00	1481.95	457.93	1024.02	5	0.00488
1205276794 MS (604463003)	21-DEC-2022 07:42:00	1443.74	457.84	985.9	5	0.00507
1205276795 MSD (604463003)	21-DEC-2022 07:42:00	1449.8	457.93	991.87	5	0.00504
604463005	21-DEC-2022 07:42:00	1465.17	458.99	1006.18	5	0.00497
604463007	21-DEC-2022 07:42:00	1406.97	450.72	956.25	5	0.00523
604463009	21-DEC-2022 07:42:00	1401.71	444.16	957.55	5	0.00522
604463011	21-DEC-2022 07:42:00	1413.62	446.23	967.39	5	0.00517
604463013	21-DEC-2022 07:42:00	1399.23	443.82	955.41	5	0.00523
604463014	21-DEC-2022 07:42:00	1427.29	458.63	968.66	5	0.00516

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1205276412	8321 Explosives LCS	IXX221130-01	.05	mL
LCS	1205276412	8321 LANL Explosives Mix 10mg/L	UXX221021-01.1	.5	mL
MS	1205276413	8321 Explosives LCS	IXX221130-01	.05	mL
MS	1205276794	8321 Explosives LCS	IXX221130-01	.05	mL
MS	1205276794	8321 LANL Explosives Mix 10mg/L	UXX221021-01.1	.5	mL
MSD	1205276414	8321 Explosives LCS	IXX221130-01	.05	mL
MSD	1205276795	8321 Explosives LCS	IXX221130-01	.05	mL
MSD	1205276795	8321 LANL Explosives Mix 10mg/L	UXX221021-01.1	.5	mL
RGNT	All	TYPE I Water for HPLC	3648249.1	1000	mL
SURR	All	3,4-Dinitrotoluene (8330 Surr.) 100ppm	IXP221215-01	.025	mL
REGNT	All	ACN Optima LC/MS Grade 4L	3623244	5	mL

Comments:

Cartridge lot #: 005332136A
Verified by:: CWW

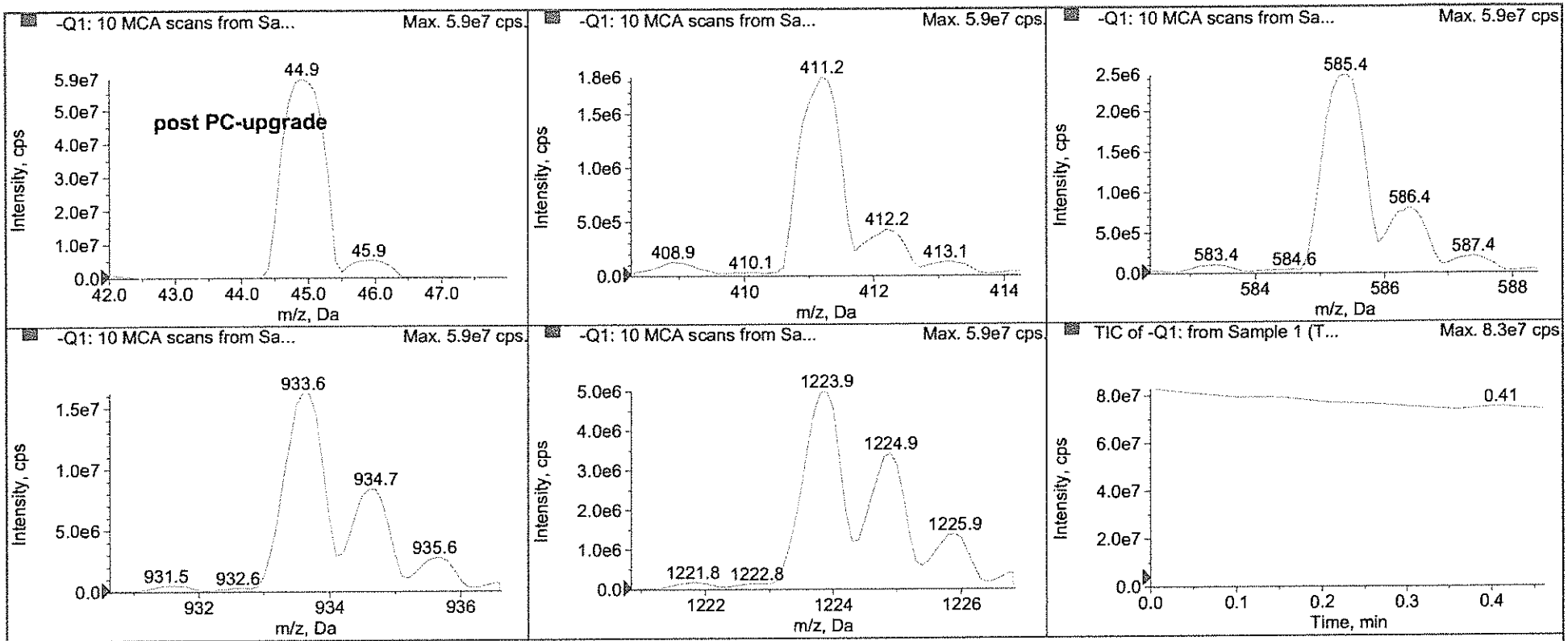
GEL ORGANIC RUN LOG INSTRUMENT ID: LCMSMS#5

Date: 12/29/2022 Method: 8330B / DOD QSM 5.3
Extr. Injection Volume: 20uL Int Std: IXX221219-01
Sequence Number: 122922 Mobile Phase Lot#: 3654443/ 3645223 SOP: GL-OA-E-056 & GL-OA-E-068
Int. Cal. Date: 12/29/2022

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXP122922001.wiff	XIBLK01	JLS	12/29/2022 15:55			1			B
EXP122922002.wiff	XIBLK01	JLS	12/29/2022 16:31			1			B
EXP122922003.wiff	WXXICAL-38	JLS	12/29/2022 17:07			1			I
EXP122922004.wiff	WXXICAL-39	JLS	12/29/2022 17:42			1			I
EXP122922005.wiff	WXXICAL-40	JLS	12/29/2022 18:18			1			I
EXP122922006.wiff	WXXICAL-41	JLS	12/29/2022 18:54			1			I
EXP122922007.wiff	WXXICAL-42	JLS	12/29/2022 19:29			1			I
EXP122922008.wiff	WXXICAL-43	JLS	12/29/2022 20:05			1			I
EXP122922009.wiff	WXXICAL-47	JLS	12/29/2022 20:41			1			I
EXP122922010.wiff	XIBLK02	JLS	12/29/2022 21:16			1			B
EXP122922011.wiff	WXXIRA	JLS	12/29/2022 21:52			1			C
EXP122922012.wiff	WXXICV	JLS	12/29/2022 22:28			1			C
EXP122922013.wiff	XIBLK03	JLS	12/29/2022 23:03			1			B
EXP122922014.wiff	WXXCRI	JLS	12/29/2022 23:39			1			C
EXP122922015.wiff	1205276411	JLS	12/30/2022 0:15	2358905	VARIOUS	2	VARIOUS		L
EXP122922016.wiff	1205276412	JLS	12/30/2022 0:50	2358905	VARIOUS	2	VARIOUS		L
EXP122922017.wiff	604449002	JLS	12/30/2022 1:26	2358905	2023-289	2	TNSL		L
EXP122922018.wiff	604449006	JLS	12/30/2022 2:02	2358905	2023-289	2	TNSL		L
EXP122922019.wiff	604449010	JLS	12/30/2022 2:37	2358905	2023-289	2	TNSL		L
EXP122922020.wiff	604449014	JLS	12/30/2022 3:13	2358905	2023-289	2	TNSL		L
EXP122922021.wiff	1205276413	JLS	12/30/2022 3:49	2358905	2023-289	2	TNSL		L
EXP122922022.wiff	1205276414	JLS	12/30/2022 4:24	2358905	2023-289	2	TNSL		L
EXP122922023.wiff	604449018	JLS	12/30/2022 5:00	2358905	2023-289	2	TNSL		L
EXP122922024.wiff	604463003	JLS	12/30/2022 5:36	2358905	N3B-2023-786	2	N3BL	DUSE BRACKETING CCV FAILURE	L
EXP122922025.wiff	WXXCCV	JLS	12/30/2022 6:11			1			C
EXP122922026.wiff	XIBLK04	JLS	12/30/2022 6:47			1			B
EXP122922027.wiff	WXXCRI	JLS	12/30/2022 7:23			1			C
EXP122922028.wiff	1205276794	JLS	12/30/2022 7:58	2358905	N3B-2023-786	2	N3BL	DUSE BRACKETING CCV FAILURE	L
EXP122922029.wiff	1205276795	JLS	12/30/2022 8:34	2358905	N3B-2023-786	2	N3BL	DUSE BRACKETING CCV FAILURE	L
EXP122922030.wiff	604463005	JLS	12/30/2022 9:09	2358905	N3B-2023-786	2	N3BL	DUSE BRACKETING CCV FAILURE	L
EXP122922031.wiff	604463007	JLS	12/30/2022 9:45	2358905	N3B-2023-786	2	N3BL	DUSE BRACKETING CCV FAILURE	L
EXP122922032.wiff	604463009	JLS	12/30/2022 10:21	2358905	N3B-2023-786	2	N3BL	DUSE BRACKETING CCV FAILURE	L
EXP122922033.wiff	604463011	JLS	12/30/2022 10:56	2358905	N3B-2023-786	2	N3BL	DUSE BRACKETING CCV FAILURE	L

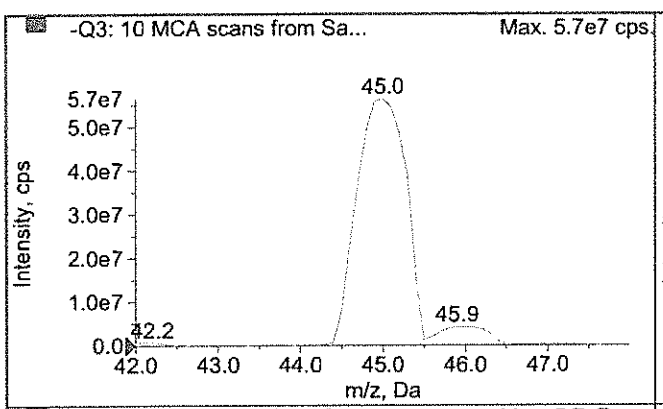
EXP122922034.wiff	WXXCCV	JLS	12/30/2022 11:32			1		C
EXP122922035.wiff	XIBLK05	JLS	12/30/2022 12:08			1		B
EXP122922036.wiff	WXXCRI	JLS	12/30/2022 12:43			1		C
EXP122922037.wiff	604463003	JLS	12/30/2022 13:19	2358905	N3B-2023-786	2	N3BL	L
EXP122922038.wiff	1205276794	JLS	12/30/2022 13:55	2358905	N3B-2023-786	2	N3BL	L
EXP122922039.wiff	1205276795	JLS	12/30/2022 14:30	2358905	N3B-2023-786	2	N3BL	L
EXP122922040.wiff	604463005	JLS	12/30/2022 15:06	2358905	N3B-2023-786	2	N3BL	L
EXP122922041.wiff	604463007	JLS	12/30/2022 15:42	2358905	N3B-2023-786	2	N3BL	L
EXP122922042.wiff	604463009	JLS	12/30/2022 16:17	2358905	N3B-2023-786	2	N3BL	L
EXP122922043.wiff	604463011	JLS	12/30/2022 16:53	2358905	N3B-2023-786	2	N3BL	L
EXP122922044.wiff	604463013	JLS	12/30/2022 17:29	2358905	N3B-2023-786	2	N3BL	L
EXP122922045.wiff	604463014	JLS	12/30/2022 18:04	2358905	N3B-2023-786	2	N3BL	L
EXP122922046.wiff	WXXCCV	JLS	12/30/2022 18:40			1		C
EXP122922047.wiff	XIBLK06	JLS	12/30/2022 19:15			1		B
EXP122922048.wiff	WXXCRI	JLS	12/30/2022 19:51			1		C
EXP122922049.wiff	1205271669	JLS	12/30/2022 20:27	2356386	VARIOUS	2	N3BL	S
EXP122922050.wiff	1205271670	JLS	12/30/2022 21:02	2356386	VARIOUS	2	N3BL	S
EXP122922051.wiff	604110001	JLS	12/30/2022 21:38	2356386	N3B-2023-732	2	N3BL	S
EXP122922052.wiff	1205271671	JLS	12/30/2022 22:14	2356386	N3B-2023-732	2	N3BL	S
EXP122922053.wiff	1205271672	JLS	12/30/2022 22:49	2356386	N3B-2023-732	2	N3BL	S
EXP122922054.wiff	604112002	JLS	12/30/2022 23:25	2356386	N3B-2023-657	2	N3BL	S
EXP122922055.wiff	604112003	JLS	12/31/2022 0:01	2356386	N3B-2023-657	2	N3BL	S
EXP122922056.wiff	604112004	JLS	12/31/2022 0:36	2356386	N3B-2023-657	2	N3BL	S
EXP122922057.wiff	604113001	JLS	12/31/2022 1:12	2356386	N3B-2023-733	2	N3BL	S
EXP122922058.wiff	604113002	JLS	12/31/2022 1:48	2356386	N3B-2023-733	2	N3BL	S
EXP122922059.wiff	WXXCCV	JLS	12/31/2022 2:23			1		C
EXP122922060.wiff	XIBLK07	JLS	12/31/2022 2:59			1		B
EXP122922061.wiff	WXXCRI	JLS	12/31/2022 3:35			1		C
EXP122922062.wiff	604113003	JLS	12/31/2022 4:10	2356386	N3B-2023-733	2	N3BL	S
EXP122922063.wiff	604113004	JLS	12/31/2022 4:46	2356386	N3B-2023-733	2	N3BL	S
EXP122922064.wiff	604113005	JLS	12/31/2022 5:22	2356386	N3B-2023-733	2	N3BL	S
EXP122922065.wiff	604113006	JLS	12/31/2022 5:57	2356386	N3B-2023-733	2	N3BL	S
EXP122922066.wiff	604113007	JLS	12/31/2022 6:33	2356386	N3B-2023-733	2	N3BL	S
EXP122922067.wiff	604113008	JLS	12/31/2022 7:09	2356386	N3B-2023-733	2	N3BL	S
EXP122922068.wiff	604113009	JLS	12/31/2022 7:44	2356386	N3B-2023-733	2	N3BL	S
EXP122922069.wiff	604113010	JLS	12/31/2022 8:20	2356386	N3B-2023-733	2	N3BL	S
EXP122922070.wiff	604121001	JLS	12/31/2022 8:55	2356386	N3B-2023-730	2	N3BL	S
EXP122922071.wiff	604121002	JLS	12/31/2022 9:31	2356386	N3B-2023-730	2	N3BL	S
EXP122922072.wiff	WXXCCV	JLS	12/31/2022 10:07			1		C
EXP122922073.wiff	XIBLK08	JLS	12/31/2022 10:42			1		B
EXP122922074.wiff	WXXCRI	JLS	12/31/2022 11:18			1		C

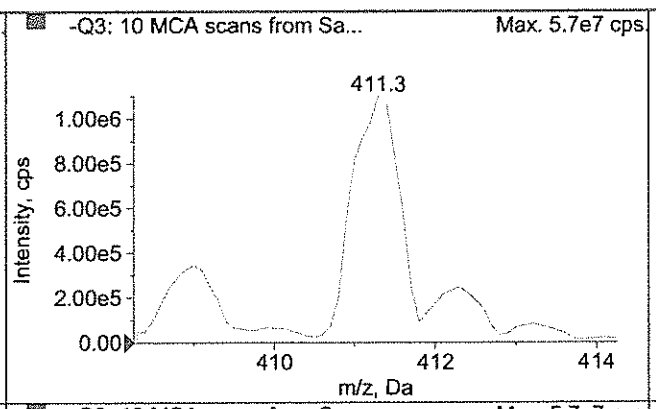
EXP122922075.wiff	604121003	JLS	12/31/2022 11:54	2356386	N3B-2023-730	2	N3BL		S
EXP122922076.wiff	604121004	JLS	12/31/2022 12:30	2356386	N3B-2023-730	2	N3BL		S
EXP122922077.wiff	604121005	JLS	12/31/2022 13:05	2356386	N3B-2023-730	2	N3BL		S
EXP122922078.wiff	604121006	JLS	12/31/2022 13:41	2356386	N3B-2023-730	2	N3BL		S
EXP122922079.wiff	1205277818	JLS	12/31/2022 14:17	2359673	VARIOUS	2	N3BL		S
EXP122922080.wiff	1205277819	JLS	12/31/2022 14:52	2359673	VARIOUS	2	N3BL		S
EXP122922081.wiff	604787001	JLS	12/31/2022 15:28	2359673	N3B-2023-796	2	N3BL		S
EXP122922082.wiff	1205277820	JLS	12/31/2022 16:04	2359673	N3B-2023-796	2	N3BL		S
EXP122922083.wiff	1205277821	JLS	12/31/2022 16:39	2359673	N3B-2023-796	2	N3BL		S
EXP122922084.wiff	604787002	JLS	12/31/2022 17:15	2359673	N3B-2023-796	2	N3BL		S
EXP122922085.wiff	WXXCCV	JLS	12/31/2022 17:51			1			C
EXP122922086.wiff	XIBLK09	JLS	12/31/2022 18:26			1			B
EXP122922087.wiff	WXXCRI	JLS	12/31/2022 19:02			1			C
EXP122922088.wiff	604787003	JLS	12/31/2022 19:38	2359673	N3B-2023-796	2	N3BL		S
EXP122922089.wiff	604787004	JLS	12/31/2022 20:13	2359673	N3B-2023-796	2	N3BL		S
EXP122922090.wiff	604787005	JLS	12/31/2022 20:49	2359673	N3B-2023-796	2	N3BL		S
EXP122922091.wiff	604787006	JLS	12/31/2022 21:25	2359673	N3B-2023-796	2	N3BL		S
EXP122922092.wiff	604787007	JLS	12/31/2022 22:00	2359673	N3B-2023-796	2	N3BL		S
EXP122922093.wiff	604787008	JLS	12/31/2022 22:36	2359673	N3B-2023-796	2	N3BL		S
EXP122922094.wiff	604787009	JLS	12/31/2022 23:12	2359673	N3B-2023-796	2	N3BL		S
EXP122922095.wiff	604787010	JLS	12/31/2022 23:47	2359673	N3B-2023-796	2	N3BL		S
EXP122922096.wiff	604787011	JLS	1/1/2023 0:23	2359673	N3B-2023-796	2	N3BL		S
EXP122922097.wiff	604787012	JLS	1/1/2023 0:59	2359673	N3B-2023-796	2	N3BL		S
EXP122922098.wiff	WXXCCV	JLS	1/1/2023 1:34			1			C
EXP122922099.wiff	XIBLK10	JLS	1/1/2023 2:10			1			B
EXP122922100.wiff	WXXCRI	JLS	1/1/2023 2:46			1			C
EXP122922101.wiff	604787013	JLS	1/1/2023 3:21	2359673	N3B-2023-796	2	N3BL		S
EXP122922102.wiff	604787016	JLS	1/1/2023 3:57	2359673	N3B-2023-796	2	N3BL		S
EXP122922103.wiff	604870001	JLS	1/1/2023 4:33	2359673	N3B-2023-796	2	N3BL		S
EXP122922104.wiff	604870002	JLS	1/1/2023 5:08	2359673	N3B-2023-794	2	N3BL		S
EXP122922105.wiff	604870003	JLS	1/1/2023 5:44	2359673	N3B-2023-794	2	N3BL		S
EXP122922106.wiff	604870004	JLS	1/1/2023 6:20	2359673	N3B-2023-794	2	N3BL		S
EXP122922107.wiff	604870005	JLS	1/1/2023 6:55	2359673	N3B-2023-794	2	N3BL		S
EXP122922108.wiff	604870006	JLS	1/1/2023 7:31	2359673	N3B-2023-794	2	N3BL		S
EXP122922109.wiff	WXXCCV	JLS	1/1/2023 8:07			1			C
EXP122922110.wiff	XIBLK11	JLS	1/1/2023 8:42			1			B
EXP122922111.wiff	WXXCRI	JLS	1/1/2023 9:18			1			C
EXP122922112.wiff	1205278830	JLS	1/1/2023 9:53	2360170	VARIOUS	2	N3BL	DUSE BRACKETING CCV FAILURE	S
EXP122922113.wiff	1205278831	JLS	1/1/2023 10:29	2360170	VARIOUS	2	N3BL	DUSE BRACKETING CCV FAILURE	S

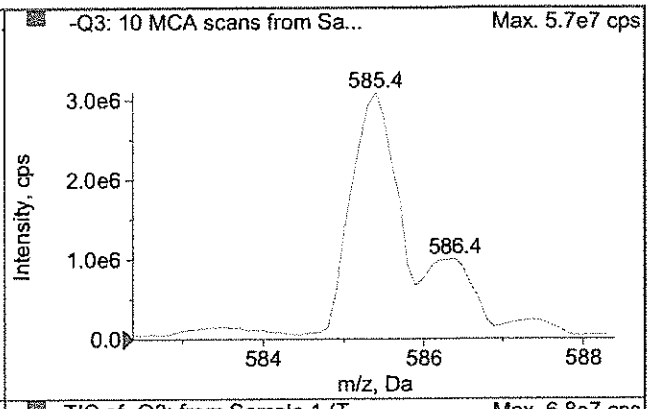


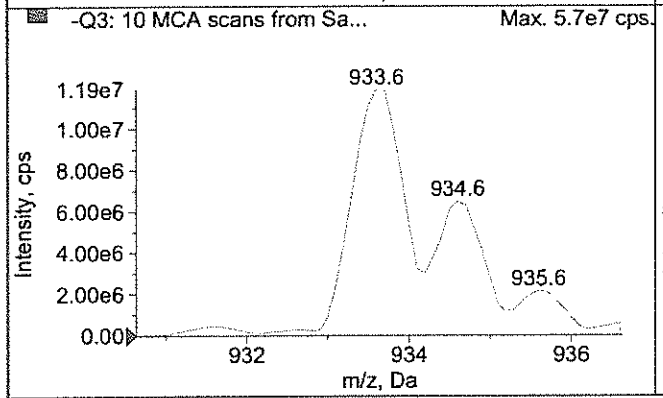
Peak List for " -Q1: 10 MCA scans from Sample 1 (TuneSampleID) of MT20200207113257.wiff (Turbo Spray)"

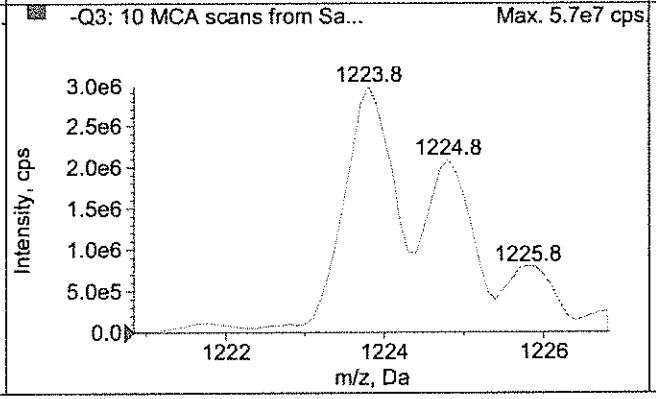
	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	44.9980	44.9224	5.9377e7	0.7404	0.0756
2	411.2590	411.1739	1.8413e6	0.7506	0.0851
3	585.3850	585.3687	2.4538e6	0.7347	0.0163
4	933.6360	933.6213	1.6241e7	0.6756	0.0147
5	1223.8450	1223.8438	5.0046e6	0.6651	1.2355e-3

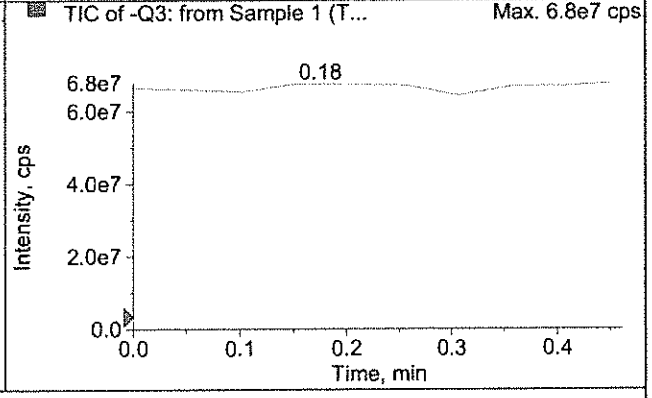






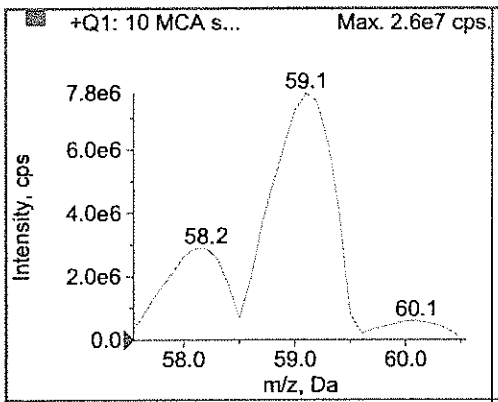


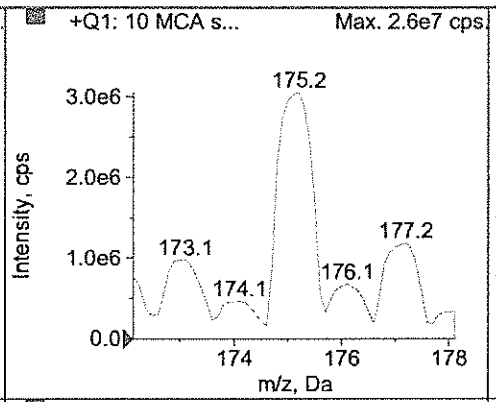


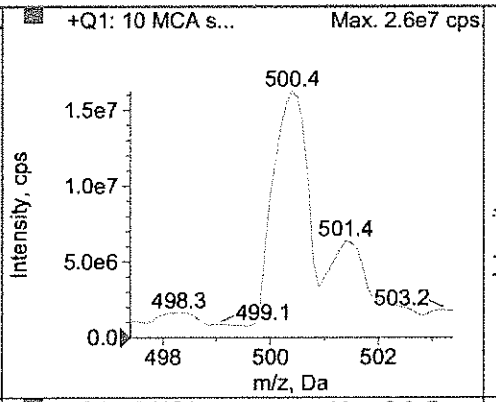


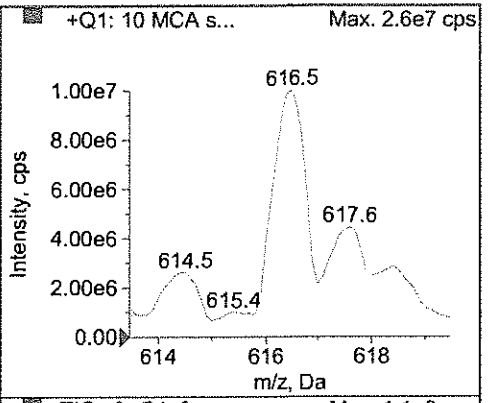
Peak List for " -Q3: 10 MCA scans from Sample 1 (TuneSampleID) of MT20200207113958.wiff (Turbo Spray)"

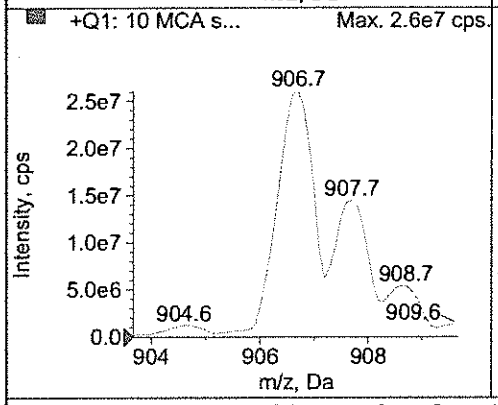
	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	44.9980	44.9991	5.6510e7	0.7120	-1.1117e-3
2	411.2590	411.2709	1.1018e6	0.7133	-0.0119
3	585.3850	585.3815	3.0986e6	0.6910	3.5293e-3
4	933.6360	933.6178	1.1910e7	0.7185	0.0182
5	1223.8450	1223.8220	2.9788e6	0.7072	0.0230

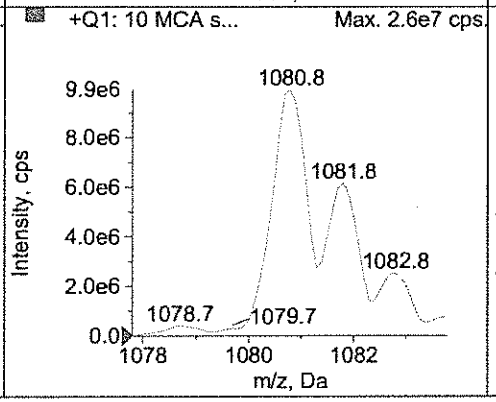


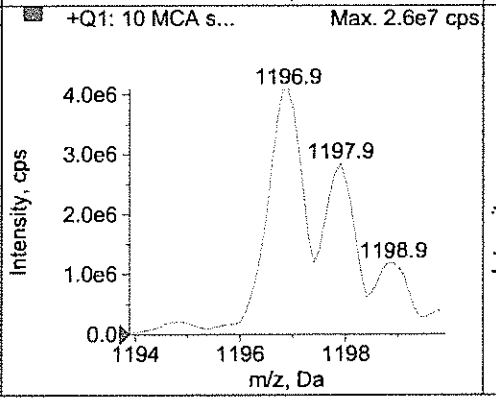


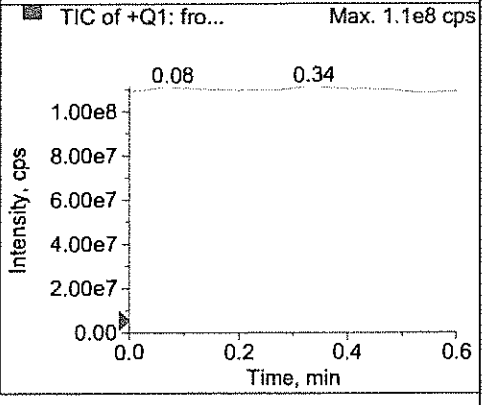






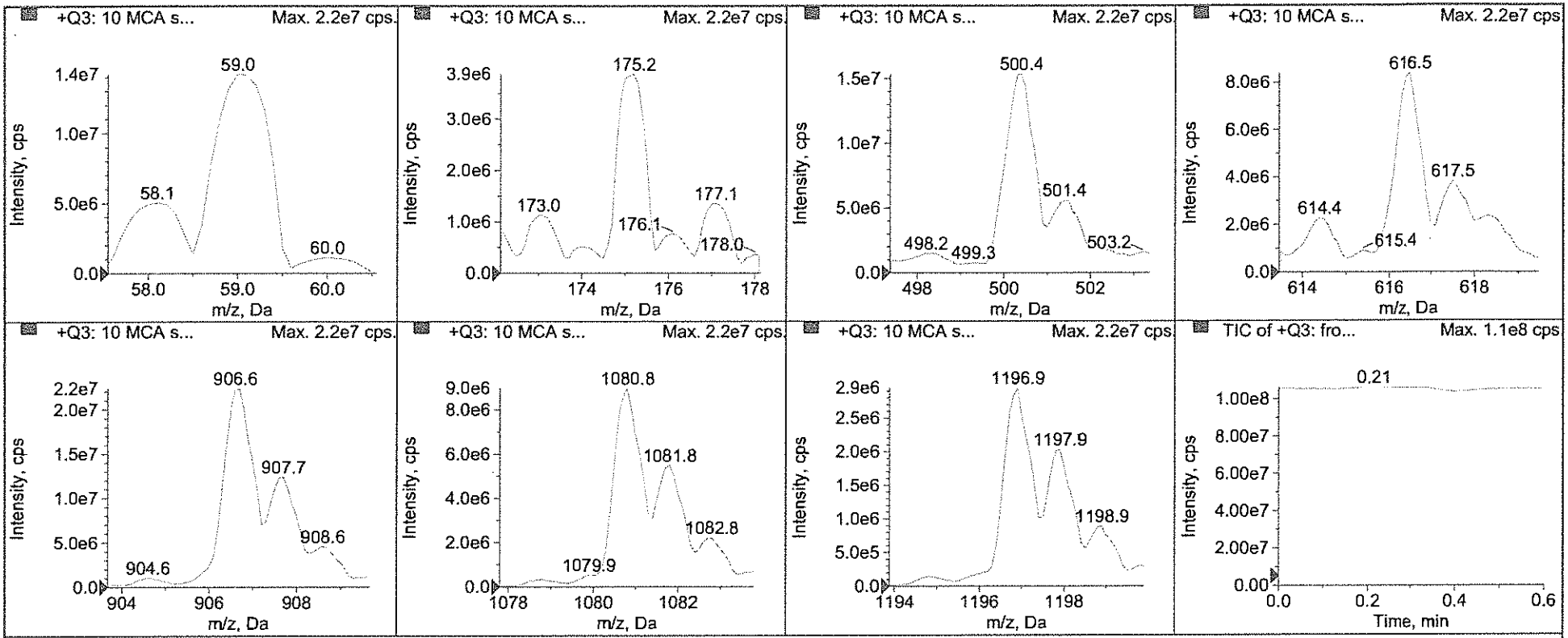






Peak List for " +Q1: 10 MCA scans from Sample 1 (TuneSampleID) of MT20200207114708.wiff (Turbo Spray)"

	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	59.0500	59.0854	7.7980e6	0.6837	-0.0354
2	175.1330	175.1210	3.0590e6	0.7635	0.0120
3	500.3800	500.3780	1.6269e7	0.7793	2.0028e-3
4	616.4640	616.4672	1.0021e7	0.7730	-3.2106e-3
5	906.6730	906.6714	2.6105e7	0.7577	1.6067e-3
6	1080.7990	1080.7887	9.9439e6	0.7355	0.0103
7	1196.8830	1196.8757	4.1023e6	0.7351	7.3322e-3



Peak List for " +Q3: 10 MCA scans from Sample 1 (TuneSampleID) of MT20200207115018.wiff (Turbo Spray)"

	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	59.0500	59.0545	1.4225e7	0.7288	-4.4710e-3
2	175.1330	175.1315	3.8747e6	0.7590	1.4652e-3
3	500.3800	500.3710	1.5382e7	0.7850	9.0366e-3
4	616.4640	616.4599	8.3795e6	0.7351	4.0592e-3
5	906.6730	906.6708	2.2362e7	0.7919	2.2316e-3
6	1080.7990	1080.7953	8.9738e6	0.7740	3.7092e-3
7	1196.8830	1196.8902	2.9488e6	0.7630	-7.1952e-3

Pesticide Analysis

Case Narrative

GC Semivolatile Pesticide
Technical Case Narrative
Triad National Security, LLC
SDG #: 2023-289
Work Order #: 604449

Product: **Organochlorine Pesticides and Chlorinated Hydrocarbons**
Analytical Method: SW846 3535A/8081B
Analytical Procedure: GL-OA-E-041 REV# 20
Analytical Batch: 2358002

Preparation Method: SW846 3535A
Preparation Procedure: GL-OA-E-070 REV# 11
Preparation Batch: 2358000

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
604449002	SMEB01-23-265371
604449006	SMEB02-23-265372
604449010	SMEB03-23-265373
604449014	SMEB04-23-265374
604449018	SMEB05-23-265375
1205274607	Method Blank (MB)
1205274608	Laboratory Control Sample (LCS)
1205274611	604449002(SMEB01-23-265371) Matrix Spike (MS)
1205274612	604449002(SMEB01-23-265371) Matrix Spike Duplicate (MSD)
1205274619	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Quality Control (QC) Information

Surrogate Recoveries
Samples (See Below) did not meet acceptance criteria for surrogate recovery due to dilution.

Sample	Analyte	Value
1205274611 (SMEB01-23-265371MS)	4cmx	151* (27%-111%)
604449002 (SMEB01-23-265371)	4cmx	142* (27%-111%)
604449006 (SMEB02-23-265372)	4cmx	140* (27%-111%)
604449010 (SMEB03-23-265373)	4cmx	26* (27%-111%)
	Decachlorobiphenyl	20* (33%-129%)
	Decachlorobiphenyl	25* (33%-129%)

Matrix Spike (MS/MSD) Recovery Statement
The matrix QC samples (See Below) did not meet spike recovery acceptance limits due to dilution.

Sample	Analyte	Value
1205274611 (SMEB01-23-265371MS)	4, 4'-DDT	32* (36%-139%)
	Aldrin	0* (13%-126%)
1205274612 (SMEB01-23-265371MSD)	4, 4'-DDT	25* (36%-139%)
	Aldrin	0* (13%-126%)

MS/MSD Relative Percent Difference (RPD) Statement
The RPD values between the MS and MSD, (See Below), were not within the acceptance limits due to the large difference between the individual recoveries in each MS and MSD analyte pair.

Sample	Analyte	Value
1205274611MS and 1205274612MSD (SMEB01-23-265371)	Dieldrin, Endosulfan II	36* (0%-30%)
	Endrin, Heptachlor	34* (0%-30%)
	alpha-BHC	46* (0%-30%)
	beta-BHC	34* (0%-30%)
	cis-Chlordane	32* (0%-30%)
	gamma-BHC (Lindane)	48* (0%-30%)
	trans-Chlordane	37* (0%-30%)

Technical Information

Preparation/Analytical Method Verification
Samples and the associated QC in this batch were cleaned with activated copper in order to remove sulfur.

Sample Dilutions
Samples 1205274611 (SMEB01-23-265371MS), 1205274612 (SMEB01-23-265371MSD), 604449002 (SMEB01-23-265371), 604449006 (SMEB02-23-265372), 604449010 (SMEB03-23-265373), 604449014 (SMEB04-23-265374) and 604449018 (SMEB05-23-265375) were diluted due to high concentrations of non-target analytes within the retention time window of interest.

Florisil
Florisil clean-up was not performed on client and quality control samples in this batch.

Miscellaneous Information

Manual Integrations
Samples 1205274611 (SMEB01-23-265371MS), 1205274612 (SMEB01-23-265371MSD), 1205274619 (LCS), 604449002 (SMEB01-23-265371) and 604449006 (SMEB02-23-265372) required manual integration to correctly position the baseline as set in the calibration standard injections.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Qualifier Definition Report
for

TNSL001 Triad National Security, LLC (620266)

Client SDG: 2023-289 GEL Work Order: 604449

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria
** Analyte is a surrogate compound
J Value is estimated
P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, the difference is >70%.
U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

DL Indicates that sample is diluted.
RA Indicates that sample is re-analyzed without re-extraction.
RE Indicates that sample is re-extracted.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature: Jimi Cao **Name: Jimin Cao**

Date: 22 DEC 2022 **Title: Data Validator**

Sample Data Summary

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**604449002**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265371**	**Method:**	**SW846 3535A/8081B**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**2358002**	**Inst:**	**ECDAA.I**	**Dilution:**	**20**
Run Date:	**12/21/2022 10:56**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 06:50**	**Aliquot:**	**1000 mL**	**Final Volume:**	**5 mL**
Data File:	**122122\eAl2116.D**	**Column:**	**1 RTX-CLP**		
	122122\eAl2116.D		**2 RTX-CLP**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
57-74-9	Chlordane	U	1.53	ug/L	1.53	5.00	1
319-84-6	alpha-BHC	U	0.133	ug/L	0.133	0.400	1
58-89-9	gamma-BHC (Lindane)	U	0.133	ug/L	0.133	0.400	1
76-44-8	Heptachlor	U	0.133	ug/L	0.133	0.400	1
309-00-2	Aldrin	U	0.133	ug/L	0.133	0.400	1
319-85-7	beta-BHC	U	0.133	ug/L	0.133	0.400	1
5103-74-2	trans-Chlordane	U	0.133	ug/L	0.133	0.400	1
5103-71-9	cis-Chlordane	U	0.133	ug/L	0.133	0.400	1
959-98-8	Endosulfan I	U	0.133	ug/L	0.133	0.400	1
60-57-1	Dieldrin	U	0.200	ug/L	0.200	0.800	1
72-20-8	Endrin	U	0.200	ug/L	0.200	0.800	1
33213-65-9	Endosulfan II	U	0.200	ug/L	0.200	0.800	1
50-29-3	4,4'-DDT	U	0.200	ug/L	0.200	0.800	1
8001-35-2	Toxaphene	U	3.00	ug/L	3.00	10.0	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
Decachlorobiphenyl	0.457	1.00	ug/L	46	(33%-129%)
4cmx	0.612	1.00	ug/L	61	(27%-111%)

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:36**	**Matrix:**	**W**
Lab Sample ID:	**604449006**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB02-23-265372**	**Method:**	**SW846 3535A/8081B**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**2358002**	**Inst:**	**ECDAA.I**	**Dilution:**	**10**
Run Date:	**12/21/2022 11:57**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 06:50**	**Aliquot:**	**1058.56 mL**	**Final Volume:**	**5 mL**
Data File:	**122122\eAl2119.D**	**Column:**	**1 RTX-CLP**		
	122122\eAl2119.D		**2 RTX-CLP**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
57-74-9	Chlordane	U	0.723	ug/L	0.723	2.36	1
319-84-6	alpha-BHC	U	0.0628	ug/L	0.0628	0.189	1
58-89-9	gamma-BHC (Lindane)	U	0.0628	ug/L	0.0628	0.189	1
76-44-8	Heptachlor	U	0.0628	ug/L	0.0628	0.189	1
309-00-2	Aldrin	U	0.0628	ug/L	0.0628	0.189	1
319-85-7	beta-BHC	U	0.0628	ug/L	0.0628	0.189	1
5103-74-2	trans-Chlordane	U	0.0628	ug/L	0.0628	0.189	1
5103-71-9	cis-Chlordane	U	0.0628	ug/L	0.0628	0.189	1
959-98-8	Endosulfan I	U	0.0628	ug/L	0.0628	0.189	1
60-57-1	Dieldrin	U	0.0945	ug/L	0.0945	0.378	1
72-20-8	Endrin	U	0.0945	ug/L	0.0945	0.378	1
33213-65-9	Endosulfan II	U	0.0945	ug/L	0.0945	0.378	1
50-29-3	4,4'-DDT	U	0.0945	ug/L	0.0945	0.378	1
8001-35-2	Toxaphene	U	1.42	ug/L	1.42	4.72	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
Decachlorobiphenyl	0.405	0.945	ug/L	43	(33%-129%)
4cmx	0.615	0.945	ug/L	65	(27%-111%)

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:35**	**Matrix:**	**W**
Lab Sample ID:	**604449010**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB03-23-265373**	**Method:**	**SW846 3535A/8081B**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**2358002**	**Inst:**	**ECDAA.I**	**Dilution:**	**10**
Run Date:	**12/21/2022 12:18**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 06:50**	**Aliquot:**	**1120.22 mL**	**Final Volume:**	**5 mL**
Data File:	**122122\eAl2120.D**	**Column:**	**1 RTX-CLP**		
	122122\eAl2120.D		**2 RTX-CLP**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
57-74-9	Chlordane	U	0.683	ug/L	0.683	2.23	1
319-84-6	alpha-BHC	U	0.0594	ug/L	0.0594	0.179	1
58-89-9	gamma-BHC (Lindane)	U	0.0594	ug/L	0.0594	0.179	1
76-44-8	Heptachlor	U	0.0594	ug/L	0.0594	0.179	1
309-00-2	Aldrin	U	0.0594	ug/L	0.0594	0.179	1
319-85-7	beta-BHC	U	0.0594	ug/L	0.0594	0.179	1
5103-74-2	trans-Chlordane	U	0.0594	ug/L	0.0594	0.179	1
5103-71-9	cis-Chlordane	U	0.0594	ug/L	0.0594	0.179	1
959-98-8	Endosulfan I	U	0.0594	ug/L	0.0594	0.179	1
60-57-1	Dieldrin	U	0.0893	ug/L	0.0893	0.357	1
72-20-8	Endrin	U	0.0893	ug/L	0.0893	0.357	1
33213-65-9	Endosulfan II	U	0.0893	ug/L	0.0893	0.357	1
50-29-3	4,4'-DDT	U	0.0893	ug/L	0.0893	0.357	1
8001-35-2	Toxaphene	U	1.34	ug/L	1.34	4.46	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%		Acceptable Limits
4cmx	0.229	0.893	ug/L	26	*	(27%-111%)
Decachlorobiphenyl	0.177	0.893	ug/L	20	*	(33%-129%)

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:01**	**Matrix:**	**W**
Lab Sample ID:	**604449014**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB04-23-265374**	**Method:**	**SW846 3535A/8081B**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**2358002**	**Inst:**	**ECDAA.I**	**Dilution:**	**10**
Run Date:	**12/21/2022 12:38**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 06:50**	**Aliquot:**	**1051.09 mL**	**Final Volume:**	**5 mL**
Data File:	**122122\eAl2121.D**	**Column:**	**1 RTX-CLP**		
	122122\eAl2121.D		**2 RTX-CLP**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
57-74-9	Chlordane	U	0.728	ug/L	0.728	2.38	1
319-84-6	alpha-BHC	U	0.0633	ug/L	0.0633	0.190	1
58-89-9	gamma-BHC (Lindane)	U	0.0633	ug/L	0.0633	0.190	1
76-44-8	Heptachlor	U	0.0633	ug/L	0.0633	0.190	1
309-00-2	Aldrin	U	0.0633	ug/L	0.0633	0.190	1
319-85-7	beta-BHC	U	0.0633	ug/L	0.0633	0.190	1
5103-74-2	trans-Chlordane	U	0.0633	ug/L	0.0633	0.190	1
5103-71-9	cis-Chlordane	U	0.0633	ug/L	0.0633	0.190	1
959-98-8	Endosulfan I	U	0.0633	ug/L	0.0633	0.190	1
60-57-1	Dieldrin	U	0.0951	ug/L	0.0951	0.381	1
72-20-8	Endrin	U	0.0951	ug/L	0.0951	0.381	1
33213-65-9	Endosulfan II	U	0.0951	ug/L	0.0951	0.381	1
50-29-3	4,4'-DDT	U	0.0951	ug/L	0.0951	0.381	1
8001-35-2	Toxaphene	U	1.43	ug/L	1.43	4.76	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
4cmx	0.586	0.951	ug/L	62	(27%-111%)
Decachlorobiphenyl	0.566	0.951	ug/L	59	(33%-129%)

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:12**	**Matrix:**	**W**
Lab Sample ID:	**604449018**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB05-23-265375**	**Method:**	**SW846 3535A/8081B**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**2358002**	**Inst:**	**ECDAA.I**	**Dilution:**	**20**
Run Date:	**12/21/2022 12:59**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 06:50**	**Aliquot:**	**1022.58 mL**	**Final Volume:**	**5 mL**
Data File:	**122122\eAl2122.D**	**Column:**	**1 RTX-CLP**		
	122122\eAl2122.D		**2 RTX-CLP**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
57-74-9	Chlordane	U	1.50	ug/L	1.50	4.89	1
319-84-6	alpha-BHC	U	0.130	ug/L	0.130	0.391	1
58-89-9	gamma-BHC (Lindane)	U	0.130	ug/L	0.130	0.391	1
76-44-8	Heptachlor	U	0.130	ug/L	0.130	0.391	1
309-00-2	Aldrin	U	0.130	ug/L	0.130	0.391	1
319-85-7	beta-BHC	U	0.130	ug/L	0.130	0.391	1
5103-74-2	trans-Chlordane	U	0.130	ug/L	0.130	0.391	1
5103-71-9	cis-Chlordane	U	0.130	ug/L	0.130	0.391	1
959-98-8	Endosulfan I	U	0.130	ug/L	0.130	0.391	1
60-57-1	Dieldrin	U	0.196	ug/L	0.196	0.782	1
72-20-8	Endrin	U	0.196	ug/L	0.196	0.782	1
33213-65-9	Endosulfan II	U	0.196	ug/L	0.196	0.782	1
50-29-3	4,4'-DDT	U	0.196	ug/L	0.196	0.782	1
8001-35-2	Toxaphene	U	2.93	ug/L	2.93	9.78	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
4cmx	0.379	0.978	ug/L	39	(27%-111%)
Decachlorobiphenyl	0.526	0.978	ug/L	54	(33%-129%)

Quality Control Summary

Surrogate Recovery Report

SDG Number: 2023-289

Matrix Type: LIQUID

Sample ID	Client ID	4CMX 1 %REC #		4CMX 2 %REC #		DCB 1 %REC #		DCB 2 %REC #	
1205274607	MB for batch 2358000	69		68		101		100	
1205274608	LCS for batch 2358000	88		85		104		103	
1205274619	LCS for batch 2358000	89		84		90		93	
604449002	SMEB01-23-265371	142 *	D	61	D	46	D	46	D
1205274611	SMEB01-23-265371MS	151 *	D	66	D	52	D	54	D
1205274612	SMEB01-23-265371MSD	96	D	44	D	50	D	44	D
604449006	SMEB02-23-265372	140 *	D	65	D	43	D	47	D
604449010	SMEB03-23-265373	26 *	D	39	D	25 *	D	20 *	D
604449014	SMEB04-23-265374	63	D	62	D	67	D	59	D
604449018	SMEB05-23-265375	39	D	41	D	57	D	54	D

Surrogate		Parmname	Acceptance Limits
4CMX	=	4cmx	(27%-111%)
DCB	=	Decachlorobiphenyl	(33%-129%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Quality Control Summary
Spike Recovery Report

SDG Number: 2023-289
Sample Type: Laboratory Control Sample
Client ID: LCS for batch 2358000
Matrix: WATER
Lab Sample ID 1205274608
Instrument: ECDAA.I
Analysis Date: 12/20/2022 19:37
Dilution: 1
Analyst: JXM
Prep Batch ID: 2358000
Inj. Vol: 1 uL
Batch ID: 2358002

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L	Spike Conc. ug/L	Recovery %	Acceptance Limits
319-84-6	LCS	alpha-BHC	0.500	0.0	0.504	101	53-137
58-89-9	LCS	gamma-BHC (Lindane)	0.500	0.0	0.500	100	52-135
76-44-8	LCS	Heptachlor	0.500	0.0	0.422	84	49-130
309-00-2	LCS	Aldrin	0.500	0.0	0.457	91	17-124
319-85-7	LCS	beta-BHC	0.500	0.0	0.499	100	51-128
5103-74-2	LCS	trans-Chlordane	0.500	0.0	0.465	93	47-131
5103-71-9	LCS	cis-Chlordane	0.500	0.0	0.460	92	52-136
959-98-8	LCS	Endosulfan I	0.500	0.0	0.471	94	52-129
60-57-1	LCS	Dieldrin	1.25	0.0	1.31	105	52-130
72-20-8	LCS	Endrin	1.25	0.0	1.45	116	36-148
33213-65-9	LCS	Endosulfan II	1.25	0.0	1.25	100	48-130
50-29-3	LCS	4,4'-DDT	1.25	0.0	1.38	110	45-135

Quality Control Summary
Spike Recovery Report

SDG Number: **2023-289**
Sample Type: **Matrix Spike**
Client ID: **SMEB01-23-265371MS**
Matrix: **W**
Lab Sample ID **1205274611**
Instrument: **ECDAA.I**
Analysis Date: **12/21/2022 11:16**
Dilution: **20**
Analyst: **JXM**
Prep Batch ID: **2358000**
Inj. Vol: **1 uL**
Batch ID: **2358002**

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits
319-84-6	MS	alpha-BHC	0.556	0.000	U	0.358	64	38-139
58-89-9	MS	gamma-BHC (Lindane)	0.556	0.000	U	0.413	74	36-141
76-44-8	MS	Heptachlor	0.556	0.000	U	0.269	48	32-137
309-00-2	MS	Aldrin	0.556	0.000	U	0.000	0 *	13-126
319-85-7	MS	beta-BHC	0.556	0.000	U	0.350	63	36-138
5103-74-2	MS	trans-Chlordane	0.556	0.000	U	0.269	48	33-138
5103-71-9	MS	cis-Chlordane	0.556	0.000	U	0.292	53	34-142
959-98-8	MS	Endosulfan I	0.556	0.000	U	0.261	47	36-138
60-57-1	MS	Dieldrin	1.39	0.000	U	0.851	61	37-139
72-20-8	MS	Endrin	1.39	0.000	U	0.852	61	29-150
33213-65-9	MS	Endosulfan II	1.39	0.000	U	0.778	56	35-134
50-29-3	MS	4,4'-DDT	1.39	0.000	U	0.447	32 *	36-139

Quality Control Summary
Spike Recovery Report

SDG Number: 2023-289
Sample Type: Matrix Spike Duplicate
Client ID: SMEB01-23-265371MSD
Matrix: W
Lab Sample ID 1205274612
Instrument: ECDAA.I
Analysis Date: 12/21/2022 11:37
Dilution: 20
Analyst: JXM
Prep Batch ID: 2358000
Inj. Vol: 1 uL
Batch ID: 2358002

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
319-84-6	MSD	alpha-BHC	0.556	0.000	U	0.225	40	38-139	46 *	0-30
58-89-9	MSD	gamma-BHC (Lindane)	0.556	0.000	U	0.252	45	36-141	48 *	0-30
76-44-8	MSD	Heptachlor	0.556	0.000	U	0.192	35	32-137	34 *	0-30
309-00-2	MSD	Aldrin	0.556	0.000	U	0.000	0 *	13-126	0	0-30
319-85-7	MSD	beta-BHC	0.556	0.000	U	0.248	45	36-138	34 *	0-30
5103-74-2	MSD	trans-Chlordane	0.556	0.000	U	0.185	33	33-138	37 *	0-30
5103-71-9	MSD	cis-Chlordane	0.556	0.000	U	0.212	38	34-142	32 *	0-30
959-98-8	MSD	Endosulfan I	0.556	0.000	U	0.210	38	36-138	21	0-30
60-57-1	MSD	Dieldrin	1.39	0.000	U	0.592	43	37-139	36 *	0-30
72-20-8	MSD	Endrin	1.39	0.000	U	0.607	44	29-150	34 *	0-30
33213-65-9	MSD	Endosulfan II	1.39	0.000	U	0.541	39	35-134	36 *	0-30
50-29-3	MSD	4,4'-DDT	1.39	0.000	U	0.353	25 *	36-139	24	0-30

Quality Control Summary
Spike Recovery Report

SDG Number: **2023-289**
Sample Type: **Laboratory Control Sample**
Client ID: **LCS for batch 2358000**
Matrix: **WATER**
Lab Sample ID **1205274619**
Instrument: **ECDAA.I**
Analysis Date: **12/20/2022 19:53**
Dilution: **1**
Analyst: **JXM**
Prep Batch ID: **2358000**
Inj. Vol: **1 uL**
Batch ID: **2358002**

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L	Spike Conc. ug/L	Recovery %	Acceptance Limits
8001-35-2	LCS	Toxaphene	4.00	0.0	3.41	85	49-115

Method Blank Summary

SDG Number:	**2023-289**	**Client:**	**TNSL001**	**Matrix:**	**WATER**
Client ID:	**MB for batch 2358000**	**Instrument ID:**	**ECDAA.I_1** **ECDAA.I_2**	**Data File:**	**122022a\eAl2048.D** **122022a\eAl2048.D**
Lab Sample ID:	**1205274607**			**Analyzed:**	**12/20/22 19:20**
Column:	**RTX-CLP** **RTX-CLP**	**Prep Date:**	**12/19/2022 06:50**		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 2358000	1205274608	122022a\eAl2049.D 122022a\eAl2049.D	12/20/22	1937
02	LCS for batch 2358000	1205274619	122022a\eAl2050.D 122022a\eAl2050.D	12/20/22	1953
03	SMEB01-23-265371	604449002	122122\eAl2116.D 122122\eAl2116.D	12/21/22	1056
04	SMEB01-23-265371MS	1205274611	122122\eAl2117.D 122122\eAl2117.D	12/21/22	1116
05	SMEB01-23-265371MSD	1205274612	122122\eAl2118.D 122122\eAl2118.D	12/21/22	1137
06	SMEB02-23-265372	604449006	122122\eAl2119.D 122122\eAl2119.D	12/21/22	1157
07	SMEB03-23-265373	604449010	122122\eAl2120.D 122122\eAl2120.D	12/21/22	1218
08	SMEB04-23-265374	604449014	122122\eAl2121.D 122122\eAl2121.D	12/21/22	1238
09	SMEB05-23-265375	604449018	122122\eAl2122.D 122122\eAl2122.D	12/21/22	1259

Identification Summary

SDG Number: 2023-289 **Client ID:** LCS for batch 2358000

Lab Sample ID: 1205274608

Data File:	122022a\eAl2049.D	**Data File:**	122022a\eAl2049.D
Inst:	ECDAA.I_1	**Inst:**	ECDAA.I_2
Column:	RTX-CLP	**Column:**	RTX-CLP
Analyzed:	20-DEC-22 19:37	**Analyzed:**	20-DEC-22 19:37

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
alpha-BHC							2.47
Column 1	1	3.36	3.32 - 3.38	.504		ug/L	
Column 2	1	3.74	3.71 - 3.77	.517		ug/L	
gamma-BHC (Lindane)							7.7
Column 1	1	3.61	3.57 - 3.63	.54		ug/L	
Column 2	1	4.07	4.04 - 4.1	.5		ug/L	
Heptachlor							4.45
Column 1	1	4	3.97 - 4.03	.441		ug/L	
Column 2	1	4.5	4.47 - 4.53	.422		ug/L	
Aldrin							6.98
Column 1	1	4.27	4.24 - 4.3	.49		ug/L	
Column 2	1	4.82	4.79 - 4.85	.457		ug/L	
beta-BHC							4.33
Column 1	1	3.67	3.64 - 3.7	.521		ug/L	
Column 2	1	4.13	4.1 - 4.16	.499		ug/L	

Identification Summary

SDG Number: 2023-289 **Client ID:** LCS for batch 2358000

Lab Sample ID: 1205274608

Data File:	122022a\eAl2049.D	**Data File:**	122022a\eAl2049.D
Inst:	ECDAA.I_1	**Inst:**	ECDAA.I_2
Column:	RTX-CLP	**Column:**	RTX-CLP
Analyzed:	20-DEC-22 19:37	**Analyzed:**	20-DEC-22 19:37

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
trans-Chlordane							4.51
Column 1	1	4.93	4.9 - 4.96	.465		ug/L	
Column 2	1	5.58	5.55 - 5.61	.487		ug/L	
cis-Chlordane							5.6
Column 1	1	5.05	5.02 - 5.08	.487		ug/L	
Column 2	1	5.73	5.7 - 5.76	.46		ug/L	
Endosulfan I							6.02
Column 1	1	5.19	5.16 - 5.22	.5		ug/L	
Column 2	1	5.79	5.77 - 5.83	.471		ug/L	
Dieldrin							8.39
Column 1	1	5.42	5.39 - 5.45	1.42		ug/L	
Column 2	1	6.08	6.05 - 6.11	1.31		ug/L	
Endrin							8.4
Column 1	1	5.65	5.62 - 5.68	1.57		ug/L	
Column 2	1	6.41	6.38 - 6.44	1.45		ug/L	

Identification Summary

SDG Number: 2023-289 **Client ID:** LCS for batch 2358000

Lab Sample ID: 1205274608

Data File:	122022a\eAl2049.D	**Data File:**	122022a\eAl2049.D
Inst:	ECDAA.I_1	**Inst:**	ECDAA.I_2
Column:	RTX-CLP	**Column:**	RTX-CLP
Analyzed:	20-DEC-22 19:37	**Analyzed:**	20-DEC-22 19:37

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Endosulfan II							6.19
Column 1	1	5.88	5.85 - 5.91	1.33		ug/L	
Column 2	1	6.63	6.61 - 6.67	1.25		ug/L	
4,4'-DDT							6.44
Column 1	1	5.99	5.96 - 6.02	1.47		ug/L	
Column 2	1	6.84	6.81 - 6.87	1.38		ug/L	

Identification Summary

SDG Number: 2023-289 **Client ID:** SMEB01-23-265371MS

Lab Sample ID: 1205274611

Data File:	122122\eAl2117.D	**Data File:**	122122\eAl2117.D
Inst:	ECDAA.I_1	**Inst:**	ECDAA.I_2
Column:	RTX-CLP	**Column:**	RTX-CLP
Analyzed:	21-DEC-22 11:16	**Analyzed:**	21-DEC-22 11:16

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
alpha-BHC							14.8
Column 1	1	3.35	3.32 - 3.38	.358		ug/L	
Column 2	1	3.74	3.71 - 3.77	.416		ug/L	
gamma-BHC (Lindane)							17.7
Column 1	1	3.6	3.57 - 3.63	.413		ug/L	
Column 2	1	4.07	4.04 - 4.1	.494		ug/L	
Heptachlor							3.69
Column 1	1	4	3.97 - 4.03	.269		ug/L	
Column 2	1	4.49	4.47 - 4.53	.279		ug/L	
beta-BHC							105
Column 1	1	3.67	3.64 - 3.7	.35		ug/L	
Column 2	1	4.13	4.1 - 4.16	1.13		ug/L	
trans-Chlordane							3.49
Column 1	1	4.93	4.9 - 4.96	.269		ug/L	
Column 2	1	5.58	5.55 - 5.61	.279		ug/L	

Identification Summary

SDG Number: 2023-289 **Client ID:** SMEB01-23-265371MS

Lab Sample ID: 1205274611

Data File:	122122\eAl2117.D	**Data File:**	122122\eAl2117.D
Inst:	ECDAA.I_1	**Inst:**	ECDAA.I_2
Column:	RTX-CLP	**Column:**	RTX-CLP
Analyzed:	21-DEC-22 11:16	**Analyzed:**	21-DEC-22 11:16

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
cis-Chlordane							8.17
Column 1	1	5.05	5.02 - 5.08	.292		ug/L	
Column 2	1	5.72	5.7 - 5.76	.317		ug/L	
Endosulfan I							37.6
Column 1	1	5.19	5.16 - 5.22	.261		ug/L	
Column 2	1	5.79	5.76 - 5.82	.382		ug/L	
Dieldrin							5
Column 1	1	5.42	5.39 - 5.45	.851		ug/L	
Column 2	1	6.08	6.05 - 6.11	.81		ug/L	
Endrin							2.64
Column 1	1	5.65	5.62 - 5.68	.852		ug/L	
Column 2	1	6.41	6.38 - 6.44	.875		ug/L	
Endosulfan II							4.29
Column 1	1	5.88	5.85 - 5.91	.778		ug/L	
Column 2	1	6.63	6.61 - 6.67	.812		ug/L	

Identification Summary

SDG Number: 2023-289 **Client ID:** SMEB01-23-265371MS

Lab Sample ID: 1205274611

Data File:	122122\eAl2117.D	**Data File:**	122122\eAl2117.D
Inst:	ECDAA.I_1	**Inst:**	ECDAA.I_2
Column:	RTX-CLP	**Column:**	RTX-CLP
Analyzed:	21-DEC-22 11:16	**Analyzed:**	21-DEC-22 11:16

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
4,4'-DDT							11
Column 1	1	5.99	5.96 - 6.02	.447		ug/L	
Column 2	1	6.84	6.81 - 6.87	.5		ug/L	

Identification Summary

SDG Number: 2023-289 **Client ID:** SMEB01-23-265371MSD

Lab Sample ID: 1205274612

Data File:	122122\eAl2118.D	**Data File:**	122122\eAl2118.D
Inst:	ECDAA.I_1	**Inst:**	ECDAA.I_2
Column:	RTX-CLP	**Column:**	RTX-CLP
Analyzed:	21-DEC-22 11:37	**Analyzed:**	21-DEC-22 11:37

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
alpha-BHC							14.6
Column 1	1	3.35	3.32 - 3.38	.225		ug/L	
Column 2	1	3.74	3.71 - 3.77	.26		ug/L	
gamma-BHC (Lindane)							22.7
Column 1	1	3.6	3.57 - 3.63	.252		ug/L	
Column 2	1	4.07	4.04 - 4.1	.317		ug/L	
Heptachlor							2.29
Column 1	1	4	3.97 - 4.03	.192		ug/L	
Column 2	1	4.5	4.47 - 4.53	.196		ug/L	
beta-BHC							93.3
Column 1	1	3.67	3.64 - 3.7	.248		ug/L	
Column 2	1	4.13	4.1 - 4.16	.682		ug/L	
trans-Chlordane							8.68
Column 1	1	4.93	4.9 - 4.96	.185		ug/L	
Column 2	1	5.58	5.55 - 5.61	.202		ug/L	

Identification Summary

SDG Number: 2023-289 **Client ID:** SMEB01-23-265371MSD

Lab Sample ID: 1205274612

Data File:	122122\eAl2118.D	**Data File:**	122122\eAl2118.D
Inst:	ECDAA.I_1	**Inst:**	ECDAA.I_2
Column:	RTX-CLP	**Column:**	RTX-CLP
Analyzed:	21-DEC-22 11:37	**Analyzed:**	21-DEC-22 11:37

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
cis-Chlordane							4.83
Column 1	1	5.05	5.02 - 5.08	.212		ug/L	
Column 2	1	5.73	5.7 - 5.76	.202		ug/L	
Endosulfan I							11.2
Column 1	1	5.19	5.16 - 5.22	.21		ug/L	
Column 2	1	5.79	5.76 - 5.82	.235		ug/L	
Dieldrin							9.62
Column 1	1	5.42	5.39 - 5.45	.592		ug/L	
Column 2	1	6.08	6.05 - 6.11	.537		ug/L	
Endrin							1.98
Column 1	1	5.65	5.62 - 5.68	.607		ug/L	
Column 2	1	6.41	6.38 - 6.44	.595		ug/L	
Endosulfan II							3.53
Column 1	1	5.88	5.85 - 5.91	.541		ug/L	
Column 2	1	6.63	6.61 - 6.67	.561		ug/L	

Identification Summary

SDG Number: 2023-289 **Client ID:** SMEB01-23-265371MSD

Lab Sample ID: 1205274612

Data File:	122122\eAl2118.D	**Data File:**	122122\eAl2118.D
Inst:	ECDAA.I_1	**Inst:**	ECDAA.I_2
Column:	RTX-CLP	**Column:**	RTX-CLP
Analyzed:	21-DEC-22 11:37	**Analyzed:**	21-DEC-22 11:37

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
4,4'-DDT							15
Column 1	1	5.99	5.96 - 6.02	.353		ug/L	
Column 2	1	6.84	6.81 - 6.87	.411		ug/L	

Identification Summary

SDG Number: 2023-289 **Client ID:** LCS for batch 2358000

Lab Sample ID: 1205274619

Data File:	122022a\eAl2050.D	**Data File:**	122022a\eAl2050.D
Inst:	ECDAA.I_1	**Inst:**	ECDAA.I_2
Column:	RTX-CLP	**Column:**	RTX-CLP
Analyzed:	20-DEC-22 19:53	**Analyzed:**	20-DEC-22 19:53

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Toxaphene							12.2
Column 1	1	5.99	5.96 - 6.02	3.47		ug/L	
	2	6.21	6.18 - 6.24	2.9		ug/L	
	3	6.28	6.26 - 6.32	3.39		ug/L	
	4	6.66	6.63 - 6.69	3.75		ug/L	
	5	6.76	6.73 - 6.79	3.54		ug/L	
					3.41		
Column 2	1	6.72	6.69 - 6.75	3.6		ug/L	
	2	7	6.97 - 7.03	3.91		ug/L	
	3	7.24	7.21 - 7.27	3.78		ug/L	
	4	7.58	7.55 - 7.61	4.01		ug/L	
	5	7.63	7.6 - 7.66	3.98		ug/L	
					3.85		

Sample Data

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**604449002**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265371**	**Method:**	**SW846 3535A/8081B**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**2358002**	**Inst:**	**ECDAA.I**	**Dilution:**	**20**
Run Date:	**12/21/2022 10:56**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 06:50**	**Aliquot:**	**1000 mL**	**Final Volume:**	**5 mL**
Data File:	**122122\eAl2116.D**	**Column:**	**1 RTX-CLP**		
	122122\eAl2116.D		**2 RTX-CLP**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
57-74-9	Chlordane	U	1.53	ug/L	1.53	5.00	1
319-84-6	alpha-BHC	U	0.133	ug/L	0.133	0.400	1
58-89-9	gamma-BHC (Lindane)	U	0.133	ug/L	0.133	0.400	1
76-44-8	Heptachlor	U	0.133	ug/L	0.133	0.400	1
309-00-2	Aldrin	U	0.133	ug/L	0.133	0.400	1
319-85-7	beta-BHC	U	0.133	ug/L	0.133	0.400	1
5103-74-2	trans-Chlordane	U	0.133	ug/L	0.133	0.400	1
5103-71-9	cis-Chlordane	U	0.133	ug/L	0.133	0.400	1
959-98-8	Endosulfan I	U	0.133	ug/L	0.133	0.400	1
60-57-1	Dieldrin	U	0.200	ug/L	0.200	0.800	1
72-20-8	Endrin	U	0.200	ug/L	0.200	0.800	1
33213-65-9	Endosulfan II	U	0.200	ug/L	0.200	0.800	1
50-29-3	4,4'-DDT	U	0.200	ug/L	0.200	0.800	1
8001-35-2	Toxaphene	U	3.00	ug/L	3.00	10.0	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
Decachlorobiphenyl	0.457	1.00	ug/L	46	(33%-129%)
4cmx	0.612	1.00	ug/L	61	(27%-111%)

Quantitation (Manual Int.) Report
GEL Laboratories, LLC

JM 12/21/2022

JC 12/22/2022

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2116.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On   : 21 Dec 2022 10:56 (#1); 21 Dec 2022 10:56 (#2)
Operator : JXM   InstName : ECDA
Sample   : |604449002|2358002|20|SVP|1|TNSL|||
Misc   : |ECD5A1B_1L|WATER|SMEB01-23-265371|MIX[P,Q,V,W]||
ALS Vial : 16   Sample Multiplier: 20

Quant Time: Dec 21 11:42:48 2022
Quant Method : D:\MSDCHEM\1\Data\122122\ECDA_PEST_120422.m
Quant Title : ECD5   SubList :
QLast Update : Mon Dec 19 11:11:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   : 1.0 ul
Signal #1 Phase : RTX-CLP1   Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um   Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
System Monitoring Compounds											
4CMX	2.938	2.952	0.014	87510637	283.100m	3.227	3.226	-0.001	68416421	122.326	#
DCB	8.167	8.172	0.005	17938427	91.301	9.287	9.288	0.001	32281297	92.256m	

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	142%	61%
DCB	200.000	No Limits	46%	46%

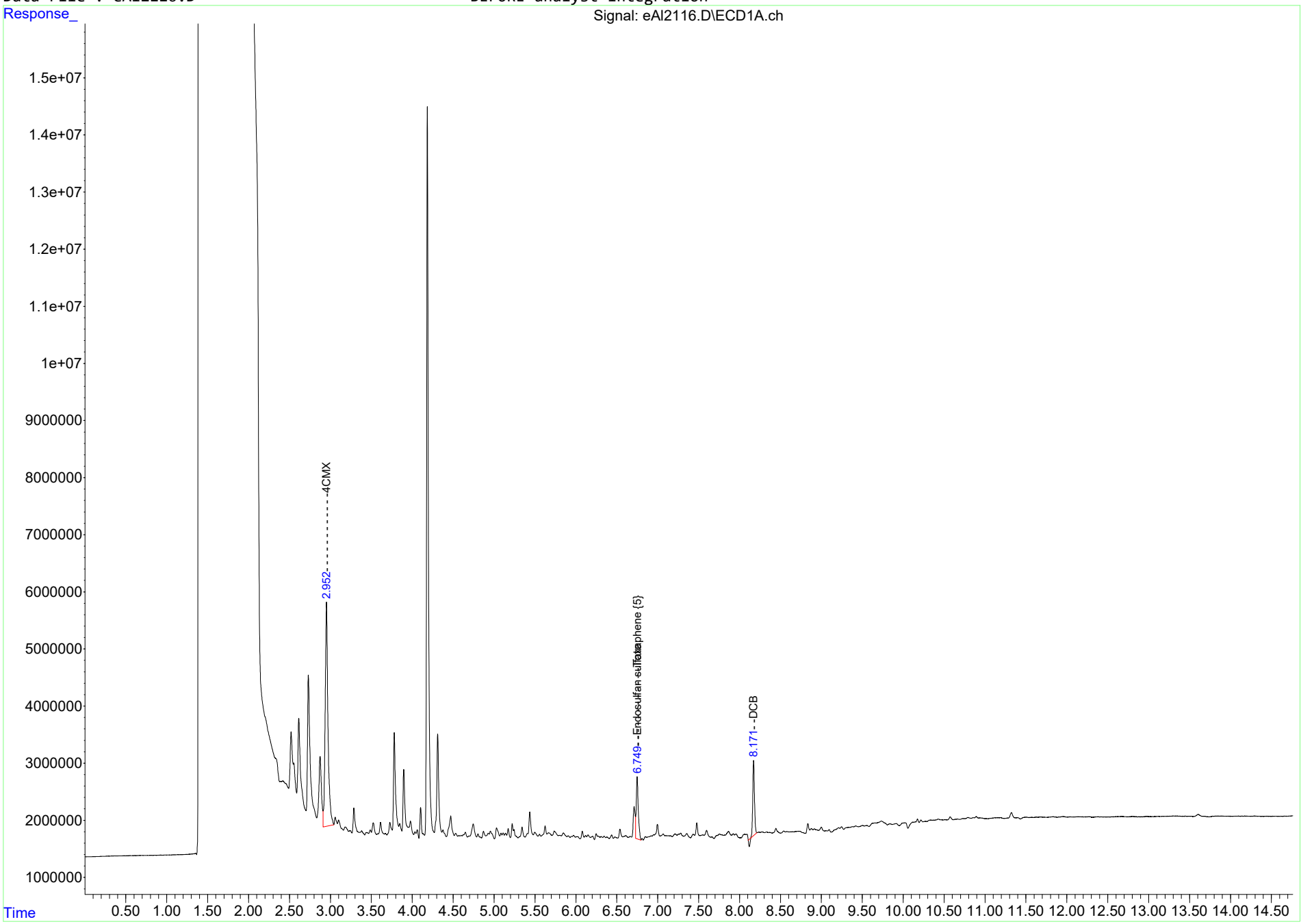
Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
alpha-BHC	3.352	0.000	-3.352	0	N.D. d	3.743	3.753	0.010	3607378	N.D. d
gamma-BHC (Lindane)	3.604	0.000	-3.604	0	N.D. d	4.067	4.059	-0.008	18098993	N.D. d
Heptachlor	4.002	0.000	-4.002	0	N.D. d	4.495	4.502	0.007	3567908	N.D. d
Aldrin	4.267	0.000	-4.267	0	N.D. d	4.820	4.802	-0.018f	11871652	N.D. d
beta-BHC	3.669	0.000	-3.669	0	N.D. d	4.132	4.124	-0.008	57915466	N.D. d
delta-BHC	3.825	0.000	-3.825	0	N.D. d	4.418	4.400	-0.018f	5025519	N.D. d
Heptachlor epoxide	4.809	0.000	-4.809	0	N.D. d	5.381	5.381	0.000	4253134	N.D. d
trans-Chlordane	4.929	0.000	-4.929	0	N.D. d	5.577	0.000	-5.577	0	N.D. d
cis-Chlordane	5.054	0.000	-5.054	0	N.D. d	5.725	5.755	0.030f	16824147	N.D. d
4,4'-DDE	5.118	0.000	-5.118	0	N.D. d	5.877	0.000	-5.877	0	N.D. d
Endosulfan I	5.187	0.000	-5.187	0	N.D. d	5.794	0.000	-5.794	0	N.D. d
Dieldrin	5.419	0.000	-5.419	0	N.D. d	6.081	0.000	-6.081	0	N.D. d
Endrin	5.651	0.000	-5.651	0	N.D. d	6.409	0.000	-6.409	0	N.D. d
Endosulfan II	5.877	0.000	-5.877	0	N.D. d	6.635	0.000	-6.635	0	N.D. d
4,4'-DDD	5.707	0.000	-5.707	0	N.D. d	6.494	0.000	-6.494	0	N.D. d

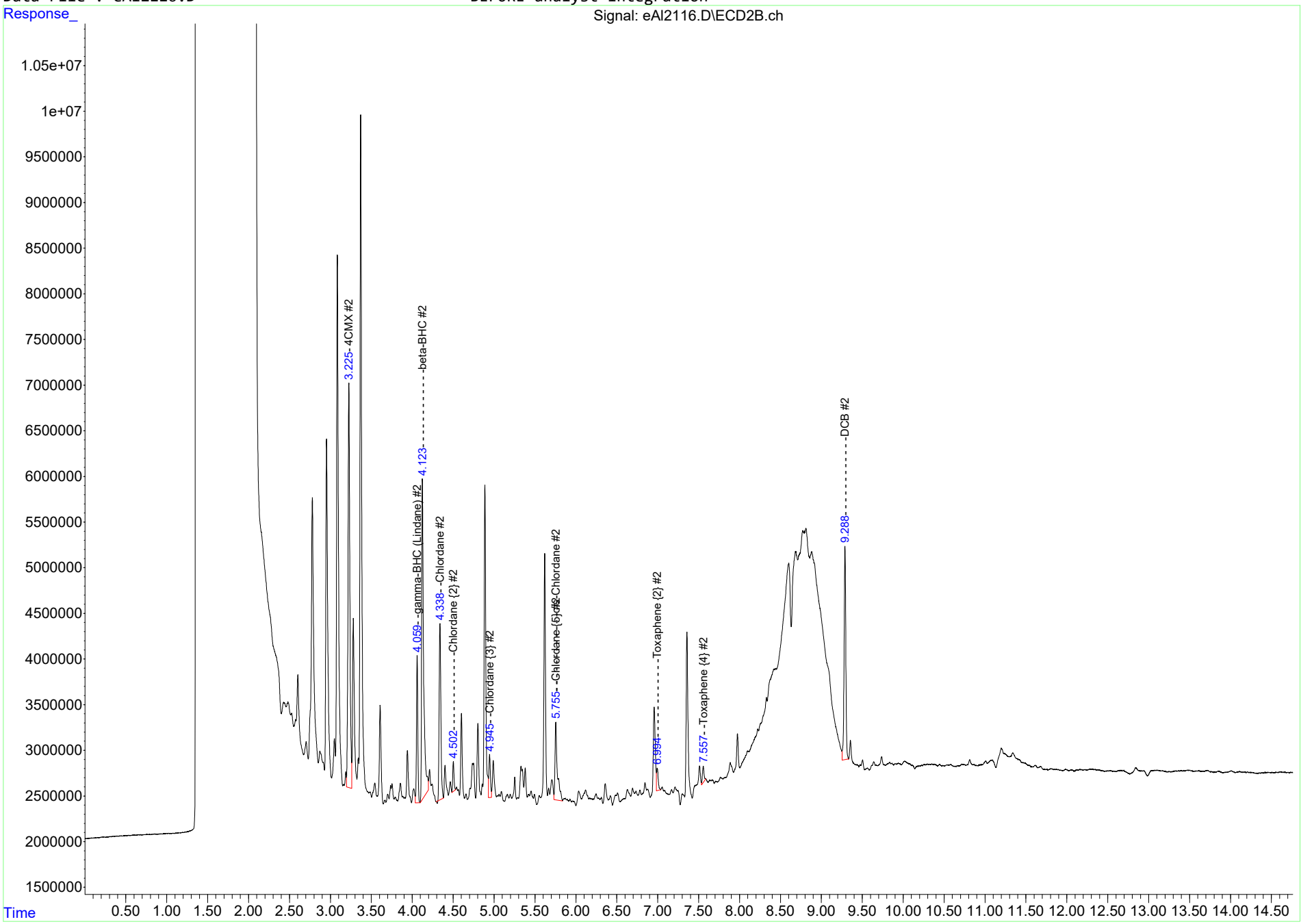
4,4'-DDT	5.992	0.000	-5.992	0	N.D. d	6.838	0.000	-6.838	0	N.D. d
Endrin aldehyde	6.301	0.000	-6.301	0	N.D. d	6.992	6.994	0.002	3316271	N.D. d
Methoxychlor	6.499	0.000	-6.499	0	N.D. d	7.585	7.557	-0.028f	2376077	N.D. d
Endosulfan sulfate	6.755	6.749	-0.006	18995628	N.D. d	7.297	0.000	-7.297	0	N.D. d
Endrin ketone	7.062	0.000	-7.062	0	N.D. d	7.907	7.887	-0.020f	7525055	N.D. d
Hexachlorobenzene	3.230	0.000	-3.230	0	N.D. d	3.636	3.607	-0.029f	14491094	N.D. d
Mirex	6.671	0.000	-6.671	0	N.D. d	7.885	7.887	0.002	7525055	N.D. d
C-Nonachlor	5.685	0.000	-5.685	0	N.D. d	6.486	0.000	-6.486	0	N.D. d
O-Chlordane	4.718	0.000	-4.718	0	N.D. d	5.289	0.000	-5.289	0	N.D. d
T-Nonachlor	5.039	0.000	-5.039	0	N.D. d	5.669	0.000	-5.669	0	N.D. d
2,4-DDE	4.796	0.000	-4.796	0	N.D. d	5.556	0.000	-5.556	0	N.D. d
2,4-DDD	5.290	0.000	-5.290	0	N.D. d	6.094	0.000	-6.094	0	N.D. d
2,4-DDT	5.543	0.000	-5.543	0	N.D. d	6.425	0.000	-6.425	0	N.D. d
Chlordane	3.930	0.000	-3.930	0	N.D. d	4.353	4.339	-0.014	28318254	N.D. d
Chlordane {2}	4.002	0.000	-4.002	0	N.D. d	4.495	4.502	0.007	3567908	N.D. d
Chlordane {3}	4.378	0.000	-4.378	0	N.D. d	4.947	4.945	-0.002	6227352	N.D. d
Chlordane {4}	4.930	0.000	-4.930	0	N.D. d	5.577	0.000	-5.577	0	N.D. d
Chlordane {5}	5.053	0.000	-5.053	0	N.D. d	5.725	5.755	0.030f	16824147	N.D. d
Toxaphene	5.991	0.000	-5.991	0	N.D. d	6.722	0.000	-6.722	0	N.D. d
Toxaphene {2}	6.214	0.000	-6.214	0	N.D. d	7.001	6.994	-0.007	3316271	N.D. d
Toxaphene {3}	6.284	0.000	-6.284	0	N.D. d	7.242	0.000	-7.242	0	N.D. d
Toxaphene {4}	6.660	0.000	-6.660	0	N.D. d	7.579	7.557	-0.022f	2376077	N.D. d
Toxaphene {5}	6.762	6.749	-0.013	18995628	N.D. d	7.631	0.000	-7.631	0	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2116.D BEFORE analyst integration

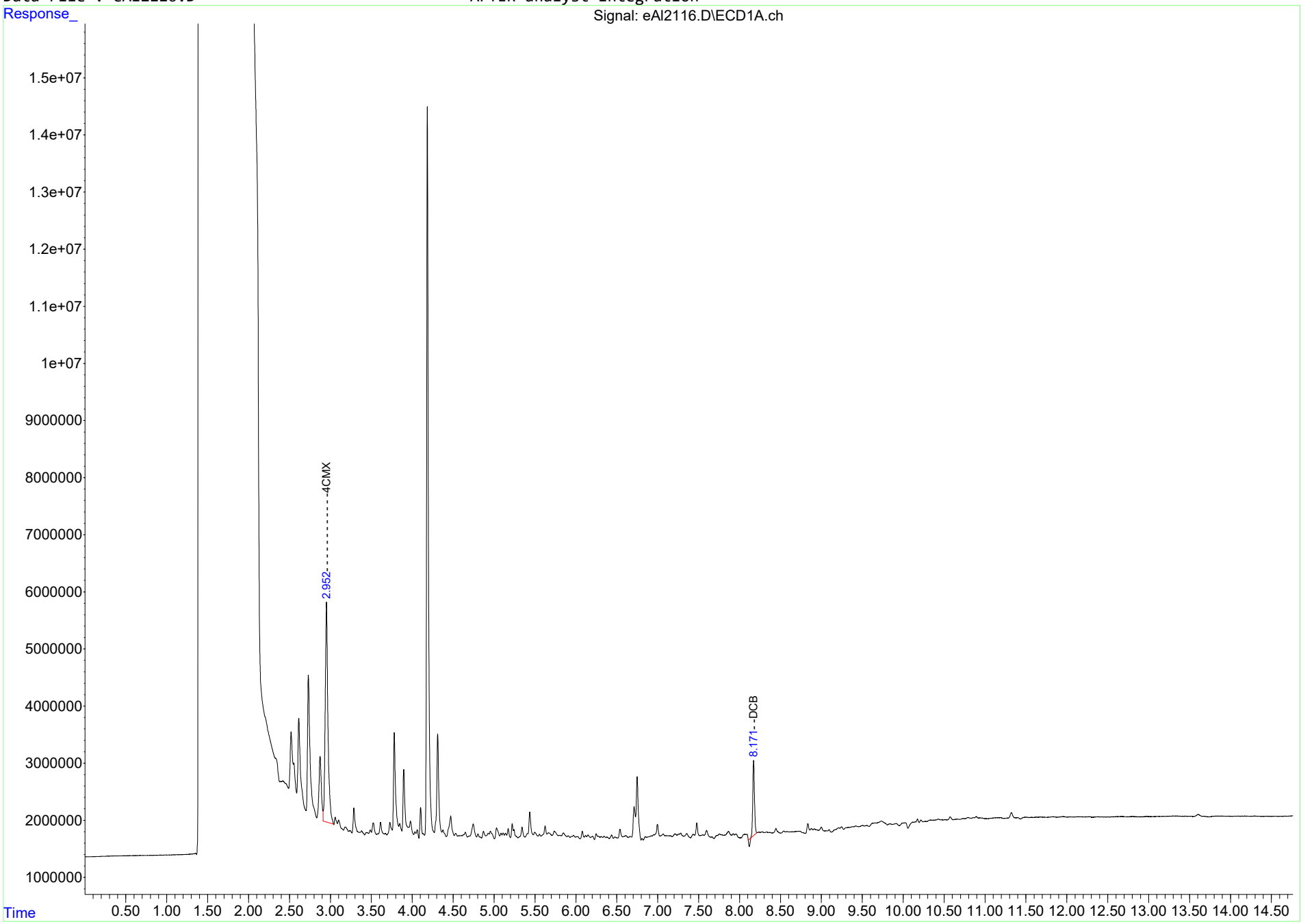


Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2116.D BEFORE analyst integration

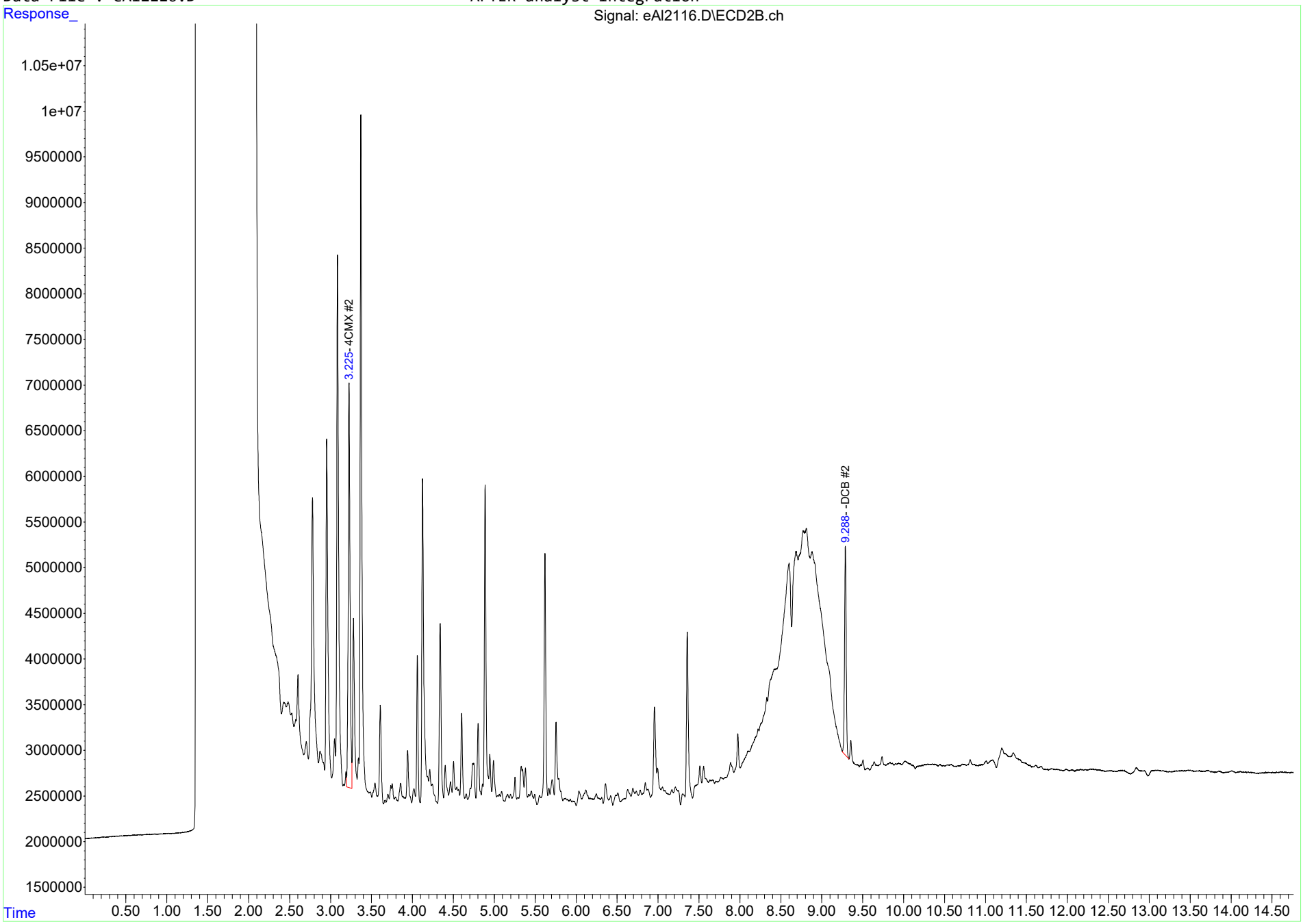


ECDA_PEST_120422.m Wed Dec 21 11:43:49 2022 Page: 4

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2116.D AFTER analyst integration



Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2116.D AFTER analyst integration



ECDA_PEST_120422.m Wed Dec 21 11:43:50 2022 Page: 6

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
System Monitoring Compounds											
4CMX	2.938	2.952	0.014	92236059	298.386	3.227	3.226	-0.001	68416421	122.326	#
DCB	8.167	8.172	0.005	17938427	91.301	9.287	9.288	0.001	34392287	98.289	

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	142%	61%
DCB	200.000	No Limits	46%	46%
4CMX	200.000	No Limits	149%	61%
DCB	200.000	No Limits	46%	49%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
alpha-BHC	3.352	0.000	-3.352	0	N.D.	3.743	3.753	0.010	3607378	<MDL	
gamma-BHC (Lindane)	3.604	0.000	-3.604	0	N.D.	4.067	4.059	-0.008	18098993	1.086	
Heptachlor	4.002	0.000	-4.002	0	N.D.	4.495	4.502	0.007	3567908	<MDL	
Aldrin	4.267	0.000	-4.267	0	N.D.	4.820	4.802	-0.018f	11871652	<MDL	
beta-BHC	3.669	0.000	-3.669	0	N.D.	4.132	4.124	-0.008	57915466	7.997	
delta-BHC	3.825	0.000	-3.825	0	N.D.	4.418	4.400	-0.018f	5025519	<MDL	
Heptachlor epoxide	4.809	0.000	-4.809	0	N.D.	5.381	5.381	0.000	4253134	<MDL	
trans-Chlordane	4.929	0.000	-4.929	0	N.D.	5.577	0.000	-5.577	0	N.D.	
cis-Chlordane	5.054	0.000	-5.054	0	N.D.	5.725	5.755	0.030f	16824147	1.321	
4,4'-DDE	5.118	0.000	-5.118	0	N.D.	5.877	0.000	-5.877	0	N.D.	
Endosulfan I	5.187	0.000	-5.187	0	N.D.	5.794	0.000	-5.794	0	N.D.	
Dieldrin	5.419	0.000	-5.419	0	N.D.	6.081	0.000	-6.081	0	N.D.	
Endrin	5.651	0.000	-5.651	0	N.D.	6.409	0.000	-6.409	0	N.D.	
Endosulfan II	5.877	0.000	-5.877	0	N.D.	6.635	0.000	-6.635	0	N.D.	
4,4'-DDD	5.707	0.000	-5.707	0	N.D.	6.494	0.000	-6.494	0	N.D.	
4,4'-DDT	5.992	0.000	-5.992	0	N.D.	6.838	0.000	-6.838	0	N.D.	
Endrin aldehyde	6.301	0.000	-6.301	0	N.D.	6.992	6.994	0.002	3316271	<MDL	
Methoxychlor	6.499	0.000	-6.499	0	N.D.	7.585	7.557	-0.028f	2376077	<MDL	
Endosulfan sulfate	6.755	6.749	-0.006	18995628	3.832	7.297	0.000	-7.297	0	N.D.	#
Endrin ketone	7.062	0.000	-7.062	0	N.D.	7.907	7.887	-0.020f	7525055	<MDL	
Hexachlorobenzene	3.230	0.000	-3.230	0	N.D.	3.636	3.607	-0.029f	14491094	<MDL	
Mirex	6.671	0.000	-6.671	0	N.D.	7.885	7.887	0.002	7525055	<MDL	
C-Nonachlor	5.685	0.000	-5.685	0	N.D.	6.486	0.000	-6.486	0	N.D.	
O-Chlordane	4.718	0.000	-4.718	0	N.D.	5.289	0.000	-5.289	0	N.D.	
T-Nonachlor	5.039	0.000	-5.039	0	N.D.	5.669	0.000	-5.669	0	N.D.	
2,4-DDE	4.796	0.000	-4.796	0	N.D.	5.556	0.000	-5.556	0	N.D.	
2,4-DDD	5.290	0.000	-5.290	0	N.D.	6.094	0.000	-6.094	0	N.D.	
2,4-DDT	5.543	0.000	-5.543	0	N.D.	6.425	0.000	-6.425	0	N.D.	
Chlordane	3.930	0.000	-3.930	0	N.D.	4.353	4.339	-0.014	28318254	58.660	
Chlordane {2}	4.002	0.000	-4.002	0	N.D.	4.495	4.502	0.007	3567908	3.879	
Chlordane {3}	4.378	0.000	-4.378	0	N.D.	4.947	4.945	-0.002	6227352	12.341	
Chlordane {4}	4.930	0.000	-4.930	0	N.D.	5.577	0.000	-5.577	0	N.D.	
Chlordane {5}	5.053	0.000	-5.053	0	N.D.	5.725	5.755	0.030f	16824147	13.168	
Sum Chlordane				0	N.D.				54937662	88.048	

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Average Chlordane					N.D.					22.012
Toxaphene	5.991	0.000	-5.991	0	N.D.	6.722	0.000	-6.722	0	N.D.
Toxaphene {2}	6.214	0.000	-6.214	0	N.D.	7.001	6.994	-0.007	3316271	11.015
Toxaphene {3}	6.284	0.000	-6.284	0	N.D.	7.242	0.000	-7.242	0	N.D.
Toxaphene {4}	6.660	0.000	-6.660	0	N.D.	7.579	7.557	-0.022f	2376077	5.041
Toxaphene {5}	6.762	6.749	-0.013	18995628	111.233	7.631	0.000	-7.631	0	N.D.
Sum Toxaphene				18995628	111.233				5692348	16.056 #
Average Toxaphene					111.233					<MDL

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2116.D

4CMX - Manual Integration ==

Endosulfan sulfate - Deletion ==

Chlordane Multi - Deletion ==
Toxaphene Multi - Deletion ==

AB/AP

DCB #2 - Manual Integration ==
alpha-BHC #2 - Deletion ==
gamma-BHC (Lindane) #2 - Deletion ==
Heptachlor #2 - Deletion ==
Aldrin #2 - Deletion ==
beta-BHC #2 - Deletion ==
delta-BHC #2 - Deletion ==
Heptachlor epoxide #2 - Deletion ==
cis-Chlordane #2 - Deletion ==
Endrin aldehyde #2 - Deletion ==
Methoxychlor #2 - Deletion ==

DNC/RT

Endrin ketone #2 - Deletion ==
Hexachlorobenzene #2 - Deletion ==
Mirex #2 - Deletion ==

DMP
DMP

AB/AP
DNC/RT
DNC/RT
DNC/RT
DNC/RT
DNC/RT
DNC/RT
DNC/RT
DNC/RT
DNC/RT
DNC/RT
DNC/RT
DNC/RT
DNC/RT
DNC/RT

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:36**	**Matrix:**	**W**
Lab Sample ID:	**604449006**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB02-23-265372**	**Method:**	**SW846 3535A/8081B**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**2358002**	**Inst:**	**ECDAA.I**	**Dilution:**	**10**
Run Date:	**12/21/2022 11:57**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 06:50**	**Aliquot:**	**1058.56 mL**	**Final Volume:**	**5 mL**
Data File:	**122122\eAl2119.D**	**Column:**	**1 RTX-CLP**		
	122122\eAl2119.D		**2 RTX-CLP**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
57-74-9	Chlordane	U	0.723	ug/L	0.723	2.36	1
319-84-6	alpha-BHC	U	0.0628	ug/L	0.0628	0.189	1
58-89-9	gamma-BHC (Lindane)	U	0.0628	ug/L	0.0628	0.189	1
76-44-8	Heptachlor	U	0.0628	ug/L	0.0628	0.189	1
309-00-2	Aldrin	U	0.0628	ug/L	0.0628	0.189	1
319-85-7	beta-BHC	U	0.0628	ug/L	0.0628	0.189	1
5103-74-2	trans-Chlordane	U	0.0628	ug/L	0.0628	0.189	1
5103-71-9	cis-Chlordane	U	0.0628	ug/L	0.0628	0.189	1
959-98-8	Endosulfan I	U	0.0628	ug/L	0.0628	0.189	1
60-57-1	Dieldrin	U	0.0945	ug/L	0.0945	0.378	1
72-20-8	Endrin	U	0.0945	ug/L	0.0945	0.378	1
33213-65-9	Endosulfan II	U	0.0945	ug/L	0.0945	0.378	1
50-29-3	4,4'-DDT	U	0.0945	ug/L	0.0945	0.378	1
8001-35-2	Toxaphene	U	1.42	ug/L	1.42	4.72	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
Decachlorobiphenyl	0.405	0.945	ug/L	43	(33%-129%)
4cmx	0.615	0.945	ug/L	65	(27%-111%)

Quantitation Report
GEL Laboratories, LLC

Jxm 12/21/2022

JC 12/22/2022

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2119.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On   : 21 Dec 2022 11:57 (#1); 21 Dec 2022 11:57 (#2)
Operator : JXM   InstName : ECDA
Sample   : |604449006|2358002|10|SVP|1|TNSL|||
Misc   : |ECD5A1B_1L|WATER|SMEB02-23-265372|MIX[P,Q,V,W]||
ALS Vial : 19   Sample Multiplier: 10

Quant Time: Dec 21 12:24:03 2022
Quant Method : D:\MSDCHEM\1\Data\122122\ECDA_PEST_120422.m
Quant Title : ECD5   SubList :
QLast Update : Mon Dec 19 11:11:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   : 1.0 ul
Signal #1 Phase : RTX-CLP1   Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um   Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
System Monitoring Compounds											
4CMX	2.938	2.950	0.012	173157275	280.085m	3.227	3.227	0.000	145607893	130.171	#
DCB	8.167	8.164	-0.003	33701252	85.764	9.287	9.285	-0.002	65395700	93.447	

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	140%	65%
DCB	200.000	No Limits	43%	47%

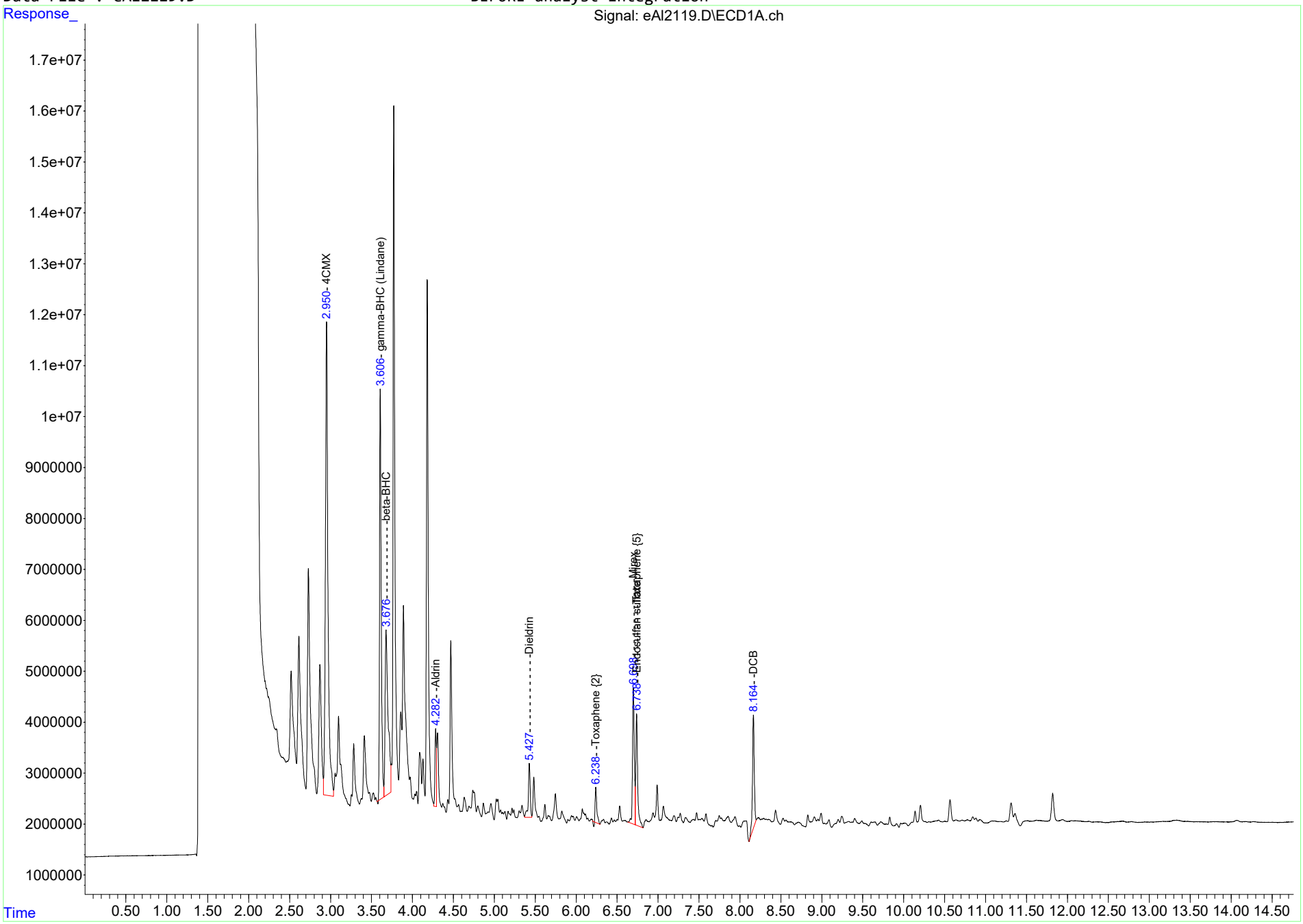
Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
alpha-BHC	3.352	0.000	-3.352	0	N.D. d	3.743	3.734	-0.009	22803351	N.D. d
gamma-BHC (Lindane)	3.604	3.607	0.003	113739043	N.D. d	4.067	4.061	-0.006	14123109	N.D. d
Heptachlor	4.002	0.000	-4.002	0	N.D. d	4.495	4.473	-0.022f	66906950	N.D. d
Aldrin	4.267	4.283	0.016f	17724277	N.D. d	4.820	4.794	-0.026f	126674322	N.D. d
beta-BHC	3.669	3.677	0.008	81812848	N.D. d	4.132	4.121	-0.011	516222177	N.D. d
delta-BHC	3.825	0.000	-3.825	0	N.D. d	4.418	4.398	-0.020f	28363464	N.D. d
Heptachlor epoxide	4.809	0.000	-4.809	0	N.D. d	5.381	5.375	-0.006	9842629	N.D. d
trans-Chlordane	4.929	0.000	-4.929	0	N.D. d	5.577	0.000	-5.577	0	N.D. d
cis-Chlordane	5.054	0.000	-5.054	0	N.D. d	5.725	5.707	-0.018f	8307968	N.D. d
4,4'-DDE	5.118	0.000	-5.118	0	N.D. d	5.877	0.000	-5.877	0	N.D. d
Endosulfan I	5.187	0.000	-5.187	0	N.D. d	5.794	5.784	-0.010	6340067	N.D. d
Dieldrin	5.419	5.427	0.008	17120555	N.D. d	6.081	6.076	-0.005	6513708	N.D. d
Endrin	5.651	0.000	-5.651	0	N.D. d	6.409	6.419	0.010	6804894	N.D. d
Endosulfan II	5.877	0.000	-5.877	0	N.D. d	6.635	6.625	-0.010	5309622	N.D. d
4,4'-DDD	5.707	0.000	-5.707	0	N.D. d	6.494	6.484	-0.010	6919526	N.D. d

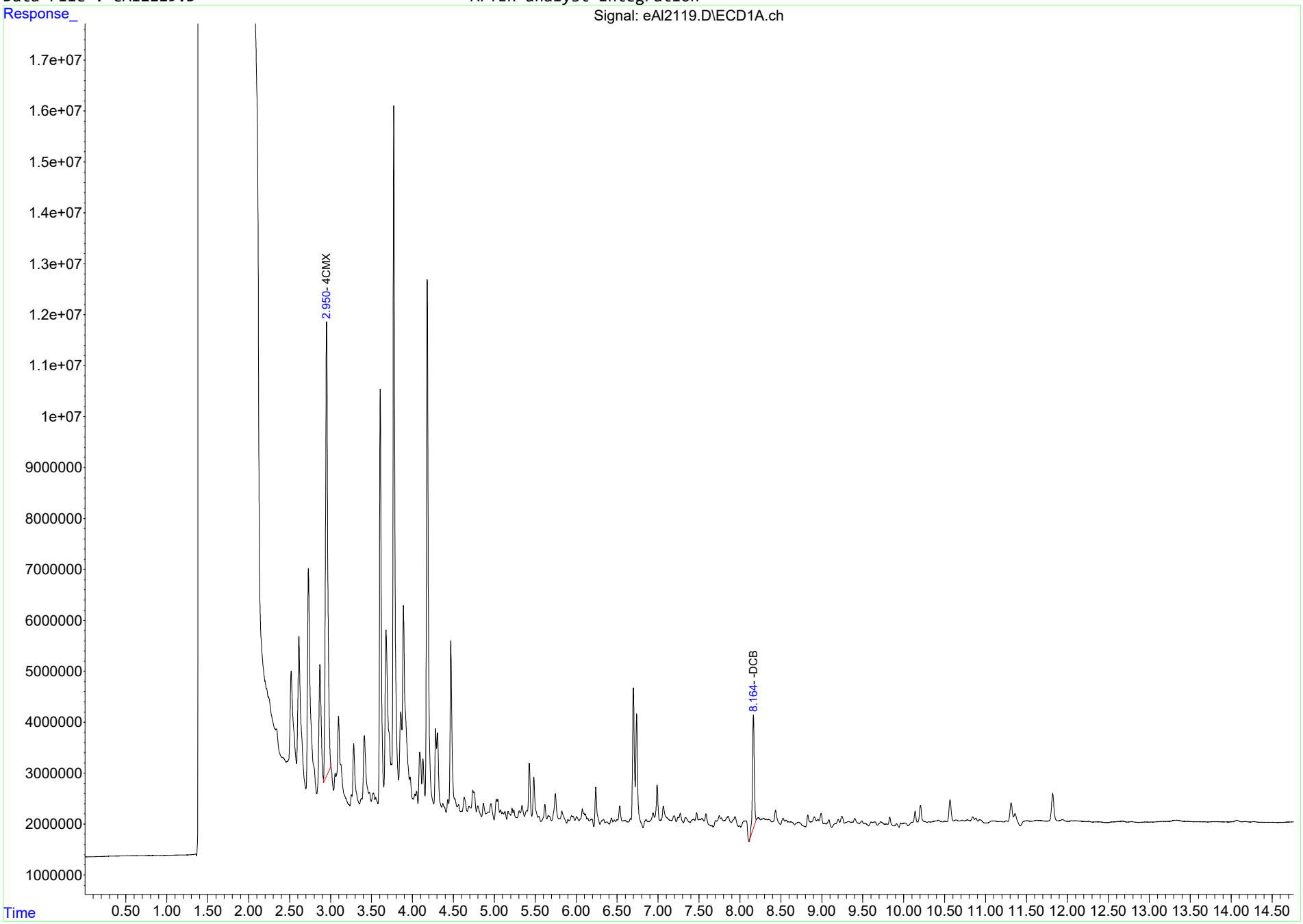
4,4'-DDT	5.992	0.000	-5.992	0	N.D. d	6.838	6.809	-0.029f	3246946	N.D. d
Endrin aldehyde	6.301	0.000	-6.301	0	N.D. d	6.992	6.992	0.000	7740180	N.D. d
Methoxychlor	6.499	0.000	-6.499	0	N.D. d	7.585	0.000	-7.585	0	N.D. d
Endosulfan sulfate	6.755	6.739	-0.016f	35223921	N.D. d	7.297	0.000	-7.297	0	N.D. d
Endrin ketone	7.062	0.000	-7.062	0	N.D. d	7.907	7.882	-0.025f	12314980	N.D. d
Hexachlorobenzene	3.230	0.000	-3.230	0	N.D. d	3.636	3.608	-0.028f	31051831	N.D. d
Mirex	6.671	6.698	0.027f	40666802	N.D. d	7.885	7.882	-0.003	12314980	N.D. d
C-Nonachlor	5.685	0.000	-5.685	0	N.D. d	6.486	6.484	-0.002	6919526	N.D. d
O-Chlordane	4.718	0.000	-4.718	0	N.D. d	5.289	0.000	-5.289	0	N.D. d
T-Nonachlor	5.039	0.000	-5.039	0	N.D. d	5.669	5.667	-0.002	2945951	N.D. d
2,4-DDE	4.796	0.000	-4.796	0	N.D. d	5.556	0.000	-5.556	0	N.D. d
2,4-DDD	5.290	0.000	-5.290	0	N.D. d	6.094	6.076	-0.018f	6513708	N.D. d
2,4-DDT	5.543	0.000	-5.543	0	N.D. d	6.425	6.419	-0.006	6804894	N.D. d
Chlordane	3.930	0.000	-3.930	0	N.D. d	4.353	4.334	-0.019f	92549357	N.D. d
Chlordane {2}	4.002	0.000	-4.002	0	N.D. d	4.495	4.473	-0.022f	66906950	N.D. d
Chlordane {3}	4.378	0.000	-4.378	0	N.D. d	4.947	0.000	-4.947	0	N.D. d
Chlordane {4}	4.930	0.000	-4.930	0	N.D. d	5.577	0.000	-5.577	0	N.D. d
Chlordane {5}	5.053	0.000	-5.053	0	N.D. d	5.725	5.707	-0.018f	8307968	N.D. d
Toxaphene	5.991	0.000	-5.991	0	N.D. d	6.722	0.000	-6.722	0	N.D. d
Toxaphene {2}	6.214	6.239	0.025f	9206591	N.D. d	7.001	6.992	-0.009	7740180	N.D. d
Toxaphene {3}	6.284	0.000	-6.284	0	N.D. d	7.242	0.000	-7.242	0	N.D. d
Toxaphene {4}	6.660	0.000	-6.660	0	N.D. d	7.579	7.552	-0.027f	9732415	N.D. d
Toxaphene {5}	6.762	6.739	-0.023f	35223921	N.D. d	7.631	0.000	-7.631	0	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

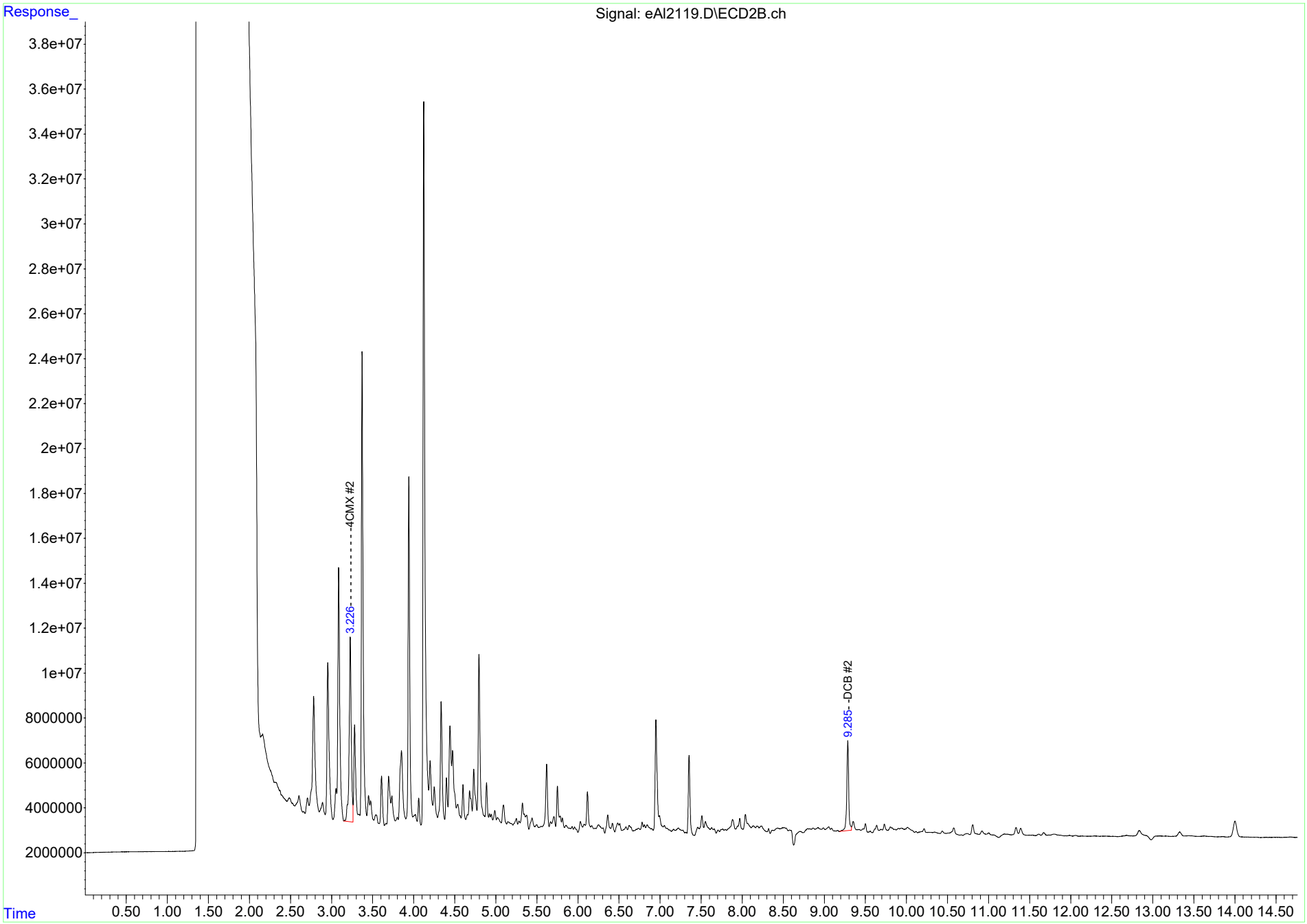
Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2119.D BEFORE analyst integration



Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2119.D AFTER analyst integration



Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2119.D



The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
System Monitoring Compounds											
4CMX	2.938	2.951	0.013	202174546	327.020	3.227	3.227	0.000	145607893	130.171	#
DCB	8.167	8.164	-0.003	33701252	85.764	9.287	9.285	-0.002	65395700	93.447	

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	140%	65%
DCB	200.000	No Limits	43%	47%
4CMX	200.000	No Limits	164%	65%
DCB	200.000	No Limits	43%	47%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
alpha-BHC	3.352	0.000	-3.352	0	N.D.	3.743	3.734	-0.009	22803351	1.237	
gamma-BHC (Lindane)	3.604	3.607	0.003	113739043	12.937	4.067	4.061	-0.006	14123109	<MDL	#
Heptachlor	4.002	0.000	-4.002	0	N.D.	4.495	4.473	-0.022f	66906950	4.314	
Aldrin	4.267	4.283	0.016f	17724277	2.261	4.820	4.794	-0.026f	126674322	8.456	#
beta-BHC	3.669	3.677	0.008	81812848	20.400	4.132	4.121	-0.011	516222177	71.283	#
delta-BHC	3.825	0.000	-3.825	0	N.D.	4.418	4.398	-0.020f	28363464	1.699	
Heptachlor epoxide	4.809	0.000	-4.809	0	N.D.	5.381	5.375	-0.006	9842629	<MDL	
trans-Chlordane	4.929	0.000	-4.929	0	N.D.	5.577	0.000	-5.577	0	N.D.	
cis-Chlordane	5.054	0.000	-5.054	0	N.D.	5.725	5.707	-0.018f	8307968	<MDL	
4,4'-DDE	5.118	0.000	-5.118	0	N.D.	5.877	0.000	-5.877	0	N.D.	
Endosulfan I	5.187	0.000	-5.187	0	N.D.	5.794	5.784	-0.010	6340067	<MDL	
Dieldrin	5.419	5.427	0.008	17120555	2.586	6.081	6.076	-0.005	6513708	<MDL	#
Endrin	5.651	0.000	-5.651	0	N.D.	6.409	6.419	0.010	6804894	<MDL	
Endosulfan II	5.877	0.000	-5.877	0	N.D.	6.635	6.625	-0.010	5309622	<MDL	
4,4'-DDD	5.707	0.000	-5.707	0	N.D.	6.494	6.484	-0.010	6919526	<MDL	
4,4'-DDT	5.992	0.000	-5.992	0	N.D.	6.838	6.809	-0.029f	3246946	<MDL	
Endrin aldehyde	6.301	0.000	-6.301	0	N.D.	6.992	6.992	0.000	7740180	<MDL	
Methoxychlor	6.499	0.000	-6.499	0	N.D.	7.585	0.000	-7.585	0	N.D.	
Endosulfan sulfate	6.755	6.739	-0.016f	35223921	7.105	7.297	0.000	-7.297	0	N.D.	#
Endrin ketone	7.062	0.000	-7.062	0	N.D.	7.907	7.882	-0.025f	12314980	<MDL	
Hexachlorobenzene	3.230	0.000	-3.230	0	N.D.	3.636	3.608	-0.028f	31051831	2.458	
Mirex	6.671	6.698	0.027f	40666802	9.704	7.885	7.882	-0.003	12314980	1.653	#
C-Nonachlor	5.685	0.000	-5.685	0	N.D.	6.486	6.484	-0.002	6919526	<MDL	
O-Chlordane	4.718	0.000	-4.718	0	N.D.	5.289	0.000	-5.289	0	N.D.	
T-Nonachlor	5.039	0.000	-5.039	0	N.D.	5.669	5.667	-0.002	2945951	<MDL	
2,4-DDE	4.796	0.000	-4.796	0	N.D.	5.556	0.000	-5.556	0	N.D.	
2,4-DDD	5.290	0.000	-5.290	0	N.D.	6.094	6.076	-0.018f	6513708	1.022	
2,4-DDT	5.543	0.000	-5.543	0	N.D.	6.425	6.419	-0.006	6804894	<MDL	
Chlordane	3.930	0.000	-3.930	0	N.D.	4.353	4.334	-0.019f	92549357	191.713	
Chlordane {2}	4.002	0.000	-4.002	0	N.D.	4.495	4.473	-0.022f	66906950	72.734	
Chlordane {3}	4.378	0.000	-4.378	0	N.D.	4.947	0.000	-4.947	0	N.D.	
Chlordane {4}	4.930	0.000	-4.930	0	N.D.	5.577	0.000	-5.577	0	N.D.	
Chlordane {5}	5.053	0.000	-5.053	0	N.D.	5.725	5.707	-0.018f	8307968	6.502	
Sum Chlordane				0	N.D.				167764276	270.949	

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Average Chlordane					N.D.					90.316
Toxaphene	5.991	0.000	-5.991	0	N.D.	6.722	0.000	-6.722	0	N.D.
Toxaphene {2}	6.214	6.239	0.025f	9206591	41.650	7.001	6.992	-0.009	7740180	25.710
Toxaphene {3}	6.284	0.000	-6.284	0	N.D.	7.242	0.000	-7.242	0	N.D.
Toxaphene {4}	6.660	0.000	-6.660	0	N.D.	7.579	7.552	-0.027f	9732415	20.647
Toxaphene {5}	6.762	6.739	-0.023f	35223921	206.262	7.631	0.000	-7.631	0	N.D.
Sum Toxaphene				44430513	247.911				17472596	46.356 #
Average Toxaphene					123.956					<MDL

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2119.D

4CMX - Manual Integration ==

gamma-BHC (Lindane)	Both	-	Deletion ==	AB/AP
Aldrin	Both	-	Deletion ==	DNC/RT
beta-BHC	Both	-	Deletion ==	DNC/RT
Dieldrin	Both	-	Deletion ==	DNC/RT
Endosulfan sulfate		-	Deletion ==	DNC/RT
Mirex	Both	-	Deletion ==	DNC/RT
Chlordane	Multi	-	Deletion ==	DMP
Toxaphene	Multi	-	Deletion ==	DMP

alpha-BHC #2	-	Deletion ==	DNC/RT
Heptachlor #2	-	Deletion ==	DNC/RT
delta-BHC #2	-	Deletion ==	DNC/RT
Heptachlor epoxide #2	-	Deletion ==	DNC/RT
cis-Chlordane #2	-	Deletion ==	DNC/RT
Endosulfan I #2	-	Deletion ==	DNC/RT
Endrin #2	-	Deletion ==	DNC/RT
Endosulfan II #2	-	Deletion ==	DNC/RT
4,4'-DDD #2	-	Deletion ==	DNC/RT
4,4'-DDT #2	-	Deletion ==	DNC/RT
Endrin aldehyde #2	-	Deletion ==	DNC/RT
Endrin ketone #2	-	Deletion ==	DNC/RT
Hexachlorobenzene #2	-	Deletion ==	DNC/RT
C-Nonachlor #2	-	Deletion ==	DNC/RT
T-Nonachlor #2	-	Deletion ==	DNC/RT
2,4-DDD #2	-	Deletion ==	DNC/RT
2,4-DDT #2	-	Deletion ==	DNC/RT

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:35**	**Matrix:**	**W**
Lab Sample ID:	**604449010**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB03-23-265373**	**Method:**	**SW846 3535A/8081B**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**2358002**	**Inst:**	**ECDAA.I**	**Dilution:**	**10**
Run Date:	**12/21/2022 12:18**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 06:50**	**Aliquot:**	**1120.22 mL**	**Final Volume:**	**5 mL**
Data File:	**122122\eAl2120.D**	**Column:**	**1 RTX-CLP**		
	122122\eAl2120.D		**2 RTX-CLP**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
57-74-9	Chlordane	U	0.683	ug/L	0.683	2.23	1
319-84-6	alpha-BHC	U	0.0594	ug/L	0.0594	0.179	1
58-89-9	gamma-BHC (Lindane)	U	0.0594	ug/L	0.0594	0.179	1
76-44-8	Heptachlor	U	0.0594	ug/L	0.0594	0.179	1
309-00-2	Aldrin	U	0.0594	ug/L	0.0594	0.179	1
319-85-7	beta-BHC	U	0.0594	ug/L	0.0594	0.179	1
5103-74-2	trans-Chlordane	U	0.0594	ug/L	0.0594	0.179	1
5103-71-9	cis-Chlordane	U	0.0594	ug/L	0.0594	0.179	1
959-98-8	Endosulfan I	U	0.0594	ug/L	0.0594	0.179	1
60-57-1	Dieldrin	U	0.0893	ug/L	0.0893	0.357	1
72-20-8	Endrin	U	0.0893	ug/L	0.0893	0.357	1
33213-65-9	Endosulfan II	U	0.0893	ug/L	0.0893	0.357	1
50-29-3	4,4'-DDT	U	0.0893	ug/L	0.0893	0.357	1
8001-35-2	Toxaphene	U	1.34	ug/L	1.34	4.46	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%		Acceptable Limits
4cmx	0.229	0.893	ug/L	26	*	(27%-111%)
Decachlorobiphenyl	0.177	0.893	ug/L	20	*	(33%-129%)

Quantitation Report
GEL Laboratories, LLC

12/21/2022

12/22/2022

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2120.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On   : 21 Dec 2022 12:18 (#1); 21 Dec 2022 12:18 (#2)
Operator : JXM   InstName : ECDA
Sample   : |604449010|2358002|10|SVP|1|TNSL|||
Misc   : |ECD5A1B_1L|WATER|SMEB03-23-265373|MIX[P,Q,V,W]||
ALS Vial : 20   Sample Multiplier: 10

Quant Time: Dec 21 13:20:05 2022
Quant Method : D:\MSDCHEM\1\Data\122122\ECDA_PEST_120422.m
Quant Title : ECD5   SubList :
QLast Update : Mon Dec 19 11:11:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   : 1.0 ul
Signal #1 Phase : RTX-CLP1   Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um   Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
System Monitoring Compounds											
4CMX	2.938	2.938	0.000	31713499	51.297	3.227	3.227	0.000	88037335	78.704	#
DCB	8.167	8.164	-0.003	19347146	49.235	9.287	9.286	-0.001	27759837	39.667	

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	26%	39%
DCB	200.000	No Limits	25%	20%

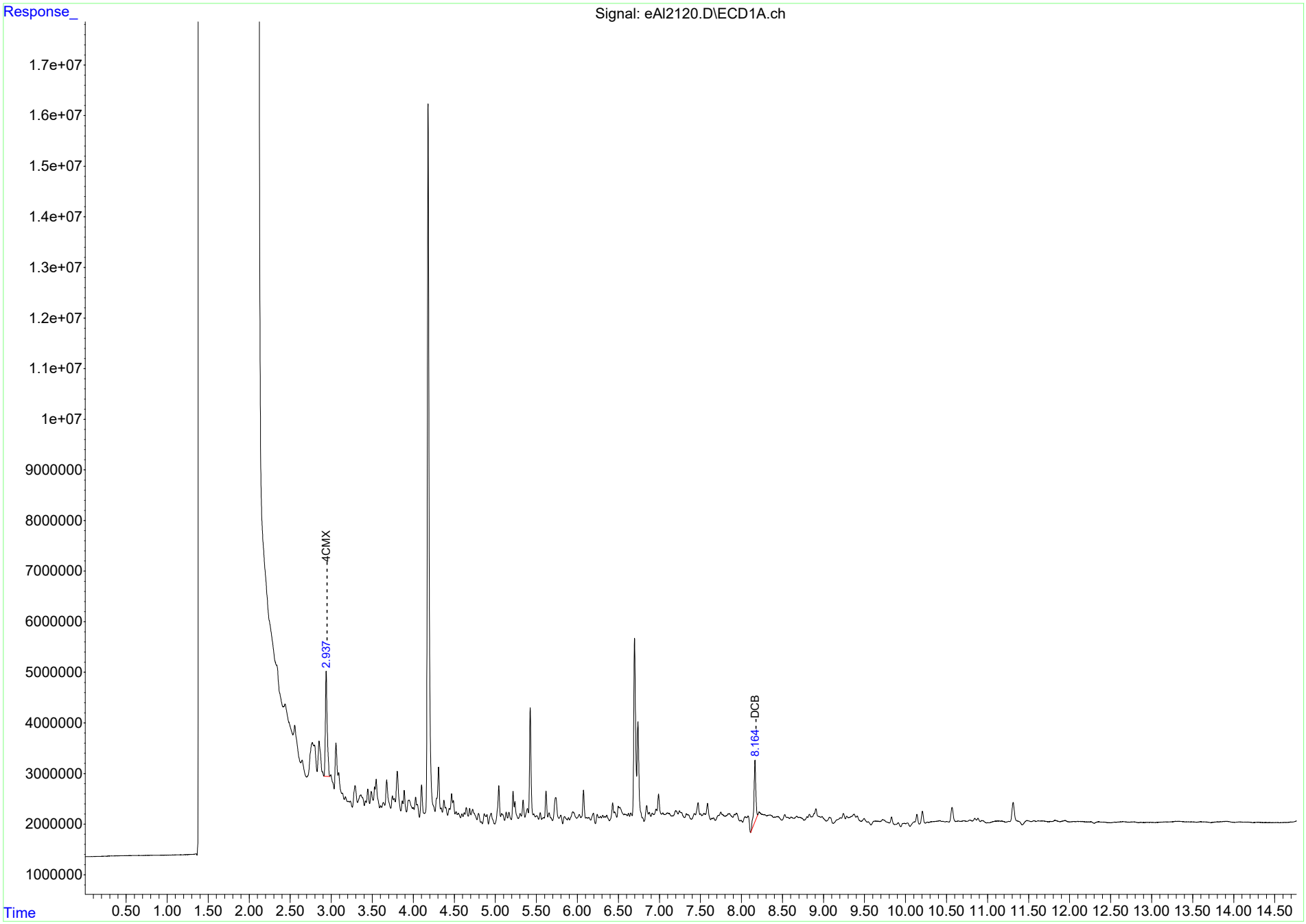
Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
alpha-BHC	3.352	0.000	-3.352	0	N.D. d	3.743	3.730	-0.013	28065988	N.D. d
gamma-BHC (Lindane)	3.604	0.000	-3.604	0	N.D. d	4.067	4.059	-0.008	19144722	N.D. d
Heptachlor	4.002	0.000	-4.002	0	N.D. d	4.495	0.000	-4.495	0	N.D. d
Aldrin	4.267	0.000	-4.267	0	N.D. d	4.820	4.802	-0.018f	18059042	N.D. d
beta-BHC	3.669	3.675	0.006	8181868	N.D. d	4.132	4.139	0.007	16144206	N.D. d
delta-BHC	3.825	3.804	-0.021f	10287129	N.D. d	4.418	0.000	-4.418	0	N.D. d
Heptachlor epoxide	4.809	0.000	-4.809	0	N.D. d	5.381	5.375	-0.006	8989899	N.D. d
trans-Chlordane	4.929	0.000	-4.929	0	N.D. d	5.577	5.570	-0.007	5647001	N.D. d
cis-Chlordane	5.054	5.042	-0.012	8932090	N.D. d	5.725	5.704	-0.021f	9336326	N.D. d
4,4'-DDE	5.118	0.000	-5.118	0	N.D. d	5.877	0.000	-5.877	0	N.D. d
Endosulfan I	5.187	5.216	0.029f	2959315	N.D. d	5.794	5.786	-0.008	10451629	N.D. d
Dieldrin	5.419	5.425	0.006	25608557	N.D. d	6.081	6.074	-0.007	5881683	N.D. d
Endrin	5.651	0.000	-5.651	0	N.D. d	6.409	6.418	0.009	6358622	N.D. d
Endosulfan II	5.877	0.000	-5.877	0	N.D. d	6.635	6.623	-0.012	6392890	N.D. d
4,4'-DDD	5.707	5.737	0.030f	8521974	N.D. d	6.494	6.481	-0.013	10000299	N.D. d

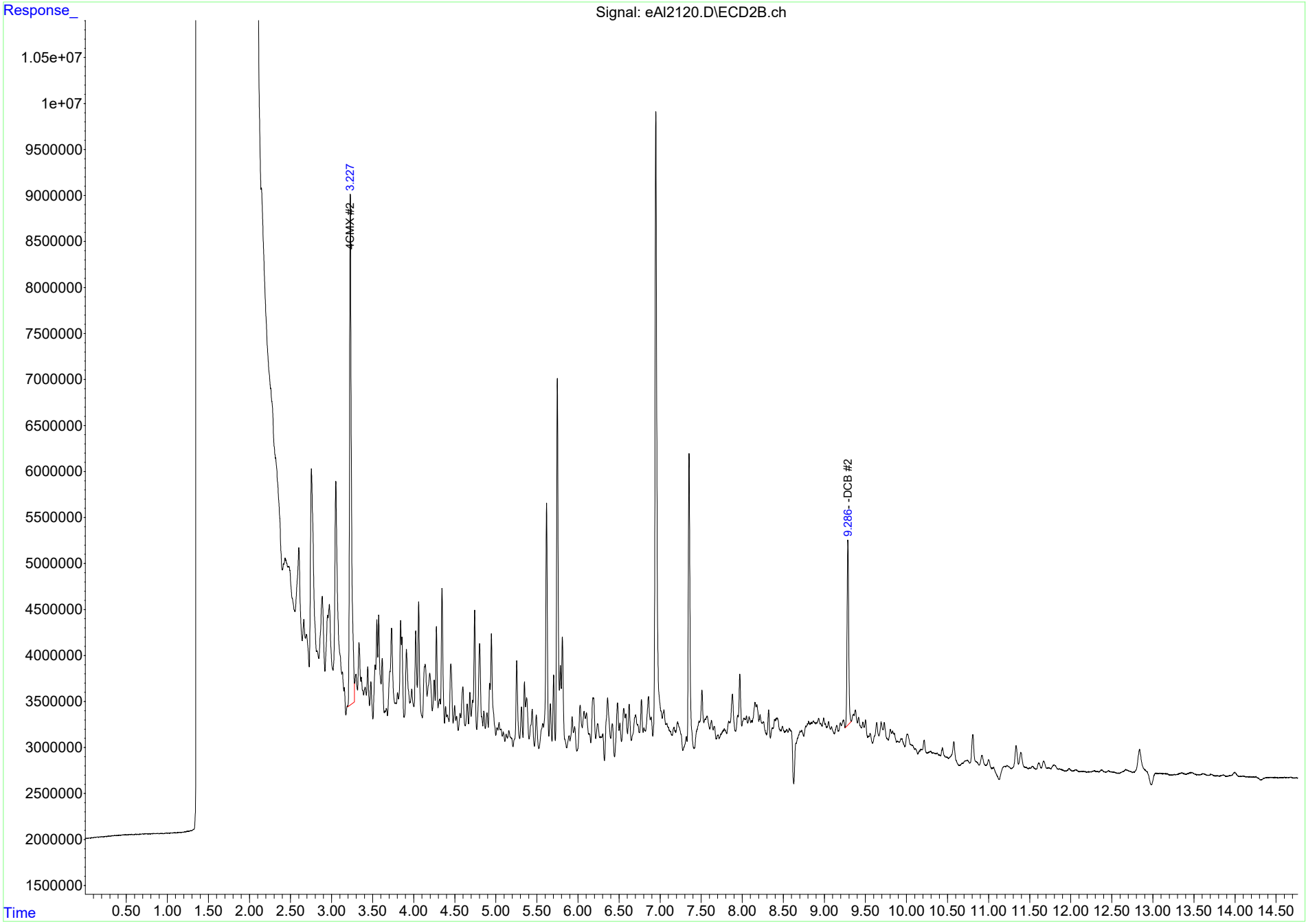
4,4'-DDT	5.992	0.000	-5.992	0	N.D. d	6.838	6.859	0.021f	7243664	N.D. d
Endrin aldehyde	6.301	0.000	-6.301	0	N.D. d	6.992	0.000	-6.992	0	N.D. d
Methoxychlor	6.499	0.000	-6.499	0	N.D. d	7.585	7.572	-0.013	12215512	N.D. d
Endosulfan sulfate	6.755	6.738	-0.017f	30801024	N.D. d	7.297	0.000	-7.297	0	N.D. d
Endrin ketone	7.062	0.000	-7.062	0	N.D. d	7.907	7.880	-0.027f	17520886	N.D. d
Hexachlorobenzene	3.230	0.000	-3.230	0	N.D. d	3.636	3.616	-0.020f	8960154	N.D. d
Mirex	6.671	6.697	0.026f	53690800	N.D. d	7.885	7.880	-0.005	17520886	N.D. d
C-Nonachlor	5.685	0.000	-5.685	0	N.D. d	6.486	6.481	-0.005	10000299	N.D. d
O-Chlordane	4.718	0.000	-4.718	0	N.D. d	5.289	5.313	0.024f	5096182	N.D. d
T-Nonachlor	5.039	5.042	0.003	8932090	N.D. d	5.669	5.664	-0.005	6377230	N.D. d
2,4-DDE	4.796	0.000	-4.796	0	N.D. d	5.556	5.570	0.014	5647001	N.D. d
2,4-DDD	5.290	0.000	-5.290	0	N.D. d	6.094	6.104	0.010	3910652	N.D. d
2,4-DDT	5.543	0.000	-5.543	0	N.D. d	6.425	6.418	-0.007	6358622	N.D. d
Chlordane	3.930	0.000	-3.930	0	N.D. d	4.353	4.344	-0.009	20650289	N.D. d
Chlordane {2}	4.002	0.000	-4.002	0	N.D. d	4.495	0.000	-4.495	0	N.D. d
Chlordane {3}	4.378	0.000	-4.378	0	N.D. d	4.947	4.945	-0.002	17091269	N.D. d
Chlordane {4}	4.930	0.000	-4.930	0	N.D. d	5.577	5.570	-0.007	5647001	N.D. d
Chlordane {5}	5.053	5.042	-0.011	8932090	N.D. d	5.725	5.704	-0.021f	9336326	N.D. d
Toxaphene	5.991	0.000	-5.991	0	N.D. d	6.722	6.702	-0.020f	7940805	N.D. d
Toxaphene {2}	6.214	0.000	-6.214	0	N.D. d	7.001	0.000	-7.001	0	N.D. d
Toxaphene {3}	6.284	0.000	-6.284	0	N.D. d	7.242	0.000	-7.242	0	N.D. d
Toxaphene {4}	6.660	0.000	-6.660	0	N.D. d	7.579	7.572	-0.007	12215512	N.D. d
Toxaphene {5}	6.762	6.738	-0.024f	30801024	N.D. d	7.631	0.000	-7.631	0	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2120.D



Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2120.D



The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
System Monitoring Compounds											
4CMX	2.938	2.938	0.000	31713499	51.297	3.227	3.227	0.000	88037335	78.704	#
DCB	8.167	8.164	-0.003	19347146	49.235	9.287	9.286	-0.001	27759837	39.667	

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	26%	39%
DCB	200.000	No Limits	25%	20%
4CMX	200.000	No Limits	26%	39%
DCB	200.000	No Limits	25%	20%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
alpha-BHC	3.352	0.000	-3.352	0	N.D.	3.743	3.730	-0.013	28065988	1.522	
gamma-BHC (Lindane)	3.604	0.000	-3.604	0	N.D.	4.067	4.059	-0.008	19144722	1.149	
Heptachlor	4.002	0.000	-4.002	0	N.D.	4.495	0.000	-4.495	0	N.D.	
Aldrin	4.267	0.000	-4.267	0	N.D.	4.820	4.802	-0.018f	18059042	1.206	
beta-BHC	3.669	3.675	0.006	8181868	2.040	4.132	4.139	0.007	16144206	2.229	
delta-BHC	3.825	3.804	-0.021f	10287129	1.164	4.418	0.000	-4.418	0	N.D.	#
Heptachlor epoxide	4.809	0.000	-4.809	0	N.D.	5.381	5.375	-0.006	8989899	<MDL	
trans-Chlordane	4.929	0.000	-4.929	0	N.D.	5.577	5.570	-0.007	5647001	<MDL	
cis-Chlordane	5.054	5.042	-0.012	8932090	1.324	5.725	5.704	-0.021f	9336326	<MDL	#
4,4'-DDE	5.118	0.000	-5.118	0	N.D.	5.877	0.000	-5.877	0	N.D.	
Endosulfan I	5.187	5.216	0.029f	2959315	<MDL	5.794	5.786	-0.008	10451629	<MDL	#
Dieldrin	5.419	5.425	0.006	25608557	3.869	6.081	6.074	-0.007	5881683	<MDL	#
Endrin	5.651	0.000	-5.651	0	N.D.	6.409	6.418	0.009	6358622	<MDL	
Endosulfan II	5.877	0.000	-5.877	0	N.D.	6.635	6.623	-0.012	6392890	<MDL	
4,4'-DDD	5.707	5.737	0.030f	8521974	<MDL	6.494	6.481	-0.013	10000299	<MDL	#
4,4'-DDT	5.992	0.000	-5.992	0	N.D.	6.838	6.859	0.021f	7243664	<MDL	
Endrin aldehyde	6.301	0.000	-6.301	0	N.D.	6.992	0.000	-6.992	0	N.D.	
Methoxychlor	6.499	0.000	-6.499	0	N.D.	7.585	7.572	-0.013	12215512	<MDL	
Endosulfan sulfate	6.755	6.738	-0.017f	30801024	6.213	7.297	0.000	-7.297	0	N.D.	#
Endrin ketone	7.062	0.000	-7.062	0	N.D.	7.907	7.880	-0.027f	17520886	<MDL	
Hexachlorobenzene	3.230	0.000	-3.230	0	N.D.	3.636	3.616	-0.020f	8960154	<MDL	
Mirex	6.671	6.697	0.026f	53690800	12.812	7.885	7.880	-0.005	17520886	2.351	#
C-Nonachlor	5.685	0.000	-5.685	0	N.D.	6.486	6.481	-0.005	10000299	<MDL	
O-Chlordane	4.718	0.000	-4.718	0	N.D.	5.289	5.313	0.024f	5096182	<MDL	
T-Nonachlor	5.039	5.042	0.003	8932090	1.487	5.669	5.664	-0.005	6377230	<MDL	#
2,4-DDE	4.796	0.000	-4.796	0	N.D.	5.556	5.570	0.014	5647001	<MDL	
2,4-DDD	5.290	0.000	-5.290	0	N.D.	6.094	6.104	0.010	3910652	<MDL	
2,4-DDT	5.543	0.000	-5.543	0	N.D.	6.425	6.418	-0.007	6358622	<MDL	
Chlordane	3.930	0.000	-3.930	0	N.D.	4.353	4.344	-0.009	20650289	42.776	
Chlordane {2}	4.002	0.000	-4.002	0	N.D.	4.495	0.000	-4.495	0	N.D.	
Chlordane {3}	4.378	0.000	-4.378	0	N.D.	4.947	4.945	-0.002	17091269	33.871	
Chlordane {4}	4.930	0.000	-4.930	0	N.D.	5.577	5.570	-0.007	5647001	3.681	
Chlordane {5}	5.053	5.042	-0.011	8932090	12.304	5.725	5.704	-0.021f	9336326	7.307	
Sum Chlordane				8932090	12.304				52724885	87.635	#

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Average Chlordane					<MDL					21.909
Toxaphene	5.991	0.000	-5.991	0	N.D.	6.722	6.702	-0.020f	7940805	15.193
Toxaphene {2}	6.214	0.000	-6.214	0	N.D.	7.001	0.000	-7.001	0	N.D.
Toxaphene {3}	6.284	0.000	-6.284	0	N.D.	7.242	0.000	-7.242	0	N.D.
Toxaphene {4}	6.660	0.000	-6.660	0	N.D.	7.579	7.572	-0.007	12215512	25.914
Toxaphene {5}	6.762	6.738	-0.024f	30801024	180.363	7.631	0.000	-7.631	0	N.D.
Sum Toxaphene				30801024	180.363				20156317	41.107 #
Average Toxaphene					180.363					<MDL

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2120.D

beta-BHC	Both	Deletion ==	
delta-BHC	-	Deletion ==	
			PPS
			DNC/RT
cis-Chlordane	Both	Deletion ==	
Endosulfan I	Both	Deletion ==	
Dieldrin	Both	Deletion ==	
			DNC/RT
			DNC/RT
			DNC/RT
4,4'-DDD	Both	Deletion ==	
			DNC/RT
Endosulfan sulfate	-	Deletion ==	
			DNC/RT
Mirex	Both	Deletion ==	
			DNC/RT
T-Nonachlor	Both	Deletion ==	
			DNC/RT
Chlordane	Multi	Deletion ==	
Toxaphene	Multi	Deletion ==	
			DNC/RT
			DNC/RT

alpha-BHC #2	-	Deletion ==	DNC/RT
gamma-BHC (Lindane) #2	-	Deletion ==	DNC/RT
Aldrin #2	-	Deletion ==	DNC/RT
Heptachlor epoxide #2	-	Deletion ==	DNC/RT
trans-Chlordane #2	-	Deletion ==	DNC/RT
Endrin #2	-	Deletion ==	DNC/RT
Endosulfan II #2	-	Deletion ==	DNC/RT
4,4'-DDT #2	-	Deletion ==	DNC/RT
Methoxychlor #2	-	Deletion ==	DNC/RT
Endrin ketone #2	-	Deletion ==	DNC/RT
Hexachlorobenzene #2	-	Deletion ==	DNC/RT
C-Nonachlor #2	-	Deletion ==	DNC/RT
O-Chlordane #2	-	Deletion ==	DNC/RT
2,4-DDE #2	-	Deletion ==	DNC/RT
2,4-DDD #2	-	Deletion ==	DNC/RT
2,4-DDT #2	-	Deletion ==	DNC/RT

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:01**	**Matrix:**	**W**
Lab Sample ID:	**604449014**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB04-23-265374**	**Method:**	**SW846 3535A/8081B**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**2358002**	**Inst:**	**ECDAA.I**	**Dilution:**	**10**
Run Date:	**12/21/2022 12:38**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 06:50**	**Aliquot:**	**1051.09 mL**	**Final Volume:**	**5 mL**
Data File:	**122122\eAl2121.D**	**Column:**	**1 RTX-CLP**		
	122122\eAl2121.D		**2 RTX-CLP**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
57-74-9	Chlordane	U	0.728	ug/L	0.728	2.38	1
319-84-6	alpha-BHC	U	0.0633	ug/L	0.0633	0.190	1
58-89-9	gamma-BHC (Lindane)	U	0.0633	ug/L	0.0633	0.190	1
76-44-8	Heptachlor	U	0.0633	ug/L	0.0633	0.190	1
309-00-2	Aldrin	U	0.0633	ug/L	0.0633	0.190	1
319-85-7	beta-BHC	U	0.0633	ug/L	0.0633	0.190	1
5103-74-2	trans-Chlordane	U	0.0633	ug/L	0.0633	0.190	1
5103-71-9	cis-Chlordane	U	0.0633	ug/L	0.0633	0.190	1
959-98-8	Endosulfan I	U	0.0633	ug/L	0.0633	0.190	1
60-57-1	Dieldrin	U	0.0951	ug/L	0.0951	0.381	1
72-20-8	Endrin	U	0.0951	ug/L	0.0951	0.381	1
33213-65-9	Endosulfan II	U	0.0951	ug/L	0.0951	0.381	1
50-29-3	4,4'-DDT	U	0.0951	ug/L	0.0951	0.381	1
8001-35-2	Toxaphene	U	1.43	ug/L	1.43	4.76	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
4cmx	0.586	0.951	ug/L	62	(27%-111%)
Decachlorobiphenyl	0.566	0.951	ug/L	59	(33%-129%)

Quantitation Report
GEL Laboratories, LLC

12/21/2022

12/22/2022

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2121.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On   : 21 Dec 2022 12:38 (#1); 21 Dec 2022 12:38 (#2)
Operator : JXM   InstName : ECDA
Sample   : |604449014|2358002|10|SVP|1|TNSL|||
Misc   : |ECD5A1B_1L|WATER|SMEB04-23-265374|MIX[P,Q,V,W]||
ALS Vial : 21   Sample Multiplier: 10

Quant Time: Dec 21 13:21:22 2022
Quant Method : D:\MSDCHEM\1\Data\122122\ECDA_PEST_120422.m
Quant Title : ECD5   SubList :
QLast Update : Mon Dec 19 11:11:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   : 1.0 ul
Signal #1 Phase : RTX-CLP1   Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um   Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.938	2.937	-0.001	77652004	125.603	3.227	3.227	0.000	137691900	123.094
DCB	8.167	8.164	-0.003	52575788	133.797	9.287	9.285	-0.002	83271032	118.989

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	63%	62%
DCB	200.000	No Limits	67%	59%

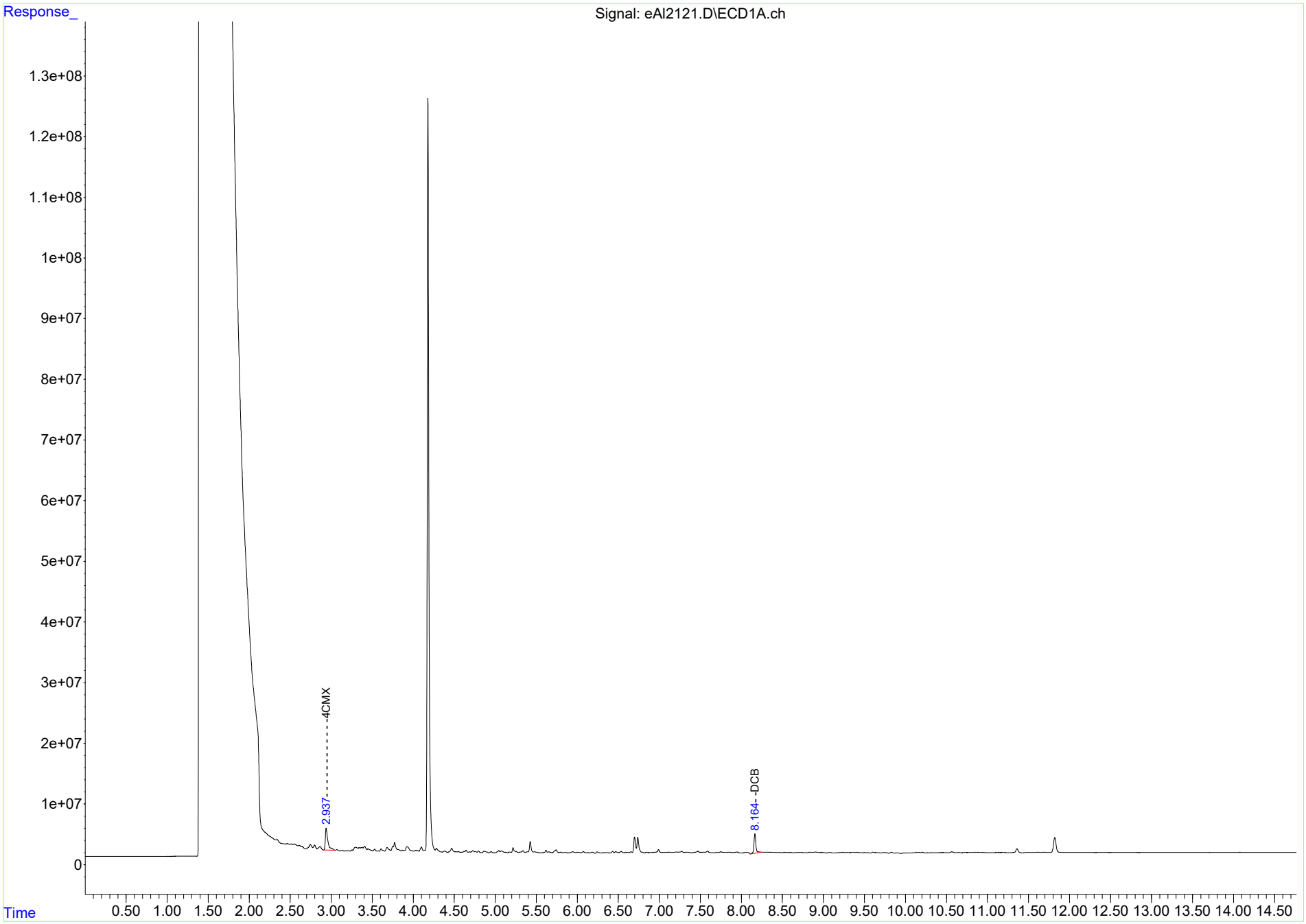
Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
alpha-BHC	3.352	0.000	-3.352	0	N.D. d	3.743	0.000	-3.743	0	N.D. d
gamma-BHC (Lindane)	3.604	0.000	-3.604	0	N.D. d	4.067	4.059	-0.008	6872563	N.D. d
Heptachlor	4.002	0.000	-4.002	0	N.D. d	4.495	4.467	-0.028f	21080792	N.D. d
Aldrin	4.267	4.282	0.015	12148225	N.D. d	4.820	4.801	-0.019f	29768728	N.D. d
beta-BHC	3.669	3.679	0.010	13523087	N.D. d	4.132	4.124	-0.008	66469708	N.D. d
delta-BHC	3.825	0.000	-3.825	0	N.D. d	4.418	4.420	0.002	11844305	N.D. d
Heptachlor epoxide	4.809	0.000	-4.809	0	N.D. d	5.381	5.370	-0.011	10035834	N.D. d
trans-Chlordane	4.929	0.000	-4.929	0	N.D. d	5.577	0.000	-5.577	0	N.D. d
cis-Chlordane	5.054	0.000	-5.054	0	N.D. d	5.725	5.703	-0.022f	5969660	N.D. d
4,4'-DDE	5.118	0.000	-5.118	0	N.D. d	5.877	0.000	-5.877	0	N.D. d
Endosulfan I	5.187	5.216	0.029f	9459809	N.D. d	5.794	5.786	-0.008	24446988	N.D. d
Dieldrin	5.419	5.426	0.007	24465004	N.D. d	6.081	6.079	-0.002	19844456	N.D. d
Endrin	5.651	0.000	-5.651	0	N.D. d	6.409	6.418	0.009	6329818	N.D. d
Endosulfan II	5.877	0.000	-5.877	0	N.D. d	6.635	6.625	-0.010	7071884	N.D. d
4,4'-DDD	5.707	0.000	-5.707	0	N.D. d	6.494	6.480	-0.014	7099204	N.D. d

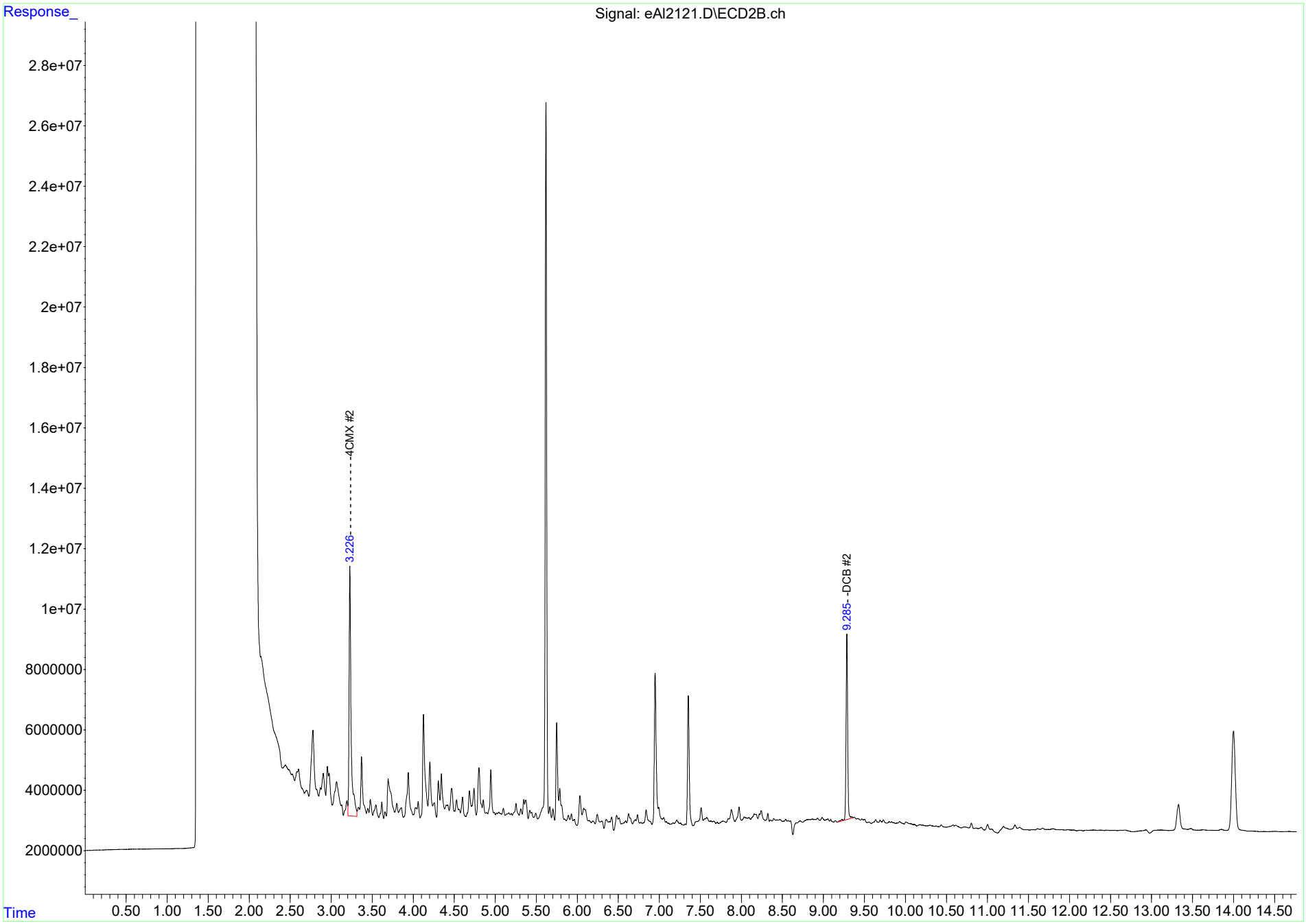
4,4'-DDT	5.992	0.000	-5.992	0	N.D. d	6.838	6.839	0.001	10765084	N.D. d
Endrin aldehyde	6.301	0.000	-6.301	0	N.D. d	6.992	6.992	0.000	6203776	N.D. d
Methoxychlor	6.499	0.000	-6.499	0	N.D. d	7.585	7.577	-0.008	4998836	N.D. d
Endosulfan sulfate	6.755	6.738	-0.017f	38022159	N.D. d	7.297	0.000	-7.297	0	N.D. d
Endrin ketone	7.062	0.000	-7.062	0	N.D. d	7.907	7.878	-0.029f	9630331	N.D. d
Hexachlorobenzene	3.230	0.000	-3.230	0	N.D. d	3.636	3.655	0.019f	2606688	N.D. d
Mirex	6.671	6.697	0.026f	36032748	N.D. d	7.885	7.878	-0.007	9630331	N.D. d
C-Nonachlor	5.685	0.000	-5.685	0	N.D. d	6.486	6.480	-0.006	7099204	N.D. d
O-Chlordane	4.718	0.000	-4.718	0	N.D. d	5.289	5.311	0.022f	3939301	N.D. d
T-Nonachlor	5.039	0.000	-5.039	0	N.D. d	5.669	5.665	-0.004	6930990	N.D. d
2,4-DDE	4.796	0.000	-4.796	0	N.D. d	5.556	0.000	-5.556	0	N.D. d
2,4-DDD	5.290	0.000	-5.290	0	N.D. d	6.094	6.079	-0.015f	19844456	N.D. d
2,4-DDT	5.543	0.000	-5.543	0	N.D. d	6.425	6.418	-0.007	6329818	N.D. d
Chlordane	3.930	3.923	-0.007	20781496	N.D. d	4.353	4.343	-0.010	25606582	N.D. d
Chlordane {2}	4.002	0.000	-4.002	0	N.D. d	4.495	4.467	-0.028f	21080792	N.D. d
Chlordane {3}	4.378	0.000	-4.378	0	N.D. d	4.947	4.946	-0.001	19003798	N.D. d
Chlordane {4}	4.930	0.000	-4.930	0	N.D. d	5.577	0.000	-5.577	0	N.D. d
Chlordane {5}	5.053	0.000	-5.053	0	N.D. d	5.725	5.703	-0.022f	5969660	N.D. d
Toxaphene	5.991	0.000	-5.991	0	N.D. d	6.722	6.734	0.012	4606776	N.D. d
Toxaphene {2}	6.214	0.000	-6.214	0	N.D. d	7.001	6.992	-0.009	6203776	N.D. d
Toxaphene {3}	6.284	0.000	-6.284	0	N.D. d	7.242	0.000	-7.242	0	N.D. d
Toxaphene {4}	6.660	0.000	-6.660	0	N.D. d	7.579	7.577	-0.002	4998836	N.D. d
Toxaphene {5}	6.762	6.738	-0.024f	38022159	N.D. d	7.631	0.000	-7.631	0	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2121.D



Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2121.D



ECDA_PEST_120422.m Wed Dec 21 13:22:31 2022 Page: 4

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
System Monitoring Compounds											
4CMX	2.938	2.937	-0.001	77652004	125.603	3.227	3.227	0.000	137691900	123.094	
DCB	8.167	8.164	-0.003	52575788	133.797	9.287	9.285	-0.002	83271032	118.989	

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	63%	62%
DCB	200.000	No Limits	67%	59%
4CMX	200.000	No Limits	63%	62%
DCB	200.000	No Limits	67%	59%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
alpha-BHC	3.352	0.000	-3.352	0	N.D.	3.743	0.000	-3.743	0	N.D.	
gamma-BHC (Lindane)	3.604	0.000	-3.604	0	N.D.	4.067	4.059	-0.008	6872563	<MDL	
Heptachlor	4.002	0.000	-4.002	0	N.D.	4.495	4.467	-0.028f	21080792	1.359	
Aldrin	4.267	4.282	0.015	12148225	1.550	4.820	4.801	-0.019f	29768728	1.987	
beta-BHC	3.669	3.679	0.010	13523087	3.372	4.132	4.124	-0.008	66469708	9.179	#
delta-BHC	3.825	0.000	-3.825	0	N.D.	4.418	4.420	0.002	11844305	<MDL	
Heptachlor epoxide	4.809	0.000	-4.809	0	N.D.	5.381	5.370	-0.011	10035834	<MDL	
trans-Chlordane	4.929	0.000	-4.929	0	N.D.	5.577	0.000	-5.577	0	N.D.	
cis-Chlordane	5.054	0.000	-5.054	0	N.D.	5.725	5.703	-0.022f	5969660	<MDL	
4,4'-DDE	5.118	0.000	-5.118	0	N.D.	5.877	0.000	-5.877	0	N.D.	
Endosulfan I	5.187	5.216	0.029f	9459809	1.462	5.794	5.786	-0.008	24446988	2.045	#
Dieldrin	5.419	5.426	0.007	24465004	3.696	6.081	6.079	-0.002	19844456	<MDL	#
Endrin	5.651	0.000	-5.651	0	N.D.	6.409	6.418	0.009	6329818	<MDL	
Endosulfan II	5.877	0.000	-5.877	0	N.D.	6.635	6.625	-0.010	7071884	<MDL	
4,4'-DDD	5.707	0.000	-5.707	0	N.D.	6.494	6.480	-0.014	7099204	<MDL	
4,4'-DDT	5.992	0.000	-5.992	0	N.D.	6.838	6.839	0.001	10765084	<MDL	
Endrin aldehyde	6.301	0.000	-6.301	0	N.D.	6.992	6.992	0.000	6203776	<MDL	
Methoxychlor	6.499	0.000	-6.499	0	N.D.	7.585	7.577	-0.008	4998836	<MDL	
Endosulfan sulfate	6.755	6.738	-0.017f	38022159	7.669	7.297	0.000	-7.297	0	N.D.	#
Endrin ketone	7.062	0.000	-7.062	0	N.D.	7.907	7.878	-0.029f	9630331	<MDL	
Hexachlorobenzene	3.230	0.000	-3.230	0	N.D.	3.636	3.655	0.019f	2606688	<MDL	
Mirex	6.671	6.697	0.026f	36032748	8.598	7.885	7.878	-0.007	9630331	<MDL	#
C-Nonachlor	5.685	0.000	-5.685	0	N.D.	6.486	6.480	-0.006	7099204	<MDL	
O-Chlordane	4.718	0.000	-4.718	0	N.D.	5.289	5.311	0.022f	3939301	<MDL	
T-Nonachlor	5.039	0.000	-5.039	0	N.D.	5.669	5.665	-0.004	6930990	<MDL	
2,4-DDE	4.796	0.000	-4.796	0	N.D.	5.556	0.000	-5.556	0	N.D.	
2,4-DDD	5.290	0.000	-5.290	0	N.D.	6.094	6.079	-0.015f	19844456	3.114	
2,4-DDT	5.543	0.000	-5.543	0	N.D.	6.425	6.418	-0.007	6329818	<MDL	
Chlordane	3.930	3.923	-0.007	20781496	85.611	4.353	4.343	-0.010	25606582	53.043	
Chlordane {2}	4.002	0.000	-4.002	0	N.D.	4.495	4.467	-0.028f	21080792	22.917	
Chlordane {3}	4.378	0.000	-4.378	0	N.D.	4.947	4.946	-0.001	19003798	37.661	
Chlordane {4}	4.930	0.000	-4.930	0	N.D.	5.577	0.000	-5.577	0	N.D.	
Chlordane {5}	5.053	0.000	-5.053	0	N.D.	5.725	5.703	-0.022f	5969660	4.672	
Sum Chlordane				20781496	85.611				71660831	118.293	

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Average Chlordane					85.611					29.573 #
Toxaphene	5.991	0.000	-5.991	0	N.D.	6.722	6.734	0.012	4606776	8.814
Toxaphene {2}	6.214	0.000	-6.214	0	N.D.	7.001	6.992	-0.009	6203776	20.606
Toxaphene {3}	6.284	0.000	-6.284	0	N.D.	7.242	0.000	-7.242	0	N.D.
Toxaphene {4}	6.660	0.000	-6.660	0	N.D.	7.579	7.577	-0.002	4998836	10.605
Toxaphene {5}	6.762	6.738	-0.024f	38022159	222.648	7.631	0.000	-7.631	0	N.D.
Sum Toxaphene				38022159	222.648				15809388	40.025 #
Average Toxaphene					222.648					<MDL

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2121.D

Aldrin	Both	Deletion ==	DNC/RT
beta-BHC	Both	Deletion ==	DNC/RT
Endosulfan I	Both	Deletion ==	DNC/RT
Dieldrin	Both	Deletion ==	DNC/RT
Endosulfan sulfate		Deletion ==	DNC/RT
Mirex	Both	Deletion ==	DNC/RT
Chlordane	Multi	Deletion ==	DNC/RT
Toxaphene	Multi	Deletion ==	DNC/RT
gamma-BHC (Lindane) #2		Deletion ==	DNC/RT
Heptachlor #2		Deletion ==	DNC/RT
delta-BHC #2		Deletion ==	DNC/RT
Heptachlor epoxide #2		Deletion ==	DNC/RT
cis-Chlordane #2		Deletion ==	DNC/RT
Endrin #2		Deletion ==	DNC/RT
Endosulfan II #2		Deletion ==	DNC/RT
4,4'-DDD #2		Deletion ==	DNC/RT
4,4'-DDT #2		Deletion ==	DNC/RT
Endrin aldehyde #2		Deletion ==	DNC/RT
Methoxychlor #2		Deletion ==	DNC/RT
Endrin ketone #2		Deletion ==	DNC/RT
Hexachlorobenzene #2		Deletion ==	DNC/RT
C-Nonachlor #2		Deletion ==	DNC/RT
O-Chlordane #2		Deletion ==	DNC/RT
T-Nonachlor #2		Deletion ==	DNC/RT
2,4-DDD #2		Deletion ==	DNC/RT
2,4-DDT #2		Deletion ==	DNC/RT

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:12**	**Matrix:**	**W**
Lab Sample ID:	**604449018**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB05-23-265375**	**Method:**	**SW846 3535A/8081B**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**2358002**	**Inst:**	**ECDAA.I**	**Dilution:**	**20**
Run Date:	**12/21/2022 12:59**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 06:50**	**Aliquot:**	**1022.58 mL**	**Final Volume:**	**5 mL**
Data File:	**122122\eAl2122.D**	**Column:**	**1 RTX-CLP**		
	122122\eAl2122.D		**2 RTX-CLP**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
57-74-9	Chlordane	U	1.50	ug/L	1.50	4.89	1
319-84-6	alpha-BHC	U	0.130	ug/L	0.130	0.391	1
58-89-9	gamma-BHC (Lindane)	U	0.130	ug/L	0.130	0.391	1
76-44-8	Heptachlor	U	0.130	ug/L	0.130	0.391	1
309-00-2	Aldrin	U	0.130	ug/L	0.130	0.391	1
319-85-7	beta-BHC	U	0.130	ug/L	0.130	0.391	1
5103-74-2	trans-Chlordane	U	0.130	ug/L	0.130	0.391	1
5103-71-9	cis-Chlordane	U	0.130	ug/L	0.130	0.391	1
959-98-8	Endosulfan I	U	0.130	ug/L	0.130	0.391	1
60-57-1	Dieldrin	U	0.196	ug/L	0.196	0.782	1
72-20-8	Endrin	U	0.196	ug/L	0.196	0.782	1
33213-65-9	Endosulfan II	U	0.196	ug/L	0.196	0.782	1
50-29-3	4,4'-DDT	U	0.196	ug/L	0.196	0.782	1
8001-35-2	Toxaphene	U	2.93	ug/L	2.93	9.78	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
4cmx	0.379	0.978	ug/L	39	(27%-111%)
Decachlorobiphenyl	0.526	0.978	ug/L	54	(33%-129%)

Quantitation Report
GEL Laboratories, LLC

12/21/2022

12/22/2022

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2122.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Dec 2022 12:59 (#1); 21 Dec 2022 12:59 (#2)
Operator : JXM InstName : ECDA
Sample : |604449018|2358002|20|SVP|1|TNSL|||
Misc : |ECD5A1B_1L|WATER|SMEB05-23-265375|MIX[P,Q,V,W]||
ALS Vial : 22 Sample Multiplier: 20

Quant Time: Dec 21 13:21:53 2022
Quant Method : D:\MSDCHEM\1\Data\122122\ECDA_PEST_120422.m
Quant Title : ECD5 SubList :
QLast Update : Mon Dec 19 11:11:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.938	2.936	-0.002	23981393	77.581	3.227	3.226	-0.001	46117974	82.457
DCB	8.167	8.164	-0.003	22330244	113.654	9.287	9.285	-0.002	37655327	107.615

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	39%	41%
DCB	200.000	No Limits	57%	54%

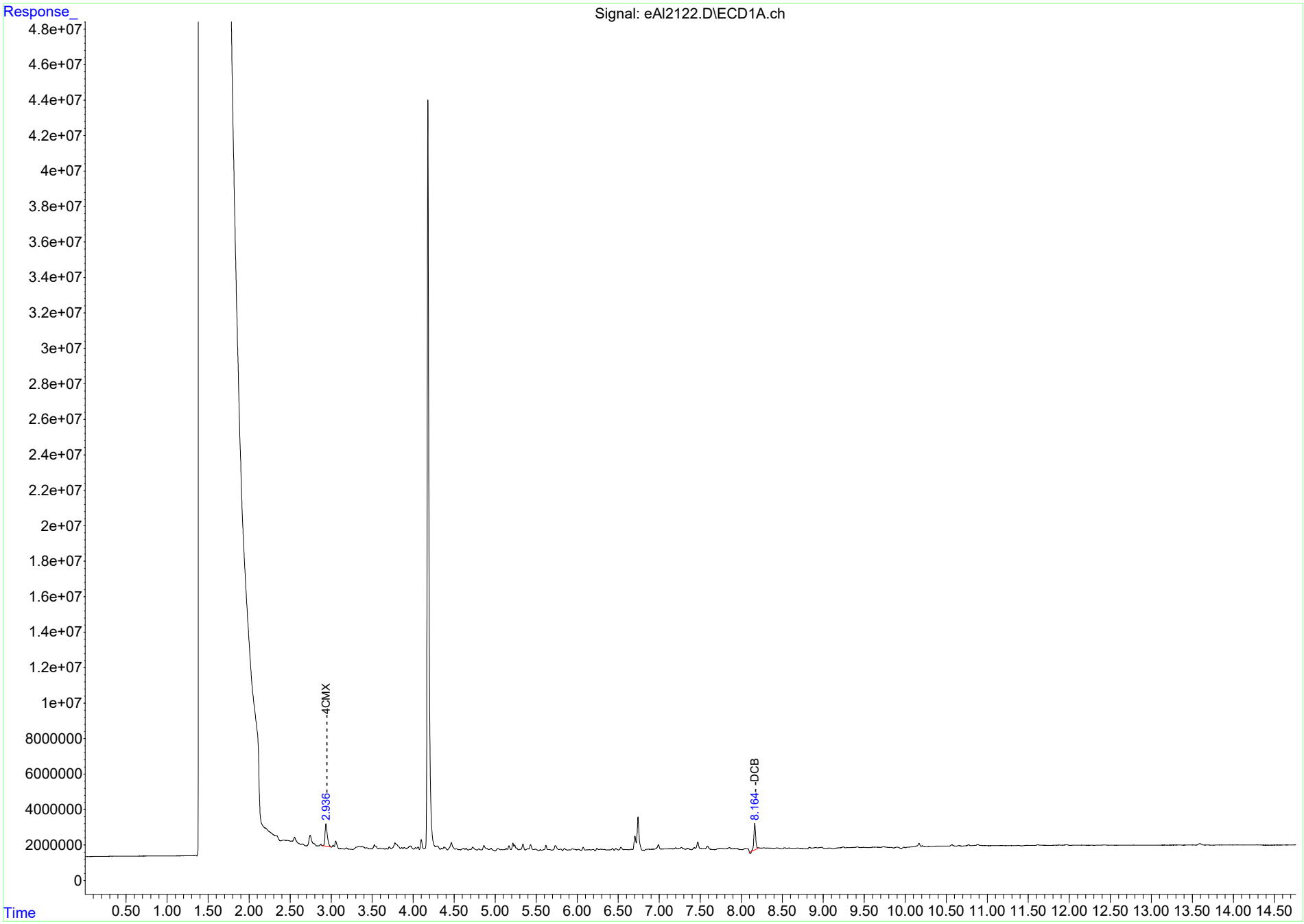
Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
alpha-BHC	3.352	0.000	-3.352	0	N.D. d	3.743	0.000	-3.743	0	N.D. d
gamma-BHC (Lindane)	3.604	0.000	-3.604	0	N.D. d	4.067	4.059	-0.008	10388515	N.D. d
Heptachlor	4.002	0.000	-4.002	0	N.D. d	4.495	0.000	-4.495	0	N.D. d
Aldrin	4.267	0.000	-4.267	0	N.D. d	4.820	4.831	0.011	2427870	N.D. d
beta-BHC	3.669	0.000	-3.669	0	N.D. d	4.132	4.127	-0.005	8465153	N.D. d
delta-BHC	3.825	0.000	-3.825	0	N.D. d	4.418	4.423	0.005	4357783	N.D. d
Heptachlor epoxide	4.809	0.000	-4.809	0	N.D. d	5.381	5.381	0.000	5301863	N.D. d
trans-Chlordane	4.929	0.000	-4.929	0	N.D. d	5.577	0.000	-5.577	0	N.D. d
cis-Chlordane	5.054	0.000	-5.054	0	N.D. d	5.725	5.704	-0.021f	4555997	N.D. d
4,4'-DDE	5.118	0.000	-5.118	0	N.D. d	5.877	0.000	-5.877	0	N.D. d
Endosulfan I	5.187	0.000	-5.187	0	N.D. d	5.794	5.790	-0.004	8015678	N.D. d
Dieldrin	5.419	0.000	-5.419	0	N.D. d	6.081	6.093	0.012	3376922	N.D. d
Endrin	5.651	0.000	-5.651	0	N.D. d	6.409	0.000	-6.409	0	N.D. d
Endosulfan II	5.877	0.000	-5.877	0	N.D. d	6.635	0.000	-6.635	0	N.D. d
4,4'-DDD	5.707	0.000	-5.707	0	N.D. d	6.494	0.000	-6.494	0	N.D. d

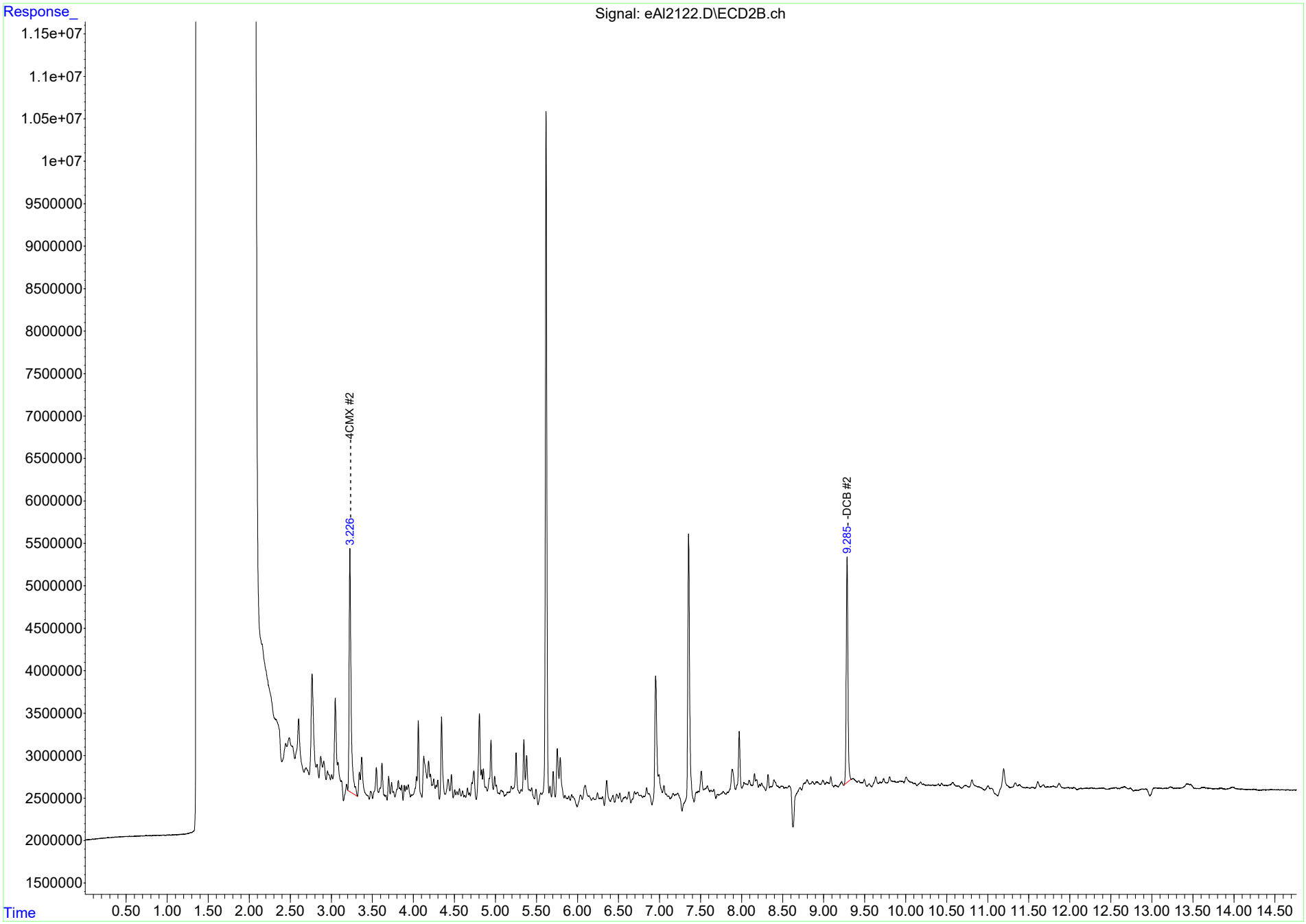
4,4'-DDT	5.992	0.000	-5.992	0	N.D. d	6.838	0.000	-6.838	0	N.D. d
Endrin aldehyde	6.301	0.000	-6.301	0	N.D. d	6.992	0.000	-6.992	0	N.D. d
Methoxychlor	6.499	0.000	-6.499	0	N.D. d	7.585	0.000	-7.585	0	N.D. d
Endosulfan sulfate	6.755	6.742	-0.013	29853660	N.D. d	7.297	0.000	-7.297	0	N.D. d
Endrin ketone	7.062	0.000	-7.062	0	N.D. d	7.907	7.886	-0.021f	5524644	N.D. d
Hexachlorobenzene	3.230	0.000	-3.230	0	N.D. d	3.636	3.617	-0.019f	6236624	N.D. d
Mirex	6.671	0.000	-6.671	0	N.D. d	7.885	7.886	0.001	5524644	N.D. d
C-Nonachlor	5.685	0.000	-5.685	0	N.D. d	6.486	0.000	-6.486	0	N.D. d
O-Chlordane	4.718	0.000	-4.718	0	N.D. d	5.289	0.000	-5.289	0	N.D. d
T-Nonachlor	5.039	0.000	-5.039	0	N.D. d	5.669	0.000	-5.669	0	N.D. d
2,4-DDE	4.796	0.000	-4.796	0	N.D. d	5.556	0.000	-5.556	0	N.D. d
2,4-DDD	5.290	0.000	-5.290	0	N.D. d	6.094	6.093	-0.001	3376922	N.D. d
2,4-DDT	5.543	0.000	-5.543	0	N.D. d	6.425	0.000	-6.425	0	N.D. d
Chlordane	3.930	0.000	-3.930	0	N.D. d	4.353	4.343	-0.010	13571107	N.D. d
Chlordane {2}	4.002	0.000	-4.002	0	N.D. d	4.495	0.000	-4.495	0	N.D. d
Chlordane {3}	4.378	0.000	-4.378	0	N.D. d	4.947	4.946	-0.001	7473689	N.D. d
Chlordane {4}	4.930	0.000	-4.930	0	N.D. d	5.577	0.000	-5.577	0	N.D. d
Chlordane {5}	5.053	0.000	-5.053	0	N.D. d	5.725	5.704	-0.021f	4555997	N.D. d
Toxaphene	5.991	0.000	-5.991	0	N.D. d	6.722	0.000	-6.722	0	N.D. d
Toxaphene {2}	6.214	0.000	-6.214	0	N.D. d	7.001	0.000	-7.001	0	N.D. d
Toxaphene {3}	6.284	0.000	-6.284	0	N.D. d	7.242	0.000	-7.242	0	N.D. d
Toxaphene {4}	6.660	0.000	-6.660	0	N.D. d	7.579	0.000	-7.579	0	N.D. d
Toxaphene {5}	6.762	6.742	-0.020f	29853660	N.D. d	7.631	0.000	-7.631	0	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2122.D



Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2122.D



The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
System Monitoring Compounds											
4CMX	2.938	2.936	-0.002	23981393	77.581	3.227	3.226	-0.001	46117974	82.457	
DCB	8.167	8.164	-0.003	22330244	113.654	9.287	9.285	-0.002	37655327	107.615	

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	39%	41%
DCB	200.000	No Limits	57%	54%
4CMX	200.000	No Limits	39%	41%
DCB	200.000	No Limits	57%	54%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
alpha-BHC	3.352	0.000	-3.352	0	N.D.	3.743	0.000	-3.743	0	N.D.	
gamma-BHC (Lindane)	3.604	0.000	-3.604	0	N.D.	4.067	4.059	-0.008	10388515	<MDL	
Heptachlor	4.002	0.000	-4.002	0	N.D.	4.495	0.000	-4.495	0	N.D.	
Aldrin	4.267	0.000	-4.267	0	N.D.	4.820	4.831	0.011	2427870	<MDL	
beta-BHC	3.669	0.000	-3.669	0	N.D.	4.132	4.127	-0.005	8465153	1.169	
delta-BHC	3.825	0.000	-3.825	0	N.D.	4.418	4.423	0.005	4357783	<MDL	
Heptachlor epoxide	4.809	0.000	-4.809	0	N.D.	5.381	5.381	0.000	5301863	<MDL	
trans-Chlordane	4.929	0.000	-4.929	0	N.D.	5.577	0.000	-5.577	0	N.D.	
cis-Chlordane	5.054	0.000	-5.054	0	N.D.	5.725	5.704	-0.021f	4555997	<MDL	
4,4'-DDE	5.118	0.000	-5.118	0	N.D.	5.877	0.000	-5.877	0	N.D.	
Endosulfan I	5.187	0.000	-5.187	0	N.D.	5.794	5.790	-0.004	8015678	<MDL	
Dieldrin	5.419	0.000	-5.419	0	N.D.	6.081	6.093	0.012	3376922	<MDL	
Endrin	5.651	0.000	-5.651	0	N.D.	6.409	0.000	-6.409	0	N.D.	
Endosulfan II	5.877	0.000	-5.877	0	N.D.	6.635	0.000	-6.635	0	N.D.	
4,4'-DDD	5.707	0.000	-5.707	0	N.D.	6.494	0.000	-6.494	0	N.D.	
4,4'-DDT	5.992	0.000	-5.992	0	N.D.	6.838	0.000	-6.838	0	N.D.	
Endrin aldehyde	6.301	0.000	-6.301	0	N.D.	6.992	0.000	-6.992	0	N.D.	
Methoxychlor	6.499	0.000	-6.499	0	N.D.	7.585	0.000	-7.585	0	N.D.	
Endosulfan sulfate	6.755	6.742	-0.013	29853660	6.022	7.297	0.000	-7.297	0	N.D.	#
Endrin ketone	7.062	0.000	-7.062	0	N.D.	7.907	7.886	-0.021f	5524644	<MDL	
Hexachlorobenzene	3.230	0.000	-3.230	0	N.D.	3.636	3.617	-0.019f	6236624	<MDL	
Mirex	6.671	0.000	-6.671	0	N.D.	7.885	7.886	0.001	5524644	<MDL	
C-Nonachlor	5.685	0.000	-5.685	0	N.D.	6.486	0.000	-6.486	0	N.D.	
O-Chlordane	4.718	0.000	-4.718	0	N.D.	5.289	0.000	-5.289	0	N.D.	
T-Nonachlor	5.039	0.000	-5.039	0	N.D.	5.669	0.000	-5.669	0	N.D.	
2,4-DDE	4.796	0.000	-4.796	0	N.D.	5.556	0.000	-5.556	0	N.D.	
2,4-DDD	5.290	0.000	-5.290	0	N.D.	6.094	6.093	-0.001	3376922	<MDL	
2,4-DDT	5.543	0.000	-5.543	0	N.D.	6.425	0.000	-6.425	0	N.D.	
Chlordane	3.930	0.000	-3.930	0	N.D.	4.353	4.343	-0.010	13571107	28.112	
Chlordane {2}	4.002	0.000	-4.002	0	N.D.	4.495	0.000	-4.495	0	N.D.	
Chlordane {3}	4.378	0.000	-4.378	0	N.D.	4.947	4.946	-0.001	7473689	14.811	
Chlordane {4}	4.930	0.000	-4.930	0	N.D.	5.577	0.000	-5.577	0	N.D.	
Chlordane {5}	5.053	0.000	-5.053	0	N.D.	5.725	5.704	-0.021f	4555997	3.566	
Sum Chlordane				0	N.D.				25600792	46.489	

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Average Chlordane					N.D.					15.496
Toxaphene	5.991	0.000	-5.991	0	N.D.	6.722	0.000	-6.722	0	N.D.
Toxaphene {2}	6.214	0.000	-6.214	0	N.D.	7.001	0.000	-7.001	0	N.D.
Toxaphene {3}	6.284	0.000	-6.284	0	N.D.	7.242	0.000	-7.242	0	N.D.
Toxaphene {4}	6.660	0.000	-6.660	0	N.D.	7.579	0.000	-7.579	0	N.D.
Toxaphene {5}	6.762	6.742	-0.020f	29853660	174.815	7.631	0.000	-7.631	0	N.D.
Sum Toxaphene				29853660	174.815				0	N.D.
Average Toxaphene					174.815					N.D.

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2122.D

gamma-BHC (Lindane) #2	-	Deletion ==	DNC/RT
Aldrin #2	-	Deletion ==	DNC/RT
beta-BHC #2	-	Deletion ==	DNC/RT
delta-BHC #2	-	Deletion ==	DNC/RT
Heptachlor epoxide #2	-	Deletion ==	DNC/RT
cis-Chlordane #2	-	Deletion ==	DNC/RT
Endosulfan I #2	-	Deletion ==	DNC/RT
Dieldrin #2	-	Deletion ==	DNC/RT
Endosulfan sulfate	-	Deletion ==	DNC/RT
Endrin ketone #2	-	Deletion ==	DNC/RT
Hexachlorobenzene #2	-	Deletion ==	DNC/RT
Mirex #2	-	Deletion ==	DNC/RT
2,4-DDD #2	-	Deletion ==	DNC/RT
Chlordane Multi	-	Deletion ==	DNC/RT
Toxaphene Multi	-	Deletion ==	DNC/RT

Standards

Calibration Levels 8081 102115+A1						
Calibration Standard Concentration Levels (ug/L)						
	Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**	**CCV**
Hexachlorobenzene	4	20	100	200	400	200
alpha-BHC	4	10	50	100	200	100
gamma-BHC (Lindane)	4	10	50	100	200	100
Heptachlor	4	10	50	100	200	100
Aldrin	4	10	50	100	200	100
beta-BHC	4	10	50	100	200	100
delta-BHC	4	10	50	100	200	100
Heptachlor epoxide	4	10	50	100	200	100
Endosulfan I	4	10	50	100	200	100
gamma-Chlordane	4	10	50	100	200	100
alpha-Chlordane	4	10	50	100	200	100
Mirex	4	10	50	100	200	100
c-Nonachlor	4	10	50	100	200	100
o-Chlordane	4	10	50	100	200	100
t-Nonachlor	4	10	50	100	200	100
2,4-DDD	4	10	50	100	200	100
2,4-DDE	4	10	50	100	200	100
2,4-DDT	4	10	50	100	200	100
4,4'-DDD	8	20	100	200	400	200
4,4'-DDE	8	20	100	200	400	200
4,4'-DDT	8	20	100	200	400	200
Dieldrin	8	20	100	200	400	200
Endrin	8	20	100	200	400	200
Endosulfan II	8	20	100	200	400	200
Endrin aldehyde	8	20	100	200	400	200
Endosulfan sulfate	8	20	100	200	400	200
Endrin ketone	8	20	100	200	400	200
4-CMX (surr)	8	20	100	200	400	200
DCB (surr)	8	20	100	200	400	200
1,2-Dichlorobenzene	20	50	100	150	200	150
Methoxychlor	40	100	500	1000	2000	1000
Chlordane (nos)	50	100	500	1000	3000	1000
Aroclor 1016	100	250	500	1000	4000	1000
Aroclor 1221	100	250	500	1000	4000	1000
Aroclor 1232	100	250	500	1000	4000	1000
Aroclor 1242	100	250	500	1000	4000	1000
Aroclor 1248	100	250	500	1000	4000	1000
Aroclor 1254	100	250	500	1000	4000	1000
Aroclor 1260	100	250	500	1000	4000	1000
Aroclor 1262	100	250	500	1000	4000	1000
Aroclor 1268	100	250	500	1000	4000	1000
Toxaphene	100	500	1000	2000	3000	2000
Calibration Levels 8081 102115						

JM 12/21/2022

JC 12/22/2022

Calibration History Report ECDA
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\Data\122022a\ECDA_PEST_120422.m
Last Update : Mon Dec 19 11:11:48 2022
Integrator : (ChemStation Integrator) Response via : Initial Calibration

Cal Lvl:1 Amt:8.00 Last Updated with: D:\MSDCHEM\1\Data\121922\eAl1907.D

Injection Date	Mix	Calibration File
19 Dec 2022 08:52	A	D:\MSDCHEM\1\Data\121922\eAl1907.D
01 Dec 2022 07:14	Q	D:\MSDCHEM\1\Data\120122\eAl0104.D
04 Dec 2022 14:11	P	D:\MSDCHEM\1\Data\120422\eAl0407.D
01 Dec 2022 08:53	V	D:\MSDCHEM\1\Data\120122\eAl0110.D
01 Dec 2022 10:31	W	D:\MSDCHEM\1\Data\120122\eAl0116.D

Cal Lvl:2 Amt:20.00 Last Updated with: D:\MSDCHEM\1\Data\121922\eAl1908.D

Injection Date	Mix	Calibration File
19 Dec 2022 09:09	A	D:\MSDCHEM\1\Data\121922\eAl1908.D
01 Dec 2022 07:30	Q	D:\MSDCHEM\1\Data\120122\eAl0105.D
04 Dec 2022 14:27	P	D:\MSDCHEM\1\Data\120422\eAl0408.D
01 Dec 2022 09:09	V	D:\MSDCHEM\1\Data\120122\eAl0111.D
01 Dec 2022 10:48	W	D:\MSDCHEM\1\Data\120122\eAl0117.D

Cal Lvl:3 Amt:100.00 Last Updated with: D:\MSDCHEM\1\Data\121922\eAl1909.D

Injection Date	Mix	Calibration File
19 Dec 2022 09:25	A	D:\MSDCHEM\1\Data\121922\eAl1909.D
01 Dec 2022 07:47	Q	D:\MSDCHEM\1\Data\120122\eAl0106.D
04 Dec 2022 14:44	P	D:\MSDCHEM\1\Data\120422\eAl0409.D
01 Dec 2022 09:26	V	D:\MSDCHEM\1\Data\120122\eAl0112.D
01 Dec 2022 11:04	W	D:\MSDCHEM\1\Data\120122\eAl0118.D

Cal Lvl:4 Amt:200.00 Last Updated with: D:\MSDCHEM\1\Data\121922\eAl1910.D

Injection Date	Mix	Calibration File
19 Dec 2022 09:42	A	D:\MSDCHEM\1\Data\121922\eAl1910.D
01 Dec 2022 08:03	Q	D:\MSDCHEM\1\Data\120122\eAl0107.D
04 Dec 2022 15:00	P	D:\MSDCHEM\1\Data\120422\eAl0410.D
01 Dec 2022 09:42	V	D:\MSDCHEM\1\Data\120122\eAl0113.D
01 Dec 2022 11:21	W	D:\MSDCHEM\1\Data\120122\eAl0119.D

Cal Lvl:5 Amt:400.00 Last Updated with: D:\MSDCHEM\1\Data\121922\eAl1911.D

Injection Date	Mix	Calibration File
19 Dec 2022 09:58	A	D:\MSDCHEM\1\Data\121922\eAl1911.D
01 Dec 2022 08:20	Q	D:\MSDCHEM\1\Data\120122\eAl0108.D
04 Dec 2022 15:17	P	D:\MSDCHEM\1\Data\120422\eAl0411.D
01 Dec 2022 09:59	V	D:\MSDCHEM\1\Data\120122\eAl0114.D
01 Dec 2022 11:37	W	D:\MSDCHEM\1\Data\120122\eAl0120.D

ECDA_PEST_120422.m Wed Dec 21 05:41:32 2022

JM 12/21/2022

JC 12/22/2022

Calibration History Report ECDA
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\Data\122122\ECDA_PEST_120422.m
Last Update : Mon Dec 19 11:11:48 2022
Integrator : (ChemStation Integrator) Response via : Initial Calibration

Cal Lvl:1 Amt:8.00 Last Updated with: D:\MSDCHEM\1\Data\121922\eAl1907.D

Injection Date	Mix	Calibration File
19 Dec 2022 08:52	A	D:\MSDCHEM\1\Data\121922\eAl1907.D
01 Dec 2022 07:14	Q	D:\MSDCHEM\1\Data\120122\eAl0104.D
04 Dec 2022 14:11	P	D:\MSDCHEM\1\Data\120422\eAl0407.D
01 Dec 2022 08:53	V	D:\MSDCHEM\1\Data\120122\eAl0110.D
01 Dec 2022 10:31	W	D:\MSDCHEM\1\Data\120122\eAl0116.D

Cal Lvl:2 Amt:20.00 Last Updated with: D:\MSDCHEM\1\Data\121922\eAl1908.D

Injection Date	Mix	Calibration File
19 Dec 2022 09:09	A	D:\MSDCHEM\1\Data\121922\eAl1908.D
01 Dec 2022 07:30	Q	D:\MSDCHEM\1\Data\120122\eAl0105.D
04 Dec 2022 14:27	P	D:\MSDCHEM\1\Data\120422\eAl0408.D
01 Dec 2022 09:09	V	D:\MSDCHEM\1\Data\120122\eAl0111.D
01 Dec 2022 10:48	W	D:\MSDCHEM\1\Data\120122\eAl0117.D

Cal Lvl:3 Amt:100.00 Last Updated with: D:\MSDCHEM\1\Data\121922\eAl1909.D

Injection Date	Mix	Calibration File
19 Dec 2022 09:25	A	D:\MSDCHEM\1\Data\121922\eAl1909.D
01 Dec 2022 07:47	Q	D:\MSDCHEM\1\Data\120122\eAl0106.D
04 Dec 2022 14:44	P	D:\MSDCHEM\1\Data\120422\eAl0409.D
01 Dec 2022 09:26	V	D:\MSDCHEM\1\Data\120122\eAl0112.D
01 Dec 2022 11:04	W	D:\MSDCHEM\1\Data\120122\eAl0118.D

Cal Lvl:4 Amt:200.00 Last Updated with: D:\MSDCHEM\1\Data\121922\eAl1910.D

Injection Date	Mix	Calibration File
19 Dec 2022 09:42	A	D:\MSDCHEM\1\Data\121922\eAl1910.D
01 Dec 2022 08:03	Q	D:\MSDCHEM\1\Data\120122\eAl0107.D
04 Dec 2022 15:00	P	D:\MSDCHEM\1\Data\120422\eAl0410.D
01 Dec 2022 09:42	V	D:\MSDCHEM\1\Data\120122\eAl0113.D
01 Dec 2022 11:21	W	D:\MSDCHEM\1\Data\120122\eAl0119.D

Cal Lvl:5 Amt:400.00 Last Updated with: D:\MSDCHEM\1\Data\121922\eAl1911.D

Injection Date	Mix	Calibration File
19 Dec 2022 09:58	A	D:\MSDCHEM\1\Data\121922\eAl1911.D
01 Dec 2022 08:20	Q	D:\MSDCHEM\1\Data\120122\eAl0108.D
04 Dec 2022 15:17	P	D:\MSDCHEM\1\Data\120422\eAl0411.D
01 Dec 2022 09:59	V	D:\MSDCHEM\1\Data\120122\eAl0114.D
01 Dec 2022 11:37	W	D:\MSDCHEM\1\Data\120122\eAl0120.D

ECDA_PEST_120422.m Wed Dec 21 08:05:12 2022

Response Factor Report ECDA
GEL Laboratories, LLC

Method File : D:\MSDCHEM\1\Data\122022a\ECDA_PEST_120422.m
Last Update : Mon Dec 19 11:11:48 2022
Integrator : (ChemStation Integrator) Response via : Initial Calibration

12/21/2022

JC
12/22/2022

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
1)SP 4CMX	6.9086475	6.2690279	6.0528577	6.1056240	5.5754521		6.1823	AVRG	E6	7.7826
2)MP alpha-BHC	0.9422473	0.9342944	0.9889741	1.0212655	0.9501083		0.9674	AVRG	E7	3.7962
3)MP gamma-BHC (Lindane)	8.9325653	8.6247937	8.8824548	9.0929703	8.4259007		8.7917	AVRG	E6	3.0121
4)MP Heptachlor	8.6909693	8.1750415	8.1337165	8.2646595	7.6313103		8.1791	AVRG	E6	4.6213
5)MP Aldrin	8.1231931	7.7967469	7.8672148	8.0155482	7.3935303		7.8392	AVRG	E6	3.5681
6)MP beta-BHC	4.6487580	4.1743906	3.8556900	3.8478034	3.5258684		4.0105	AVRG	E6	10.5754
7)MP delta-BHC	8.3925214	8.5549014	9.0995474	9.3977233	8.7307840		8.8351	AVRG	E6	4.6383
8)MP Heptachlor epoxide	7.5518962	6.9892697	6.7814152	6.8308559	6.2773375		6.8862	AVRG	E6	6.6489
9)MP trans-Chlordane	7.3258573	6.9987982	6.8454218	6.9499115	6.4139234		6.9068	AVRG	E6	4.7616
10)MP cis-Chlordane	7.4857041	6.8764908	6.5754761	6.6498474	6.1382705		6.7452	AVRG	E6	7.3076
11)MP 4,4'-DDE	6.3618515	6.2691922	6.4085168	6.4683390	5.9742667		6.2964	AVRG	E6	3.0850
12)MP Endosulfan I	7.1143527	6.6068061	6.3539469	6.3966854	5.8746204		6.4693	AVRG	E6	6.9440
13)MP Dieldrin	6.8873417	6.6591835	6.6789291	6.7071578	6.1638237		6.6193	AVRG	E6	4.0830
14)MP Endrin	6.0954656	5.8088184	5.7635243	5.7110903	5.2908077					

Response Factor Report ECDA
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\Data\122022a\ECDA_PEST_120422.m
Last Update : Mon Dec 19 11:11:48 2022
Integrator : (ChemStation Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
							5.7339	AVRG	E6	5.0401
15)MP Endosulfan II	6.1729667	5.8224609	5.6098578	5.5984133	5.0916185					
							5.6591	AVRG	E6	6.9508
16)MP 4,4'-DDD	5.3036687	5.1462801	5.3497237	5.2688579	4.8852920					
							5.1908	AVRG	E6	3.5965
17)MP 4,4'-DDT	5.6525681	5.6112527	5.5584803	5.6461786	5.2075555					
							5.5352	AVRG	E6	3.3771
18)MP Endrin aldehyde	5.0874375	4.7040955	4.4420713	4.3047140	3.9108075					
							4.4898	AVRG	E6	9.8028
19)MP Methoxychlor	3.0735507	2.8349617	2.5878912	2.5508752	2.3728282					
							2.6840	AVRG	E6	10.1749
20)MP Endosulfan sulfate	5.7870638	5.2208095	4.7778624	4.7254758	4.2767999					
							4.9576	AVRG	E6	11.5300
21)MP Endrin ketone	7.1748102	6.7037031	6.3426379	6.3108610	5.7811879					
							6.4626	AVRG	E6	7.9922
22)MW Hexachlorobenzene	8.3950844	7.0442910	6.5071581	6.5067972	6.5370038					
							6.9981	AVRG	E6	11.6281
23)MW Mirex	5.3253883	4.3480791	3.7970797	3.7467717	3.7359745					
							4.1907	AVRG	E6	16.3205
24)MW C-Nonachlor	6.6506609	6.2027656	6.0205419	6.0827559	6.1281971					
							6.2170	AVRG	E6	4.0434
25)MW O-Chlordane	6.4461854	5.6549328	5.2715557	5.2002790	5.1094486					
							5.5365	AVRG	E6	9.9225
26)MW T-Nonachlor	6.7002117	6.0085410	5.7813129	5.7654755	5.7828141					
							6.0077	AVRG	E6	6.6585
27)MW 2,4-DDE	4.1077230	3.8373061	3.6689450	3.7271588	3.7304892					
							3.8143	AVRG	E6	4.5856

Response Factor Report ECDA
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\Data\122022a\ECDA_PEST_120422.m
Last Update : Mon Dec 19 11:11:48 2022
Integrator : (ChemStation Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
28)MW 2,4-DDD	3.7158376	3.3628948	3.2461899	3.2603262	3.3043767					
							3.3779	AVRG	E6	5.7519
29)MW 2,4-DDT	4.2484754	4.0676862	3.8985153	3.9181091	3.9259398					
							4.0117	AVRG	E6	3.6998
30)MVL10Chlordane	2.5520375	2.4364644	2.3764977	2.3614706	2.4106481					
							2.4274	AVRG	E5	3.1126
31)MVL10Chlordane {2}	4.7177410	4.5560007	4.6563787	4.6579785	4.6784023					
							4.6533	AVRG	E5	1.2841
32)MVL10Chlordane {3}	3.2459904	2.9339370	2.5191180	2.4124269	2.6020482					
							2.7427	AVRG	E5	12.4810
33)MVL10Chlordane {4}	9.1409594	8.9477370	9.1844054	9.1138590	9.1662603					
							9.1106	AVRG	E5	1.0413
34)MVL10Chlordane {5}	7.1968640	7.2541227	7.3977680	7.2594528	7.1879271					
							7.2592	AVRG	E5	1.1565
35)MQL11Toxaphene	2.2131077	1.7451269	1.8515114	1.8386367	1.8699796					
							1.9037	AVRG	E5	9.4325
36)MQL11Toxaphene {2}	2.3907026	2.1470770	2.2168801	2.1494661	2.1483333					
							2.2105	AVRG	E5	4.7515
37)MQL11Toxaphene {3}	2.8761284	2.5034473	2.5273107	2.5429846	2.5559067					
							2.6012	AVRG	E5	5.9571
38)MQL11Toxaphene {4}	2.9839292	2.6071464	2.6480013	2.5964123	2.5921522					
							2.6855	AVRG	E5	6.2657
39)MQL11Toxaphene {5}	1.9153530	1.6302327	1.6604176	1.6522372	1.6804017					
							1.7077	AVRG	E5	6.8775
40)MAL1 Aroclor-1016	3.2853745	2.6607234	2.4707708	2.2887070	1.9625234					
							2.5336	AVRG	E5	19.4501

Response Factor Report ECDA
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\Data\122022a\ECDA_PEST_120422.m
Last Update : Mon Dec 19 11:11:48 2022
Integrator : (ChemStation Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
41)MAL1 Aroclor-1016 {2}	3.9310210	3.5661238	3.2543154	3.1799234	2.7681169					
							3.3399	AVRG	E5	13.0549
42)MAL1 Aroclor-1016 {3}	2.6931152	2.2222822	2.0649684	1.9663278	1.7259940					
							2.1345	AVRG	E5	16.8874
43)MAL1 Aroclor-1016 {4}	1.8529756	1.5398331	1.4382014	1.3650860	1.1854079					
							1.4763	AVRG	E5	16.7421
44)MAL1 Aroclor-1016 {5}	1.9570649	1.5186692	1.4306250	1.3858380	1.2014281					
							1.4987	AVRG	E5	18.7610
45)JL2 Aroclor-1221										
							0.0000	AVRG		-1.0000
46)JL2 Aroclor-1221 {2}										
							0.0000	AVRG		-1.0000
47)JL2 Aroclor-1221 {3}										
							0.0000	AVRG		-1.0000
48)FL3 Aroclor-1232										
							0.0000	AVRG		-1.0000
49)FL3 Aroclor-1232 {2}										
							0.0000	AVRG		-1.0000
50)FL3 Aroclor-1232 {3}										
							0.0000	AVRG		-1.0000
51)FL3 Aroclor-1232 {4}										
							0.0000	AVRG		-1.0000
52)FL3 Aroclor-1232 {5}										
							0.0000	AVRG		-1.0000
53)DL4 Aroclor-1242										
							0.0000	AVRG		-1.0000
54)DL4 Aroclor-1242 {2}										

Response Factor Report ECDA
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\Data\122022a\ECDA_PEST_120422.m
Last Update : Mon Dec 19 11:11:48 2022
Integrator : (ChemStation Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
							0.0000	AVRG		-1.0000
55)DL4 Aroclor-1242 {3}										
							0.0000	AVRG		-1.0000
56)DL4 Aroclor-1242 {4}										
							0.0000	AVRG		-1.0000
57)DL4 Aroclor-1242 {5}										
							0.0000	AVRG		-1.0000
58)EL5 Aroclor-1248										
							0.0000	AVRG		-1.0000
59)EL5 Aroclor-1248 {2}										
							0.0000	AVRG		-1.0000
60)EL5 Aroclor-1248 {3}										
							0.0000	AVRG		-1.0000
61)EL5 Aroclor-1248 {4}										
							0.0000	AVRG		-1.0000
62)EL5 Aroclor-1248 {5}										
							0.0000	AVRG		-1.0000
63)BL6 Aroclor-1254										
							0.0000	AVRG		-1.0000
64)BL6 Aroclor-1254 {2}										
							0.0000	AVRG		-1.0000
65)BL6 Aroclor-1254 {3}										
							0.0000	AVRG		-1.0000
66)BL6 Aroclor-1254 {4}										
							0.0000	AVRG		-1.0000
67)BL6 Aroclor-1254 {5}										
							0.0000	AVRG		-1.0000

Response Factor Report ECDA
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\Data\122022a\ECDA_PEST_120422.m
Last Update : Mon Dec 19 11:11:48 2022
Integrator : (ChemStation Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b	m1	m2								
68)MAL7 Aroclor-1260	3.4189909	2.7083642	2.5468306	2.3970413	2.1219371					
							2.6386	AVRG	E5	18.4460
69)MAL7 Aroclor-1260 {2}	4.5329933	3.8920098	3.6223540	3.5023604	3.1968162					
							3.7493	AVRG	E5	13.4478
70)MAL7 Aroclor-1260 {3}	3.0716321	2.6676594	2.4092554	2.2511620	2.0604770					
							2.4920	AVRG	E5	15.7714
71)MAL7 Aroclor-1260 {4}	5.9988660	5.1428602	5.0895113	5.1022185	4.8586412					
							5.2384	AVRG	E5	8.3884
72)MAL7 Aroclor-1260 {5}	2.8359069	2.6058177	2.5262908	2.5886773	2.4815009					
							2.6076	AVRG	E5	5.2510
73)KL8 Aroclor-1262										
							0.0000	AVRG		-1.0000
74)KL8 Aroclor-1262 {2}										
							0.0000	AVRG		-1.0000
75)KL8 Aroclor-1262 {3}										
							0.0000	AVRG		-1.0000
76)KL8 Aroclor-1262 {4}										
							0.0000	AVRG		-1.0000
77)KL8 Aroclor-1262 {5}										
							0.0000	AVRG		-1.0000
78)OL9 Aroclor-1268										
							0.0000	AVRG		-1.0000
79)OL9 Aroclor-1268 {2}										
							0.0000	AVRG		-1.0000
80)OL9 Aroclor-1268 {3}										
							0.0000	AVRG		-1.0000

Response Factor Report ECDA
GEL Laboratories, LLC
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Last Update : Mon Dec 19 11:11:48 2022
Integrator : (ChemStation Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
81)OL9 Aroclor-1268 {4}										
							0.0000	AVRG		-1.0000
82)OL9 Aroclor-1268 {5}										
							0.0000	AVRG		-1.0000
83)SP DCB	5.0041585	4.3187725	3.5792320	3.5128632	3.2325336					
							3.9295	AVRG	E6	18.3884

COLUMN #2

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
1)SP 4CMX	1.2904401	1.1704137	1.0916820	1.0735249	0.9669025					
							1.1186	AVRG	E7	10.7633
2)MP alpha-BHC	1.9510918	1.8792695	1.8531085	1.8491582	1.6857992					
							1.8437	AVRG	E7	5.2761
3)MP gamma-BHC (Lindane)	1.8081760	1.7117654	1.6625712	1.6512714	1.4990788					
							1.6666	AVRG	E7	6.7352
4)MP Heptachlor	1.7425664	1.6198902	1.5326729	1.5050764	1.3537558					
							1.5508	AVRG	E7	9.2771
5)MP Aldrin	1.6528004	1.5558034	1.4852809	1.4711096	1.3248734					
							1.4980	AVRG	E7	8.0498
6)MP beta-BHC	8.6416967	7.7095136	6.9482874	6.8052278	6.1045295					
							7.2419	AVRG	E6	13.3676
7)MP delta-BHC	1.7757859	1.6990460	1.6794404	1.6698599	1.5206509					
							1.6690	AVRG	E7	5.5584
8)MP Heptachlor epoxide	1.4895593	1.3837831	1.2807313	1.2573752	1.1315674					
							1.3086	AVRG	E7	10.3333

Response Factor Report ECDA
GEL Laboratories, LLC

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Last Update : Mon Dec 19 11:11:48 2022
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For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
9)MP trans-Chlordane	1.4672779	1.3542060	1.2863562	1.2656557	1.1528339					
							1.3053	AVRG	E7	8.8855
10)MP cis-Chlordane	1.4576721	1.3356954	1.2420087	1.2201233	1.1103316					
							1.2732	AVRG	E7	10.2599
11)MP 4,4'-DDE	1.2836821	1.2408890	1.1869796	1.1625197	1.0771122					
							1.1902	AVRG	E7	6.6253
12)MP Endosulfan I	1.3647526	1.2598338	1.1732846	1.1437004	1.0362963					
							1.1956	AVRG	E7	10.3550
13)MP Dieldrin	1.3715372	1.3062675	1.2323285	1.2025975	1.1104323					
							1.2446	AVRG	E7	8.0176
14)MP Endrin	1.2177163	1.1475281	1.0673438	1.0293382	0.9435341					
							1.0811	AVRG	E7	9.7968
15)MP Endosulfan II	1.2050813	1.1155976	1.0429862	1.0112528	0.9126629					
							1.0575	AVRG	E7	10.4106
16)MP 4,4'-DDD	1.0705507	1.0217999	0.9790983	0.9639966	0.8837874					
							0.9838	AVRG	E7	7.0761
17)MP 4,4'-DDT	1.1174963	1.0681007	1.0098233	0.9970044	0.9210227					
							1.0227	AVRG	E7	7.2865
18)MP Endrin aldehyde	9.3558357	8.5499801	7.9650333	7.7534743	6.9439935					
							8.1137	AVRG	E6	11.1152
19)MP Methoxychlor	5.6119966	5.2057879	4.5476832	4.4482208	4.1867128					
							4.8001	AVRG	E6	12.2700
20)MP Endosulfan sulfate	1.0605356	0.9567079	0.8493540	0.8248298	0.7408516					
							0.8865	AVRG	E7	14.0008
21)MP Endrin ketone	1.3612253	1.2575102	1.1503724	1.1278865	1.0417604					
							1.1878	AVRG	E7	10.4186
22)MW Hexachlorobenzene	1.5467008	1.3035160	1.1764384	1.1460851	1.1427662					

Response Factor Report ECDA
GEL Laboratories, LLC

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Last Update : Mon Dec 19 11:11:48 2022
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For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
							1.2631	AVRG	E7	13.5833
23)MW Mirex	9.2019934	7.6381153	6.9419722	6.7745946	6.7016981					
							7.4517	AVRG	E6	14.0413
24)MW C-Nonachlor	1.3149607	1.2034320	1.1185862	1.1069614	1.1398502					
							1.1768	AVRG	E7	7.2891
25)MW O-Chlordane	1.2199904	1.0808161	0.9692035	0.9360543	0.9086242					
							1.0229	AVRG	E7	12.5270
26)MW T-Nonachlor	1.2780662	1.1521944	1.0583348	1.0500601	1.0472104					
							1.1172	AVRG	E7	8.9483
27)MW 2,4-DDE	8.2647088	7.5399904	6.8970023	6.7078732	6.5688795					
							7.1957	AVRG	E6	9.7810
28)MW 2,4-DDD	7.3173488	6.4945750	6.1245497	6.0162442	5.9134888					
							6.3732	AVRG	E6	8.9681
29)MW 2,4-DDT	8.4757618	7.7133205	7.1388369	7.0119577	6.9462639					
							7.4572	AVRG	E6	8.6483
30)MVL10Chlordane	5.2361107	4.9445861	4.7418225	4.7189015	4.4960867					
							4.8275	AVRG	E5	5.7634
31)MVL10Chlordane {2}	9.7745190	9.5074619	9.1668702	9.0319002	8.5134003					
							9.1988	AVRG	E5	5.2287
32)MVL10Chlordane {3}	6.0012831	5.4696073	4.6787243	4.7070637	4.3733878					
							5.0460	AVRG	E5	13.2726
33)MVL10Chlordane {4}	1.5995354	1.5276581	1.5556262	1.5232022	1.4645155					
							1.5341	AVRG	E6	3.2178
34)MVL10Chlordane {5}	1.3578540	1.2771040	1.2881476	1.2655292	1.1998396					
							1.2777	AVRG	E6	4.4178
35)MQL11Toxaphene	5.8703638	5.2589954	5.0575704	4.9978894	4.9486321					
							5.2267	AVRG	E5	7.2453

Response Factor Report ECDA
GEL Laboratories, LLC
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Last Update : Mon Dec 19 11:11:48 2022
Integrator : (ChemStation Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
36)MQL11Toxaphene {2}	3.2666830	3.0339962	2.9596311	2.9361251	2.8566159					
							3.0106	AVRG	E5	5.1986
37)MQL11Toxaphene {3}	4.1544179	4.0251659	3.9454624	3.8862917	3.9446282					
							3.9912	AVRG	E5	2.5996
38)MQL11Toxaphene {4}	5.1670304	4.7166063	4.5632471	4.5604336	4.5616722					
							4.7138	AVRG	E5	5.5600
39)MQL11Toxaphene {5}	4.9092373	4.6756351	4.5634657	4.5502051	4.5981979					
							4.6593	AVRG	E5	3.1753
40)MAL1 Aroclor-1016	3.2911344	2.7028785	2.6841266	2.3244342	1.9787750					
							2.5963	AVRG	E5	18.8409
41)MAL1 Aroclor-1016 {2}	7.2382349	6.1565261	5.6867030	5.3861346	4.5650728					
							5.8065	AVRG	E5	17.0153
42)MAL1 Aroclor-1016 {3}	4.5379340	3.8767586	3.6057258	3.3400186	2.8644511					
							3.6450	AVRG	E5	17.1049
43)MAL1 Aroclor-1016 {4}	2.8152292	2.4799484	2.3161591	2.2124526	1.9494447					
							2.3546	AVRG	E5	13.6584
44)MAL1 Aroclor-1016 {5}	3.2863947	2.9318434	2.6977502	2.5613648	2.2406612					
							2.7436	AVRG	E5	14.3303
45)JL2 Aroclor-1221										
							0.0000	AVRG		-1.0000
46)JL2 Aroclor-1221 {2}										
							0.0000	AVRG		-1.0000
47)JL2 Aroclor-1221 {3}										
							0.0000	AVRG		-1.0000
48)FL3 Aroclor-1232										
							0.0000	AVRG		-1.0000

Response Factor Report ECDA
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\Data\122022a\ECDA_PEST_120422.m
Last Update : Mon Dec 19 11:11:48 2022
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For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5	Avg	Curve	Exp	%RSD/r2
b m1 m2									
49)FL3 Aroclor-1232 {2}						0.0000	AVRG		-1.0000
50)FL3 Aroclor-1232 {3}						0.0000	AVRG		-1.0000
51)FL3 Aroclor-1232 {4}						0.0000	AVRG		-1.0000
52)FL3 Aroclor-1232 {5}						0.0000	AVRG		-1.0000
53)DL4 Aroclor-1242						0.0000	AVRG		-1.0000
54)DL4 Aroclor-1242 {2}						0.0000	AVRG		-1.0000
55)DL4 Aroclor-1242 {3}						0.0000	AVRG		-1.0000
56)DL4 Aroclor-1242 {4}						0.0000	AVRG		-1.0000
57)DL4 Aroclor-1242 {5}						0.0000	AVRG		-1.0000
58)EL5 Aroclor-1248						0.0000	AVRG		-1.0000
59)EL5 Aroclor-1248 {2}						0.0000	AVRG		-1.0000
60)EL5 Aroclor-1248 {3}						0.0000	AVRG		-1.0000
61)EL5 Aroclor-1248 {4}						0.0000	AVRG		-1.0000
62)EL5 Aroclor-1248 {5}									

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
							0.0000	AVRG		-1.0000
63)BL6 Aroclor-1254										
							0.0000	AVRG		-1.0000
64)BL6 Aroclor-1254 {2}										
							0.0000	AVRG		-1.0000
65)BL6 Aroclor-1254 {3}										
							0.0000	AVRG		-1.0000
66)BL6 Aroclor-1254 {4}										
							0.0000	AVRG		-1.0000
67)BL6 Aroclor-1254 {5}										
							0.0000	AVRG		-1.0000
68)MAL7 Aroclor-1260	5.4686481	4.5554557	4.2088553	3.9729167	3.5506988					
							4.3513	AVRG	E5	16.6302
69)MAL7 Aroclor-1260 {2}	6.9853713	5.8177521	5.5810457	5.2234229	4.4722761					
							5.6160	AVRG	E5	16.3667
70)MAL7 Aroclor-1260 {3}	5.4754286	4.6410348	4.2710588	4.0157800	3.4825045					
							4.3772	AVRG	E5	17.0124
71)MAL7 Aroclor-1260 {4}	1.2030626	1.0616350	1.0029660	0.9714786	0.8806022					
							1.0239	AVRG	E6	11.6830
72)MAL7 Aroclor-1260 {5}	8.4533541	7.4489293	7.0392547	6.8838859	6.3086229					
							7.2268	AVRG	E5	11.0474
73)KL8 Aroclor-1262										
							0.0000	AVRG		-1.0000
74)KL8 Aroclor-1262 {2}										
							0.0000	AVRG		-1.0000
75)KL8 Aroclor-1262 {3}										
							0.0000	AVRG		-1.0000

Response Factor Report ECDA
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\Data\122022a\ECDA_PEST_120422.m
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For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b / m1 / m2										
76)KL8 Aroclor-1262 {4}										
							0.0000	AVRG		-1.0000
77)KL8 Aroclor-1262 {5}										
							0.0000	AVRG		-1.0000
78)OL9 Aroclor-1268										
							0.0000	AVRG		-1.0000
79)OL9 Aroclor-1268 {2}										
							0.0000	AVRG		-1.0000
80)OL9 Aroclor-1268 {3}										
							0.0000	AVRG		-1.0000
81)OL9 Aroclor-1268 {4}										
							0.0000	AVRG		-1.0000
82)OL9 Aroclor-1268 {5}										
							0.0000	AVRG		-1.0000
83)SP DCB	8.8165331	7.6774631	6.3918493	6.3072038	5.7978683					
							6.9982	AVRG	E6	17.5790

(#) = Out of Range ($) = Individual RF Out of Range ### Number of calibration levels exceeded format ###
AVRG = Average, LINR = Linear Regression, 1/x = the inverse of concentration, 1/x^2 = the inverse square of concentration

Response Factor Report ECDA
GEL Laboratories, LLC

Method File : D:\MSDCHEM\1\Data\122122\ECDA_PEST_120422.m
Last Update : Mon Dec 19 11:11:48 2022
Integrator : (ChemStation Integrator) Response via : Initial Calibration

12/21/2022

12/22/2022

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
1)SP 4CMX	6.9086475	6.2690279	6.0528577	6.1056240	5.5754521		6.1823	AVRG	E6	7.7826
2)MP alpha-BHC	0.9422473	0.9342944	0.9889741	1.0212655	0.9501083		0.9674	AVRG	E7	3.7962
3)MP gamma-BHC (Lindane)	8.9325653	8.6247937	8.8824548	9.0929703	8.4259007		8.7917	AVRG	E6	3.0121
4)MP Heptachlor	8.6909693	8.1750415	8.1337165	8.2646595	7.6313103		8.1791	AVRG	E6	4.6213
5)MP Aldrin	8.1231931	7.7967469	7.8672148	8.0155482	7.3935303		7.8392	AVRG	E6	3.5681
6)MP beta-BHC	4.6487580	4.1743906	3.8556900	3.8478034	3.5258684		4.0105	AVRG	E6	10.5754
7)MP delta-BHC	8.3925214	8.5549014	9.0995474	9.3977233	8.7307840		8.8351	AVRG	E6	4.6383
8)MP Heptachlor epoxide	7.5518962	6.9892697	6.7814152	6.8308559	6.2773375		6.8862	AVRG	E6	6.6489
9)MP trans-Chlordane	7.3258573	6.9987982	6.8454218	6.9499115	6.4139234		6.9068	AVRG	E6	4.7616
10)MP cis-Chlordane	7.4857041	6.8764908	6.5754761	6.6498474	6.1382705		6.7452	AVRG	E6	7.3076
11)MP 4,4'-DDE	6.3618515	6.2691922	6.4085168	6.4683390	5.9742667		6.2964	AVRG	E6	3.0850
12)MP Endosulfan I	7.1143527	6.6068061	6.3539469	6.3966854	5.8746204		6.4693	AVRG	E6	6.9440
13)MP Dieldrin	6.8873417	6.6591835	6.6789291	6.7071578	6.1638237		6.6193	AVRG	E6	4.0830
14)MP Endrin	6.0954656	5.8088184	5.7635243	5.7110903	5.2908077					

Response Factor Report ECDA
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Last Update : Mon Dec 19 11:11:48 2022
Integrator : (ChemStation Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
							5.7339	AVRG	E6	5.0401
15)MP Endosulfan II	6.1729667	5.8224609	5.6098578	5.5984133	5.0916185					
							5.6591	AVRG	E6	6.9508
16)MP 4,4'-DDD	5.3036687	5.1462801	5.3497237	5.2688579	4.8852920					
							5.1908	AVRG	E6	3.5965
17)MP 4,4'-DDT	5.6525681	5.6112527	5.5584803	5.6461786	5.2075555					
							5.5352	AVRG	E6	3.3771
18)MP Endrin aldehyde	5.0874375	4.7040955	4.4420713	4.3047140	3.9108075					
							4.4898	AVRG	E6	9.8028
19)MP Methoxychlor	3.0735507	2.8349617	2.5878912	2.5508752	2.3728282					
							2.6840	AVRG	E6	10.1749
20)MP Endosulfan sulfate	5.7870638	5.2208095	4.7778624	4.7254758	4.2767999					
							4.9576	AVRG	E6	11.5300
21)MP Endrin ketone	7.1748102	6.7037031	6.3426379	6.3108610	5.7811879					
							6.4626	AVRG	E6	7.9922
22)MW Hexachlorobenzene	8.3950844	7.0442910	6.5071581	6.5067972	6.5370038					
							6.9981	AVRG	E6	11.6281
23)MW Mirex	5.3253883	4.3480791	3.7970797	3.7467717	3.7359745					
							4.1907	AVRG	E6	16.3205
24)MW C-Nonachlor	6.6506609	6.2027656	6.0205419	6.0827559	6.1281971					
							6.2170	AVRG	E6	4.0434
25)MW O-Chlordane	6.4461854	5.6549328	5.2715557	5.2002790	5.1094486					
							5.5365	AVRG	E6	9.9225
26)MW T-Nonachlor	6.7002117	6.0085410	5.7813129	5.7654755	5.7828141					
							6.0077	AVRG	E6	6.6585
27)MW 2,4-DDE	4.1077230	3.8373061	3.6689450	3.7271588	3.7304892					
							3.8143	AVRG	E6	4.5856

Response Factor Report ECDA
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\Data\122122\ECDA_PEST_120422.m
Last Update : Mon Dec 19 11:11:48 2022
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For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
28)MW 2,4-DDD	3.7158376	3.3628948	3.2461899	3.2603262	3.3043767					
							3.3779	AVRG	E6	5.7519
29)MW 2,4-DDT	4.2484754	4.0676862	3.8985153	3.9181091	3.9259398					
							4.0117	AVRG	E6	3.6998
30)MVL10Chlordane	2.5520375	2.4364644	2.3764977	2.3614706	2.4106481					
							2.4274	AVRG	E5	3.1126
31)MVL10Chlordane {2}	4.7177410	4.5560007	4.6563787	4.6579785	4.6784023					
							4.6533	AVRG	E5	1.2841
32)MVL10Chlordane {3}	3.2459904	2.9339370	2.5191180	2.4124269	2.6020482					
							2.7427	AVRG	E5	12.4810
33)MVL10Chlordane {4}	9.1409594	8.9477370	9.1844054	9.1138590	9.1662603					
							9.1106	AVRG	E5	1.0413
34)MVL10Chlordane {5}	7.1968640	7.2541227	7.3977680	7.2594528	7.1879271					
							7.2592	AVRG	E5	1.1565
35)MQL11Toxaphene	2.2131077	1.7451269	1.8515114	1.8386367	1.8699796					
							1.9037	AVRG	E5	9.4325
36)MQL11Toxaphene {2}	2.3907026	2.1470770	2.2168801	2.1494661	2.1483333					
							2.2105	AVRG	E5	4.7515
37)MQL11Toxaphene {3}	2.8761284	2.5034473	2.5273107	2.5429846	2.5559067					
							2.6012	AVRG	E5	5.9571
38)MQL11Toxaphene {4}	2.9839292	2.6071464	2.6480013	2.5964123	2.5921522					
							2.6855	AVRG	E5	6.2657
39)MQL11Toxaphene {5}	1.9153530	1.6302327	1.6604176	1.6522372	1.6804017					
							1.7077	AVRG	E5	6.8775
40)MAL1 Aroclor-1016	3.2853745	2.6607234	2.4707708	2.2887070	1.9625234					
							2.5336	AVRG	E5	19.4501

Response Factor Report ECDA
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\Data\122122\ECDA_PEST_120422.m
Last Update : Mon Dec 19 11:11:48 2022
Integrator : (ChemStation Integrator) Response via : Initial Calibration

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Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
41)MAL1 Aroclor-1016 {2}	3.9310210	3.5661238	3.2543154	3.1799234	2.7681169					
							3.3399	AVRG	E5	13.0549
42)MAL1 Aroclor-1016 {3}	2.6931152	2.2222822	2.0649684	1.9663278	1.7259940					
							2.1345	AVRG	E5	16.8874
43)MAL1 Aroclor-1016 {4}	1.8529756	1.5398331	1.4382014	1.3650860	1.1854079					
							1.4763	AVRG	E5	16.7421
44)MAL1 Aroclor-1016 {5}	1.9570649	1.5186692	1.4306250	1.3858380	1.2014281					
							1.4987	AVRG	E5	18.7610
45)JL2 Aroclor-1221										
							0.0000	AVRG		-1.0000
46)JL2 Aroclor-1221 {2}										
							0.0000	AVRG		-1.0000
47)JL2 Aroclor-1221 {3}										
							0.0000	AVRG		-1.0000
48)FL3 Aroclor-1232										
							0.0000	AVRG		-1.0000
49)FL3 Aroclor-1232 {2}										
							0.0000	AVRG		-1.0000
50)FL3 Aroclor-1232 {3}										
							0.0000	AVRG		-1.0000
51)FL3 Aroclor-1232 {4}										
							0.0000	AVRG		-1.0000
52)FL3 Aroclor-1232 {5}										
							0.0000	AVRG		-1.0000
53)DL4 Aroclor-1242										
							0.0000	AVRG		-1.0000
54)DL4 Aroclor-1242 {2}										

Response Factor Report ECDA
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\Data\122122\ECDA_PEST_120422.m
Last Update : Mon Dec 19 11:11:48 2022
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Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b	m1	m2								
							0.0000	AVRG		-1.0000
55)DL4 Aroclor-1242 {3}										
							0.0000	AVRG		-1.0000
56)DL4 Aroclor-1242 {4}										
							0.0000	AVRG		-1.0000
57)DL4 Aroclor-1242 {5}										
							0.0000	AVRG		-1.0000
58)EL5 Aroclor-1248										
							0.0000	AVRG		-1.0000
59)EL5 Aroclor-1248 {2}										
							0.0000	AVRG		-1.0000
60)EL5 Aroclor-1248 {3}										
							0.0000	AVRG		-1.0000
61)EL5 Aroclor-1248 {4}										
							0.0000	AVRG		-1.0000
62)EL5 Aroclor-1248 {5}										
							0.0000	AVRG		-1.0000
63)BL6 Aroclor-1254										
							0.0000	AVRG		-1.0000
64)BL6 Aroclor-1254 {2}										
							0.0000	AVRG		-1.0000
65)BL6 Aroclor-1254 {3}										
							0.0000	AVRG		-1.0000
66)BL6 Aroclor-1254 {4}										
							0.0000	AVRG		-1.0000
67)BL6 Aroclor-1254 {5}										
							0.0000	AVRG		-1.0000

Response Factor Report ECDA
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\Data\122122\ECDA_PEST_120422.m
Last Update : Mon Dec 19 11:11:48 2022
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Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
68)MAL7 Aroclor-1260	3.4189909	2.7083642	2.5468306	2.3970413	2.1219371					
							2.6386	AVRG	E5	18.4460
69)MAL7 Aroclor-1260 {2}	4.5329933	3.8920098	3.6223540	3.5023604	3.1968162					
							3.7493	AVRG	E5	13.4478
70)MAL7 Aroclor-1260 {3}	3.0716321	2.6676594	2.4092554	2.2511620	2.0604770					
							2.4920	AVRG	E5	15.7714
71)MAL7 Aroclor-1260 {4}	5.9988660	5.1428602	5.0895113	5.1022185	4.8586412					
							5.2384	AVRG	E5	8.3884
72)MAL7 Aroclor-1260 {5}	2.8359069	2.6058177	2.5262908	2.5886773	2.4815009					
							2.6076	AVRG	E5	5.2510
73)KL8 Aroclor-1262										
							0.0000	AVRG		-1.0000
74)KL8 Aroclor-1262 {2}										
							0.0000	AVRG		-1.0000
75)KL8 Aroclor-1262 {3}										
							0.0000	AVRG		-1.0000
76)KL8 Aroclor-1262 {4}										
							0.0000	AVRG		-1.0000
77)KL8 Aroclor-1262 {5}										
							0.0000	AVRG		-1.0000
78)OL9 Aroclor-1268										
							0.0000	AVRG		-1.0000
79)OL9 Aroclor-1268 {2}										
							0.0000	AVRG		-1.0000
80)OL9 Aroclor-1268 {3}										
							0.0000	AVRG		-1.0000

Response Factor Report ECDA
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\Data\122122\ECDA_PEST_120422.m
Last Update : Mon Dec 19 11:11:48 2022
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Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
81)OL9 Aroclor-1268 {4}										
							0.0000	AVRG		-1.0000
82)OL9 Aroclor-1268 {5}										
							0.0000	AVRG		-1.0000
83)SP DCB	5.0041585	4.3187725	3.5792320	3.5128632	3.2325336					
							3.9295	AVRG	E6	18.3884

COLUMN #2

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
1)SP 4CMX	1.2904401	1.1704137	1.0916820	1.0735249	0.9669025					
							1.1186	AVRG	E7	10.7633
2)MP alpha-BHC	1.9510918	1.8792695	1.8531085	1.8491582	1.6857992					
							1.8437	AVRG	E7	5.2761
3)MP gamma-BHC (Lindane)	1.8081760	1.7117654	1.6625712	1.6512714	1.4990788					
							1.6666	AVRG	E7	6.7352
4)MP Heptachlor	1.7425664	1.6198902	1.5326729	1.5050764	1.3537558					
							1.5508	AVRG	E7	9.2771
5)MP Aldrin	1.6528004	1.5558034	1.4852809	1.4711096	1.3248734					
							1.4980	AVRG	E7	8.0498
6)MP beta-BHC	8.6416967	7.7095136	6.9482874	6.8052278	6.1045295					
							7.2419	AVRG	E6	13.3676
7)MP delta-BHC	1.7757859	1.6990460	1.6794404	1.6698599	1.5206509					
							1.6690	AVRG	E7	5.5584
8)MP Heptachlor epoxide	1.4895593	1.3837831	1.2807313	1.2573752	1.1315674					
							1.3086	AVRG	E7	10.3333

Response Factor Report ECDA
GEL Laboratories, LLC

Method File : D:\MSDCHEM\1\Data\122122\ECDA_PEST_120422.m
Last Update : Mon Dec 19 11:11:48 2022
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Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
9)MP trans-Chlordane	1.4672779	1.3542060	1.2863562	1.2656557	1.1528339					
							1.3053	AVRG	E7	8.8855
10)MP cis-Chlordane	1.4576721	1.3356954	1.2420087	1.2201233	1.1103316					
							1.2732	AVRG	E7	10.2599
11)MP 4,4'-DDE	1.2836821	1.2408890	1.1869796	1.1625197	1.0771122					
							1.1902	AVRG	E7	6.6253
12)MP Endosulfan I	1.3647526	1.2598338	1.1732846	1.1437004	1.0362963					
							1.1956	AVRG	E7	10.3550
13)MP Dieldrin	1.3715372	1.3062675	1.2323285	1.2025975	1.1104323					
							1.2446	AVRG	E7	8.0176
14)MP Endrin	1.2177163	1.1475281	1.0673438	1.0293382	0.9435341					
							1.0811	AVRG	E7	9.7968
15)MP Endosulfan II	1.2050813	1.1155976	1.0429862	1.0112528	0.9126629					
							1.0575	AVRG	E7	10.4106
16)MP 4,4'-DDD	1.0705507	1.0217999	0.9790983	0.9639966	0.8837874					
							0.9838	AVRG	E7	7.0761
17)MP 4,4'-DDT	1.1174963	1.0681007	1.0098233	0.9970044	0.9210227					
							1.0227	AVRG	E7	7.2865
18)MP Endrin aldehyde	9.3558357	8.5499801	7.9650333	7.7534743	6.9439935					
							8.1137	AVRG	E6	11.1152
19)MP Methoxychlor	5.6119966	5.2057879	4.5476832	4.4482208	4.1867128					
							4.8001	AVRG	E6	12.2700
20)MP Endosulfan sulfate	1.0605356	0.9567079	0.8493540	0.8248298	0.7408516					
							0.8865	AVRG	E7	14.0008
21)MP Endrin ketone	1.3612253	1.2575102	1.1503724	1.1278865	1.0417604					
							1.1878	AVRG	E7	10.4186
22)MW Hexachlorobenzene	1.5467008	1.3035160	1.1764384	1.1460851	1.1427662					

Response Factor Report ECDA
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\Data\122122\ECDA_PEST_120422.m
Last Update : Mon Dec 19 11:11:48 2022
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For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
							1.2631	AVRG	E7	13.5833
23)MW Mirex	9.2019934	7.6381153	6.9419722	6.7745946	6.7016981					
							7.4517	AVRG	E6	14.0413
24)MW C-Nonachlor	1.3149607	1.2034320	1.1185862	1.1069614	1.1398502					
							1.1768	AVRG	E7	7.2891
25)MW O-Chlordane	1.2199904	1.0808161	0.9692035	0.9360543	0.9086242					
							1.0229	AVRG	E7	12.5270
26)MW T-Nonachlor	1.2780662	1.1521944	1.0583348	1.0500601	1.0472104					
							1.1172	AVRG	E7	8.9483
27)MW 2,4-DDE	8.2647088	7.5399904	6.8970023	6.7078732	6.5688795					
							7.1957	AVRG	E6	9.7810
28)MW 2,4-DDD	7.3173488	6.4945750	6.1245497	6.0162442	5.9134888					
							6.3732	AVRG	E6	8.9681
29)MW 2,4-DDT	8.4757618	7.7133205	7.1388369	7.0119577	6.9462639					
							7.4572	AVRG	E6	8.6483
30)MVL10Chlordane	5.2361107	4.9445861	4.7418225	4.7189015	4.4960867					
							4.8275	AVRG	E5	5.7634
31)MVL10Chlordane {2}	9.7745190	9.5074619	9.1668702	9.0319002	8.5134003					
							9.1988	AVRG	E5	5.2287
32)MVL10Chlordane {3}	6.0012831	5.4696073	4.6787243	4.7070637	4.3733878					
							5.0460	AVRG	E5	13.2726
33)MVL10Chlordane {4}	1.5995354	1.5276581	1.5556262	1.5232022	1.4645155					
							1.5341	AVRG	E6	3.2178
34)MVL10Chlordane {5}	1.3578540	1.2771040	1.2881476	1.2655292	1.1998396					
							1.2777	AVRG	E6	4.4178
35)MQL11Toxaphene	5.8703638	5.2589954	5.0575704	4.9978894	4.9486321					
							5.2267	AVRG	E5	7.2453

Response Factor Report ECDA
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\Data\122122\ECDA_PEST_120422.m
Last Update : Mon Dec 19 11:11:48 2022
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Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b	m1	m2								
36)MQL11Toxaphene {2}	3.2666830	3.0339962	2.9596311	2.9361251	2.8566159					
							3.0106	AVRG	E5	5.1986
37)MQL11Toxaphene {3}	4.1544179	4.0251659	3.9454624	3.8862917	3.9446282					
							3.9912	AVRG	E5	2.5996
38)MQL11Toxaphene {4}	5.1670304	4.7166063	4.5632471	4.5604336	4.5616722					
							4.7138	AVRG	E5	5.5600
39)MQL11Toxaphene {5}	4.9092373	4.6756351	4.5634657	4.5502051	4.5981979					
							4.6593	AVRG	E5	3.1753
40)MAL1 Aroclor-1016	3.2911344	2.7028785	2.6841266	2.3244342	1.9787750					
							2.5963	AVRG	E5	18.8409
41)MAL1 Aroclor-1016 {2}	7.2382349	6.1565261	5.6867030	5.3861346	4.5650728					
							5.8065	AVRG	E5	17.0153
42)MAL1 Aroclor-1016 {3}	4.5379340	3.8767586	3.6057258	3.3400186	2.8644511					
							3.6450	AVRG	E5	17.1049
43)MAL1 Aroclor-1016 {4}	2.8152292	2.4799484	2.3161591	2.2124526	1.9494447					
							2.3546	AVRG	E5	13.6584
44)MAL1 Aroclor-1016 {5}	3.2863947	2.9318434	2.6977502	2.5613648	2.2406612					
							2.7436	AVRG	E5	14.3303
45)JL2 Aroclor-1221										
							0.0000	AVRG		-1.0000
46)JL2 Aroclor-1221 {2}										
							0.0000	AVRG		-1.0000
47)JL2 Aroclor-1221 {3}										
							0.0000	AVRG		-1.0000
48)FL3 Aroclor-1232										
							0.0000	AVRG		-1.0000

Response Factor Report ECDA
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\Data\122122\ECDA_PEST_120422.m
Last Update : Mon Dec 19 11:11:48 2022
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Compound b | m1 | m2	1	2	3	4	5	Avg	Curve	Exp	%RSD/r2
49)FL3 Aroclor-1232 {2}						0.0000	AVRG		-1.0000
50)FL3 Aroclor-1232 {3}						0.0000	AVRG		-1.0000
51)FL3 Aroclor-1232 {4}						0.0000	AVRG		-1.0000
52)FL3 Aroclor-1232 {5}						0.0000	AVRG		-1.0000
53)DL4 Aroclor-1242						0.0000	AVRG		-1.0000
54)DL4 Aroclor-1242 {2}						0.0000	AVRG		-1.0000
55)DL4 Aroclor-1242 {3}						0.0000	AVRG		-1.0000
56)DL4 Aroclor-1242 {4}						0.0000	AVRG		-1.0000
57)DL4 Aroclor-1242 {5}						0.0000	AVRG		-1.0000
58)EL5 Aroclor-1248						0.0000	AVRG		-1.0000
59)EL5 Aroclor-1248 {2}						0.0000	AVRG		-1.0000
60)EL5 Aroclor-1248 {3}						0.0000	AVRG		-1.0000
61)EL5 Aroclor-1248 {4}						0.0000	AVRG		-1.0000
62)EL5 Aroclor-1248 {5}									

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
							0.0000	AVRG		-1.0000
63)BL6 Aroclor-1254										
							0.0000	AVRG		-1.0000
64)BL6 Aroclor-1254 {2}										
							0.0000	AVRG		-1.0000
65)BL6 Aroclor-1254 {3}										
							0.0000	AVRG		-1.0000
66)BL6 Aroclor-1254 {4}										
							0.0000	AVRG		-1.0000
67)BL6 Aroclor-1254 {5}										
							0.0000	AVRG		-1.0000
68)MAL7 Aroclor-1260	5.4686481	4.5554557	4.2088553	3.9729167	3.5506988					
							4.3513	AVRG	E5	16.6302
69)MAL7 Aroclor-1260 {2}	6.9853713	5.8177521	5.5810457	5.2234229	4.4722761					
							5.6160	AVRG	E5	16.3667
70)MAL7 Aroclor-1260 {3}	5.4754286	4.6410348	4.2710588	4.0157800	3.4825045					
							4.3772	AVRG	E5	17.0124
71)MAL7 Aroclor-1260 {4}	1.2030626	1.0616350	1.0029660	0.9714786	0.8806022					
							1.0239	AVRG	E6	11.6830
72)MAL7 Aroclor-1260 {5}	8.4533541	7.4489293	7.0392547	6.8838859	6.3086229					
							7.2268	AVRG	E5	11.0474
73)KL8 Aroclor-1262										
							0.0000	AVRG		-1.0000
74)KL8 Aroclor-1262 {2}										
							0.0000	AVRG		-1.0000
75)KL8 Aroclor-1262 {3}										
							0.0000	AVRG		-1.0000

Response Factor Report ECDA
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\Data\122122\ECDA_PEST_120422.m
Last Update : Mon Dec 19 11:11:48 2022
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For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b / m1 / m2										
76)KL8 Aroclor-1262 {4}										
							0.0000	AVRG		-1.0000
77)KL8 Aroclor-1262 {5}										
							0.0000	AVRG		-1.0000
78)OL9 Aroclor-1268										
							0.0000	AVRG		-1.0000
79)OL9 Aroclor-1268 {2}										
							0.0000	AVRG		-1.0000
80)OL9 Aroclor-1268 {3}										
							0.0000	AVRG		-1.0000
81)OL9 Aroclor-1268 {4}										
							0.0000	AVRG		-1.0000
82)OL9 Aroclor-1268 {5}										
							0.0000	AVRG		-1.0000
83)SP DCB	8.8165331	7.6774631	6.3918493	6.3072038	5.7978683					
							6.9982	AVRG	E6	17.5790

(#) = Out of Range ($) = Individual RF Out of Range ### Number of calibration levels exceeded format ###
AVRG = Average, LINR = Linear Regression, 1/x = the inverse of concentration, 1/x^2 = the inverse square of concentration

COMPOUND LISTING
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\Data\122022a\ECDA_PEST_120422.m
Last Update : Mon Dec 19 11:11:48 2022
Integrator : (ChemStation Integrator) Response via : Initial Calibration

Jm 12/21/2022

JC 12/22/2022

Integration Parameter File: autoint1.e

*** Integrator Events ***	
Initial Threshold	20.0
Initial Peak Width	0.010
Initial Area Reject	0.0
Shoulders OFF	

Integration Parameter File: autoint2.e

*** Integrator Events ***	
Initial Threshold	19.0
Initial Peak Width	0.010
Initial Area Reject	0.0
Shoulders OFF	

	Compound	RT	RT Window
1)SP	4CMX	2.938	2.908- 2.968
2)MP	alpha-BHC	3.352	3.322- 3.382
3)MP	gamma-BHC (Lindane)	3.604	3.574- 3.634
4)MP	Heptachlor	4.002	3.972- 4.032
5)MP	Aldrin	4.268	4.238- 4.298
6)MP	beta-BHC	3.670	3.640- 3.700
7)MP	delta-BHC	3.825	3.795- 3.855
8)MP	Heptachlor epoxide	4.811	4.781- 4.841
9)MP	trans-Chlordane	4.931	4.901- 4.961
10)MP	cis-Chlordane	5.054	5.024- 5.084
11)MP	4,4'-DDE	5.119	5.089- 5.149
12)MP	Endosulfan I	5.188	5.158- 5.218
13)MP	Dieldrin	5.419	5.389- 5.449
14)MP	Endrin	5.652	5.622- 5.682
15)MP	Endosulfan II	5.878	5.848- 5.908
16)MP	4,4'-DDD	5.708	5.678- 5.738
17)MP	4,4'-DDT	5.993	5.963- 6.023
18)MP	Endrin aldehyde	6.302	6.272- 6.332
19)MP	Methoxychlor	6.501	6.471- 6.531
20)MP	Endosulfan sulfate	6.757	6.727- 6.787
21)MP	Endrin ketone	7.065	7.035- 7.095
22)MW	Hexachlorobenzene	3.230	3.200- 3.260
23)MW	Mirex	6.670	6.640- 6.700
24)MW	C-Nonachlor	5.685	5.655- 5.715
25)MW	O-Chlordane	4.718	4.688- 4.748
26)MW	T-Nonachlor	5.037	5.007- 5.067
27)MW	2,4-DDE	4.795	4.765- 4.825
28)MW	2,4-DDD	5.289	5.259- 5.319
29)MW	2,4-DDT	5.542	5.512- 5.572
30)MVL10Chlordane		3.931	3.901- 3.961
31)MVL10Chlordane {2}		4.002	3.972- 4.032
32)MVL10Chlordane {3}		4.378	4.348- 4.408
33)MVL10Chlordane {4}		4.930	4.900- 4.960
34)MVL10Chlordane {5}		5.053	5.023- 5.083
35)MQL11Toxaphene		5.992	5.962- 6.022
36)MQL11Toxaphene {2}		6.214	6.184- 6.244
37)MQL11Toxaphene {3}		6.285	6.255- 6.315
38)MQL11Toxaphene {4}		6.661	6.631- 6.691

39)	MQL11Toxaphene {5}	6.762	6.732- 6.792
40)	MAL1Aroclor-1016	3.462	3.432- 3.492
41)	MAL1Aroclor-1016 {2}	3.833	3.803- 3.863
42)	MAL1Aroclor-1016 {3}	3.942	3.912- 3.972
43)	MAL1Aroclor-1016 {4}	3.996	3.966- 4.026
44)	MAL1Aroclor-1016 {5}	4.286	4.256- 4.316
45)	JL2 Aroclor-1221	3.157	3.127- 3.187
46)	JL2 Aroclor-1221 {2}	3.268	3.238- 3.298
47)	JL2 Aroclor-1221 {3}	3.301	3.271- 3.331
48)	FL3 Aroclor-1232	3.575	3.545- 3.605
49)	FL3 Aroclor-1232 {2}	3.958	3.928- 3.988
50)	FL3 Aroclor-1232 {3}	4.071	4.041- 4.101
51)	FL3 Aroclor-1232 {4}	4.127	4.097- 4.157
52)	FL3 Aroclor-1232 {5}	4.422	4.392- 4.452
53)	DL4 Aroclor-1242	3.575	3.545- 3.605
54)	DL4 Aroclor-1242 {2}	3.957	3.927- 3.987
55)	DL4 Aroclor-1242 {3}	4.070	4.040- 4.100
56)	DL4 Aroclor-1242 {4}	4.126	4.096- 4.156
57)	DL4 Aroclor-1242 {5}	4.422	4.392- 4.452
58)	EL5 Aroclor-1248	3.958	3.928- 3.988
59)	EL5 Aroclor-1248 {2}	4.243	4.213- 4.273
60)	EL5 Aroclor-1248 {3}	4.421	4.391- 4.451
61)	EL5 Aroclor-1248 {4}	4.500	4.471- 4.531
62)	EL5 Aroclor-1248 {5}	4.809	4.779- 4.839
63)	BL6 Aroclor-1254	4.765	4.735- 4.795
64)	BL6 Aroclor-1254 {2}	5.003	4.973- 5.033
65)	BL6 Aroclor-1254 {3}	5.397	5.367- 5.427
66)	BL6 Aroclor-1254 {4}	5.676	5.646- 5.706
67)	BL6 Aroclor-1254 {5}	5.847	5.817- 5.877
68)	MAL7Aroclor-1260	5.413	5.383- 5.443
69)	MAL7Aroclor-1260 {2}	5.682	5.652- 5.712
70)	MAL7Aroclor-1260 {3}	6.085	6.055- 6.115
71)	MAL7Aroclor-1260 {4}	6.667	6.637- 6.697
72)	MAL7Aroclor-1260 {5}	6.976	6.946- 7.006
73)	KL8 Aroclor-1262	5.586	5.561- 5.616
74)	KL8 Aroclor-1262 {2}	5.859	5.834- 5.889
75)	KL8 Aroclor-1262 {3}	6.267	6.242- 6.297
76)	KL8 Aroclor-1262 {4}	6.531	6.506- 6.561
77)	KL8 Aroclor-1262 {5}	6.857	6.832- 6.887
78)	OL9 Aroclor-1268	7.199	7.174- 7.229
79)	OL9 Aroclor-1268 {2}	7.244	7.219- 7.274
80)	OL9 Aroclor-1268 {3}	7.456	7.431- 7.486
81)	OL9 Aroclor-1268 {4}	7.846	7.821- 7.876
82)	OL9 Aroclor-1268 {5}	8.162	8.137- 8.193
83)	SP DCB	8.168	8.138- 8.198
84)	Signal #2	6.125	6.095- 6.155
85)	SP 4CMX #2	3.228	3.198- 3.258
86)	MP alpha-BHC #2	3.743	3.713- 3.773
87)	MP gamma-BHC (Lindane) #2	4.067	4.037- 4.097
88)	MP Heptachlor #2	4.495	4.465- 4.525
89)	MP Aldrin #2	4.820	4.790- 4.850
90)	MP beta-BHC #2	4.133	4.103- 4.163
91)	MP delta-BHC #2	4.418	4.388- 4.448
92)	MP Heptachlor epoxide #2	5.382	5.352- 5.412
93)	MP trans-Chlordane #2	5.577	5.547- 5.607
94)	MP cis-Chlordane #2	5.726	5.696- 5.756
95)	MP 4,4'-DDE #2	5.877	5.847- 5.907
96)	MP Endosulfan I #2	5.795	5.765- 5.825
97)	MP Dieldrin #2	6.082	6.052- 6.112
98)	MP Endrin #2	6.410	6.380- 6.440
99)	MP Endosulfan II #2	6.636	6.606- 6.666
100)	MP 4,4'-DDD #2	6.495	6.465- 6.525
101)	MP 4,4'-DDT #2	6.839	6.809- 6.869
102)	MP Endrin aldehyde #2	6.994	6.964- 7.024
103)	MP Methoxychlor #2	7.585	7.555- 7.615
104)	MP Endosulfan sulfate #2	7.298	7.268- 7.328
105)	MP Endrin ketone #2	7.908	7.878- 7.938
106)	MW Hexachlorobenzene #2	3.636	3.606- 3.666

107)MW Mirex #2	7.884	7.854- 7.914
108)MW C-Nonachlor #2	6.487	6.457- 6.517
109)MW O-Chlordane #2	5.290	5.260- 5.320
110)MW T-Nonachlor #2	5.670	5.640- 5.699
111)MW 2,4-DDE #2	5.557	5.527- 5.587
112)MW 2,4-DDD #2	6.094	6.064- 6.124
113)MW 2,4-DDT #2	6.425	6.395- 6.455
114)MVL10Chlordane #2	4.353	4.323- 4.383
115)MVL10Chlordane {2} #2	4.495	4.465- 4.525
116)MVL10Chlordane {3} #2	4.947	4.917- 4.977
117)MVL10Chlordane {4} #2	5.577	5.547- 5.607
118)MVL10Chlordane {5} #2	5.725	5.695- 5.755
119)MQL11Toxaphene #2	6.722	6.692- 6.752
120)MQL11Toxaphene {2} #2	7.002	6.972- 7.032
121)MQL11Toxaphene {3} #2	7.242	7.212- 7.272
122)MQL11Toxaphene {4} #2	7.578	7.548- 7.608
123)MQL11Toxaphene {5} #2	7.632	7.602- 7.662
124)MAL1Aroclor-1016 #2	3.964	3.934- 3.994
125)MAL1Aroclor-1016 {2} #2	4.382	4.352- 4.412
126)MAL1Aroclor-1016 {3} #2	4.507	4.477- 4.537
127)MAL1Aroclor-1016 {4} #2	4.605	4.575- 4.635
128)MAL1Aroclor-1016 {5} #2	4.950	4.920- 4.980
129)JL2 Aroclor-1221 #2	3.531	3.501- 3.561
130)JL2 Aroclor-1221 {2} #2	3.650	3.620- 3.680
131)JL2 Aroclor-1221 {3} #2	3.704	3.674- 3.734
132)FL3 Aroclor-1232 #2	4.054	4.024- 4.084
133)FL3 Aroclor-1232 {2} #2	4.478	4.448- 4.508
134)FL3 Aroclor-1232 {3} #2	4.606	4.576- 4.636
135)FL3 Aroclor-1232 {4} #2	4.706	4.676- 4.736
136)FL3 Aroclor-1232 {5} #2	5.055	5.024- 5.085
137)DL4 Aroclor-1242 #2	4.053	4.023- 4.083
138)DL4 Aroclor-1242 {2} #2	4.478	4.448- 4.508
139)DL4 Aroclor-1242 {3} #2	4.605	4.575- 4.635
140)DL4 Aroclor-1242 {4} #2	4.705	4.675- 4.735
141)DL4 Aroclor-1242 {5} #2	5.179	5.149- 5.209
142)EL5 Aroclor-1248 #2	4.478	4.448- 4.508
143)EL5 Aroclor-1248 {2} #2	4.782	4.752- 4.812
144)EL5 Aroclor-1248 {3} #2	5.054	5.024- 5.084
145)EL5 Aroclor-1248 {4} #2	5.179	5.149- 5.209
146)EL5 Aroclor-1248 {5} #2	5.433	5.403- 5.463
147)BL6 Aroclor-1254 #2	5.475	5.445- 5.505
148)BL6 Aroclor-1254 {2} #2	5.661	5.631- 5.691
149)BL6 Aroclor-1254 {3} #2	6.189	6.159- 6.219
150)BL6 Aroclor-1254 {4} #2	6.396	6.366- 6.426
151)BL6 Aroclor-1254 {5} #2	6.577	6.547- 6.607
152)MAL7Aroclor-1260 #2	6.241	6.211- 6.271
153)MAL7Aroclor-1260 {2} #2	6.456	6.426- 6.486
154)MAL7Aroclor-1260 {3} #2	6.946	6.916- 6.976
155)MAL7Aroclor-1260 {4} #2	7.548	7.518- 7.578
156)MAL7Aroclor-1260 {5} #2	7.968	7.938- 7.998
157)KL8 Aroclor-1262 #2	6.379	6.354- 6.409
158)KL8 Aroclor-1262 {2} #2	6.597	6.572- 6.627
159)KL8 Aroclor-1262 {3} #2	7.092	7.067- 7.122
160)KL8 Aroclor-1262 {4} #2	7.427	7.402- 7.457
161)KL8 Aroclor-1262 {5} #2	7.697	7.672- 7.727
162)OL9 Aroclor-1268 #2	8.105	8.080- 8.135
163)OL9 Aroclor-1268 {2} #2	8.159	8.134- 8.189
164)OL9 Aroclor-1268 {3} #2	8.453	8.428- 8.483
165)OL9 Aroclor-1268 {4} #2	8.770	8.745- 8.800
166)OL9 Aroclor-1268 {5} #2	9.150	9.125- 9.180
167)SP DCB #2	9.289	9.259- 9.319

JM
12/21/2022

COMPOUND LISTING
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\Data\122122\ECDA_PEST_120422.m
Last Update : Mon Dec 19 11:11:48 2022
Integrator : (ChemStation Integrator) Response via : Initial Calibration

JC
12/22/2022

Integration Parameter File: autoint1.e

*** Integrator Events ***
Initial Threshold 20.0
Initial Peak Width 0.010
Initial Area Reject 0.0
Shoulders OFF

Integration Parameter File: autoint2.e

*** Integrator Events ***
Initial Threshold 19.0
Initial Peak Width 0.010
Initial Area Reject 0.0
Shoulders OFF

Compound	RT	RT Window
1)SP 4CMX	2.938	2.908- 2.968
2)MP alpha-BHC	3.352	3.322- 3.382
3)MP gamma-BHC (Lindane)	3.604	3.574- 3.634
4)MP Heptachlor	4.002	3.972- 4.032
5)MP Aldrin	4.267	4.237- 4.297
6)MP beta-BHC	3.669	3.639- 3.699
7)MP delta-BHC	3.825	3.795- 3.855
8)MP Heptachlor epoxide	4.809	4.779- 4.839
9)MP trans-Chlordane	4.929	4.899- 4.959
10)MP cis-Chlordane	5.054	5.024- 5.084
11)MP 4,4'-DDE	5.118	5.088- 5.148
12)MP Endosulfan I	5.187	5.157- 5.217
13)MP Dieldrin	5.419	5.389- 5.449
14)MP Endrin	5.651	5.621- 5.681
15)MP Endosulfan II	5.877	5.847- 5.907
16)MP 4,4'-DDD	5.707	5.677- 5.737
17)MP 4,4'-DDT	5.992	5.962- 6.022
18)MP Endrin aldehyde	6.301	6.271- 6.331
19)MP Methoxychlor	6.499	6.469- 6.529
20)MP Endosulfan sulfate	6.755	6.725- 6.785
21)MP Endrin ketone	7.062	7.032- 7.092
22)MW Hexachlorobenzene	3.230	3.200- 3.260
23)MW Mirex	6.671	6.641- 6.701
24)MW C-Nonachlor	5.685	5.655- 5.715
25)MW O-Chlordane	4.718	4.688- 4.748
26)MW T-Nonachlor	5.039	5.009- 5.069
27)MW 2,4-DDE	4.796	4.766- 4.826
28)MW 2,4-DDD	5.290	5.260- 5.320
29)MW 2,4-DDT	5.543	5.513- 5.573
30)MVL10Chlordane	3.930	3.900- 3.960
31)MVL10Chlordane {2}	4.002	3.972- 4.032
32)MVL10Chlordane {3}	4.378	4.348- 4.408
33)MVL10Chlordane {4}	4.930	4.900- 4.960
34)MVL10Chlordane {5}	5.053	5.023- 5.083
35)MQL11Toxaphene	5.991	5.961- 6.021
36)MQL11Toxaphene {2}	6.214	6.184- 6.244
37)MQL11Toxaphene {3}	6.284	6.254- 6.314
38)MQL11Toxaphene {4}	6.660	6.630- 6.690

39)MQL11Toxaphene {5}	6.762	6.732- 6.792
40)MAL1Aroclor-1016	3.462	3.432- 3.492
41)MAL1Aroclor-1016 {2}	3.833	3.803- 3.863
42)MAL1Aroclor-1016 {3}	3.942	3.912- 3.972
43)MAL1Aroclor-1016 {4}	3.996	3.966- 4.026
44)MAL1Aroclor-1016 {5}	4.286	4.256- 4.316
45)JL2 Aroclor-1221	3.157	3.127- 3.187
46)JL2 Aroclor-1221 {2}	3.268	3.238- 3.298
47)JL2 Aroclor-1221 {3}	3.301	3.271- 3.331
48)FL3 Aroclor-1232	3.575	3.545- 3.605
49)FL3 Aroclor-1232 {2}	3.958	3.928- 3.988
50)FL3 Aroclor-1232 {3}	4.071	4.041- 4.101
51)FL3 Aroclor-1232 {4}	4.127	4.097- 4.157
52)FL3 Aroclor-1232 {5}	4.422	4.392- 4.452
53)DL4 Aroclor-1242	3.575	3.545- 3.605
54)DL4 Aroclor-1242 {2}	3.957	3.927- 3.987
55)DL4 Aroclor-1242 {3}	4.070	4.040- 4.100
56)DL4 Aroclor-1242 {4}	4.126	4.096- 4.156
57)DL4 Aroclor-1242 {5}	4.422	4.392- 4.452
58)EL5 Aroclor-1248	3.958	3.928- 3.988
59)EL5 Aroclor-1248 {2}	4.243	4.213- 4.273
60)EL5 Aroclor-1248 {3}	4.421	4.391- 4.451
61)EL5 Aroclor-1248 {4}	4.500	4.471- 4.531
62)EL5 Aroclor-1248 {5}	4.809	4.779- 4.839
63)BL6 Aroclor-1254	4.765	4.735- 4.795
64)BL6 Aroclor-1254 {2}	5.003	4.973- 5.033
65)BL6 Aroclor-1254 {3}	5.397	5.367- 5.427
66)BL6 Aroclor-1254 {4}	5.676	5.646- 5.706
67)BL6 Aroclor-1254 {5}	5.847	5.817- 5.877
68)MAL7Aroclor-1260	5.413	5.383- 5.443
69)MAL7Aroclor-1260 {2}	5.682	5.652- 5.712
70)MAL7Aroclor-1260 {3}	6.085	6.055- 6.115
71)MAL7Aroclor-1260 {4}	6.667	6.637- 6.697
72)MAL7Aroclor-1260 {5}	6.976	6.946- 7.006
73)KL8 Aroclor-1262	5.586	5.561- 5.616
74)KL8 Aroclor-1262 {2}	5.859	5.834- 5.889
75)KL8 Aroclor-1262 {3}	6.267	6.242- 6.297
76)KL8 Aroclor-1262 {4}	6.531	6.506- 6.561
77)KL8 Aroclor-1262 {5}	6.857	6.832- 6.887
78)OL9 Aroclor-1268	7.199	7.174- 7.229
79)OL9 Aroclor-1268 {2}	7.244	7.219- 7.274
80)OL9 Aroclor-1268 {3}	7.456	7.431- 7.486
81)OL9 Aroclor-1268 {4}	7.846	7.821- 7.876
82)OL9 Aroclor-1268 {5}	8.162	8.137- 8.193
83)SP DCB	8.167	8.137- 8.197
84) Signal #2	6.125	6.095- 6.155
85)SP 4CMX #2	3.227	3.197- 3.257
86)MP alpha-BHC #2	3.743	3.713- 3.773
87)MP gamma-BHC (Lindane) #2	4.067	4.037- 4.097
88)MP Heptachlor #2	4.495	4.465- 4.525
89)MP Aldrin #2	4.820	4.790- 4.850
90)MP beta-BHC #2	4.132	4.102- 4.162
91)MP delta-BHC #2	4.418	4.388- 4.448
92)MP Heptachlor epoxide #2	5.381	5.351- 5.411
93)MP trans-Chlordane #2	5.577	5.547- 5.607
94)MP cis-Chlordane #2	5.725	5.695- 5.755
95)MP 4,4'-DDE #2	5.877	5.847- 5.907
96)MP Endosulfan I #2	5.794	5.764- 5.824
97)MP Dieldrin #2	6.081	6.051- 6.111
98)MP Endrin #2	6.409	6.379- 6.439
99)MP Endosulfan II #2	6.635	6.605- 6.665
100)MP 4,4'-DDD #2	6.494	6.464- 6.524
101)MP 4,4'-DDT #2	6.838	6.808- 6.868
102)MP Endrin aldehyde #2	6.992	6.962- 7.022
103)MP Methoxychlor #2	7.585	7.555- 7.615
104)MP Endosulfan sulfate #2	7.297	7.267- 7.327
105)MP Endrin ketone #2	7.907	7.877- 7.937
106)MW Hexachlorobenzene #2	3.636	3.606- 3.666

107)MW Mirex #2	7.885	7.855- 7.915
108)MW C-Nonachlor #2	6.486	6.456- 6.516
109)MW O-Chlordane #2	5.289	5.259- 5.319
110)MW T-Nonachlor #2	5.669	5.639- 5.699
111)MW 2,4-DDE #2	5.556	5.526- 5.586
112)MW 2,4-DDD #2	6.094	6.064- 6.124
113)MW 2,4-DDT #2	6.425	6.395- 6.455
114)MVL10Chlordane #2	4.353	4.323- 4.383
115)MVL10Chlordane {2} #2	4.495	4.465- 4.525
116)MVL10Chlordane {3} #2	4.947	4.917- 4.977
117)MVL10Chlordane {4} #2	5.577	5.547- 5.607
118)MVL10Chlordane {5} #2	5.725	5.695- 5.755
119)MQL11Toxaphene #2	6.722	6.692- 6.752
120)MQL11Toxaphene {2} #2	7.001	6.971- 7.031
121)MQL11Toxaphene {3} #2	7.242	7.212- 7.272
122)MQL11Toxaphene {4} #2	7.579	7.549- 7.609
123)MQL11Toxaphene {5} #2	7.631	7.601- 7.661
124)MAL1Aroclor-1016 #2	3.964	3.934- 3.994
125)MAL1Aroclor-1016 {2} #2	4.382	4.352- 4.412
126)MAL1Aroclor-1016 {3} #2	4.507	4.477- 4.537
127)MAL1Aroclor-1016 {4} #2	4.605	4.575- 4.635
128)MAL1Aroclor-1016 {5} #2	4.950	4.920- 4.980
129)JL2 Aroclor-1221 #2	3.531	3.501- 3.561
130)JL2 Aroclor-1221 {2} #2	3.650	3.620- 3.680
131)JL2 Aroclor-1221 {3} #2	3.704	3.674- 3.734
132)FL3 Aroclor-1232 #2	4.054	4.024- 4.084
133)FL3 Aroclor-1232 {2} #2	4.478	4.448- 4.508
134)FL3 Aroclor-1232 {3} #2	4.606	4.576- 4.636
135)FL3 Aroclor-1232 {4} #2	4.706	4.676- 4.736
136)FL3 Aroclor-1232 {5} #2	5.055	5.024- 5.085
137)DL4 Aroclor-1242 #2	4.053	4.023- 4.083
138)DL4 Aroclor-1242 {2} #2	4.478	4.448- 4.508
139)DL4 Aroclor-1242 {3} #2	4.605	4.575- 4.635
140)DL4 Aroclor-1242 {4} #2	4.705	4.675- 4.735
141)DL4 Aroclor-1242 {5} #2	5.179	5.149- 5.209
142)EL5 Aroclor-1248 #2	4.478	4.448- 4.508
143)EL5 Aroclor-1248 {2} #2	4.782	4.752- 4.812
144)EL5 Aroclor-1248 {3} #2	5.054	5.024- 5.084
145)EL5 Aroclor-1248 {4} #2	5.179	5.149- 5.209
146)EL5 Aroclor-1248 {5} #2	5.433	5.403- 5.463
147)BL6 Aroclor-1254 #2	5.475	5.445- 5.505
148)BL6 Aroclor-1254 {2} #2	5.661	5.631- 5.691
149)BL6 Aroclor-1254 {3} #2	6.189	6.159- 6.219
150)BL6 Aroclor-1254 {4} #2	6.396	6.366- 6.426
151)BL6 Aroclor-1254 {5} #2	6.577	6.547- 6.607
152)MAL7Aroclor-1260 #2	6.241	6.211- 6.271
153)MAL7Aroclor-1260 {2} #2	6.456	6.426- 6.486
154)MAL7Aroclor-1260 {3} #2	6.946	6.916- 6.976
155)MAL7Aroclor-1260 {4} #2	7.548	7.518- 7.578
156)MAL7Aroclor-1260 {5} #2	7.968	7.938- 7.998
157)KL8 Aroclor-1262 #2	6.379	6.354- 6.409
158)KL8 Aroclor-1262 {2} #2	6.597	6.572- 6.627
159)KL8 Aroclor-1262 {3} #2	7.092	7.067- 7.122
160)KL8 Aroclor-1262 {4} #2	7.427	7.402- 7.457
161)KL8 Aroclor-1262 {5} #2	7.697	7.672- 7.727
162)OL9 Aroclor-1268 #2	8.105	8.080- 8.135
163)OL9 Aroclor-1268 {2} #2	8.159	8.134- 8.189
164)OL9 Aroclor-1268 {3} #2	8.453	8.428- 8.483
165)OL9 Aroclor-1268 {4} #2	8.770	8.745- 8.800
166)OL9 Aroclor-1268 {5} #2	9.150	9.125- 9.180
167)SP DCB #2	9.287	9.257- 9.317

Quantitation Report
GEL Laboratories, LLC

Jm 12/01/2022

JC 12/01/2022

Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0104.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 01 Dec 2022 07:14 (#1); 01 Dec 2022 07:14 (#2)
Operator : JXM InstName : ECDA
Sample : |WPE221201-41|ICAL|1|SVP|1|TOX-1
Misc : |MIX[Q]
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 01 12:09:01 2022
Quant Method : D:\MSDCHEM\1\Data\120122\ECDA_PEST_113022A.m
Quant Title : ECD5 SubList :
QLast Update : Thu Dec 01 12:05:51 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um Signal #2 Info : 250 um

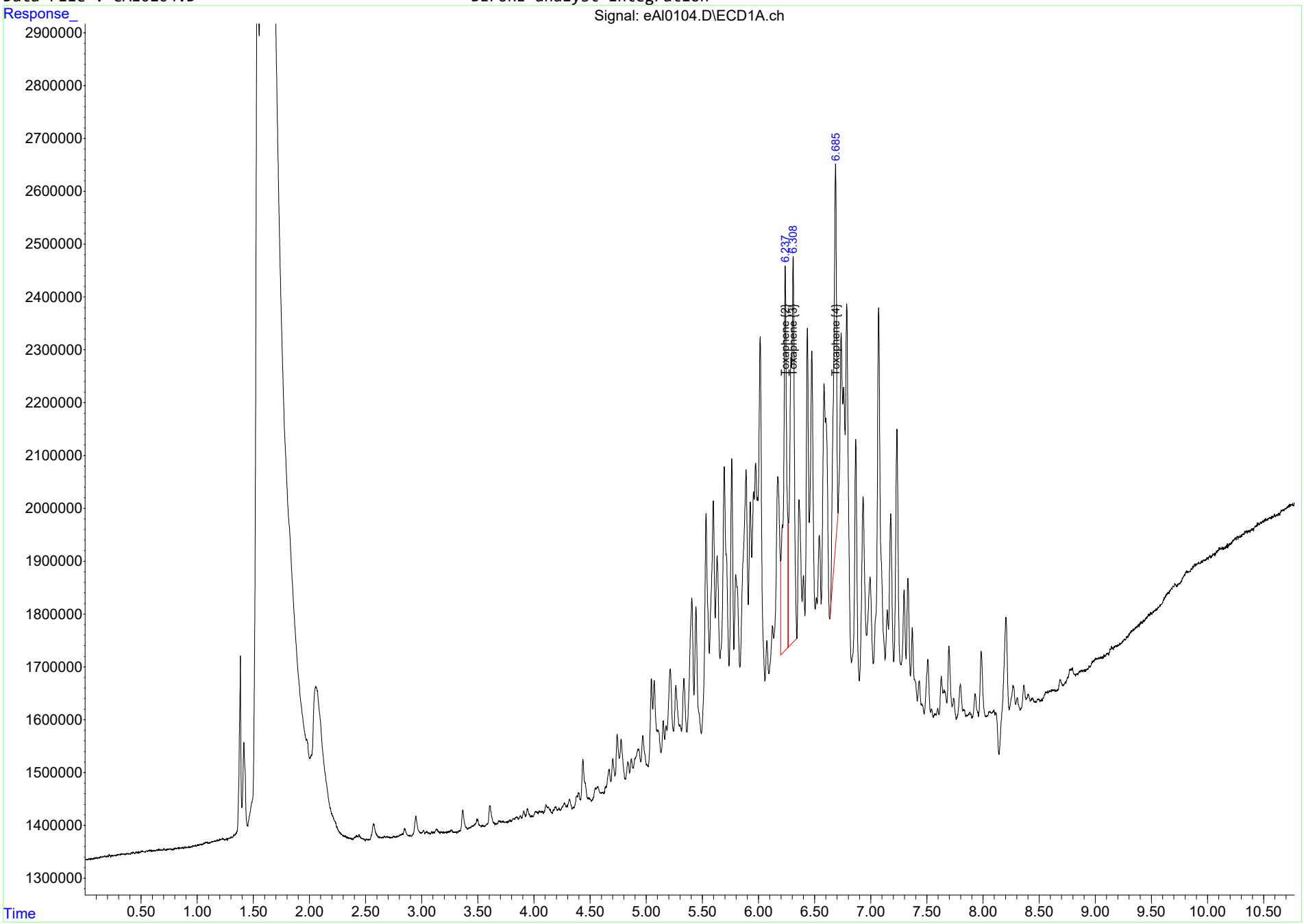
System Monitoring Compounds

Target Compounds

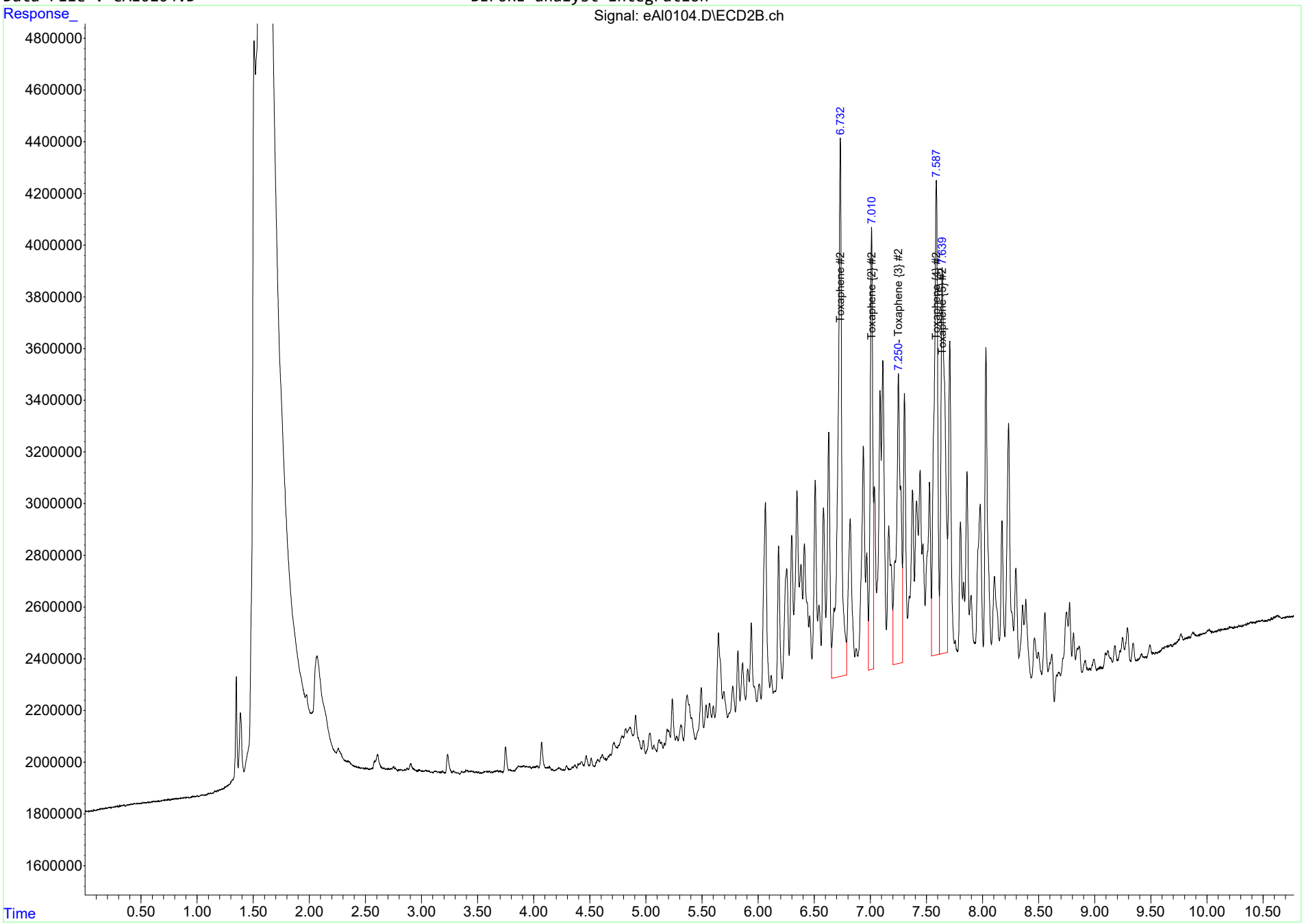
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Toxaphene	6.014	6.014	0.000	22131077	116.255m	6.731	6.732	0.001	58703638	112.315m
Toxaphene {2}	6.236	6.237	0.001	23907026	108.153m	7.009	7.010	0.001	32666830	108.506m
Toxaphene {3}	6.306	6.308	0.002	28761284	110.571m	7.251	7.250	-0.001	41544179	104.090m
Toxaphene {4}	6.683	6.685	0.002	29839292	111.111m	7.587	7.587	0.000	51670304	109.615m
Toxaphene {5}	6.785	6.785	0.000	19153530	112.158m	7.640	7.639	-0.001	49092373	105.363m
Sum Toxaphene				123792209	558.248				233677325	539.889
Average Toxaphene					111.650					107.978

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

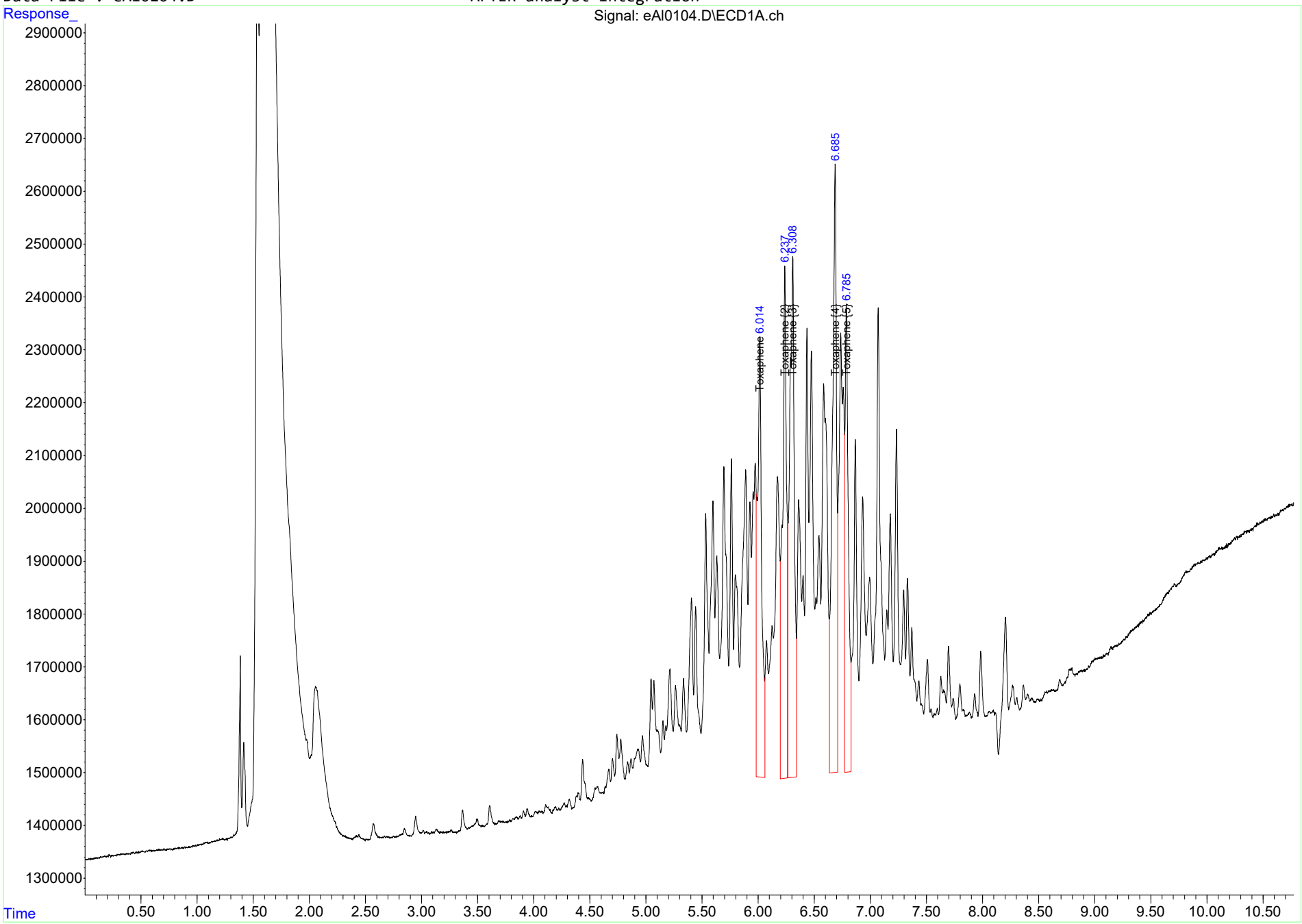
Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0104.D BEFORE analyst integration



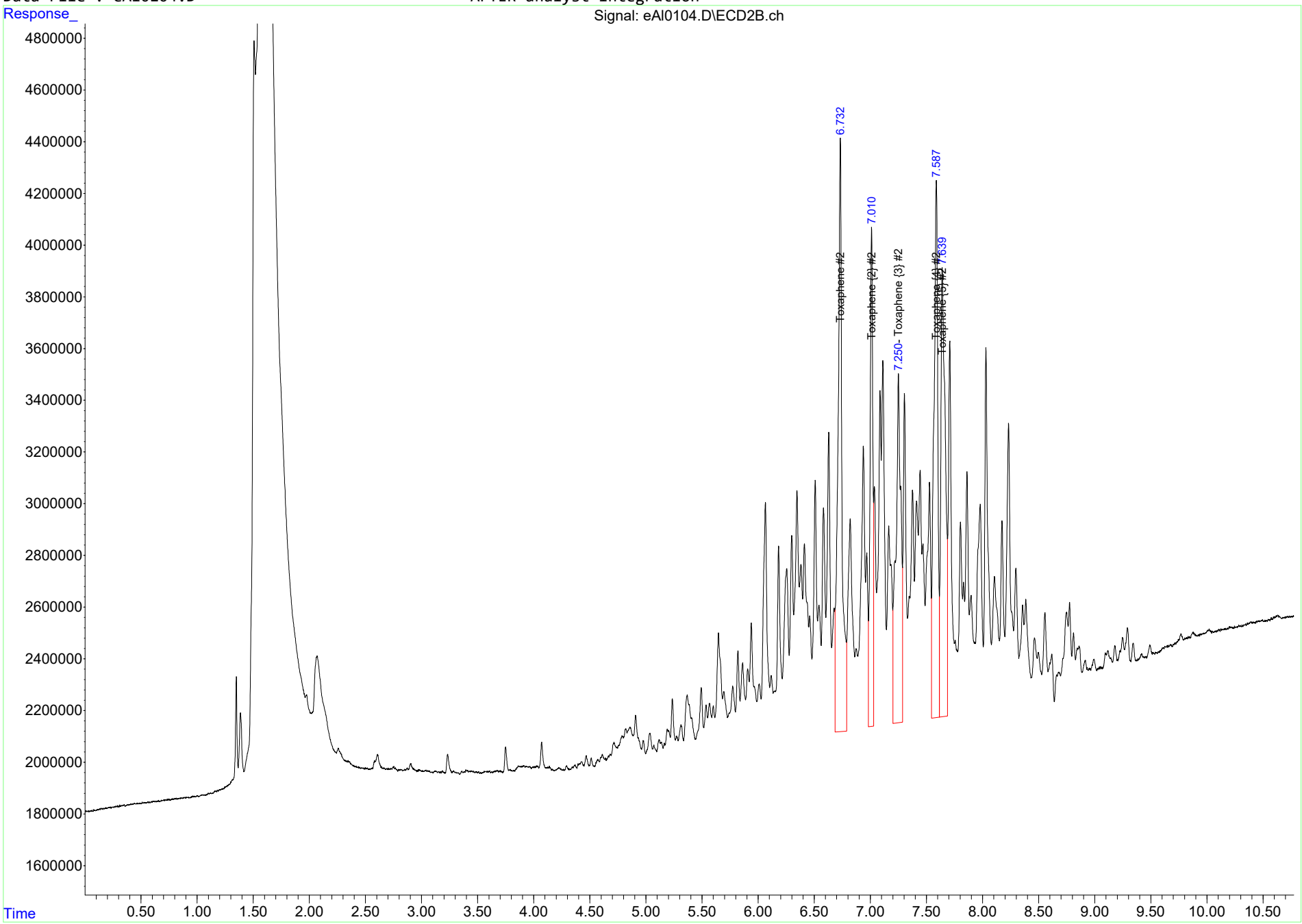
Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0104.D BEFORE analyst integration



Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0104.D AFTER analyst integration



Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0104.D AFTER analyst integration



The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
Target Compounds										
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Toxaphene	6.014	0.000	-6.014	0	N.D.	6.733	6.732	-0.001	49362062	103.103
Toxaphene {2}	6.236	6.237	0.001	14801256	70.291	7.011	7.010	-0.001	26764260	95.749
Toxaphene {3}	6.308	6.308	0.000	17593896	116.956	7.251	7.250	-0.001	30456098	81.361
Toxaphene {4}	6.684	6.686	0.002	12938871	53.352	7.588	7.588	0.000	41189121	93.678
Toxaphene {5}	6.785	0.000	-6.785	0	N.D.	7.640	7.640	0.000	38620111	88.436
Sum Toxaphene				45334023	240.599				186391653	462.327 #
Average Toxaphene					80.200					92.465

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0104.D

Toxaphene - Manual Integration ==	AB/AP	Toxaphene #2 - Manual Integration ==	AB/AP
Toxaphene {2} - Manual Integration ==	AB/AP	Toxaphene {2} #2 - Manual Integration ==	AB/AP
Toxaphene {3} - Manual Integration ==	AB/AP	Toxaphene {3} #2 - Manual Integration ==	AB/AP
Toxaphene {4} - Manual Integration ==	AB/AP	Toxaphene {4} #2 - Manual Integration ==	AB/AP
Toxaphene {5} - Manual Integration ==	AB/AP	Toxaphene {5} #2 - Manual Integration ==	AB/AP

Quantitation Report
GEL Laboratories, LLC

Jm 12/01/2022

JC 12/01/2022

Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0105.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 01 Dec 2022 07:30 (#1); 01 Dec 2022 07:30 (#2)
Operator : JXM InstName : ECDA
Sample : |WPE221201-42|ICAL|1|SVP|1|TOX-2
Misc : |MIX[Q]
ALS Vial : 5 Sample Multiplier: 1

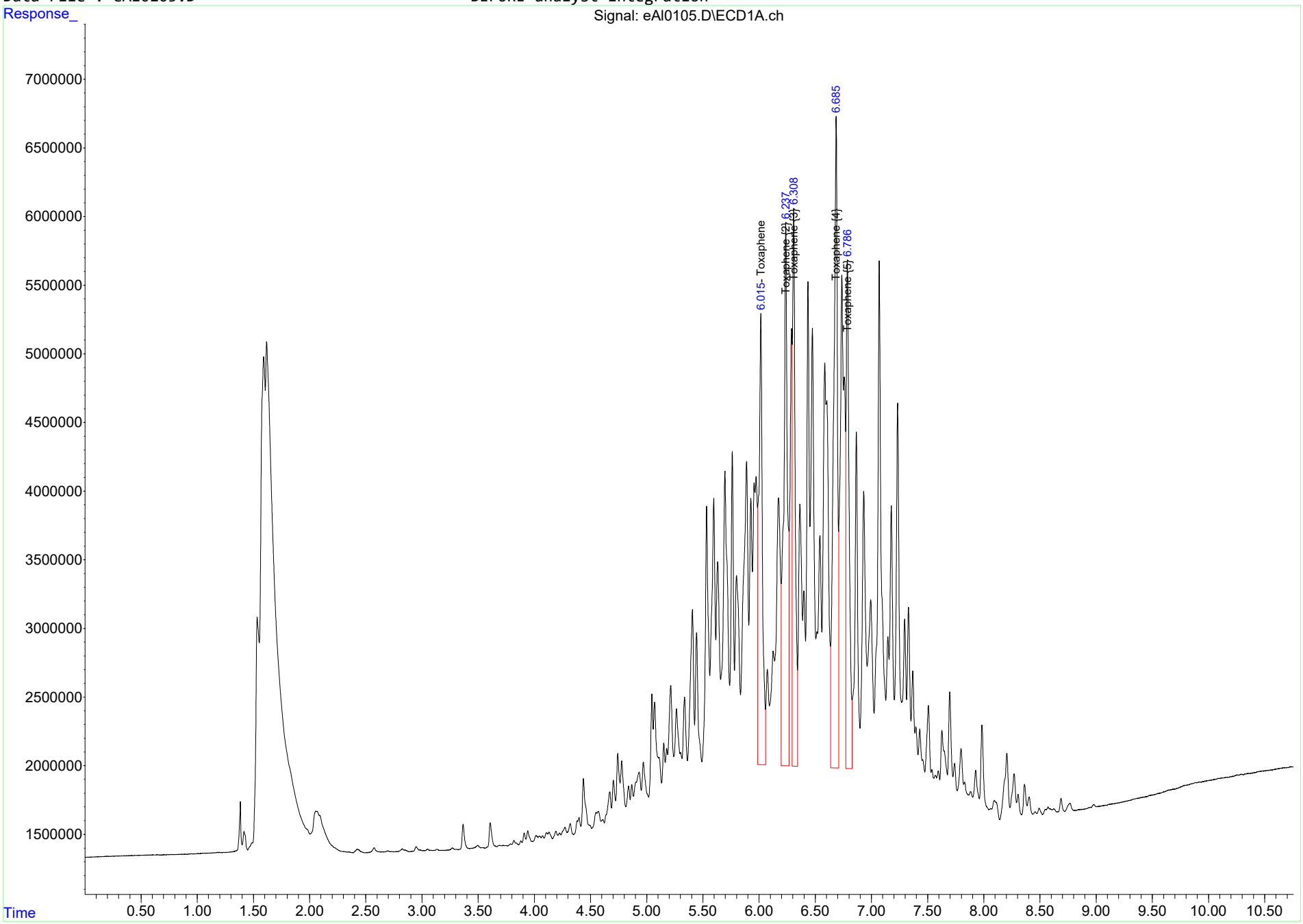
Quant Time: Dec 01 12:09:16 2022
Quant Method : D:\MSDCHEM\1\Data\120122\ECDA_PEST_113022A.m
Quant Title : ECD5 SubList :
QLast Update : Thu Dec 01 12:05:51 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um Signal #2 Info : 250 um

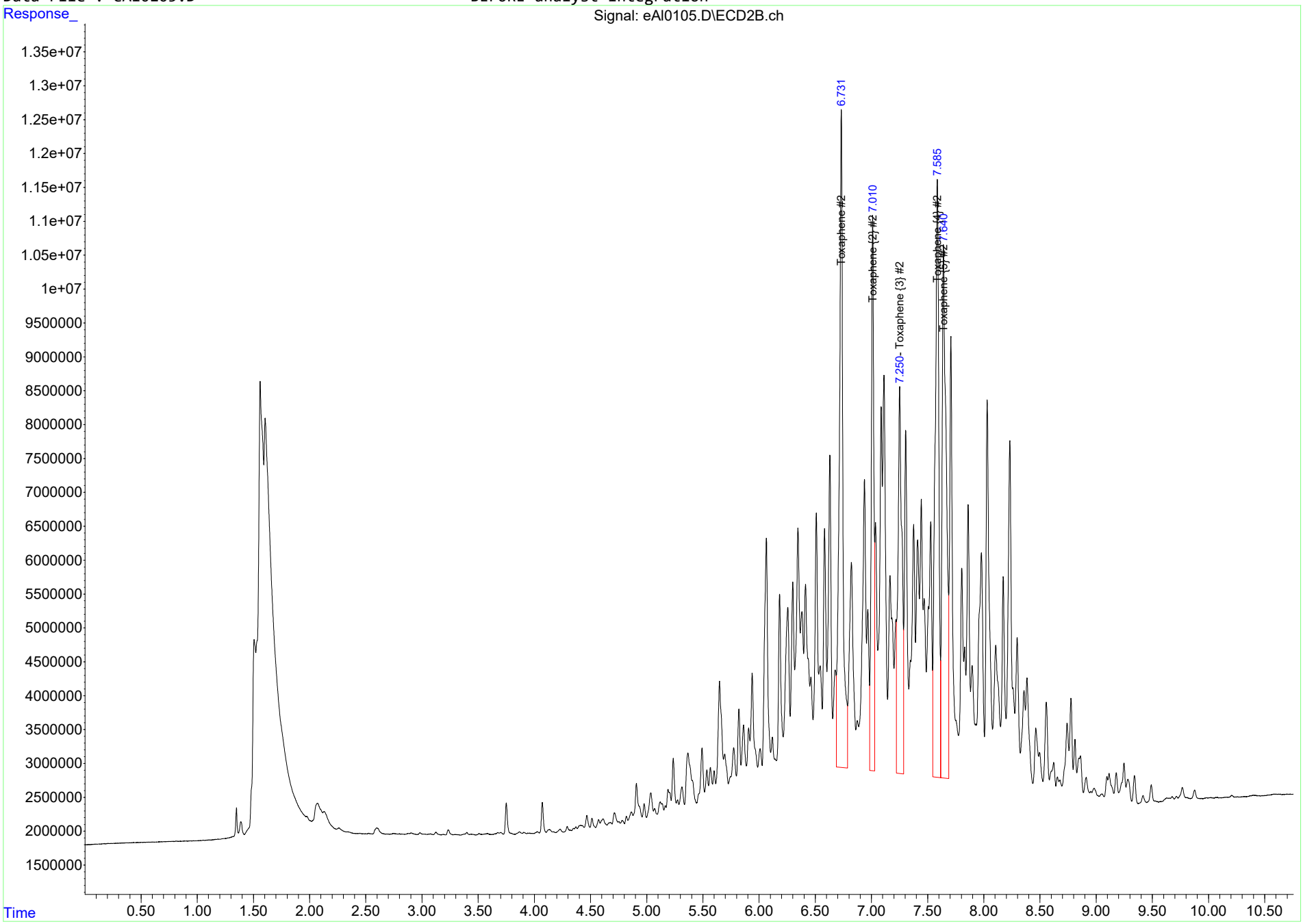
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
Target Compounds										
Toxaphene	6.014	6.015	0.001	87256344	458.358m	6.731	6.731	0.000	262949771	503.090m
Toxaphene {2}	6.236	6.237	0.001	107353851	485.656m	7.009	7.010	0.001	151699809	503.884m
Toxaphene {3}	6.306	6.308	0.002	125172364	481.218m	7.251	7.250	-0.001	201258293	504.256m
Toxaphene {4}	6.683	6.685	0.002	130357319	485.407m	7.587	7.585	-0.002	235830317	500.298m
Toxaphene {5}	6.785	6.786	0.001	81511637	477.310m	7.640	7.640	0.000	233781754	501.748m
Sum Toxaphene				531651515	2387.949				1085519943	2513.276
Average Toxaphene					477.590					502.655

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

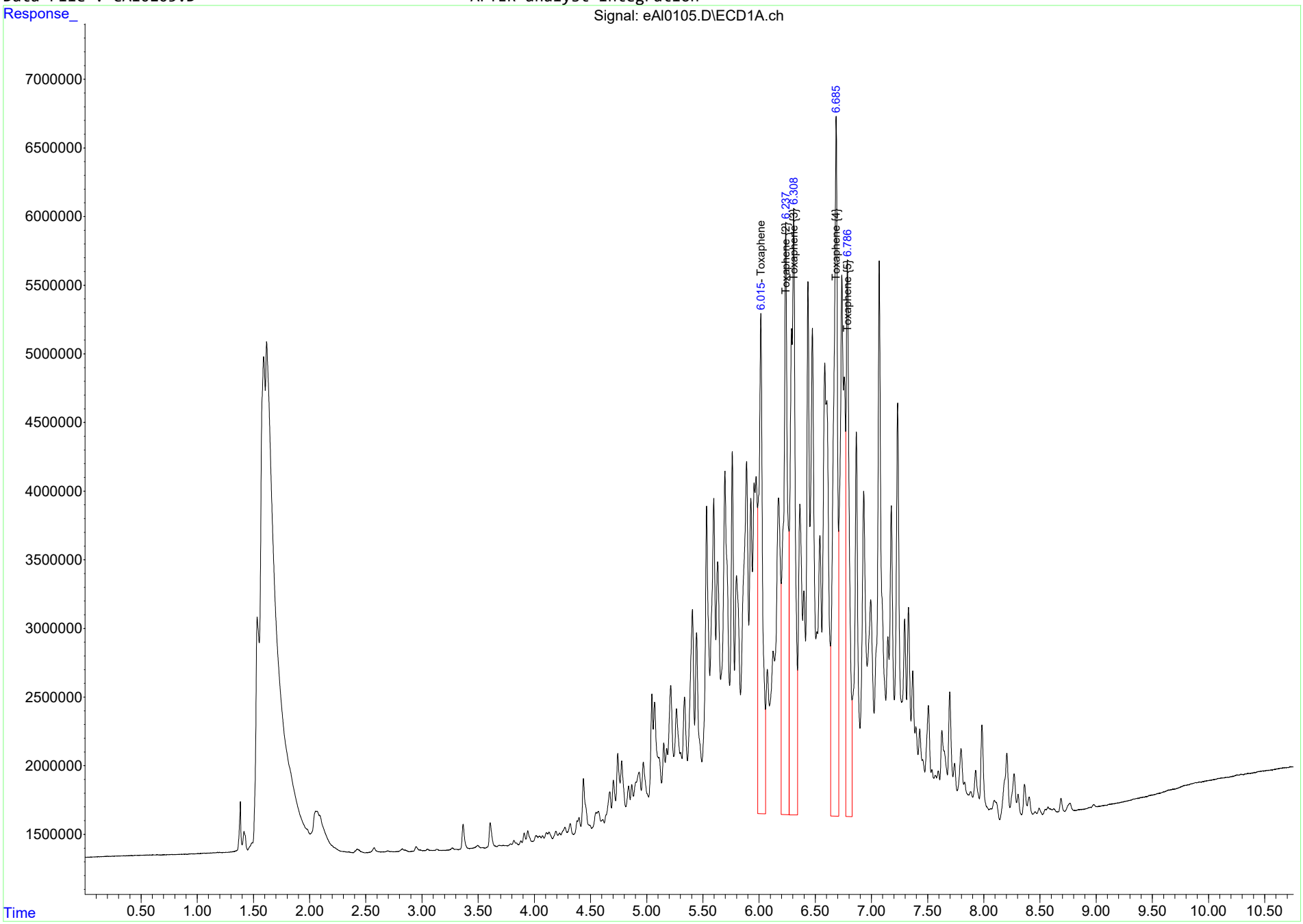
Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0105.D BEFORE analyst integration



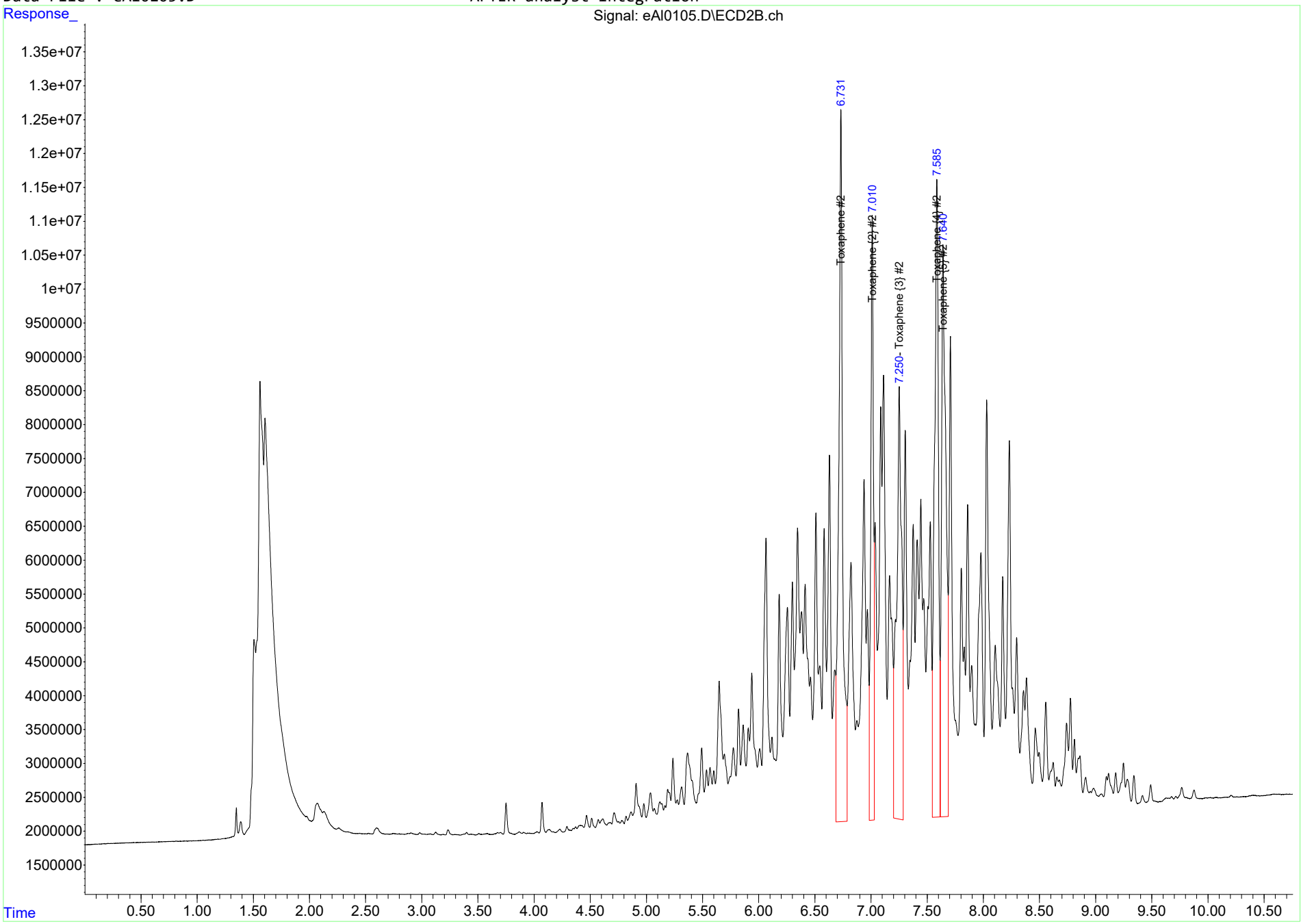
Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0105.D BEFORE analyst integration



Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0105.D AFTER analyst integration



Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0105.D AFTER analyst integration



The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
Target Compounds										
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Toxaphene	6.014	6.016	0.002	74494658	426.887	6.733	6.731	-0.002	215430546	449.971
Toxaphene {2}	6.236	6.237	0.001	94347790	448.054	7.011	7.010	-0.001	130447082	466.675
Toxaphene {3}	6.308	6.308	0.000	68609428	456.084	7.251	7.251	0.000	140845253	376.256
Toxaphene {4}	6.684	6.686	0.002	115660875	476.913	7.588	7.586	-0.002	211315858	480.604
Toxaphene {5}	6.785	6.786	0.001	70116404	446.913	7.640	7.641	0.001	207435905	475.006
Sum Toxaphene				423229155	2254.851				905474644	2248.511
Average Toxaphene					450.970					449.702

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Reasons for Analyst Intervention

Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0105.D

Toxaphene - Manual Integration ==	AB/AP	Toxaphene #2 - Manual Integration ==	AB/AP
Toxaphene {2} - Manual Integration ==	AB/AP	Toxaphene {2} #2 - Manual Integration ==	AB/AP
Toxaphene {3} - Manual Integration ==	AB/AP	Toxaphene {3} #2 - Manual Integration ==	AB/AP
Toxaphene {4} - Manual Integration ==	AB/AP	Toxaphene {4} #2 - Manual Integration ==	AB/AP
Toxaphene {5} - Manual Integration ==	AB/AP	Toxaphene {5} #2 - Manual Integration ==	AB/AP

Quantitation Report
GEL Laboratories, LLC

Jm 12/01/2022

JC 12/01/2022

Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0106.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 01 Dec 2022 07:47 (#1); 01 Dec 2022 07:47 (#2)
Operator : JXM InstName : ECDA
Sample : |WPE221201-43|ICAL|1|SVP|1|TOX-3
Misc : |MIX[Q]
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 01 12:09:29 2022
Quant Method : D:\MSDCHEM\1\Data\120122\ECDA_PEST_113022A.m
Quant Title : ECD5 SubList :
QLast Update : Thu Dec 01 12:05:51 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um Signal #2 Info : 250 um

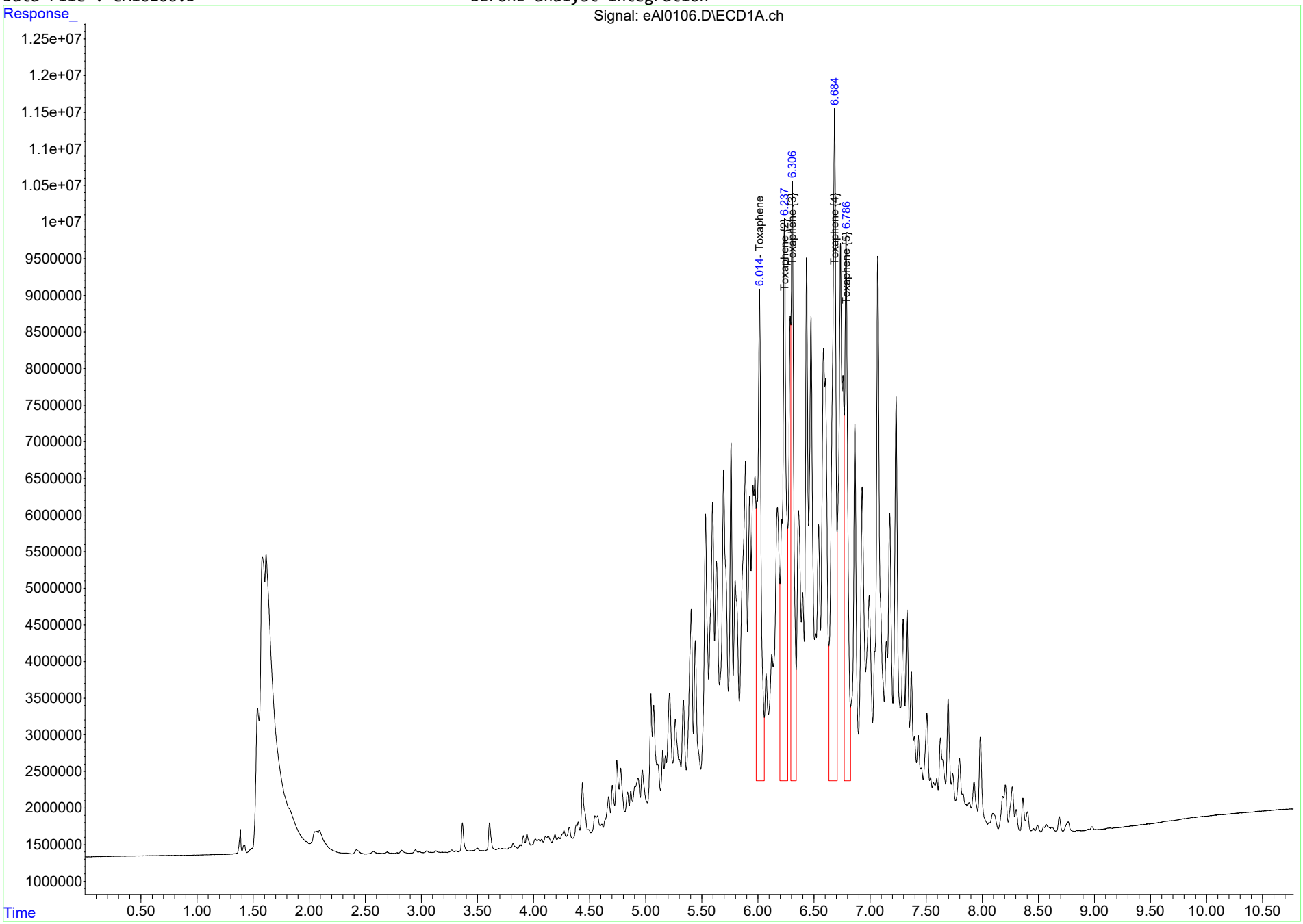
System Monitoring Compounds

Target Compounds

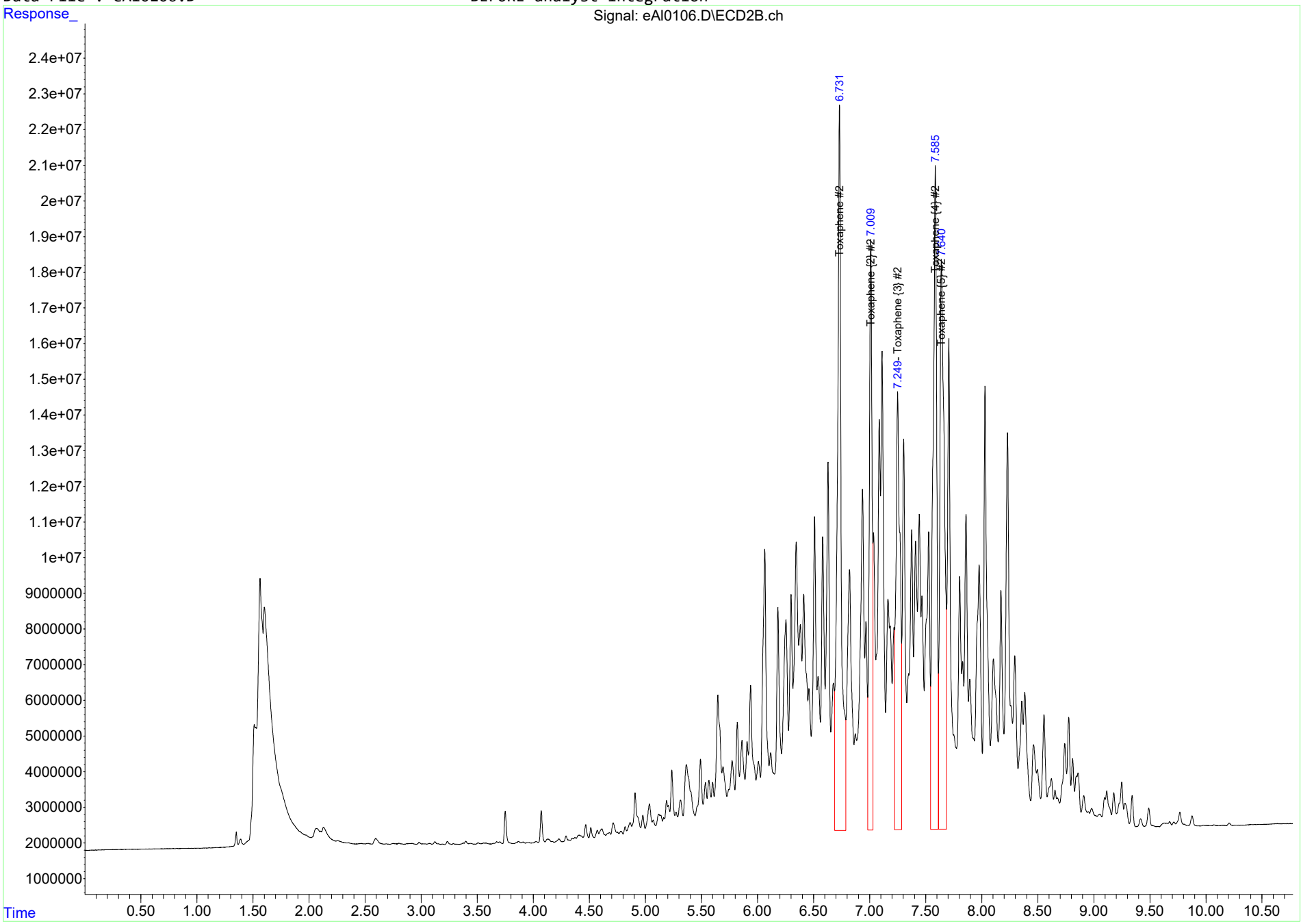
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Toxaphene	6.014	6.014	0.000	185151142	972.600m	6.731	6.731	0.000	505757040	967.643m
Toxaphene {2}	6.236	6.237	0.001	221688010	1002.890m	7.009	7.009	0.000	295963109	983.067m
Toxaphene {3}	6.306	6.306	0.000	252731068	971.611m	7.251	7.249	-0.002	394546241	988.542m
Toxaphene {4}	6.683	6.684	0.001	264800129	986.026m	7.587	7.585	-0.002	456324714	968.062m
Toxaphene {5}	6.785	6.786	0.001	166041764	972.296m	7.640	7.640	0.000	456346573	979.421m
Sum Toxaphene				1090412114	4905.423				2108937678	4886.735
Average Toxaphene					981.085					977.347

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0106.D BEFORE analyst integration

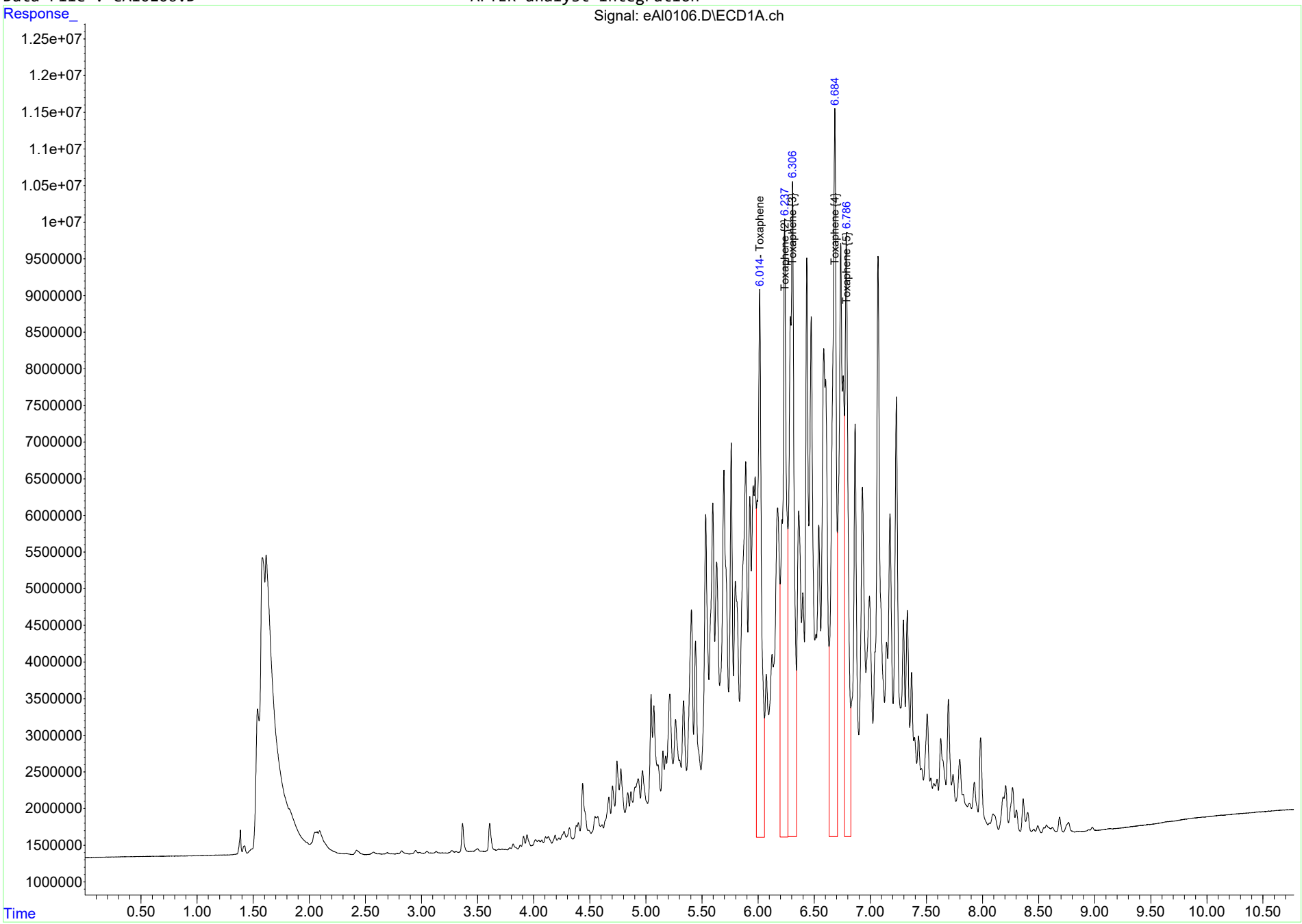


Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0106.D BEFORE analyst integration

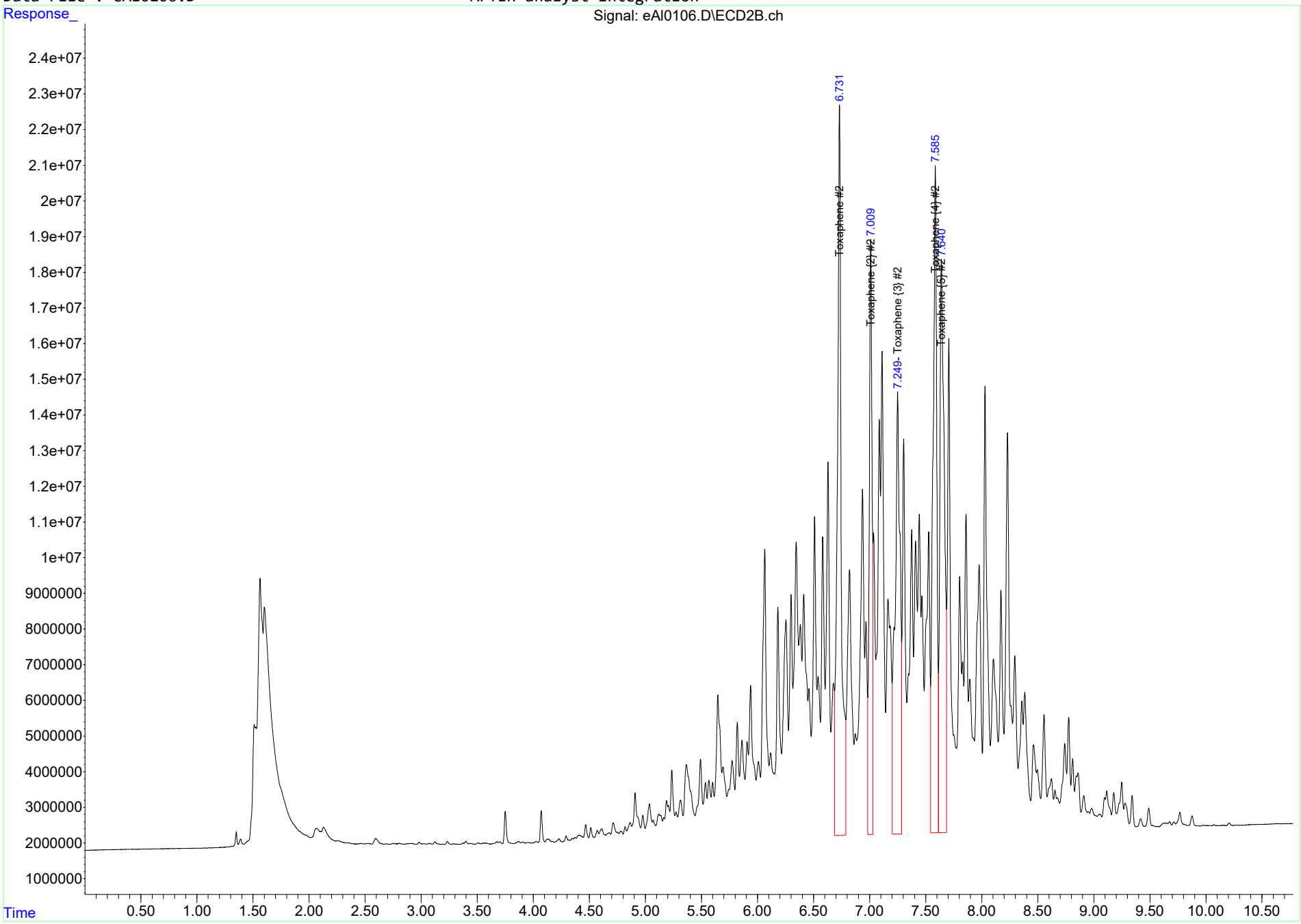


ECDA_PEST_113022A.m Thu Dec 01 12:16:32 2022 Page: 3

Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0106.D AFTER analyst integration



Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0106.D AFTER analyst integration



ECDA_PEST_113022A.m Thu Dec 01 12:16:33 2022 Page: 5

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
Target Compounds										
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Toxaphene	6.014	6.014	0.000	153131775	877.512	6.733	6.731	-0.002	497422438	1038.968
Toxaphene {2}	6.236	6.237	0.001	188382850	894.624	7.011	7.010	-0.001	291325307	1042.218
Toxaphene {3}	6.308	6.307	-0.001	141423454	940.118	7.251	7.249	-0.002	319757216	854.203
Toxaphene {4}	6.684	6.684	0.000	229016881	944.322	7.588	7.585	-0.003	453857882	1032.226
Toxaphene {5}	6.785	6.786	0.001	141091796	899.300	7.640	7.640	0.000	452377203	1035.894
Sum Toxaphene				853046756	4555.876				2014740047	5003.511
Average Toxaphene					911.175					1000.702

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0106.D

Toxaphene - Manual Integration ==	AB/AP	Toxaphene #2 - Manual Integration ==	AB/AP
Toxaphene {2} - Manual Integration ==	AB/AP	Toxaphene {2} #2 - Manual Integration ==	AB/AP
Toxaphene {3} - Manual Integration ==	AB/AP	Toxaphene {3} #2 - Manual Integration ==	AB/AP
Toxaphene {4} - Manual Integration ==	AB/AP	Toxaphene {4} #2 - Manual Integration ==	AB/AP
Toxaphene {5} - Manual Integration ==	AB/AP	Toxaphene {5} #2 - Manual Integration ==	AB/AP

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0107.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 01 Dec 2022 08:03 (#1); 01 Dec 2022 08:03 (#2)
Operator : JXM InstName : ECDA
Sample : |WPE221201-44|ICAL|1|SVP|1|TOX-4
Misc : |MIX[Q]
ALS Vial : 7 Sample Multiplier: 1

Jxm 12/01/2022

JC 12/01/2022

Quant Time: Dec 01 12:09:43 2022
Quant Method : D:\MSDCHEM\1\Data\120122\ECDA_PEST_113022A.m
Quant Title : ECD5 SubList :
QLast Update : Thu Dec 01 12:05:51 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um Signal #2 Info : 250 um

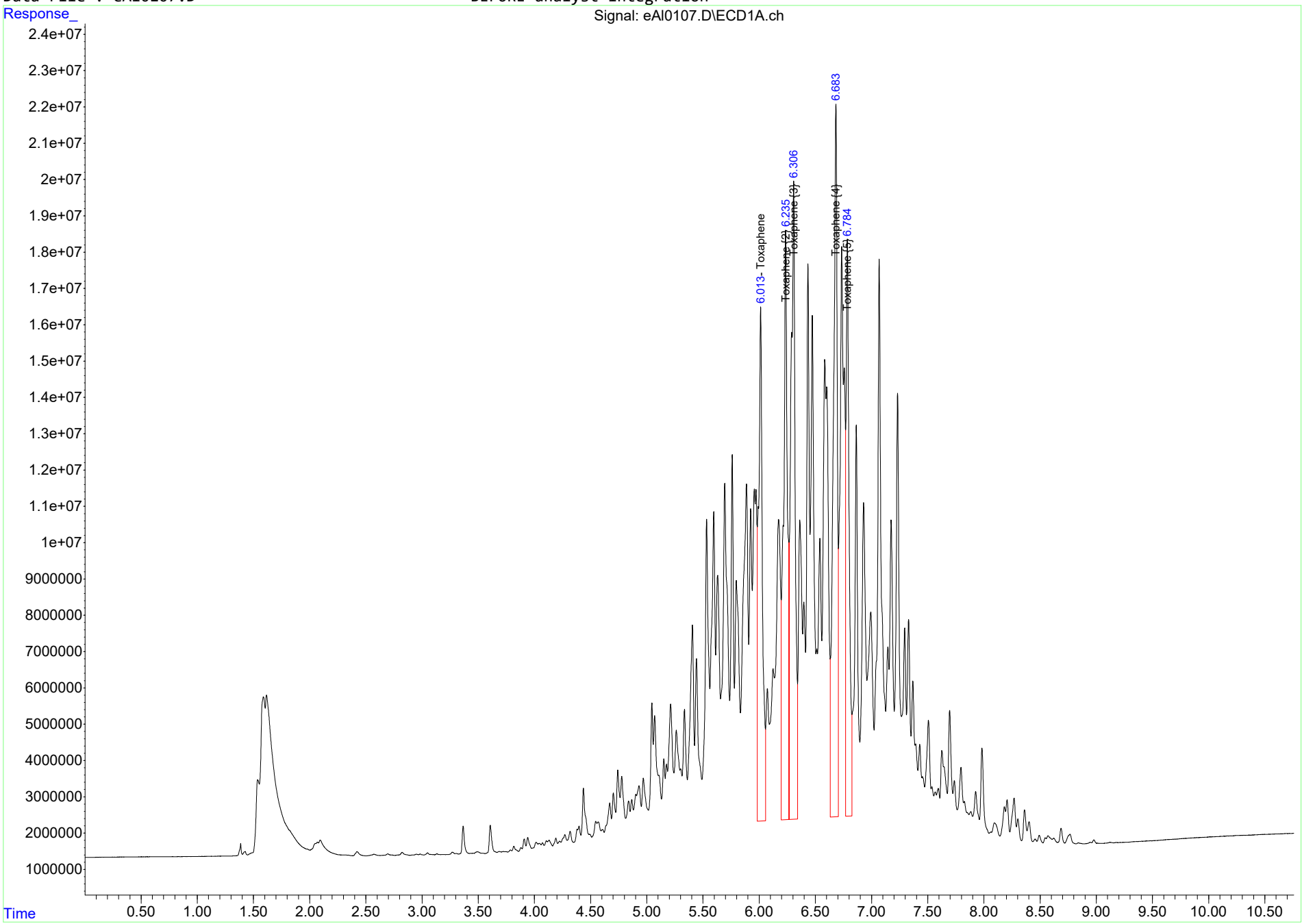
System Monitoring Compounds

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Toxaphene	6.014	6.013	-0.001	367727334	1931.673m	6.731	6.730	-0.001	999577874	1912.449m
Toxaphene {2}	6.236	6.235	-0.001	429893229	1944.785m	7.009	7.009	0.000	587225012	1950.518m
Toxaphene {3}	6.306	6.306	0.000	508596918	1955.273m	7.251	7.250	-0.001	777258332	1947.433m
Toxaphene {4}	6.683	6.683	0.000	519282466	1933.632m	7.587	7.585	-0.002	912086715	1934.930m
Toxaphene {5}	6.785	6.784	-0.001	330447439	1935.012m	7.640	7.640	0.000	910041012	1953.151m
Sum Toxaphene				2155947387	9700.376				4186188945	9698.481
Average Toxaphene					1940.075					1939.696

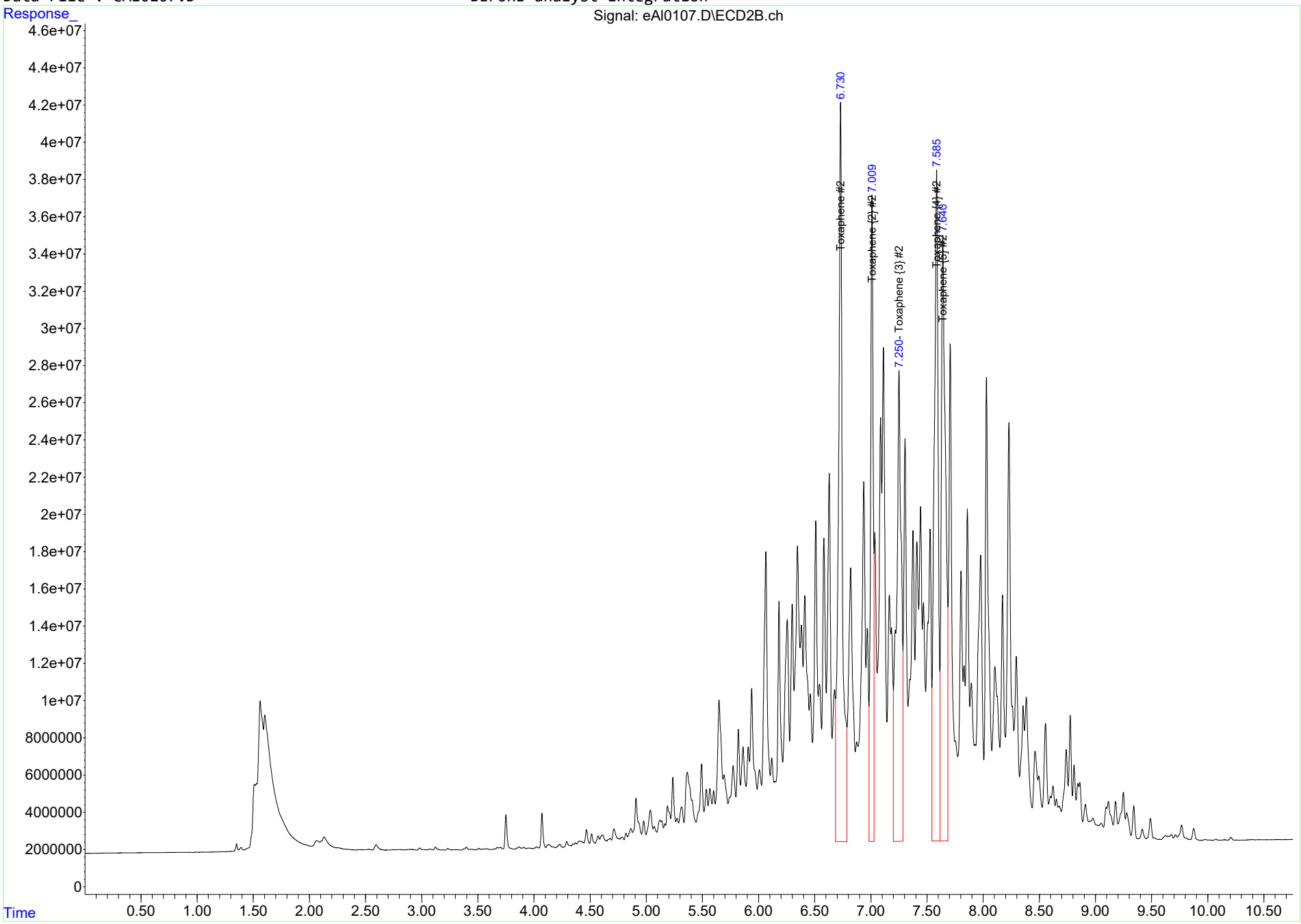
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0107.D BEFORE analyst integration



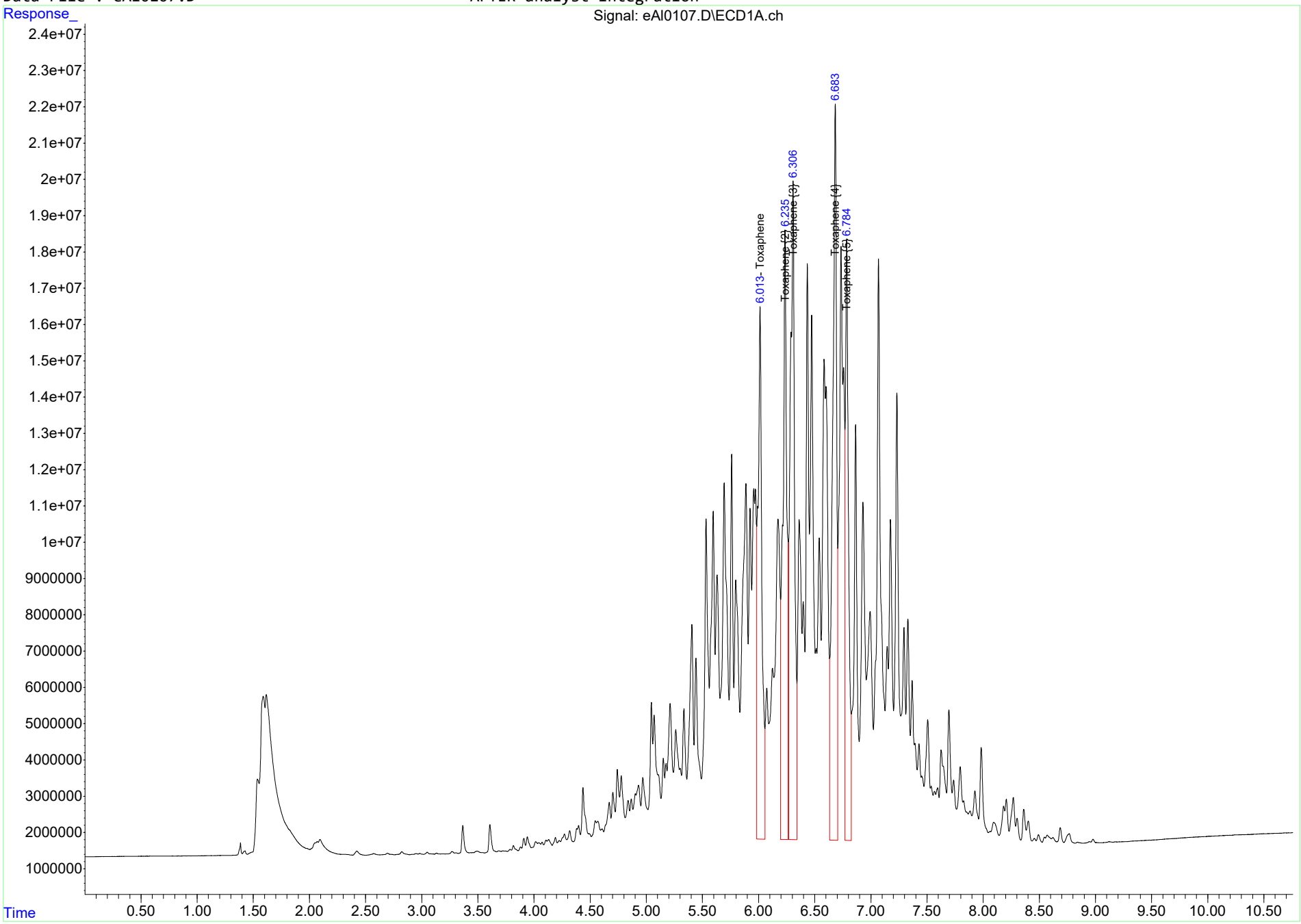
ECDA_PEST_113022A.m Thu Dec 01 12:16:39 2022 Page: 2

Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0107.D BEFORE analyst integration



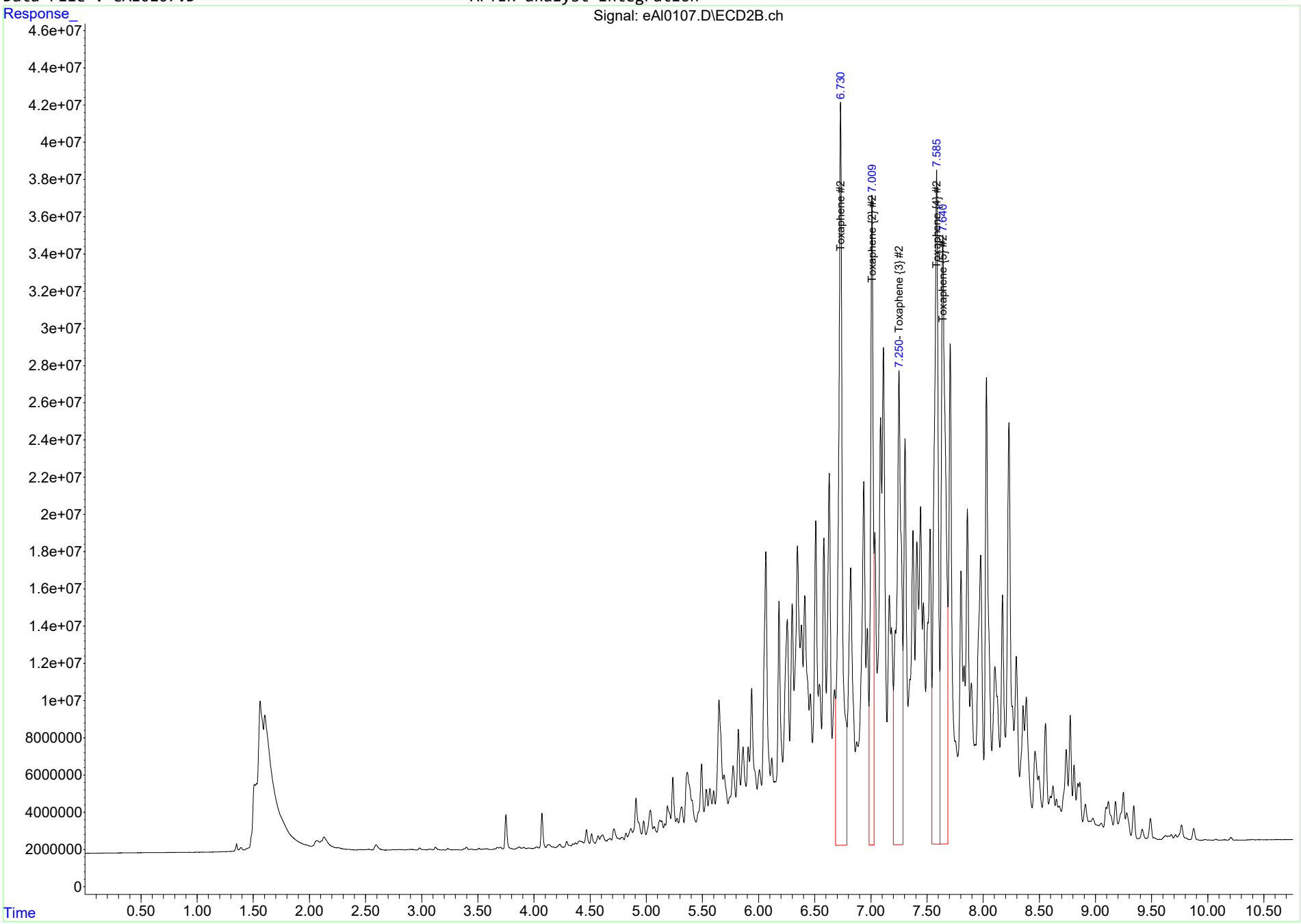
ECDA_PEST_113022A.m Thu Dec 01 12:16:40 2022 Page: 3

Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0107.D AFTER analyst integration



ECDA_PEST_113022A.m Thu Dec 01 12:16:41 2022 Page: 4

Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0107.D AFTER analyst integration



ECDA_PEST_113022A.m Thu Dec 01 12:16:41 2022 Page: 5

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
Target Compounds										
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Toxaphene	6.014	6.013	-0.001	345916455	1982.253	6.733	6.730	-0.003	989916763	2067.643 A
Toxaphene {2}	6.236	6.235	-0.001	409256233	1943.544	7.011	7.009	-0.002	576114201	2061.052 A
Toxaphene {3}	6.308	6.307	-0.001	484297506	3219.386 A	7.251	7.250	-0.001	772210342	2062.892 A
Toxaphene {4}	6.684	6.683	-0.001	487403321	2009.746 A	7.588	7.585	-0.003	907245207	2063.382 A
Toxaphene {5}	6.785	6.784	-0.001	310077904	1976.395	7.640	7.640	0.000	906635763	2076.097 A
Sum Toxaphene				2036951419	11131.324				4152122276	10331.067
Average Toxaphene					2226.265					2066.213

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0107.D

Toxaphene - Manual Integration ==	AB/AP	Toxaphene #2 - Manual Integration ==	AB/AP
Toxaphene {2} - Manual Integration ==	AB/AP	Toxaphene {2} #2 - Manual Integration ==	AB/AP
Toxaphene {3} - Manual Integration ==	AB/AP	Toxaphene {3} #2 - Manual Integration ==	AB/AP
Toxaphene {4} - Manual Integration ==	AB/AP	Toxaphene {4} #2 - Manual Integration ==	AB/AP
Toxaphene {5} - Manual Integration ==	AB/AP	Toxaphene {5} #2 - Manual Integration ==	AB/AP

Quantitation Report
GEL Laboratories, LLC

Jxm 12/01/2022

JC 12/01/2022

Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0108.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 01 Dec 2022 08:20 (#1); 01 Dec 2022 08:20 (#2)
Operator : JXM InstName : ECDA
Sample : |IPE221024-40|ICAL|1|SVP|1|TOX-5
Misc : |MIX[Q]
ALS Vial : 8 Sample Multiplier: 1

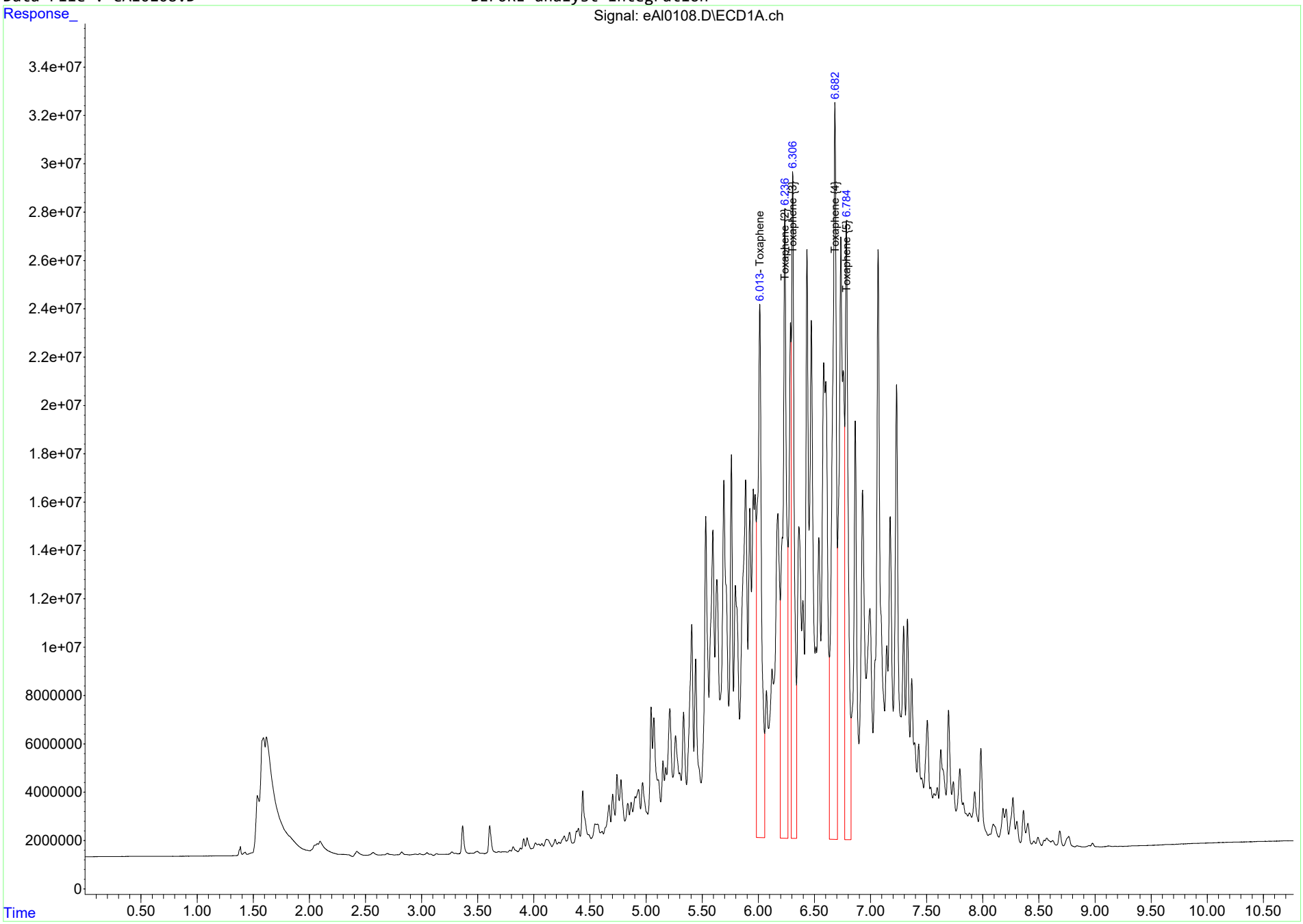
Quant Time: Dec 01 12:10:00 2022
Quant Method : D:\MSDCHEM\1\Data\120122\ECDA_PEST_113022A.m
Quant Title : ECD5 SubList :
QLast Update : Thu Dec 01 12:05:51 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um Signal #2 Info : 250 um

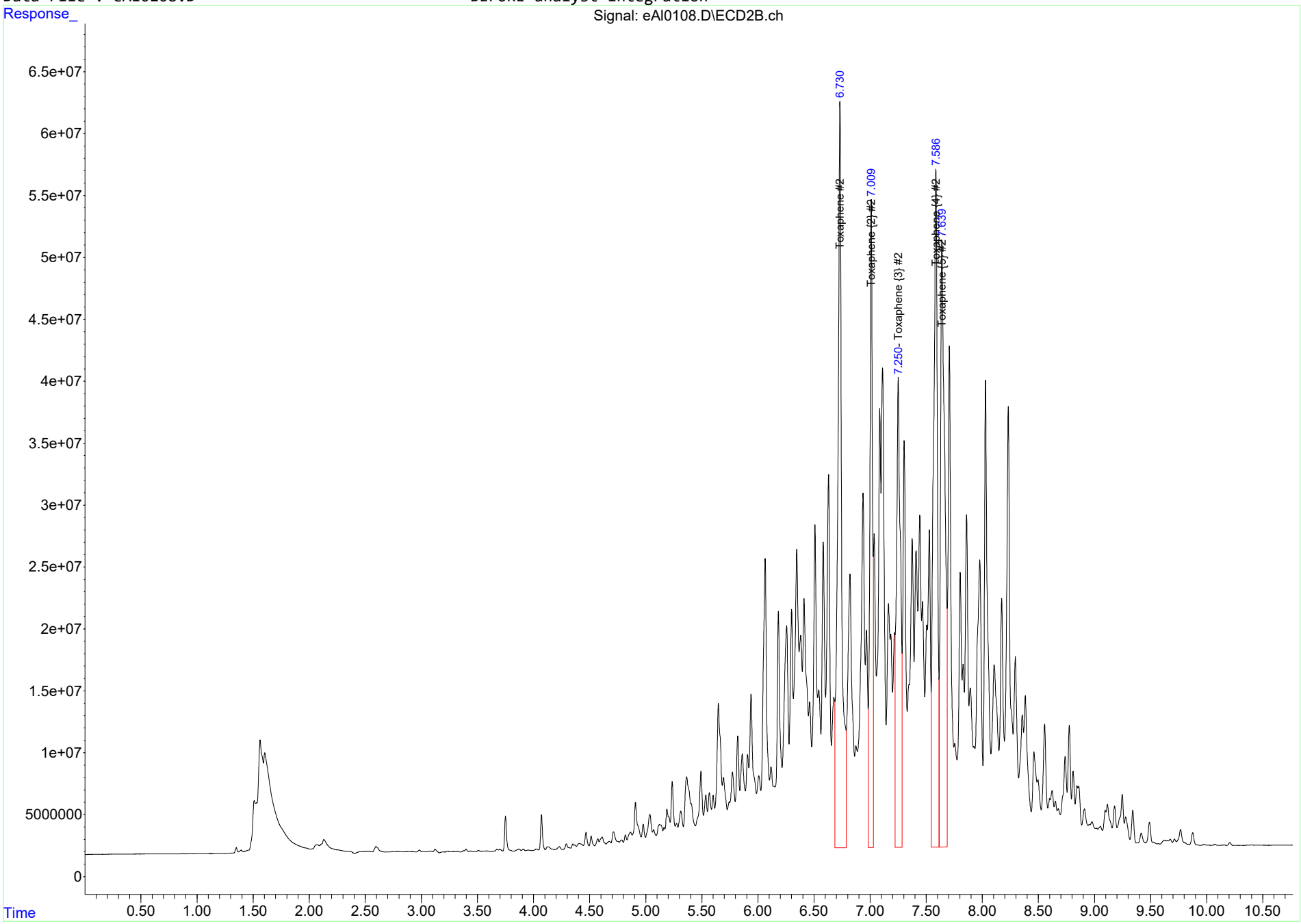
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
Target Compounds										
Toxaphene	6.014	6.013	-0.001	560993894	2946.903	6.731	6.730	-0.001	1484589620	2840.401
Toxaphene {2}	6.236	6.236	0.000	644499983	2915.641	7.009	7.010	0.001	856984757	2846.548
Toxaphene {3}	6.306	6.306	0.000	766772018	2947.813m	7.251	7.250	-0.001	1183388475	2964.999m
Toxaphene {4}	6.683	6.682	-0.001	777645647	2895.690	7.587	7.586	-0.001	1368501653	2903.183
Toxaphene {5}	6.785	6.784	-0.001	504120496	2951.994	7.640	7.639	-0.001	1379459367	2960.627
Sum Toxaphene				3254032038	14658.041				6272923872	14515.759
Average Toxaphene					2931.608					2903.152

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0108.D BEFORE analyst integration

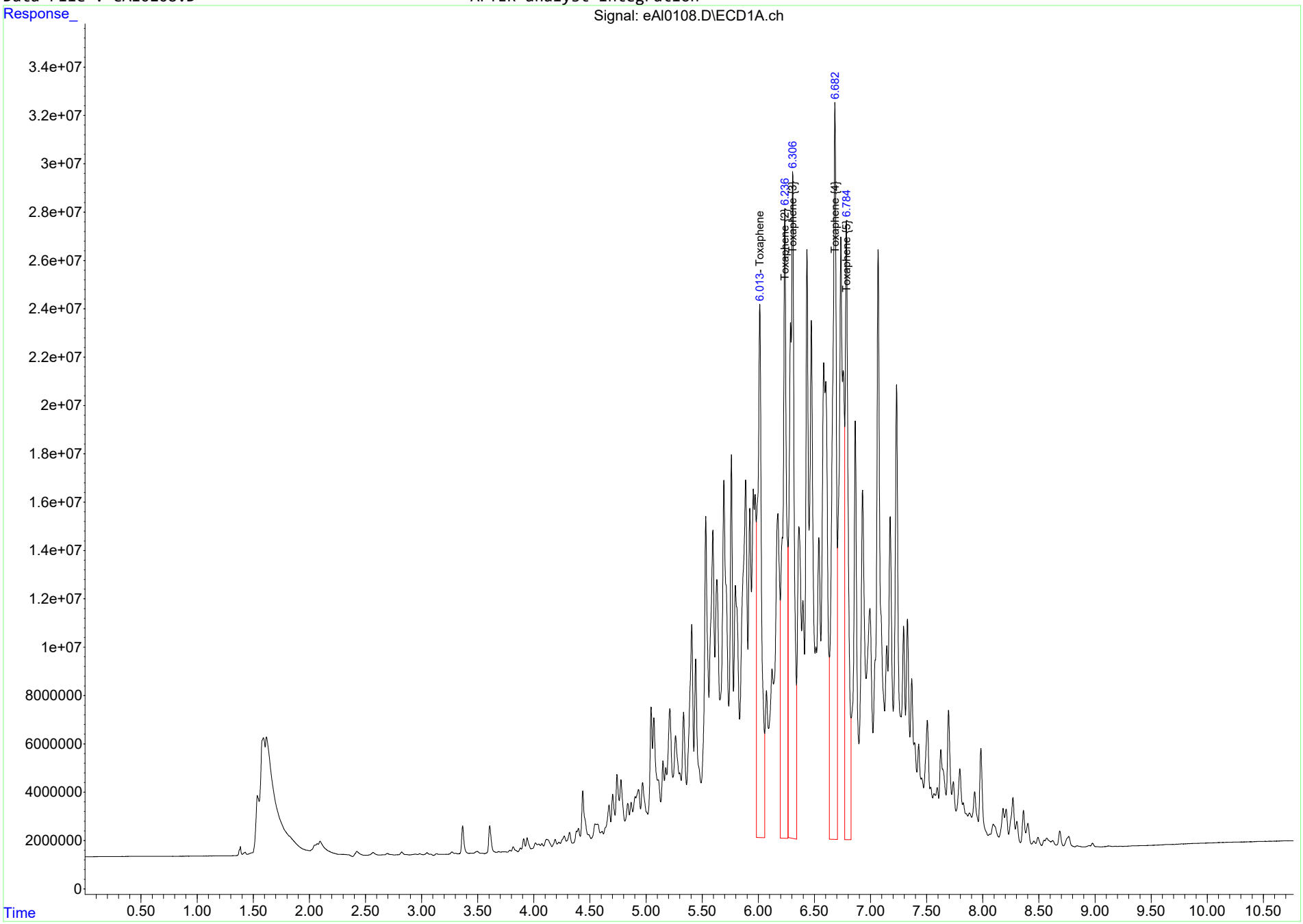


Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0108.D BEFORE analyst integration

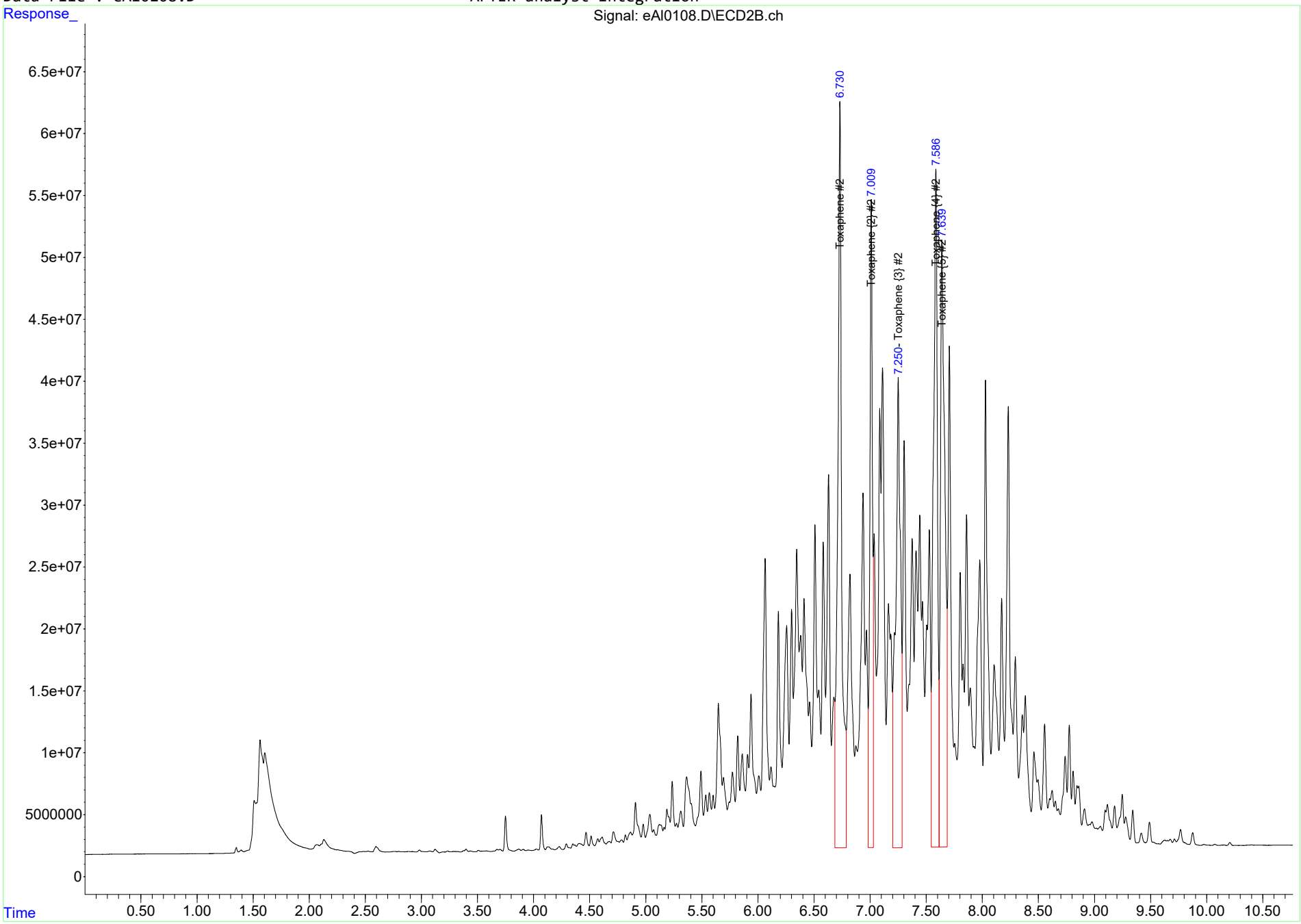


ECDA_PEST_113022A.m Thu Dec 01 12:16:48 2022 Page: 3

Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0108.D AFTER analyst integration



Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0108.D AFTER analyst integration



The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1		Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
System Monitoring Compounds												
Target Compounds												
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1		Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
Toxaphene	6.014	6.013	-0.001	560993894	3214.742	A	6.733	6.730	-0.003	1484589620	3100.868	A
Toxaphene {2}	6.236	6.236	0.000	644499983	3060.709	A	7.011	7.010	-0.001	856984757	3065.869	A
Toxaphene {3}	6.308	6.306	-0.002	486193425	3231.989	A	7.251	7.251	0.000	968893737	2588.314	A
Toxaphene {4}	6.684	6.682	-0.002	777645647	3206.524	A	7.588	7.586	-0.002	1368501653	3112.436	A
Toxaphene {5}	6.785	6.784	-0.001	504120496	3213.196	A	7.640	7.639	-0.001	1379459367	3158.812	A
Sum Toxaphene				2973453446	15927.159					6058429135	15026.299	
Average Toxaphene					3185.432						3005.260	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0108.D

Toxaphene {3} - Manual Integration ==	AB/AP	Toxaphene {3} #2 - Manual Integration ==	AB/AP

Quantitation Report
GEL Laboratories, LLC

JXM 12/05/2022

JC 12/05/2022

Data Path : D:\MSDCHEM\1\Data\120422\
Data File : eAl0407.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 04 Dec 2022 14:11 (#1); 04 Dec 2022 14:11 (#2)
Operator : JXM InstName : ECDA
Sample : |WPE221203-01|ICAL|1|SVP|1|AB-1
Misc : |MIX[P]
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 05 06:56:34 2022
Quant Method : D:\MSDCHEM\1\Data\120422\ECDA_PEST_120422.m
Quant Title : ECD5 SubList :
QLast Update : Mon Dec 05 06:53:50 2022
Response via : Initial Calibration
Integrator: ChemStation

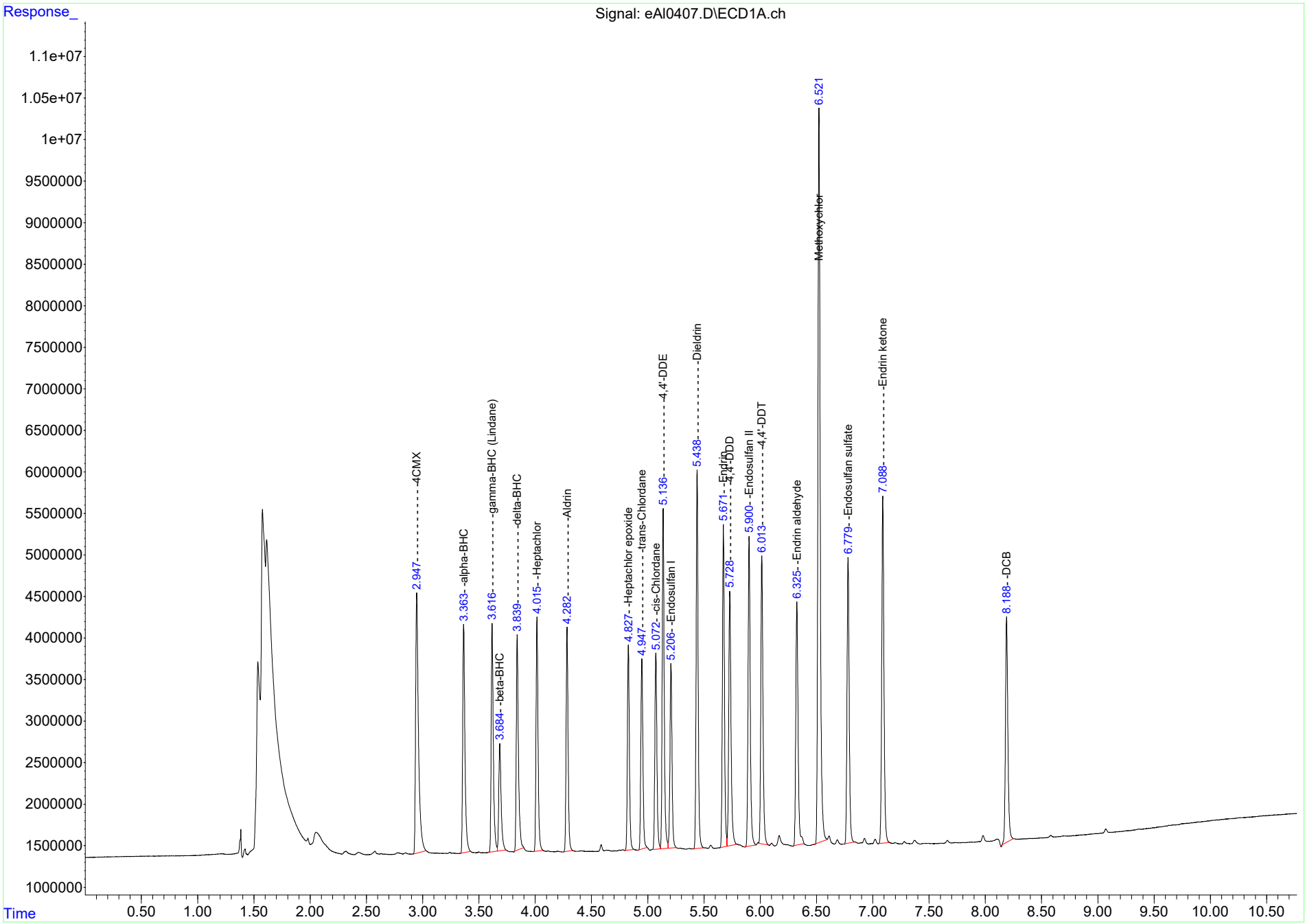
Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.948	2.947	-0.001	55269180	8.940	3.233	3.232	-0.001	103235208	9.229
DCB	8.189	8.189	0.000	40033268	10.188	9.292	9.291	-0.001	70532265	10.079
Target Compounds										
alpha-BHC	3.364	3.364	0.000	37689894	3.896	3.750	3.749	-0.001	78043673	4.233
gamma-BHC (Lindane)	3.617	3.617	0.000	35730261	4.064	4.075	4.073	-0.002	72327039	4.340
Heptachlor	4.017	4.016	-0.001	34763877	4.250	4.503	4.502	-0.001	69702654	4.495
Aldrin	4.283	4.283	0.000	32492772	4.145	4.828	4.827	-0.001	66112014	4.413
beta-BHC	3.684	3.685	0.001	18595032	4.637	4.140	4.140	0.000	34566787	4.773
delta-BHC	3.840	3.840	0.000	33570085	3.800	4.426	4.426	0.000	71031437	4.256
Heptachlor epoxide	4.828	4.827	-0.001	30207585	4.387	5.390	5.389	-0.001	59582372	4.553
trans-Chlordane	4.948	4.947	-0.001	29303429	4.243	5.585	5.585	0.000	58691118	4.496
cis-Chlordane	5.072	5.072	0.000	29942816	4.439	5.734	5.733	-0.001	58306886	4.580
4,4'-DDE	5.136	5.137	0.001	50894812	8.083	5.883	5.884	0.001	102694572	8.628
Endosulfan I	5.206	5.206	0.000	28457411	4.399	5.803	5.802	-0.001	54590106	4.566
Dieldrin	5.438	5.438	0.000	55098734	8.324	6.090	6.089	-0.001	109722974	8.816
Endrin	5.671	5.672	0.001	48763725	8.504	6.418	6.417	-0.001	97417304	9.011
Endosulfan II	5.899	5.900	0.001	49383734	8.726	6.643	6.643	0.000	96406508	9.116
4,4'-DDD	5.726	5.729	0.003	42429349	8.174	6.501	6.501	0.000	85644053	8.705
4,4'-DDT	6.011	6.013	0.002	45220545	8.170	6.845	6.845	0.000	89399702	8.742
Endrin aldehyde	6.323	6.325	0.002	40699500	9.065	7.001	7.002	0.001	74846685	9.225
Methoxychlor	6.518	6.521	0.003	122942027	45.805	7.591	7.591	0.000	224479862	46.766
Endosulfan sulfate	6.778	6.780	0.002	46296511	9.338	7.305	7.305	0.000	84842851	9.571

Endrin ketone	7.086	7.088	0.002	57398481	8.882	7.916	7.916	0.000	108898026	9.168

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\120422\
Data File : eAl0407.D



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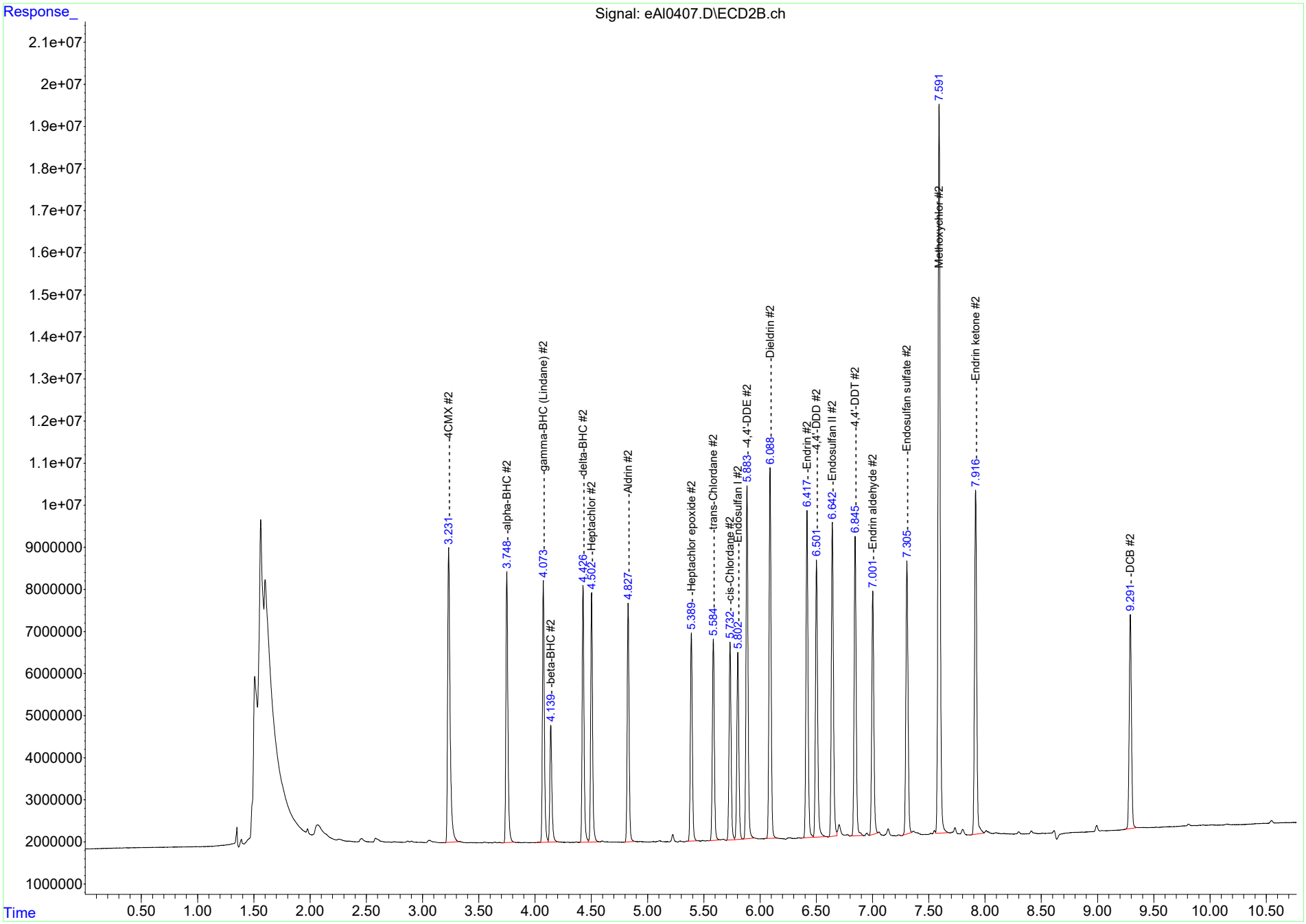
Data File : eAl0407.D



Quantitation Report
GEL Laboratories, LLC

JXM 12/05/2022

JC 12/05/2022

Data Path : D:\MSDCHEM\1\Data\120422\
Data File : eAl0408.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 04 Dec 2022 14:27 (#1); 04 Dec 2022 14:27 (#2)
Operator : JXM InstName : ECDA
Sample : |WPE221203-02|ICAL|1|SVP|1|AB-2
Misc : |MIX[P]
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 05 06:56:36 2022
Quant Method : D:\MSDCHEM\1\Data\120422\ECDA_PEST_120422.m
Quant Title : ECD5 SubList :
QLast Update : Mon Dec 05 06:53:50 2022
Response via : Initial Calibration
Integrator: ChemStation

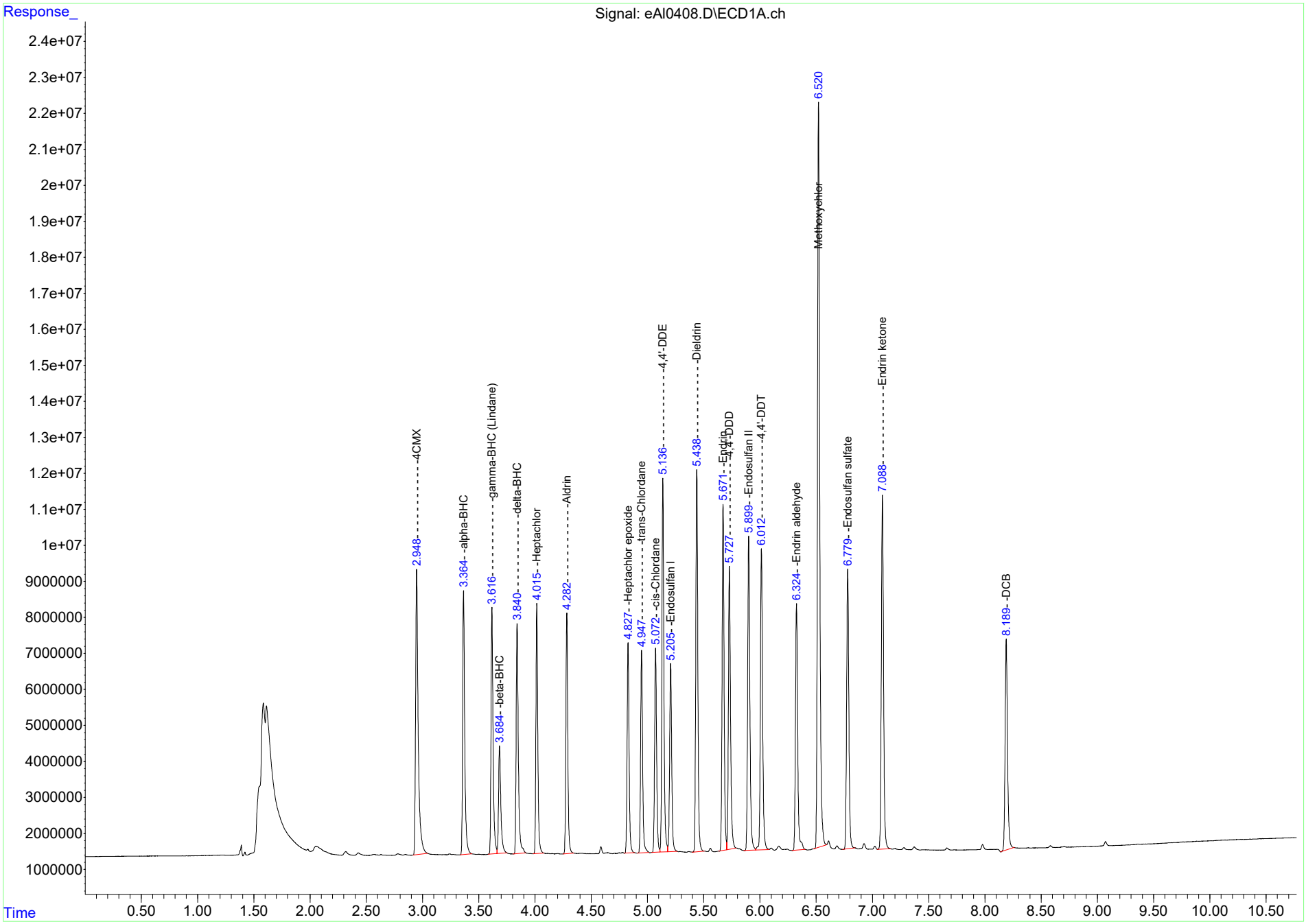
Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.948	2.948	0.000	125380558	20.280	3.233	3.232	-0.001	234082744	20.927
DCB	8.189	8.189	0.000	86375451	21.981	9.292	9.292	0.000	153549262	21.941
Target Compounds										
alpha-BHC	3.364	3.364	0.000	93429442	9.658	3.750	3.749	-0.001	187926954	10.193
gamma-BHC (Lindane)	3.617	3.617	0.000	86247937	9.810	4.075	4.073	-0.002	171176544	10.271
Heptachlor	4.017	4.016	-0.001	81750415	9.995	4.503	4.501	-0.002	161989016	10.446
Aldrin	4.283	4.283	0.000	77967469	9.946	4.828	4.827	-0.001	155580341	10.386
beta-BHC	3.684	3.684	0.000	41743906	10.409	4.140	4.139	-0.001	77095136	10.646
delta-BHC	3.840	3.841	0.001	85549014	9.683	4.426	4.426	0.000	169904599	10.180
Heptachlor epoxide	4.828	4.827	-0.001	69892697	10.150	5.390	5.389	-0.001	138378311	10.575
trans-Chlordane	4.948	4.947	-0.001	69987982	10.133	5.585	5.585	0.000	135420597	10.375
cis-Chlordane	5.072	5.072	0.000	68764908	10.195	5.734	5.733	-0.001	133569543	10.491
4,4'-DDE	5.136	5.136	0.000	125383844	19.913	5.883	5.884	0.001	248177803	20.851
Endosulfan I	5.206	5.206	0.000	66068061	10.213	5.803	5.803	0.000	125983378	10.537
Dieldrin	5.438	5.438	0.000	133183670	20.121	6.090	6.089	-0.001	261253505	20.990
Endrin	5.671	5.672	0.001	116176368	20.261	6.418	6.417	-0.001	229505615	21.229
Endosulfan II	5.899	5.900	0.001	116449218	20.577	6.643	6.643	0.000	223119528	21.098
4,4'-DDD	5.726	5.728	0.002	102925602	19.829	6.501	6.502	0.001	204359987	20.772
4,4'-DDT	6.011	6.013	0.002	112225054	20.275	6.845	6.845	0.000	213620149	20.888
Endrin aldehyde	6.323	6.325	0.002	94081910	20.954	7.001	7.001	0.000	170999602	21.076
Methoxychlor	6.518	6.521	0.003	283496172	105.624	7.591	7.591	0.000	520578790	108.452
Endosulfan sulfate	6.778	6.780	0.002	104416190	21.062	7.305	7.305	0.000	191341571	21.585

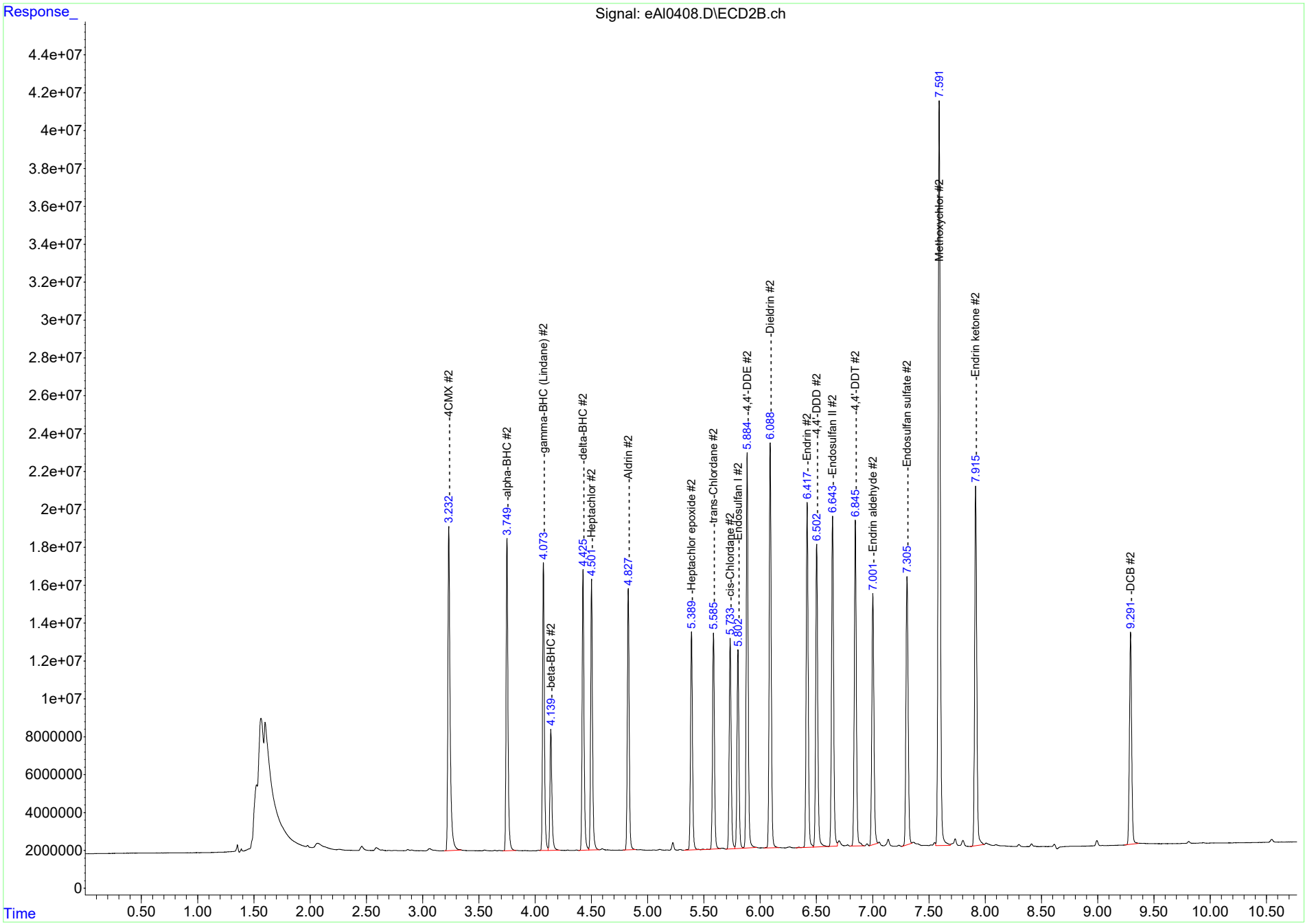
Endrin ketone	7.086	7.089	0.003	134074061	20.746	7.916	7.915	-0.001	251502041	21.175

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\120422\
Data File : eAl0408.D



Data Path : D:\MSDCHEM\1\Data\120422\
Data File : eAl0408.D



Quantitation Report
GEL Laboratories, LLC

JXM 12/05/2022

JC 12/05/2022

Data Path : D:\MSDCHEM\1\Data\120422\
Data File : eAl0409.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 04 Dec 2022 14:44 (#1); 04 Dec 2022 14:44 (#2)
Operator : JXM InstName : ECDA
Sample : |WPE221203-03|ICAL|1|SVP|1|AB-3
Misc : |MIX[P]
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 05 06:56:38 2022
Quant Method : D:\MSDCHEM\1\Data\120422\ECDA_PEST_120422.m
Quant Title : ECD5 SubList :
QLast Update : Mon Dec 05 06:53:50 2022
Response via : Initial Calibration
Integrator: ChemStation

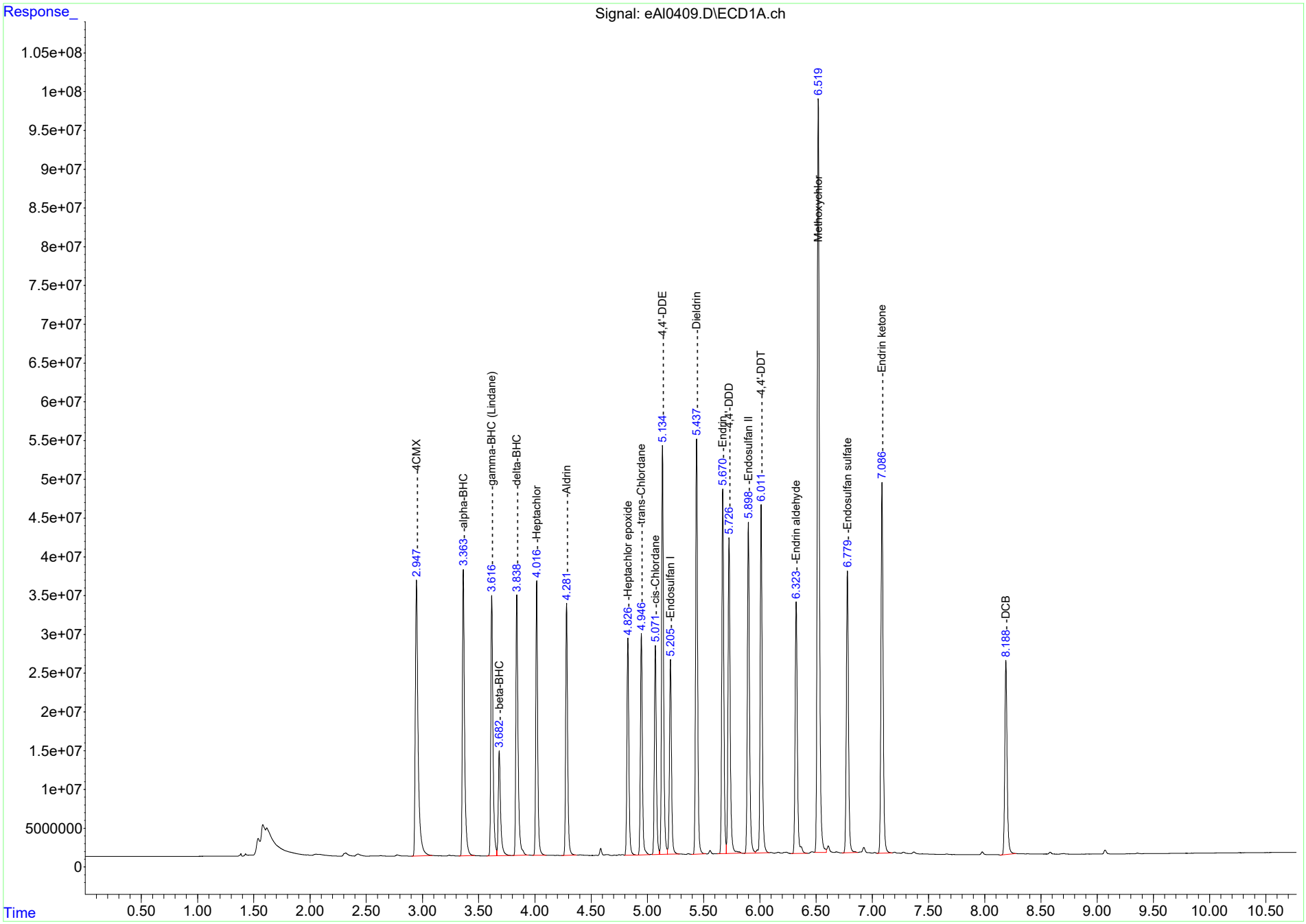
Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.948	2.947	-0.001	605285767	97.906	3.233	3.231	-0.002	1091682017	97.594
DCB	8.189	8.188	-0.001	357923195	91.086	9.292	9.291	-0.001	639184935	91.336
Target Compounds										
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
alpha-BHC	3.364	3.363	-0.001	494487039	51.116	3.750	3.749	-0.001	926554236	50.256
gamma-BHC (Lindane)	3.617	3.616	-0.001	444122742	50.516	4.075	4.073	-0.002	831285585	49.880
Heptachlor	4.017	4.016	-0.001	406685826	49.722	4.503	4.502	-0.001	766336448	49.416
Aldrin	4.283	4.282	-0.001	393360740	50.178	4.828	4.827	-0.001	742640438	49.576
beta-BHC	3.684	3.683	-0.001	192784499	48.070	4.140	4.139	-0.001	347414372	47.973
delta-BHC	3.840	3.839	-0.001	454977370	51.497	4.426	4.426	0.000	839720223	50.314
Heptachlor epoxide	4.828	4.827	-0.001	339070758	49.239	5.390	5.389	-0.001	640365665	48.935
trans-Chlordane	4.948	4.946	-0.002	342271090	49.556	5.585	5.584	-0.001	643178109	49.276
cis-Chlordane	5.072	5.071	-0.001	328773805	48.742	5.734	5.733	-0.001	621004342	48.776
4,4'-DDE	5.136	5.135	-0.001	640851676	101.780	5.883	5.883	0.000	1186979594	99.726
Endosulfan I	5.206	5.206	0.000	317697347	49.109	5.803	5.802	-0.001	586642310	49.068
Dieldrin	5.438	5.438	0.000	667892912	100.901	6.090	6.089	-0.001	1232328477	99.011
Endrin	5.671	5.671	0.000	576352426	100.516	6.418	6.417	-0.001	1067343788	98.728
Endosulfan II	5.899	5.898	-0.001	560985780	99.130	6.643	6.642	-0.001	1042986170	98.626
4,4'-DDD	5.726	5.726	0.000	534972371	103.062	6.501	6.501	0.000	979098317	99.517
4,4'-DDT	6.011	6.012	0.001	555848031	100.420	6.845	6.844	-0.001	1009823326	98.742
Endrin aldehyde	6.323	6.323	0.000	444207129	98.936	7.001	7.001	0.000	796503329	98.168
Methoxychlor	6.518	6.520	0.002	1293945585	482.092	7.591	7.590	-0.001	2273841624	473.709
Endosulfan sulfate	6.778	6.779	0.001	477786239	96.374	7.305	7.305	0.000	849353979	95.815

Endrin ketone	7.086	7.087	0.001	634263790	98.143	7.916	7.914	-0.002	1150372423	96.853

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\120422\
Data File : eAl0409.D



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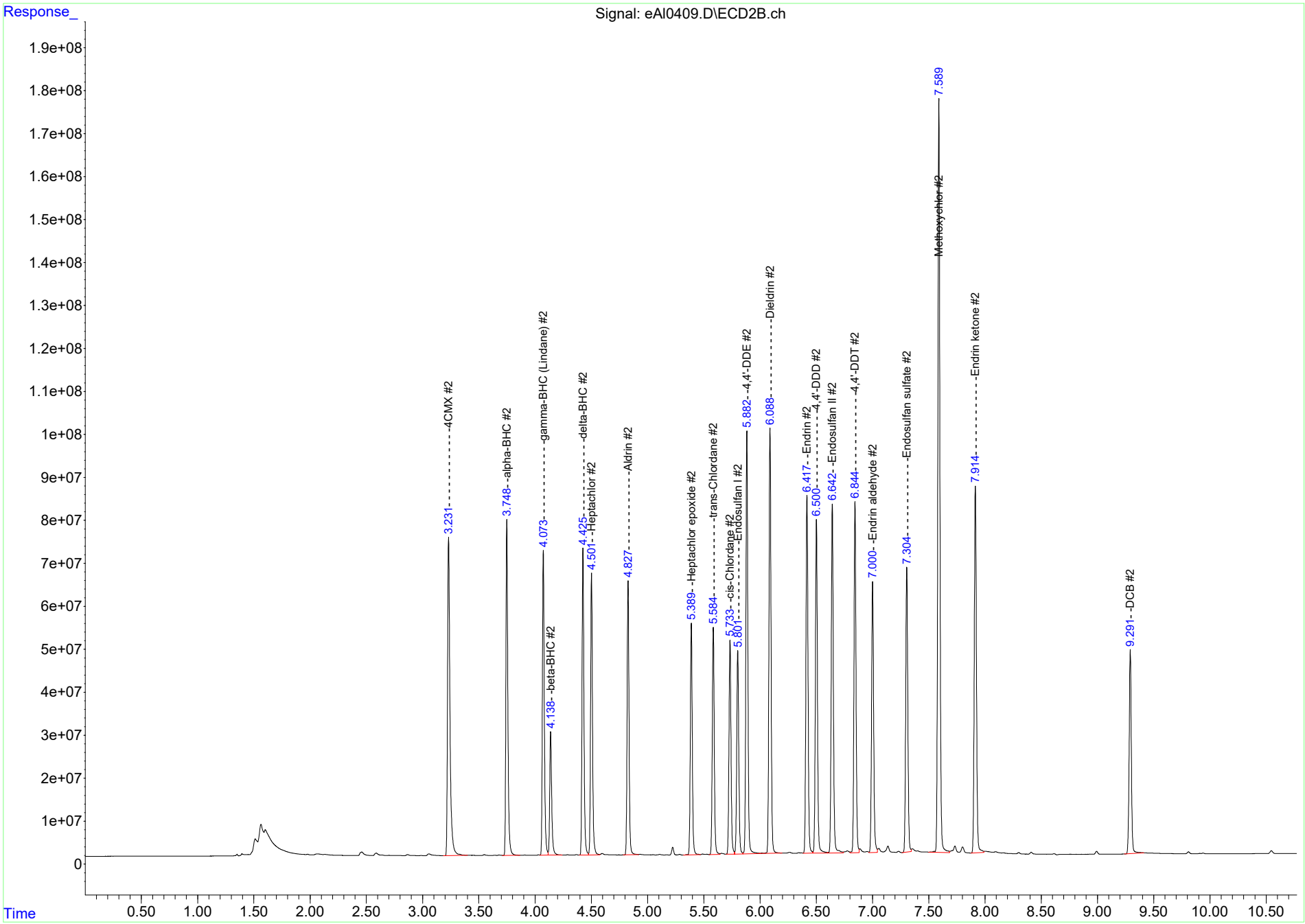
Data File : eAl0409.D



Quantitation Report
GEL Laboratories, LLC

JXM 12/05/2022

JC 12/05/2022

Data Path : D:\MSDCHEM\1\Data\120422\
Data File : eAl0410.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 04 Dec 2022 15:00 (#1); 04 Dec 2022 15:00 (#2)
Operator : JXM InstName : ECDA
Sample : |WPE221203-04|ICAL|1|SVP|1|AB-4
Misc : |MIX[P]
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 05 06:56:40 2022
Quant Method : D:\MSDCHEM\1\Data\120422\ECDA_PEST_120422.m
Quant Title : ECD5 SubList :
QLast Update : Mon Dec 05 06:53:50 2022
Response via : Initial Calibration
Integrator: ChemStation

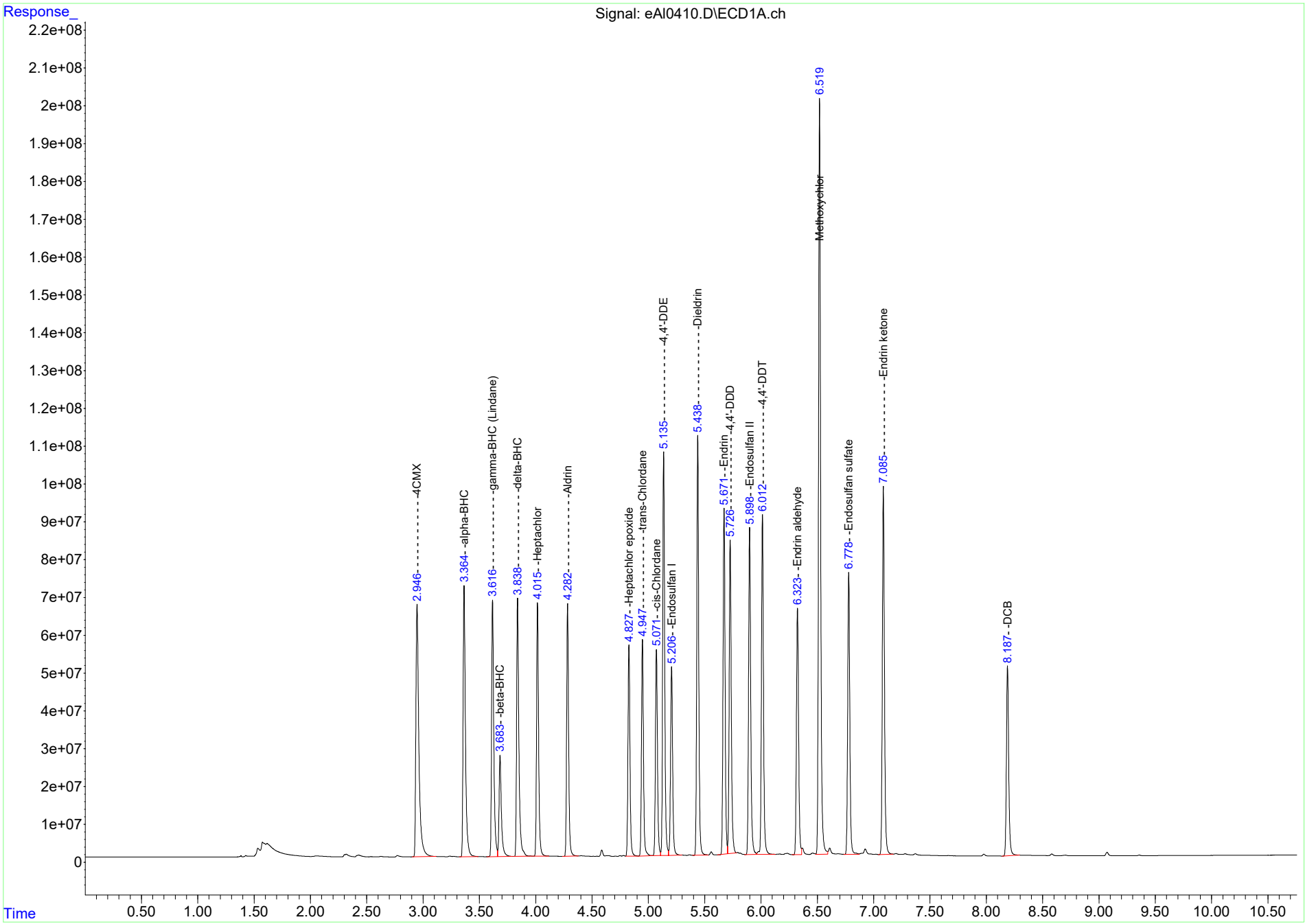
Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.948	2.947	-0.001	1221124799	197.519	3.233	3.232	-0.001	2147049860	191.942
DCB	8.189	8.188	-0.001	702572643	178.794	9.292	9.291	-0.001	1261440752	180.253
Target Compounds										
alpha-BHC	3.364	3.364	0.000	1021265468	105.570	3.750	3.749	-0.001	1849158242	100.297
gamma-BHC (Lindane)	3.617	3.617	0.000	909297035	103.426	4.075	4.074	-0.001	1651271370	99.082
Heptachlor	4.017	4.016	-0.001	826465945	101.046	4.503	4.502	-0.001	1505076364	97.052
Aldrin	4.283	4.283	0.000	801554821	102.249	4.828	4.827	-0.001	1471109611	98.207
beta-BHC	3.684	3.683	-0.001	384780337	95.943	4.140	4.139	-0.001	680522778	93.971
delta-BHC	3.840	3.839	-0.001	939772335	106.368	4.426	4.425	-0.001	1669859939	100.054
Heptachlor epoxide	4.828	4.828	0.000	683085592	99.197	5.390	5.390	0.000	1257375170	96.085
trans-Chlordane	4.948	4.947	-0.001	694991154	100.624	5.585	5.585	0.000	1265655686	96.965
cis-Chlordane	5.072	5.072	0.000	664984736	98.587	5.734	5.733	-0.001	1220123309	95.834
4,4'-DDE	5.136	5.136	0.000	1293667799	205.460	5.883	5.884	0.001	2325039349	195.343
Endosulfan I	5.206	5.206	0.000	639668541	98.878	5.803	5.802	-0.001	1143700377	95.661
Dieldrin	5.438	5.438	0.000	1341431568	202.655	6.090	6.090	0.000	2405194977	193.245
Endrin	5.671	5.672	0.001	1142218069	199.203	6.418	6.418	0.000	2058676393	190.426
Endosulfan II	5.899	5.898	-0.001	1119682664	197.857	6.643	6.643	0.000	2022505554	191.251
4,4'-DDD	5.726	5.726	0.000	1053771579	203.009	6.501	6.501	0.000	1927993235	195.965
4,4'-DDT	6.011	6.013	0.002	1129235720	204.010	6.845	6.845	0.000	1994008800	194.977
Endrin aldehyde	6.323	6.324	0.001	860942799	191.754	7.001	7.001	0.000	1550694860	191.121
Methoxychlor	6.518	6.519	0.001	2550875222	950.393	7.591	7.591	0.000	4448220797	926.697
Endosulfan sulfate	6.778	6.779	0.001	945095157	190.636	7.305	7.305	0.000	1649659532	186.096

Endrin ketone	7.086	7.086	0.000	1262172201	195.303	7.916	7.915	-0.001	2255772971	189.920

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\120422\
Data File : eAl0410.D



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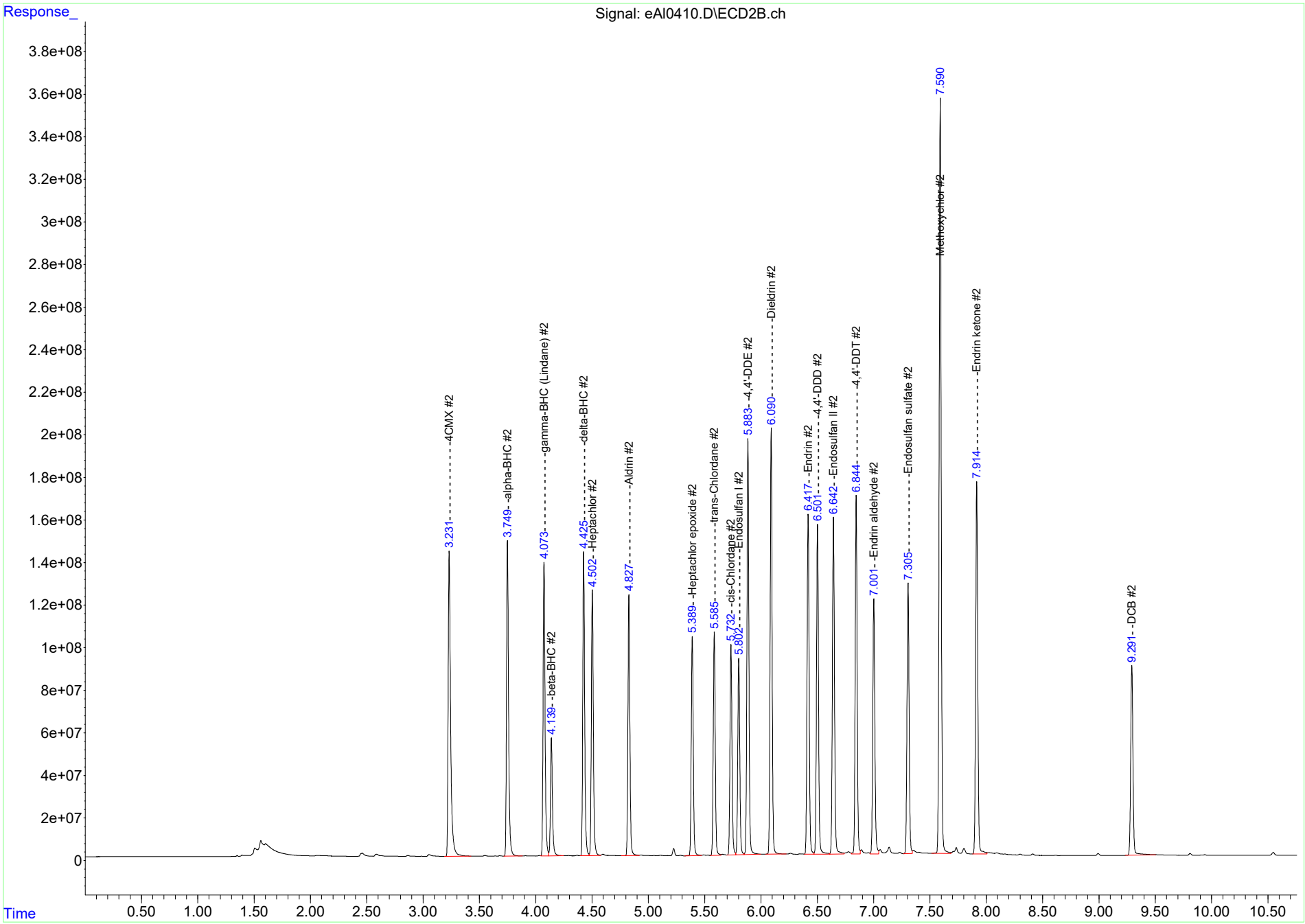
Data File : eAl0410.D



Quantitation Report
GEL Laboratories, LLC

JXM 12/05/2022

JC 12/05/2022

Data Path : D:\MSDCHEM\1\Data\120422\
Data File : eAl0411.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 04 Dec 2022 15:17 (#1); 04 Dec 2022 15:17 (#2)
Operator : JXM InstName : ECDA
Sample : |IPE221203-11|ICAL|1|SVP|1|AB-5
Misc : |MIX[P]
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 05 06:56:42 2022
Quant Method : D:\MSDCHEM\1\Data\120422\ECDA_PEST_120422.m
Quant Title : ECD5 SubList :
QLast Update : Mon Dec 05 06:53:50 2022
Response via : Initial Calibration
Integrator: ChemStation

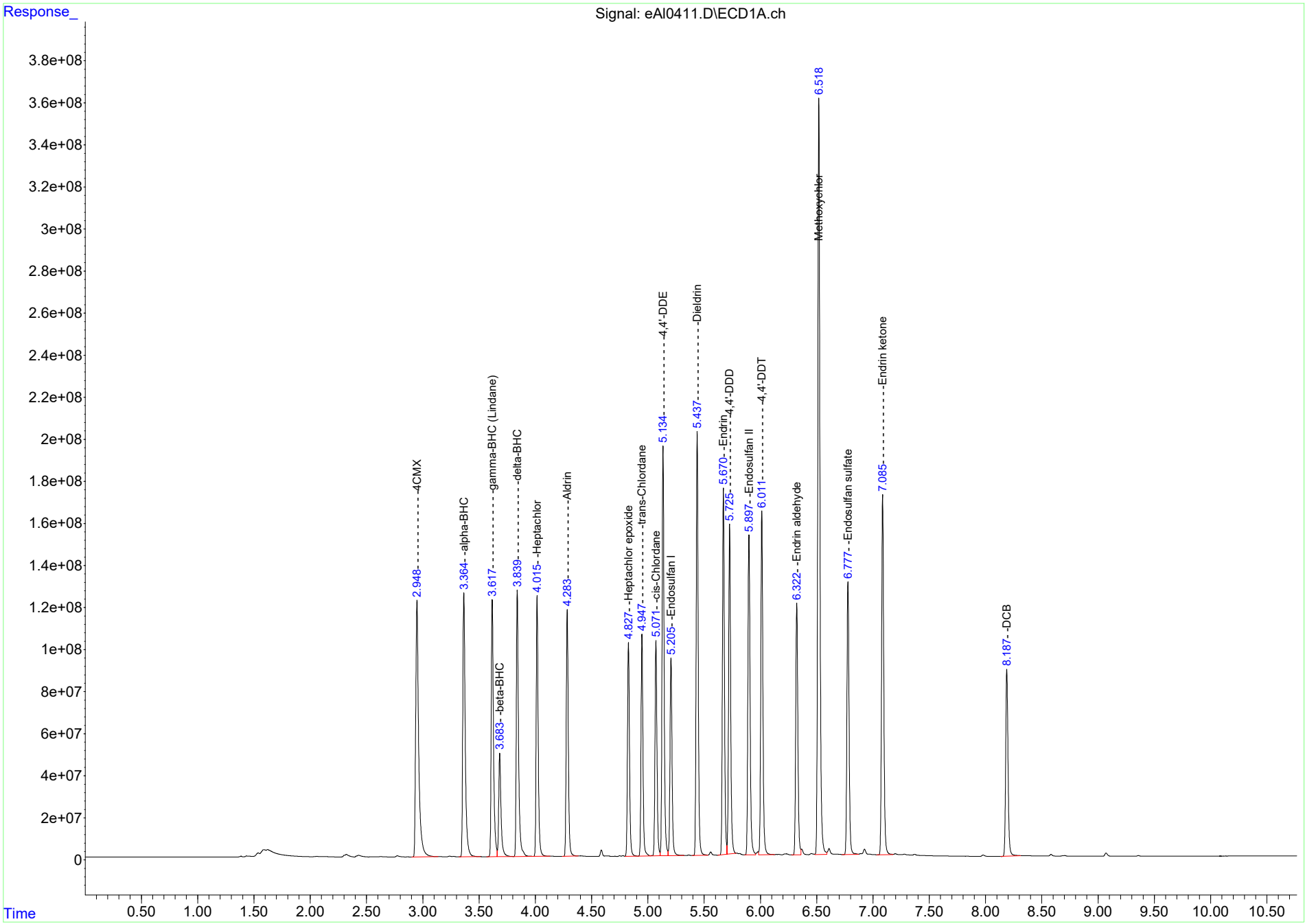
Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.948	2.948	0.000	2230180857	360.735	3.233	3.232	-0.001	3867610182	345.757
DCB	8.189	8.188	-0.001	1293013433	329.052	9.292	9.292	0.000	2319147303	331.393
Target Compounds										
alpha-BHC	3.364	3.365	0.001	1900216545	196.430	3.750	3.750	0.000	3371598395	182.873
gamma-BHC (Lindane)	3.617	3.617	0.000	1685180138	191.678	4.075	4.074	-0.001	2998157618	179.900
Heptachlor	4.017	4.016	-0.001	1526262060	186.604	4.503	4.503	0.000	2707511543	174.589
Aldrin	4.283	4.283	0.000	1478706068	188.629	4.828	4.827	-0.001	2649746794	176.889
beta-BHC	3.684	3.683	-0.001	705173680	175.832	4.140	4.139	-0.001	1220905901	168.590
delta-BHC	3.840	3.839	-0.001	1746156809	197.639	4.426	4.426	0.000	3041301812	182.228
Heptachlor epoxide	4.828	4.827	-0.001	1255467493	182.318	5.390	5.390	0.000	2263134737	172.943
trans-Chlordane	4.948	4.947	-0.001	1282784683	185.728	5.585	5.585	0.000	2305667737	176.644
cis-Chlordane	5.072	5.071	-0.001	1227654101	182.005	5.734	5.734	0.000	2220663193	174.421
4,4'-DDE	5.136	5.135	-0.001	2389706692	379.533	5.883	5.884	0.001	4308448721	361.983
Endosulfan I	5.206	5.205	-0.001	1174924087	181.616	5.803	5.803	0.000	2072592656	173.356
Dieldrin	5.438	5.438	0.000	2465529466	372.477	6.090	6.090	0.000	4441729318	356.871
Endrin	5.671	5.671	0.000	2116323064	369.087	6.418	6.418	0.000	3774136409	349.104
Endosulfan II	5.899	5.898	-0.001	2036647400	359.891	6.643	6.643	0.000	3650651442	345.210
4,4'-DDD	5.726	5.726	0.000	1954116799	376.460	6.501	6.500	-0.001	3535149441	359.319
4,4'-DDT	6.011	6.012	0.001	2083022185	376.322	6.845	6.845	0.000	3684090835	360.236
Endrin aldehyde	6.323	6.323	0.000	1564323010	348.415	7.001	7.002	0.001	2777597415	342.336
Methoxychlor	6.518	6.518	0.000	4745656466	1768.114	7.591	7.592	0.001	8373425690	1744.435
Endosulfan sulfate	6.778	6.777	-0.001	1710719946	345.070	7.305	7.305	0.000	2963406502	334.298

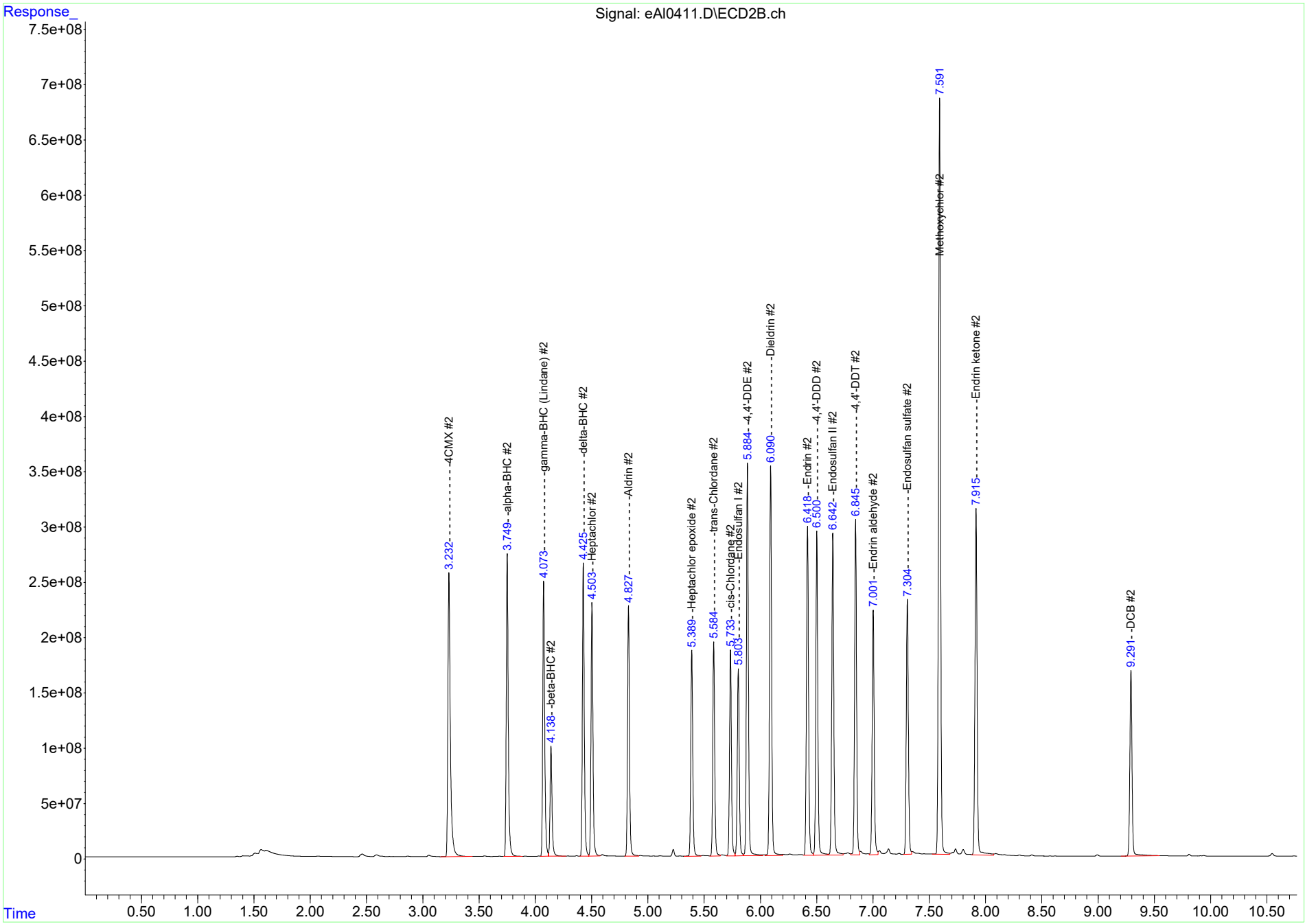
Endrin ketone	7.086	7.085	-0.001	2312475157	357.822	7.916	7.915	-0.001	4167041545	350.835

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\120422\
Data File : eAl0411.D



Data Path : D:\MSDCHEM\1\Data\120422\
Data File : eAl0411.D



Continuing Calibration Summary

Instrument ID: ECDAA.I_1

Client SDG: 2023-289

Injection Date: 01-DEC-22 08:36

Data File: 120122\eAl0109.D

Init. Cal. Date(s): 01-DEC-22 07:14 - 01-DEC-22 08:20

Lab Sample ID WPE221014-20

Method: 120122\ECDA_PEST_113022A.m

Column ID: RTX-CLP

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Toxaphene	190367.25	190385.58	2000	0.01	20		Averaged
Toxaphene(2)	221049.18	221218.34	2000	0.08	20		Averaged
Toxaphene(3)	260115.55	265850.55	2000	2.2	20		Averaged
Toxaphene(4)	268552.83	270072.73	2000	0.57	20		Averaged
Toxaphene(5)	170772.84	171499.64	2000	0.43	20		Averaged

Continuing Calibration Summary

Instrument ID: ECDAA.I_2

Client SDG: 2023-289

Injection Date: 01-DEC-22 08:36

Data File: 120122\eAl0109.D

Init. Cal. Date(s): 01-DEC-22 07:14 - 01-DEC-22 08:20

Lab Sample ID WPE221014-20

Method: 120122\ECDA_PEST_113022A.m

Column ID: RTX-CLP

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Toxaphene	522669.02	513755.94	2000	-1.71	20		Averaged
Toxaphene(2)	301061.02	298509.62	2000	-0.85	20		Averaged
Toxaphene(3)	399119.32	404260.72	2000	1.29	20		Averaged
Toxaphene(4)	471379.79	476895.85	2000	1.17	20		Averaged
Toxaphene(5)	465934.82	474806.45	2000	1.9	20		Averaged

Quantitation Report
GEL Laboratories, LLC

Jxm 12/01/2022

JC 12/01/2022

Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0109.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 01 Dec 2022 08:36 (#1); 01 Dec 2022 08:36 (#2)
Operator : JXM InstName : ECDA
Sample : |WPE221014-20|ICV|1|SVP|1|TOX-ICV
Misc : |MIX[Q]
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 01 12:10:41 2022
Quant Method : D:\MSDCHEM\1\Data\120122\ECDA_PEST_113022A.m
Quant Title : ECD5 SubList :
QLast Update : Thu Dec 01 12:05:51 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um Signal #2 Info : 250 um

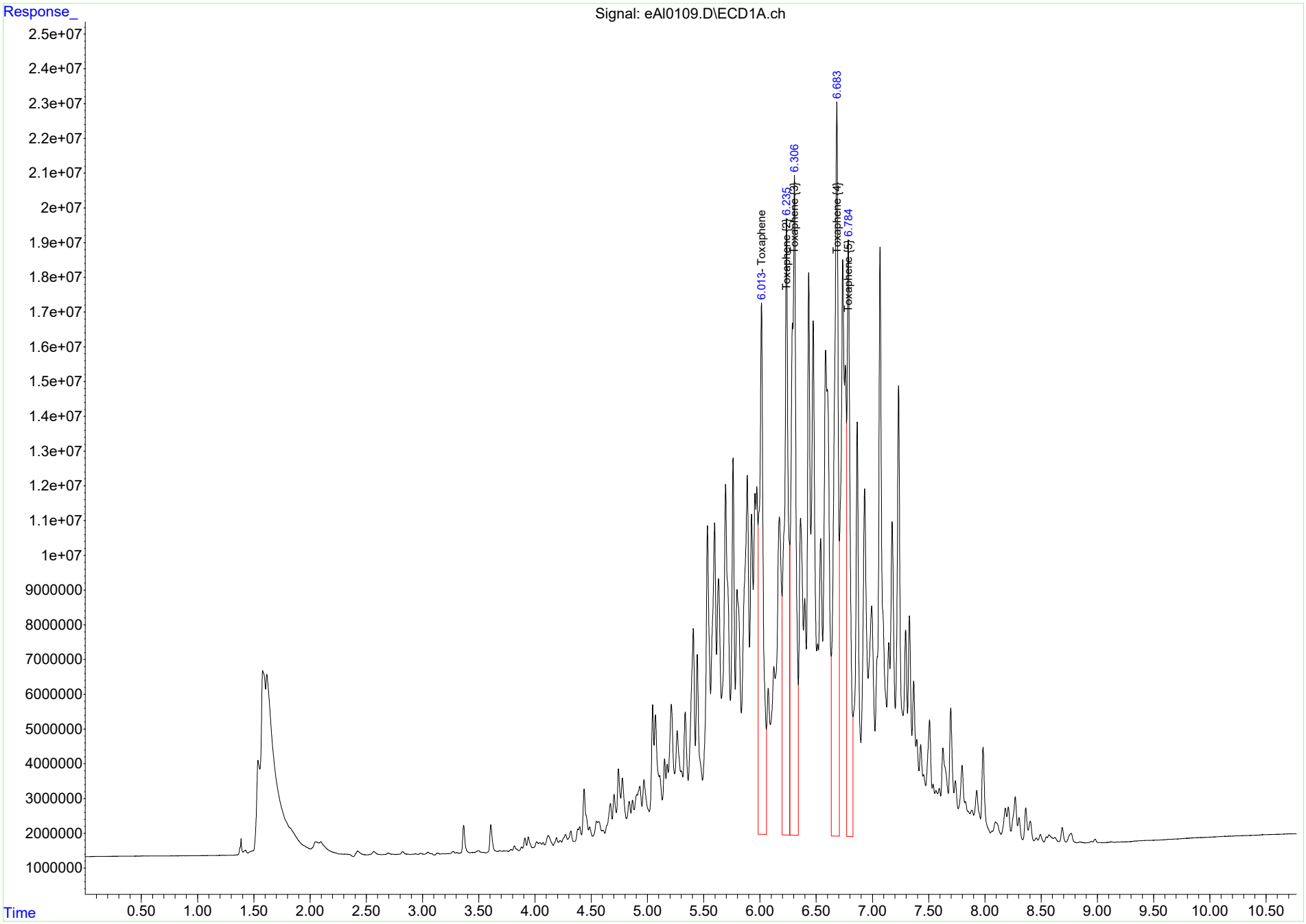
System Monitoring Compounds

Target Compounds

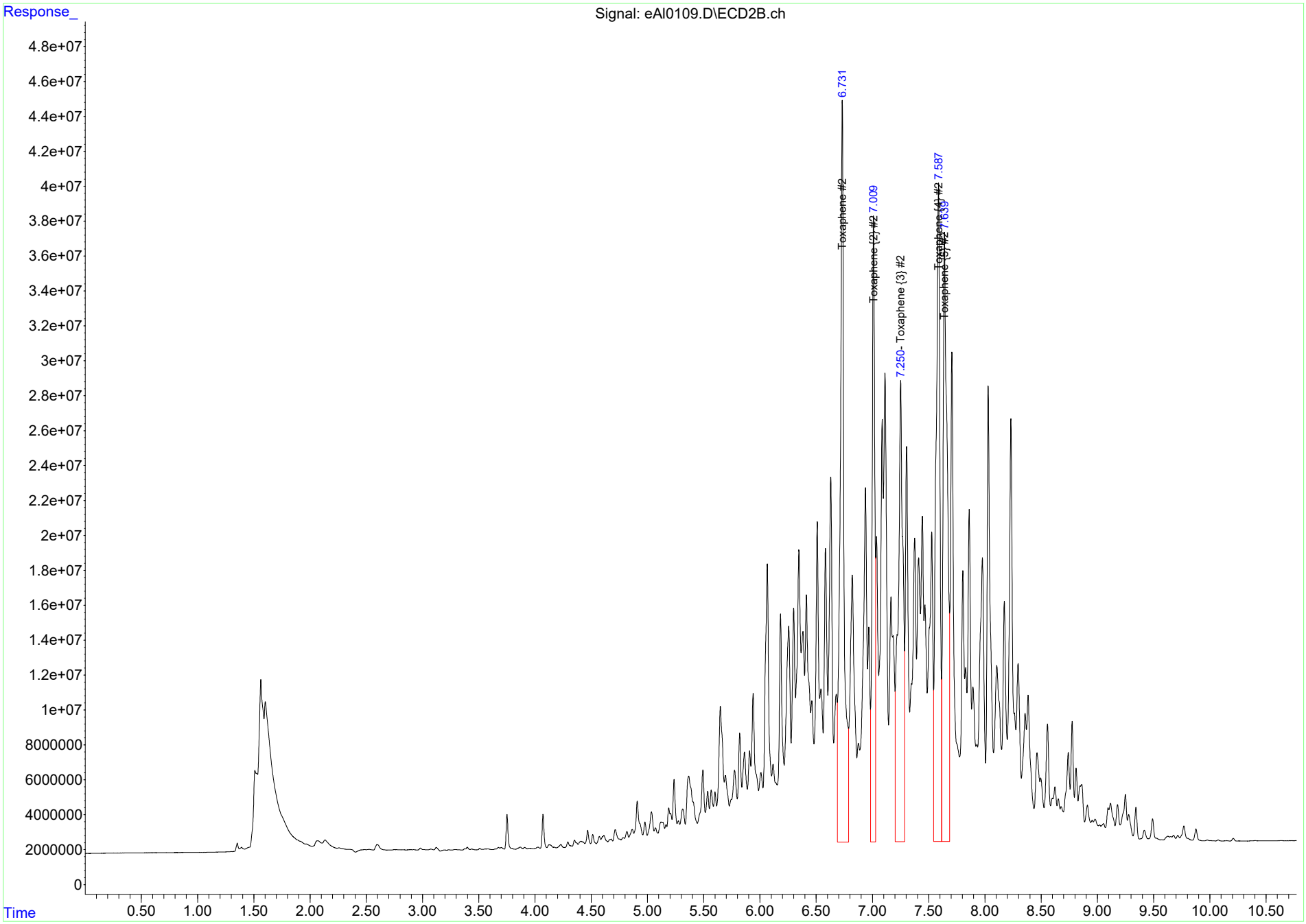
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Toxaphene	6.014	6.014	0.000	380771158	2000.193	6.731	6.731	0.000	1027511884	1965.894
Toxaphene {2}	6.236	6.236	0.000	442436687	2001.531	7.009	7.009	0.000	597019245	1983.051
Toxaphene {3}	6.306	6.306	0.000	531701090	2044.096	7.251	7.251	0.000	808521431	2025.764
Toxaphene {4}	6.683	6.683	0.000	540145466	2011.319	7.587	7.587	0.000	953791698	2023.404
Toxaphene {5}	6.785	6.785	0.000	342999277	2008.512	7.640	7.640	0.000	949612892	2038.081
Sum Toxaphene				2238053679	10065.650				4336457151	10036.193
Average Toxaphene					2013.130					2007.239

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0109.D



Data Path : D:\MSDCHEM\1\Data\120122\
Data File : eAl0109.D



ECDA_PEST_113022A.m Thu Dec 01 12:16:56 2022 Page: 3

Pesticide Breakdown Summary

Instrument ID: ECDAA.I_1

Data File: 120422\eAl0402.D

Lab Sample ID: WPE221122-99

Client Sample ID: PEM01

Client SDG: 2023-289

Injection Date: 04-DEC-22 12:46

Init. Cal. Date(s): 04-DEC-22 14:11 - 04-DEC-22 15:17

Method: D:\MSDCHEM\1\Data\120422\ECDA_PEST_120422.m

Quant Type: ESTD

Compound	Area	Compound	Area
Endrin	818724662	4,4'-DDE	1134682
Endrin aldehyde	18788772	4,4'-DDD	10176094
Endrin ketone	25450698	4,4'-DDT	1473426600

Endrin % Breakdown : 5.13 4,4'-DDT % Breakdown .76 Combined % Breakdown: 5.89

Pesticide Breakdown Summary

Instrument ID: ECDAA.I_2

Data File: 120422\eAl0402.D

Lab Sample ID: WPE221122-99

Client Sample ID: PEM01

Client SDG: 2023-289

Injection Date: 04-DEC-22 12:46

Init. Cal. Date(s): 04-DEC-22 14:11 - 04-DEC-22 15:17

Method: D:\MSDCHEM\1\Data\120422\ECDA_PEST_120422.m

Quant Type: ESTD

Compound	Area	Compound	Area
Endrin	1475417777	4,4'-DDE	1939321
Endrin aldehyde	47846782	4,4'-DDD	24515622
Endrin ketone	46451741	4,4'-DDT	2614492073

Endrin % Breakdown : 6.01 4,4'-DDT % Breakdown 1 Combined % Breakdown: 7.01

Quantitation Report
GEL Laboratories, LLC

JM 12/05/2022

JC 12/05/2022

Data Path : D:\MSDCHEM\1\Data\120422\
Data File : eAl0402.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 04 Dec 2022 12:46 (#1); 04 Dec 2022 12:46 (#2)
Operator : JXM InstName : ECDA
Sample : |WPE221122-99|PEM|1|SVP|1|PEM
Misc : |MIX[P]
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 05 06:56:24 2022
Quant Method : D:\MSDCHEM\1\Data\120422\ECDA_PEST_120422.m
Quant Title : ECD5 SubList :
QLast Update : Mon Dec 05 06:53:50 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
System Monitoring Compounds											
4CMX	2.948	2.948	0.000	1188230124	192.198	3.233	3.232	-0.001	2072281430	185.258	
DCB	8.189	8.190	0.001	675237595	171.838	9.292	9.291	-0.001	1209701291	172.859	

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	96%	93%
DCB	200.000	No Limits	86%	86%

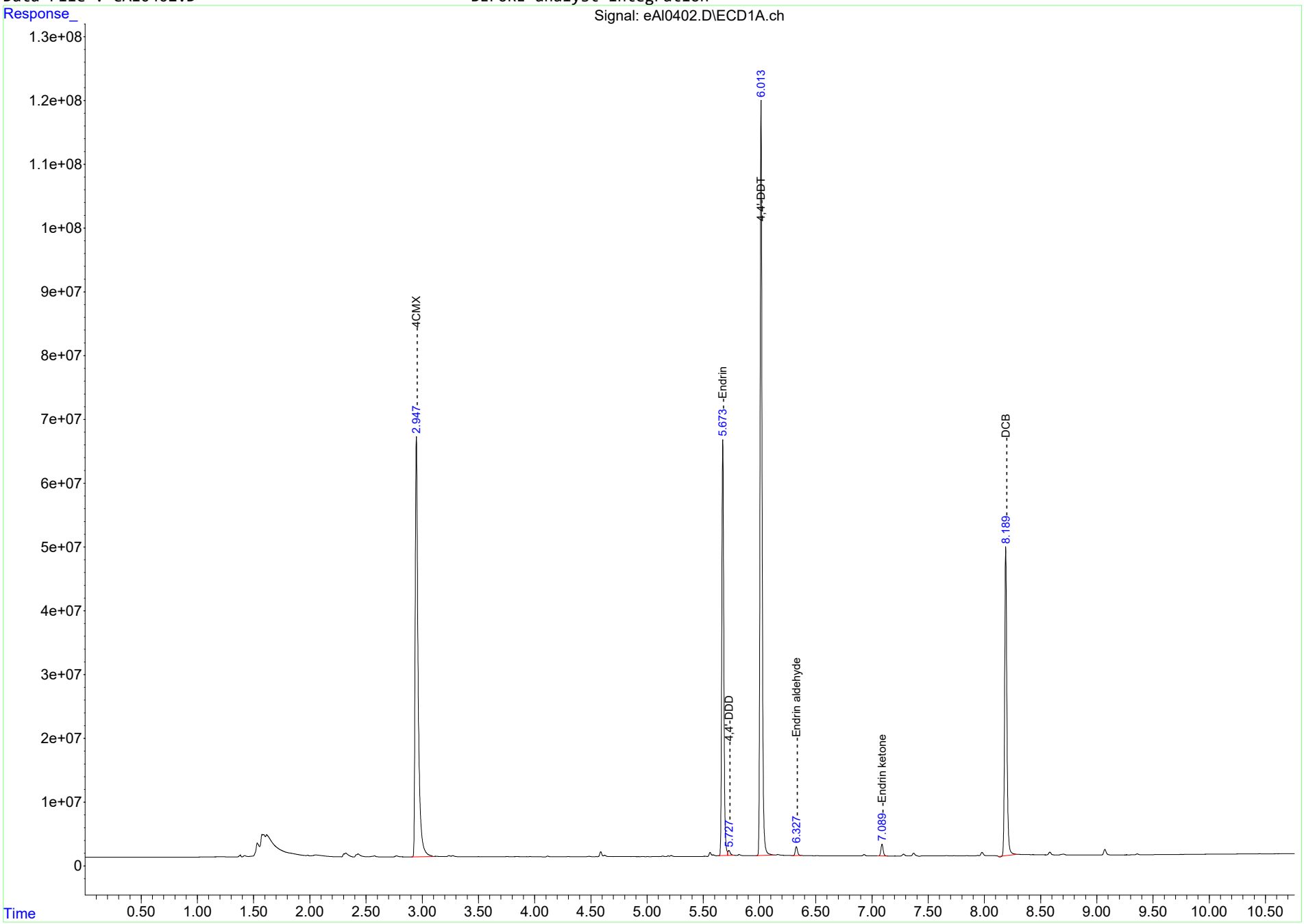
Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
alpha-BHC	3.364	0.000	-3.364	0	N.D.	3.750	0.000	-3.750	0	N.D.	
gamma-BHC (Lindane)	3.617	0.000	-3.617	0	N.D.	4.075	0.000	-4.075	0	N.D.	
Heptachlor	4.017	0.000	-4.017	0	N.D.	4.503	0.000	-4.503	0	N.D.	
Aldrin	4.283	0.000	-4.283	0	N.D.	4.828	0.000	-4.828	0	N.D.	
beta-BHC	3.684	0.000	-3.684	0	N.D.	4.140	0.000	-4.140	0	N.D.	
delta-BHC	3.840	0.000	-3.840	0	N.D.	4.426	0.000	-4.426	0	N.D.	
Heptachlor epoxide	4.828	0.000	-4.828	0	N.D.	5.390	0.000	-5.390	0	N.D.	
trans-Chlordane	4.948	0.000	-4.948	0	N.D.	5.585	0.000	-5.585	0	N.D.	
cis-Chlordane	5.072	0.000	-5.072	0	N.D.	5.734	0.000	-5.734	0	N.D.	
4,4'-DDE	5.136	5.139	0.003	1134682	0.180m	5.883	5.862	-0.021f	1939321	0.163m	
Endosulfan I	5.206	0.000	-5.206	0	N.D.	5.803	0.000	-5.803	0	N.D.	
Dieldrin	5.438	0.000	-5.438	0	N.D.	6.090	0.000	-6.090	0	N.D.	
Endrin	5.671	5.673	0.002	818724662	142.786	6.418	6.418	0.000	1475417777	136.475	
Endosulfan II	5.899	0.000	-5.899	0	N.D.	6.643	6.661	0.018f	2959441	0.280	#
4,4'-DDD	5.726	5.727	0.001	10176094	1.960m	6.501	6.500	-0.001	24515622	2.492m	

4,4'-DDT	6.011	6.013	0.002	1473426600	266.192	6.845	6.845	0.000	2614492073	255.649
Endrin aldehyde	6.323	6.327	0.004	18788772	4.185	7.001	7.002	0.001	47846782	5.897
Methoxychlor	6.518	0.000	-6.518	0	N.D.	7.591	0.000	-7.591	0	N.D.
Endosulfan sulfate	6.778	0.000	-6.778	0	N.D.	7.305	0.000	-7.305	0	N.D.
Endrin ketone	7.086	7.089	0.003	25450698	3.938	7.916	7.915	-0.001	46451741	3.911

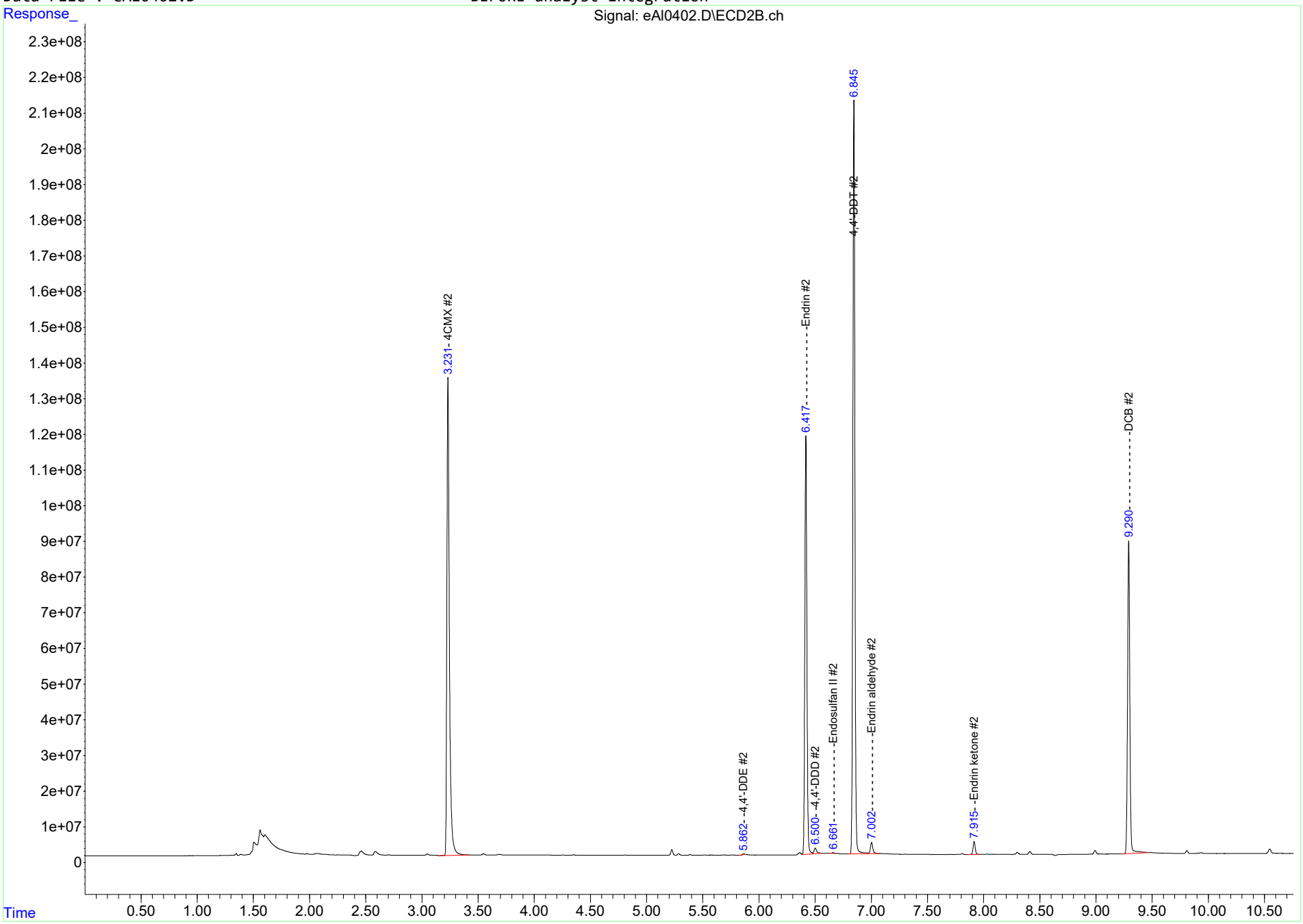
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\120422\
Data File : eAl0402.D BEFORE analyst integration

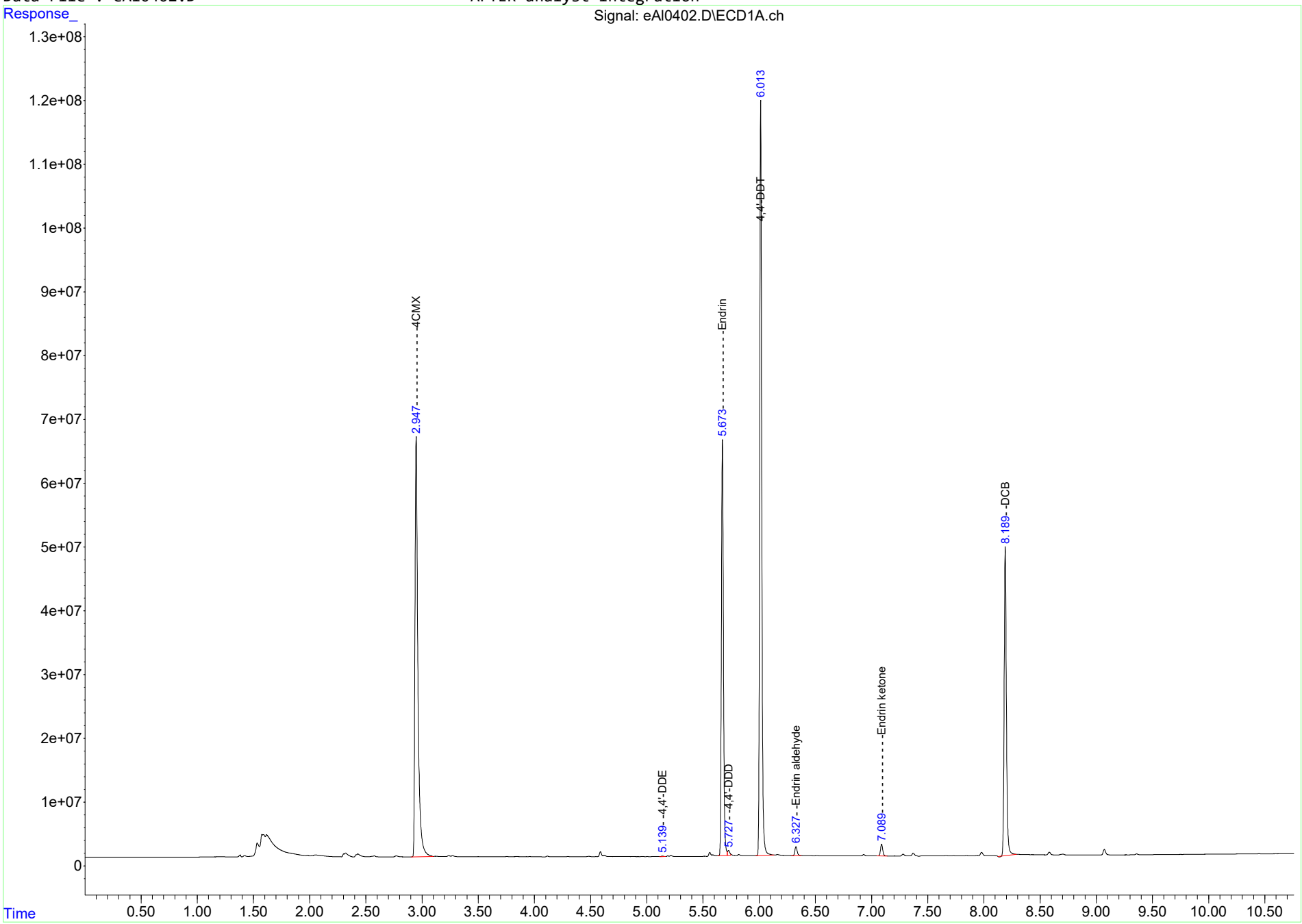


ECDA_PEST_120422.m Mon Dec 05 06:58:50 2022 Page: 3

Data Path : D:\MSDCHEM\1\Data\120422\
Data File : eAl0402.D BEFORE analyst integration

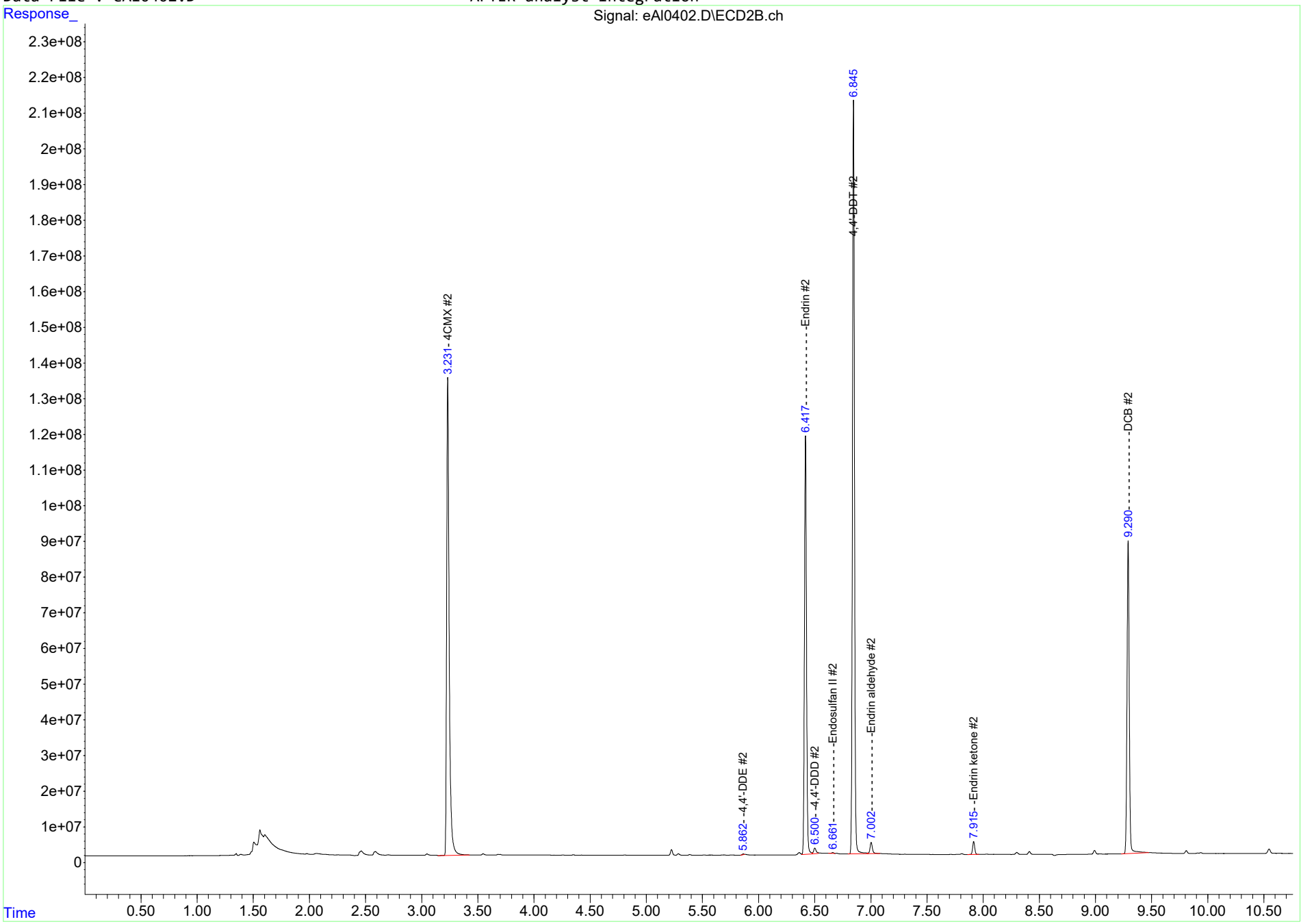


Data Path : D:\MSDCHEM\1\Data\120422\
Data File : eAl0402.D AFTER analyst integration



ECDA_PEST_120422.m Mon Dec 05 06:58:52 2022 Page: 5

Data Path : D:\MSDCHEM\1\Data\120422\
Data File : eAl0402.D AFTER analyst integration



The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
System Monitoring Compounds											
4CMX	2.948	2.948	0.000	1188230124	192.198	3.233	3.232	-0.001	2072281430	185.258	
DCB	8.189	8.190	0.001	675237595	171.838	9.292	9.291	-0.001	1209701291	172.859	

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	96%	93%
DCB	200.000	No Limits	86%	86%
4CMX	200.000	No Limits	96%	93%
DCB	200.000	No Limits	86%	86%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
alpha-BHC	3.364	0.000	-3.364	0	N.D.	3.750	0.000	-3.750	0	N.D.	
gamma-BHC (Lindane)	3.617	0.000	-3.617	0	N.D.	4.075	0.000	-4.075	0	N.D.	
Heptachlor	4.017	0.000	-4.017	0	N.D.	4.503	0.000	-4.503	0	N.D.	
Aldrin	4.283	0.000	-4.283	0	N.D.	4.828	0.000	-4.828	0	N.D.	
beta-BHC	3.684	0.000	-3.684	0	N.D.	4.140	0.000	-4.140	0	N.D.	
delta-BHC	3.840	0.000	-3.840	0	N.D.	4.426	0.000	-4.426	0	N.D.	
Heptachlor epoxide	4.828	0.000	-4.828	0	N.D.	5.390	0.000	-5.390	0	N.D.	
trans-Chlordane	4.948	0.000	-4.948	0	N.D.	5.585	0.000	-5.585	0	N.D.	
cis-Chlordane	5.072	0.000	-5.072	0	N.D.	5.734	0.000	-5.734	0	N.D.	
4,4'-DDE	5.136	0.000	-5.136	0	N.D.	5.883	5.863	-0.020f	832002	0.070	#
Endosulfan I	5.206	0.000	-5.206	0	N.D.	5.803	0.000	-5.803	0	N.D.	
Dieldrin	5.438	0.000	-5.438	0	N.D.	6.090	0.000	-6.090	0	N.D.	
Endrin	5.671	5.673	0.002	818724662	142.786	6.418	6.418	0.000	1475417777	136.475	
Endosulfan II	5.899	0.000	-5.899	0	N.D.	6.643	6.661	0.018f	2959441	0.280	#
4,4'-DDD	5.726	5.728	0.002	11379661	2.192	6.501	6.501	0.000	26172212	2.660	
4,4'-DDT	6.011	6.013	0.002	1473426600	266.192	6.845	6.845	0.000	2614492073	255.649	
Endrin aldehyde	6.323	6.327	0.004	18788772	4.185	7.001	7.002	0.001	47846782	5.897	
Methoxychlor	6.518	0.000	-6.518	0	N.D.	7.591	0.000	-7.591	0	N.D.	
Endosulfan sulfate	6.778	0.000	-6.778	0	N.D.	7.305	0.000	-7.305	0	N.D.	
Endrin ketone	7.086	7.089	0.003	25450698	3.938	7.916	7.915	-0.001	46451741	3.911	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\120422\
Data File : eAl0402.D

4,4'-DDE - Manual Integration ==	AB/AP	4,4'-DDE #2 - Manual Integration ==	AB/AP
4,4'-DDD - Manual Integration ==	AB/AP	4,4'-DDD #2 - Manual Integration ==	AB/AP

Continuing Calibration Summary

Instrument ID: ECDAA.I_1

Client SDG: 2023-289

Injection Date: 04-DEC-22 15:33

Data File: 120422\eAl0412.D

Init. Cal. Date(s): 01-DEC-22 07:14 - 01-DEC-22 08:20

Lab Sample ID WPE221203-10

Method: 120422\ECDA_PEST_120422.m

Column ID: RTX-CLP

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
4,4'-DDT	5535207.04	5655572.75	200	2.17	20		Averaged
Aldrin	7839246.68	7803322.69	100	-0.46	20		Averaged
Dieldrin	6619287.16	6452215.47	200	-2.52	20		Averaged
Endosulfan I	6469282.31	6441130.6	100	-0.44	20		Averaged
Endosulfan II	5659063.44	5744638.7	200	1.51	20		Averaged
Endrin	5733941.25	5816028.35	200	1.43	20		Averaged
Heptachlor	8179139.42	8095441.78	100	-1.02	20		Averaged
alpha-BHC	9673779.15	9831733.35	100	1.63	20		Averaged
beta-BHC	4010502.08	3772212.12	100	-5.94	20		Averaged
cis-Chlordane	6745157.77	6960662.36	100	3.19	20		Averaged
gamma-BHC (Lindane)	8791736.98	8802847.24	100	0.13	20		Averaged
trans-Chlordane	6906782.44	7147874.8	100	3.49	20		Averaged
4cmx(Surr)	6182321.84	6222600.47	200	0.65	20		Averaged
Decachlorobiphenyl(Surr)	3929511.97	3644393.46	200	-7.26	20		Averaged

Continuing Calibration Summary

Instrument ID: ECDAA.I_2

Client SDG: 2023-289

Injection Date: 04-DEC-22 15:33

Data File: 120422\eAl0412.D

Init. Cal. Date(s): 01-DEC-22 07:14 - 01-DEC-22 08:20

Lab Sample ID WPE221203-10

Method: 120422\ECDA_PEST_120422.m

Column ID: RTX-CLP

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
4,4'-DDT	10226894.91	10094173.38	200	-1.3	20		Averaged
Aldrin	14979735.29	14355089.06	100	-4.17	20		Averaged
Dieldrin	12446325.99	11644552.08	200	-6.44	20		Averaged
Endosulfan I	11955735.49	11560032.35	100	-3.31	20		Averaged
Endosulfan II	10575161.58	10356067.95	200	-2.07	20		Averaged
Endrin	10810920.93	10453673.22	200	-3.3	20		Averaged
Heptachlor	15507923.11	14707267.75	100	-5.16	20		Averaged
alpha-BHC	18436854.55	17818565.64	100	-3.35	20		Averaged
beta-BHC	7241851.01	6663680.69	100	-7.98	20		Averaged
cis-Chlordane	12731662.34	12734971.67	100	0.03	20		Averaged
gamma-BHC (Lindane)	16665725.51	15959452.45	100	-4.24	20		Averaged
trans-Chlordane	13052659.37	13024466.13	100	-0.22	20		Averaged
4cmx(Surr)	11185926.62	11010517.12	200	-1.57	20		Averaged
Decachlorobiphenyl(Surr)	6998183.51	6546016.09	200	-6.46	20		Averaged

Quantitation Report
GEL Laboratories, LLC

JXM 12/05/2022

JC 12/05/2022

Data Path : D:\MSDCHEM\1\Data\120422\
Data File : eAl0412.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 04 Dec 2022 15:33 (#1); 04 Dec 2022 15:33 (#2)
Operator : JXM InstName : ECDA
Sample : |WPE221203-10|ICV|1|SVP|1|AB-ICV
Misc : |MIX[P]
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 05 07:03:09 2022
Quant Method : D:\MSDCHEM\1\Data\120422\ECDA_PEST_120422.m
Quant Title : ECD5 SubList :
QLast Update : Mon Dec 05 06:53:50 2022
Response via : Initial Calibration
Integrator: ChemStation

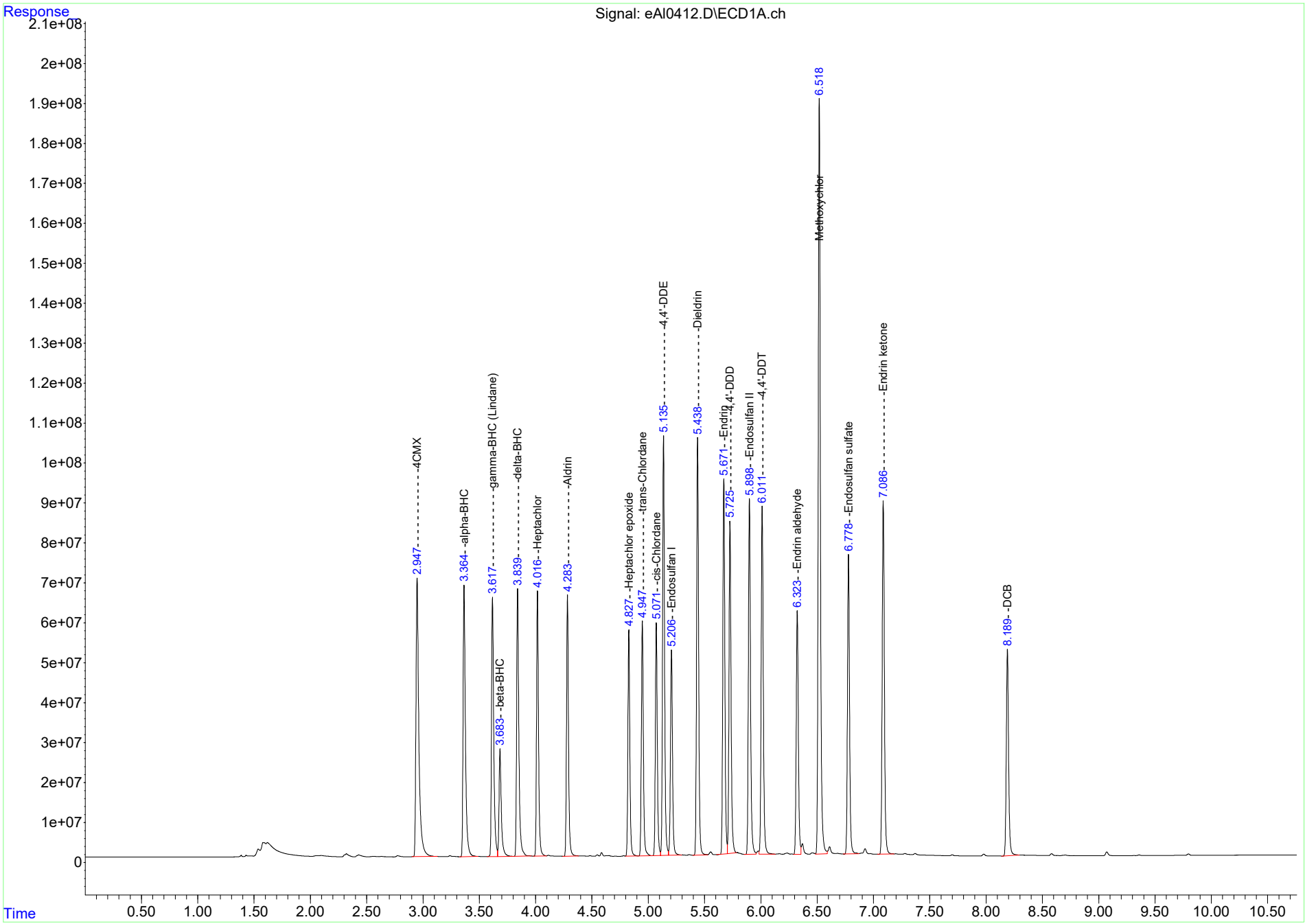
Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.948	2.948	0.000	1244520094	201.303	3.233	3.233	0.000	2202103423	196.864
DCB	8.189	8.189	0.000	728878692	185.488	9.292	9.292	0.000	1309203218	187.078
Target Compounds										
alpha-BHC	3.364	3.364	0.000	983173335	101.633	3.750	3.750	0.000	1781856564	96.646
gamma-BHC (Lindane)	3.617	3.617	0.000	880284724	100.126	4.075	4.075	0.000	1595945245	95.762
Heptachlor	4.017	4.017	0.000	809544178	98.977	4.503	4.503	0.000	1470726775	94.837
Aldrin	4.283	4.283	0.000	780332269	99.542	4.828	4.828	0.000	1435508906	95.830
beta-BHC	3.684	3.684	0.000	377221212	94.058	4.140	4.140	0.000	666368069	92.016
delta-BHC	3.840	3.840	0.000	907054519	102.665	4.426	4.426	0.000	1626209756	97.439
Heptachlor epoxide	4.828	4.828	0.000	682357924	99.091	5.390	5.390	0.000	1245054659	95.144
trans-Chlordane	4.948	4.948	0.000	714787480	103.491	5.585	5.585	0.000	1302446613	99.784
cis-Chlordane	5.072	5.072	0.000	696066236	103.195	5.734	5.734	0.000	1273497167	100.026
4,4'-DDE	5.136	5.136	0.000	1293032642	205.360	5.883	5.883	0.000	2338764558	196.496
Endosulfan I	5.206	5.206	0.000	644113060	99.565	5.803	5.803	0.000	1156003235	96.690
Dieldrin	5.438	5.438	0.000	1290443094	194.952	6.090	6.090	0.000	2328910415	187.116
Endrin	5.671	5.671	0.000	1163205670	202.863	6.418	6.418	0.000	2090734643	193.391
Endosulfan II	5.899	5.899	0.000	1148927739	203.024	6.643	6.643	0.000	2071213590	195.856
4,4'-DDD	5.726	5.726	0.000	1060251825	204.257	6.501	6.501	0.000	1940264351	197.212
4,4'-DDT	6.011	6.011	0.000	1131114549	204.349	6.845	6.845	0.000	2018834675	197.404
Endrin aldehyde	6.323	6.323	0.000	789881875	175.927	7.001	7.001	0.000	1429676282	176.206
Methoxychlor	6.518	6.518	0.000	2505739245	933.576	7.591	7.591	0.000	4353934608	907.055
Endosulfan sulfate	6.778	6.778	0.000	964741753	194.598	7.305	7.305	0.000	1690461984	190.699

Endrin ketone	7.086	7.086	0.000	1198470511	185.446	7.916	7.916	0.000	2162974669	182.107

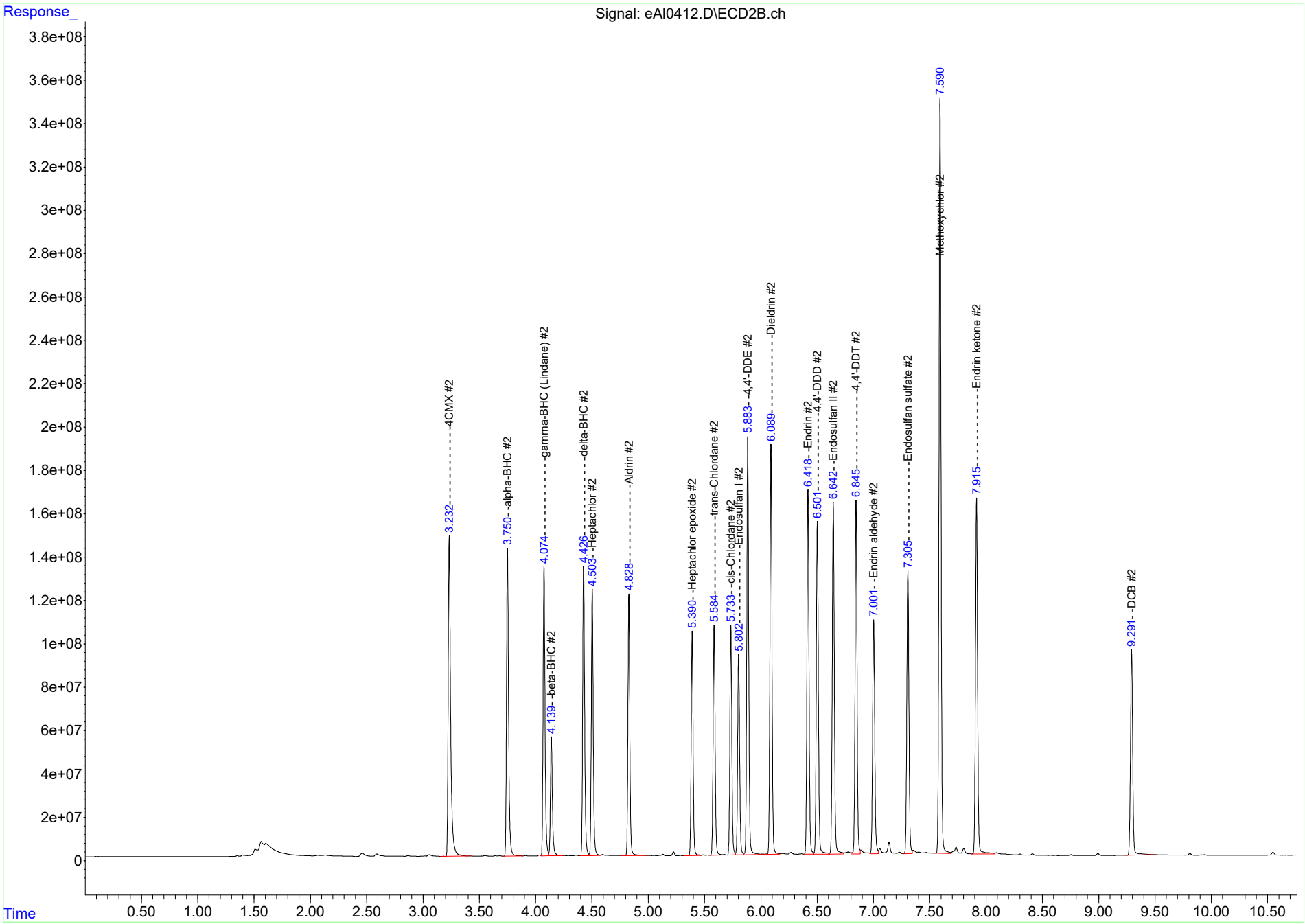
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\120422\
Data File : eAl0412.D



ECDA_PEST_120422.m Mon Dec 05 07:04:02 2022 Page: 3

Data Path : D:\MSDCHEM\1\Data\120422\
Data File : eAl0412.D



Pesticide Breakdown Summary

Instrument ID: ECDAA.I_1

Data File: 122022a\eAl2042.D

Lab Sample ID: WPE221122-99

Client Sample ID: PEM02

Client SDG: 2023-289

Injection Date: 20-DEC-22 17:58

Init. Cal. Date(s): 04-DEC-22 14:11 - 04-DEC-22 15:17

Method: D:\MSDCHEM\1\Data\122022a\ECDA_PEST_120422.m

Quant Type: ESTD

Compound	Area	Compound	Area
Endrin	841378263	4,4'-DDE	1552644
Endrin aldehyde	16370152	4,4'-DDD	12042734
Endrin ketone	23184662	4,4'-DDT	1495766053

Endrin % Breakdown : 4.49 4,4'-DDT % Breakdown .9 Combined % Breakdown: 5.39

Pesticide Breakdown Summary

Instrument ID: ECDAA.I_2

Client SDG: 2023-289

Data File: 122022a\eAl2042.D

Injection Date: 20-DEC-22 17:58

Lab Sample ID: WPE221122-99

Init. Cal. Date(s): 04-DEC-22 14:11 - 04-DEC-22 15:17

Client Sample ID: PEM02

Method: D:\MSDCHEM\1\Data\122022a\ECDA_PEST_120422.m

Quant Type: ESTD

Compound	Area	Compound	Area
Endrin	1476512698	4,4'-DDE	1887535
Endrin aldehyde	47336869	4,4'-DDD	33028897
Endrin ketone	39404017	4,4'-DDT	2580377966

Endrin % Breakdown : 5.55 4,4'-DDT % Breakdown 1.3 Combined % Breakdown: 6.89

Quantitation Report
GEL Laboratories, LLC

JM 12/21/2022

JC 12/22/2022

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2042.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Dec 2022 17:58 (#1); 20 Dec 2022 17:58 (#2)
Operator : JXM InstName : ECDA
Sample : |WPE221122-99|PEM|1|SVP|1|PEM
Misc : |MIX[P]
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 21 05:35:36 2022
Quant Method : D:\MSDCHEM\1\Data\122022a\ECDA_PEST_120422.m
Quant Title : ECD5 SubList :
QLast Update : Mon Dec 19 11:11:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.938	2.938	0.000	1183221638	191.388	3.228	3.227	-0.001	2030197756	181.496
DCB	8.168	8.168	0.000	707964707	180.166	9.289	9.288	-0.001	1270024345	181.479

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	96%	91%
DCB	200.000	No Limits	90%	91%

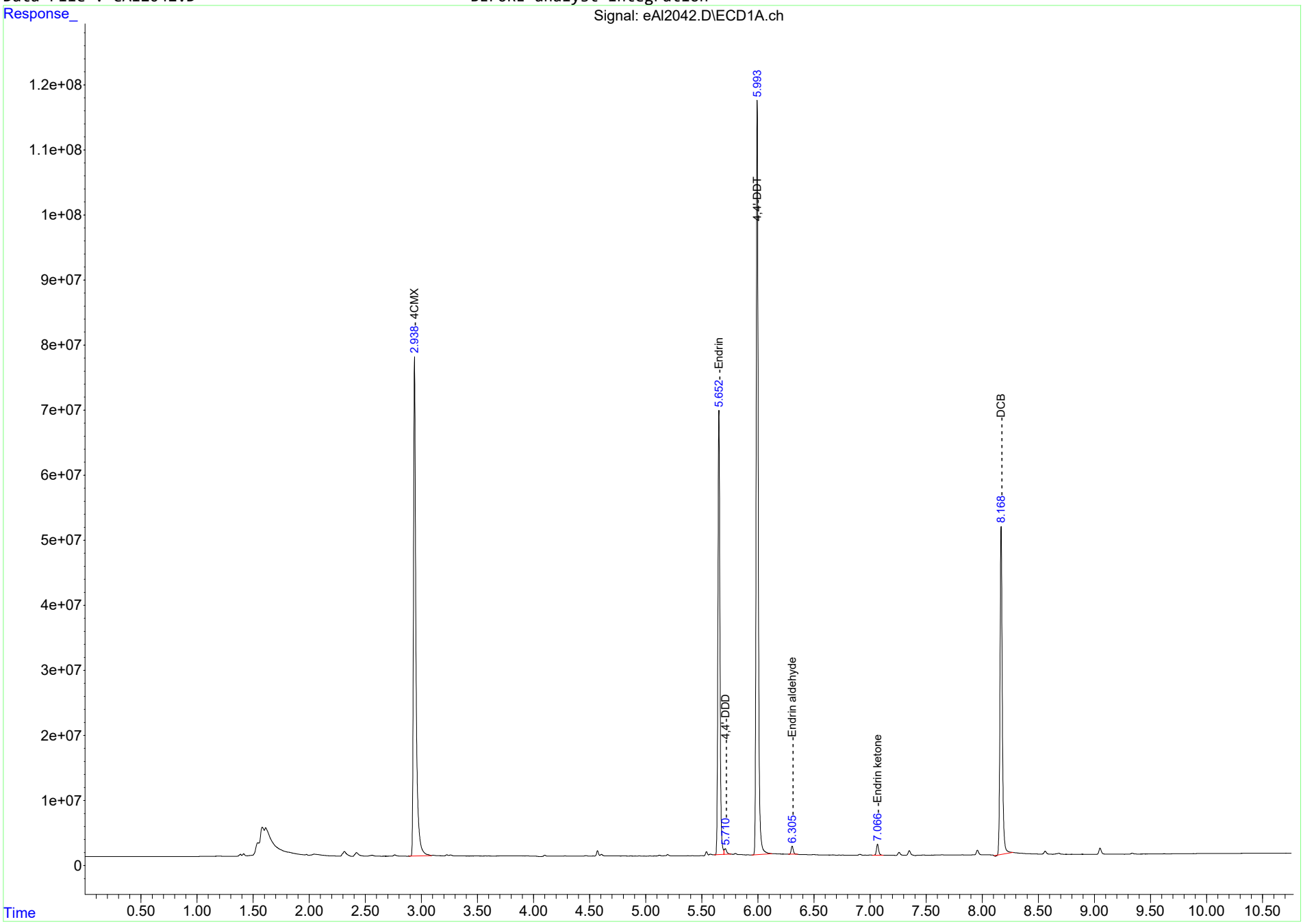
Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
alpha-BHC	3.352	0.000	-3.352	0	N.D.	3.743	0.000	-3.743	0	N.D.
gamma-BHC (Lindane)	3.604	0.000	-3.604	0	N.D.	4.067	0.000	-4.067	0	N.D.
Heptachlor	4.002	0.000	-4.002	0	N.D.	4.495	0.000	-4.495	0	N.D.
Aldrin	4.268	0.000	-4.268	0	N.D.	4.820	0.000	-4.820	0	N.D.
beta-BHC	3.670	0.000	-3.670	0	N.D.	4.133	0.000	-4.133	0	N.D.
delta-BHC	3.825	0.000	-3.825	0	N.D.	4.418	0.000	-4.418	0	N.D.
Heptachlor epoxide	4.811	0.000	-4.811	0	N.D.	5.382	0.000	-5.382	0	N.D.
trans-Chlordane	4.931	0.000	-4.931	0	N.D.	5.577	0.000	-5.577	0	N.D.
cis-Chlordane	5.054	0.000	-5.054	0	N.D.	5.726	0.000	-5.726	0	N.D.
4,4'-DDE	5.119	5.122	0.003	1552644	0.247m	5.877	5.878	0.001	1887535	0.159m #
Endosulfan I	5.188	0.000	-5.188	0	N.D.	5.795	0.000	-5.795	0	N.D.
Dieldrin	5.419	0.000	-5.419	0	N.D.	6.082	0.000	-6.082	0	N.D.
Endrin	5.652	5.653	0.001	841378263	146.736	6.410	6.410	0.000	1476512698	136.576
Endosulfan II	5.878	0.000	-5.878	0	N.D.	6.636	0.000	-6.636	0	N.D.
4,4'-DDD	5.708	5.710	0.002	12042734	2.320m	6.495	6.495	0.000	33028897	3.357m

4,4'-DDT	5.993	5.994	0.001	1495766053	270.228	6.839	6.838	-0.001	2580377966	252.313
Endrin aldehyde	6.302	6.306	0.004	16370152	3.646	6.994	6.994	0.000	47336869	5.834m #
Methoxychlor	6.501	0.000	-6.501	0	N.D.	7.585	0.000	-7.585	0	N.D.
Endosulfan sulfate	6.757	0.000	-6.757	0	N.D.	7.298	0.000	-7.298	0	N.D.
Endrin ketone	7.065	7.066	0.001	23184662	3.587	7.908	7.908	0.000	39404017	3.318m

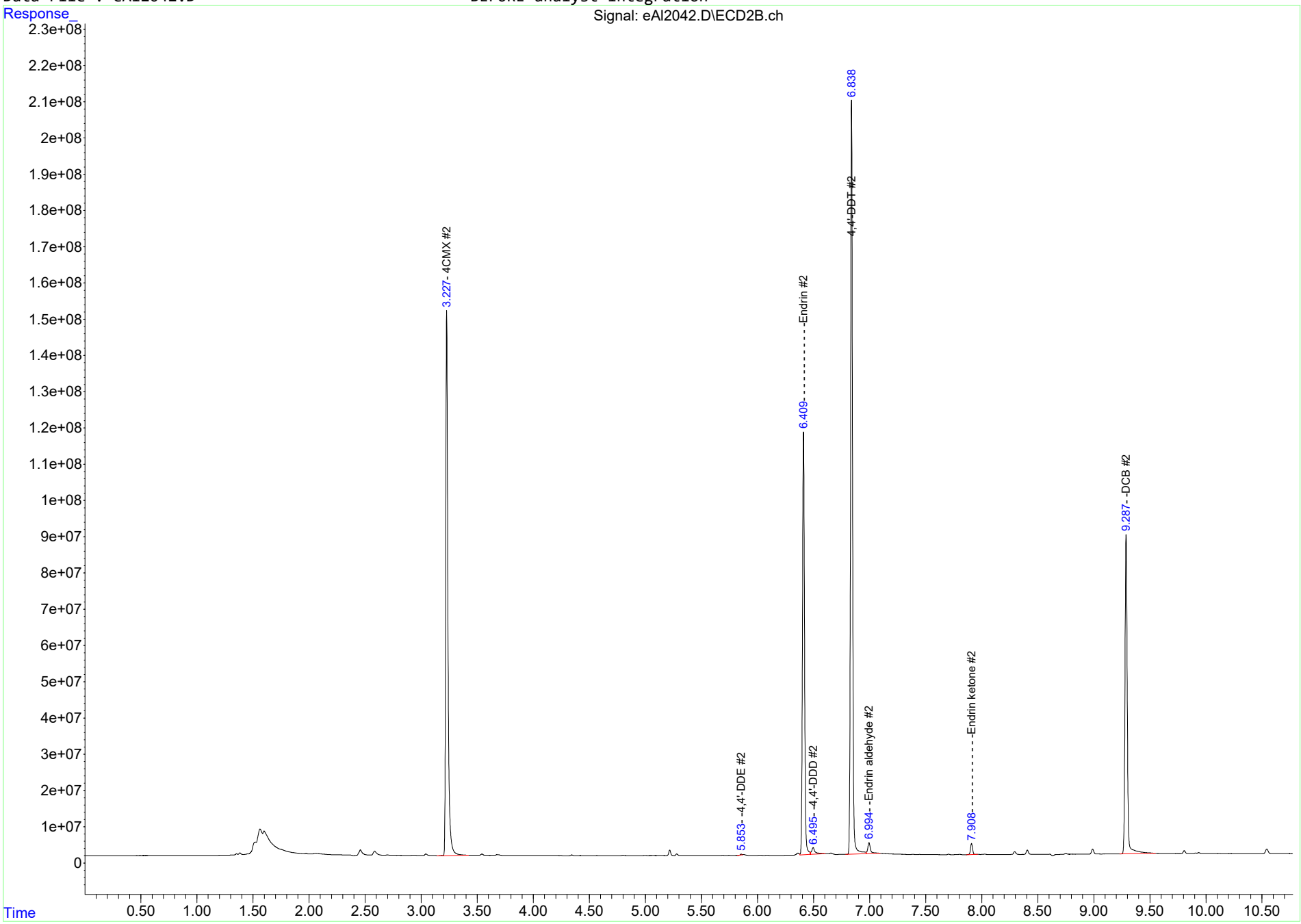
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2042.D BEFORE analyst integration



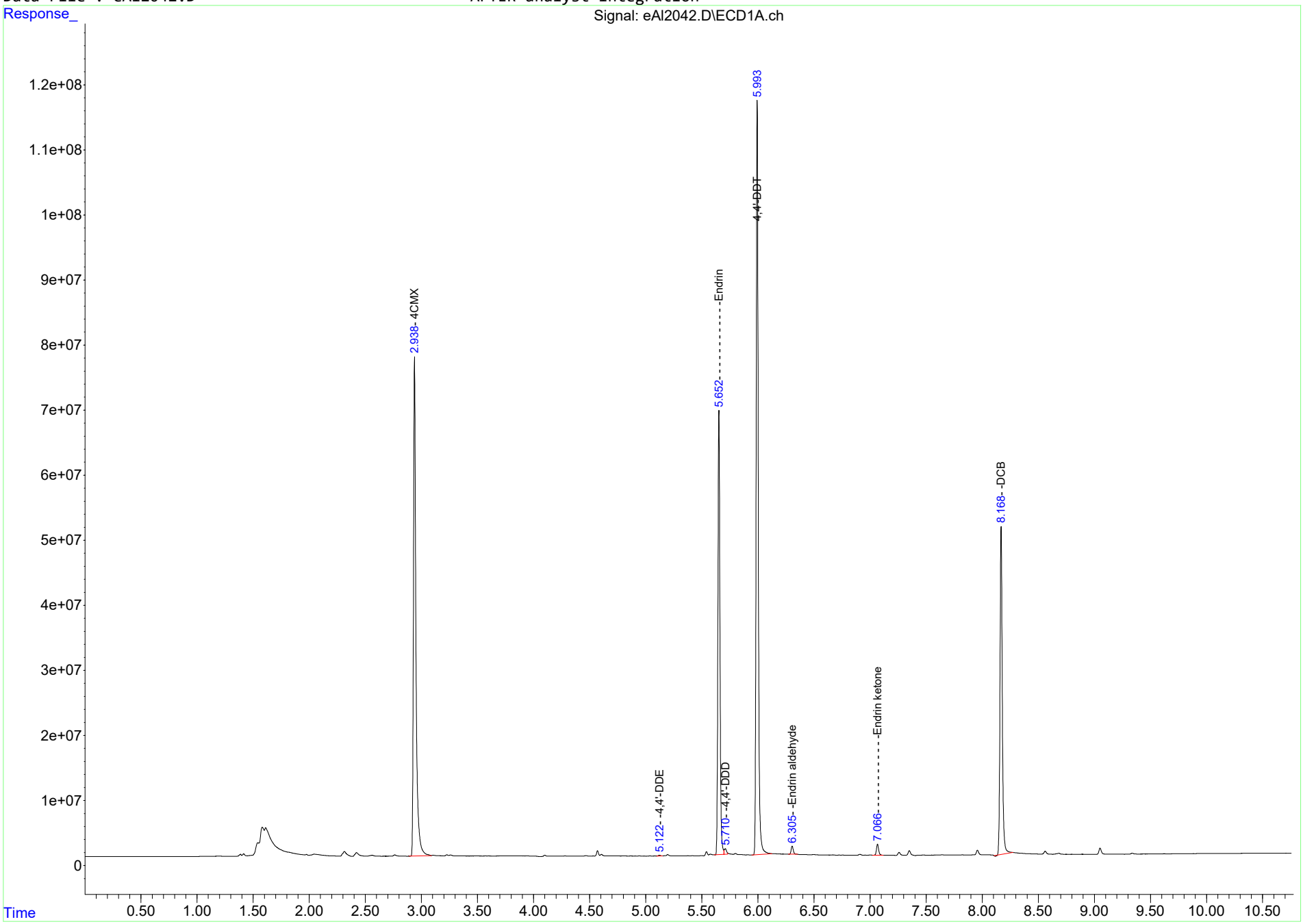
ECDA_PEST_120422.m Wed Dec 21 05:36:43 2022 Page: 3

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2042.D BEFORE analyst integration



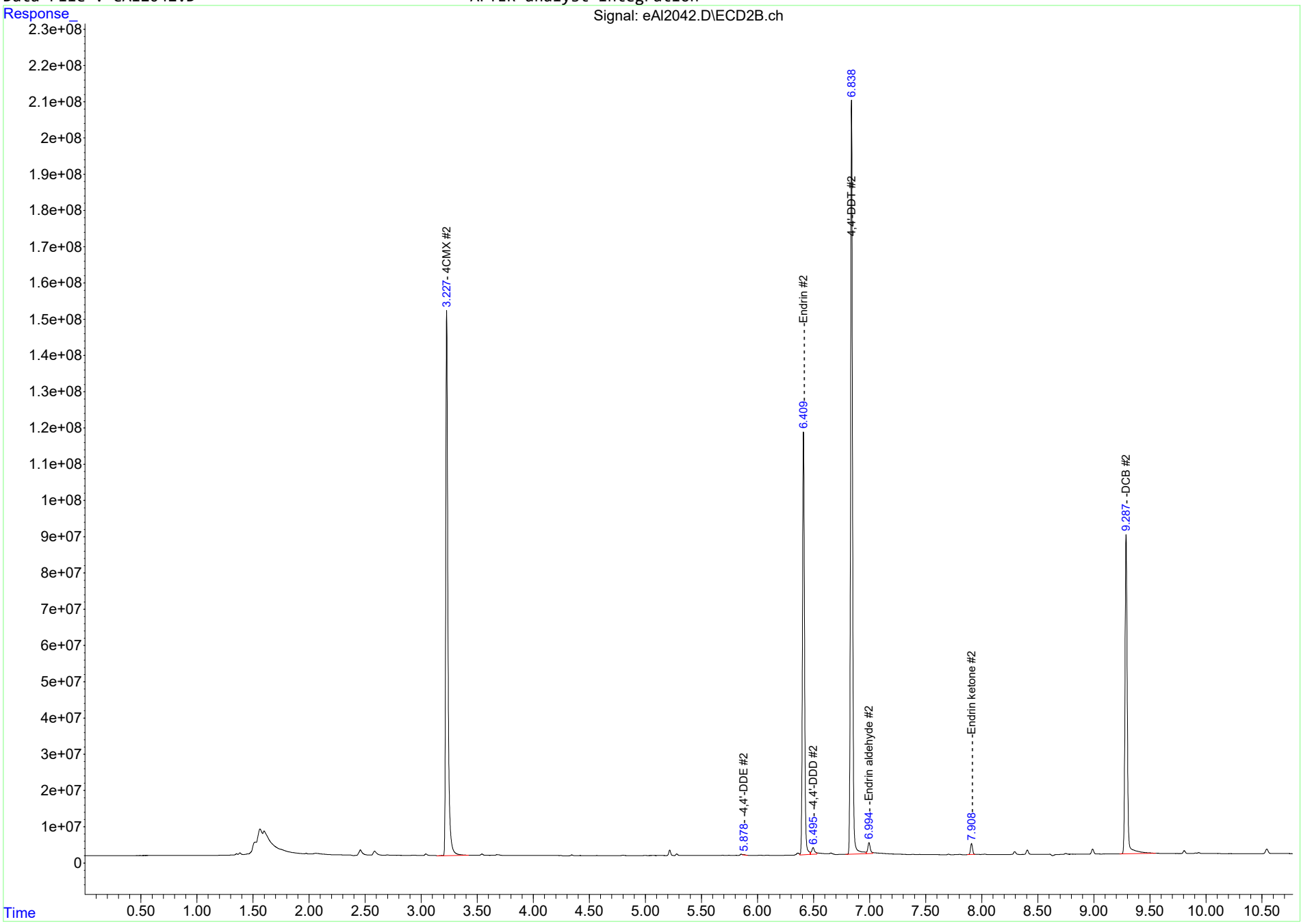
ECDA_PEST_120422.m Wed Dec 21 05:36:43 2022 Page: 4

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2042.D AFTER analyst integration



ECDA_PEST_120422.m Wed Dec 21 05:36:44 2022 Page: 5

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2042.D AFTER analyst integration



ECDA_PEST_120422.m Wed Dec 21 05:36:44 2022 Page: 6

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
System Monitoring Compounds											
4CMX	2.938	2.938	0.000	1183221638	191.388	3.228	3.227	-0.001	2030197756	181.496	
DCB	8.168	8.168	0.000	707964707	180.166	9.289	9.288	-0.001	1270024345	181.479	

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	96%	91%
DCB	200.000	No Limits	90%	91%
4CMX	200.000	No Limits	96%	91%
DCB	200.000	No Limits	90%	91%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
alpha-BHC	3.352	0.000	-3.352	0	N.D.	3.743	0.000	-3.743	0	N.D.	
gamma-BHC (Lindane)	3.604	0.000	-3.604	0	N.D.	4.067	0.000	-4.067	0	N.D.	
Heptachlor	4.002	0.000	-4.002	0	N.D.	4.495	0.000	-4.495	0	N.D.	
Aldrin	4.268	0.000	-4.268	0	N.D.	4.820	0.000	-4.820	0	N.D.	
beta-BHC	3.670	0.000	-3.670	0	N.D.	4.133	0.000	-4.133	0	N.D.	
delta-BHC	3.825	0.000	-3.825	0	N.D.	4.418	0.000	-4.418	0	N.D.	
Heptachlor epoxide	4.811	0.000	-4.811	0	N.D.	5.382	0.000	-5.382	0	N.D.	
trans-Chlordane	4.931	0.000	-4.931	0	N.D.	5.577	0.000	-5.577	0	N.D.	
cis-Chlordane	5.054	0.000	-5.054	0	N.D.	5.726	0.000	-5.726	0	N.D.	
4,4'-DDE	5.119	0.000	-5.119	0	N.D.	5.877	5.854	-0.023f	1263337	0.106	#
Endosulfan I	5.188	0.000	-5.188	0	N.D.	5.795	0.000	-5.795	0	N.D.	
Dieldrin	5.419	0.000	-5.419	0	N.D.	6.082	0.000	-6.082	0	N.D.	
Endrin	5.652	5.653	0.001	841378263	146.736	6.410	6.410	0.000	1476512698	136.576	
Endosulfan II	5.878	0.000	-5.878	0	N.D.	6.636	0.000	-6.636	0	N.D.	
4,4'-DDD	5.708	5.710	0.002	13483346	2.598	6.495	6.496	0.001	40442867	4.111	#
4,4'-DDT	5.993	5.994	0.001	1495766053	270.228	6.839	6.838	-0.001	2580377966	252.313	
Endrin aldehyde	6.302	6.306	0.004	16370152	3.646	6.994	6.994	0.000	52222188	6.436	#
Methoxychlor	6.501	0.000	-6.501	0	N.D.	7.585	0.000	-7.585	0	N.D.	
Endosulfan sulfate	6.757	0.000	-6.757	0	N.D.	7.298	0.000	-7.298	0	N.D.	
Endrin ketone	7.065	7.066	0.001	23184662	3.587	7.908	7.909	0.001	40028886	3.370	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2042.D

4,4'-DDE - Manual Integration ==	AB/AP	4,4'-DDE #2 - Manual Integration ==	AB/AP
4,4'-DDD - Manual Integration ==	AB/AP	4,4'-DDD #2 - Manual Integration ==	AB/AP
		Endrin aldehyde #2 - Manual Integration ==	AB/AP
		Endrin ketone #2 - Manual Integration ==	AB/AP

Continuing Calibration Summary

Instrument ID: ECDAA.I_1

Client SDG: 2023-289

Injection Date: 20-DEC-22 18:15

Data File: 122022a\eAl2043.D

Init. Cal. Date(s): 01-DEC-22 07:14 - 01-DEC-22 08:20

Lab Sample ID WPE221107-10

Method: 122022a\ECDA_PEST_120422.m

Column ID: RTX-CLP

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
4,4'-DDT	5535207.04	5928320.67	200	7.1	20		Averaged
Aldrin	7839246.68	8190564	100	4.48	20		Averaged
Dieldrin	6619287.16	6893646.83	200	4.14	20		Averaged
Endosulfan I	6469282.31	6869969.44	100	6.19	20		Averaged
Endosulfan II	5659063.44	6087486.98	200	7.57	20		Averaged
Endrin	5733941.25	6485159.87	200	13.1	20		Averaged
Heptachlor	8179139.42	8425433.03	100	3.01	20		Averaged
alpha-BHC	9673779.15	10400875.08	100	7.52	20		Averaged
beta-BHC	4010502.08	3950915.28	100	-1.49	20		Averaged
cis-Chlordane	6745157.77	7282402.8	100	7.96	20		Averaged
gamma-BHC (Lindane)	8791736.98	9279193.96	100	5.54	20		Averaged
trans-Chlordane	6906782.44	7495813.04	100	8.53	20		Averaged
4cmx(Surr)	6182321.84	6556844.07	200	6.06	20		Averaged
Decachlorobiphenyl(Surr)	3929511.97	3906390.67	200	-0.59	20		Averaged

Continuing Calibration Summary

Instrument ID: ECDAA.I_2

Client SDG: 2023-289

Injection Date: 20-DEC-22 18:15

Data File: 122022a\eAl2043.D

Init. Cal. Date(s): 01-DEC-22 07:14 - 01-DEC-22 08:20

Lab Sample ID WPE221107-10

Method: 122022a\ECDA_PEST_120422.m

Column ID: RTX-CLP

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
4,4'-DDT	10226894.91	10542417.95	200	3.09	20		Averaged
Aldrin	14979735.29	14587908.41	100	-2.62	20		Averaged
Dieldrin	12446325.99	12310747.87	200	-1.09	20		Averaged
Endosulfan I	11955735.49	11995869.24	100	0.34	20		Averaged
Endosulfan II	10575161.58	10769862.98	200	1.84	20		Averaged
Endrin	10810920.93	11295237.75	200	4.48	20		Averaged
Heptachlor	15507923.11	14797823.02	100	-4.58	20		Averaged
alpha-BHC	18436854.55	18206111.13	100	-1.25	20		Averaged
beta-BHC	7241851.01	6709939.12	100	-7.34	20		Averaged
cis-Chlordane	12731662.34	13051372.87	100	2.51	20		Averaged
gamma-BHC (Lindane)	16665725.51	16292526.93	100	-2.24	20		Averaged
trans-Chlordane	13052659.37	13361135.5	100	2.36	20		Averaged
4cmx(Surr)	11185926.62	11217823.12	200	0.29	20		Averaged
Decachlorobiphenyl(Surr)	6998183.51	6936053.12	200	-0.89	20		Averaged

Quantitation Report
GEL Laboratories, LLC

JM 12/21/2022

JC 12/22/2022

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2043.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Dec 2022 18:15 (#1); 20 Dec 2022 18:15 (#2)
Operator : JXM InstName : ECDA
Sample : |WPE221107-10|CCV|1|SVP|1|AB-CCV
Misc : |MIX[P]
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 21 05:34:50 2022
Quant Method : D:\MSDCHEM\1\Data\122022a\ECDA_PEST_120422.m
Quant Title : ECD5 SubList :
QLast Update : Mon Dec 19 11:11:48 2022
Response via : Initial Calibration
Integrator: ChemStation

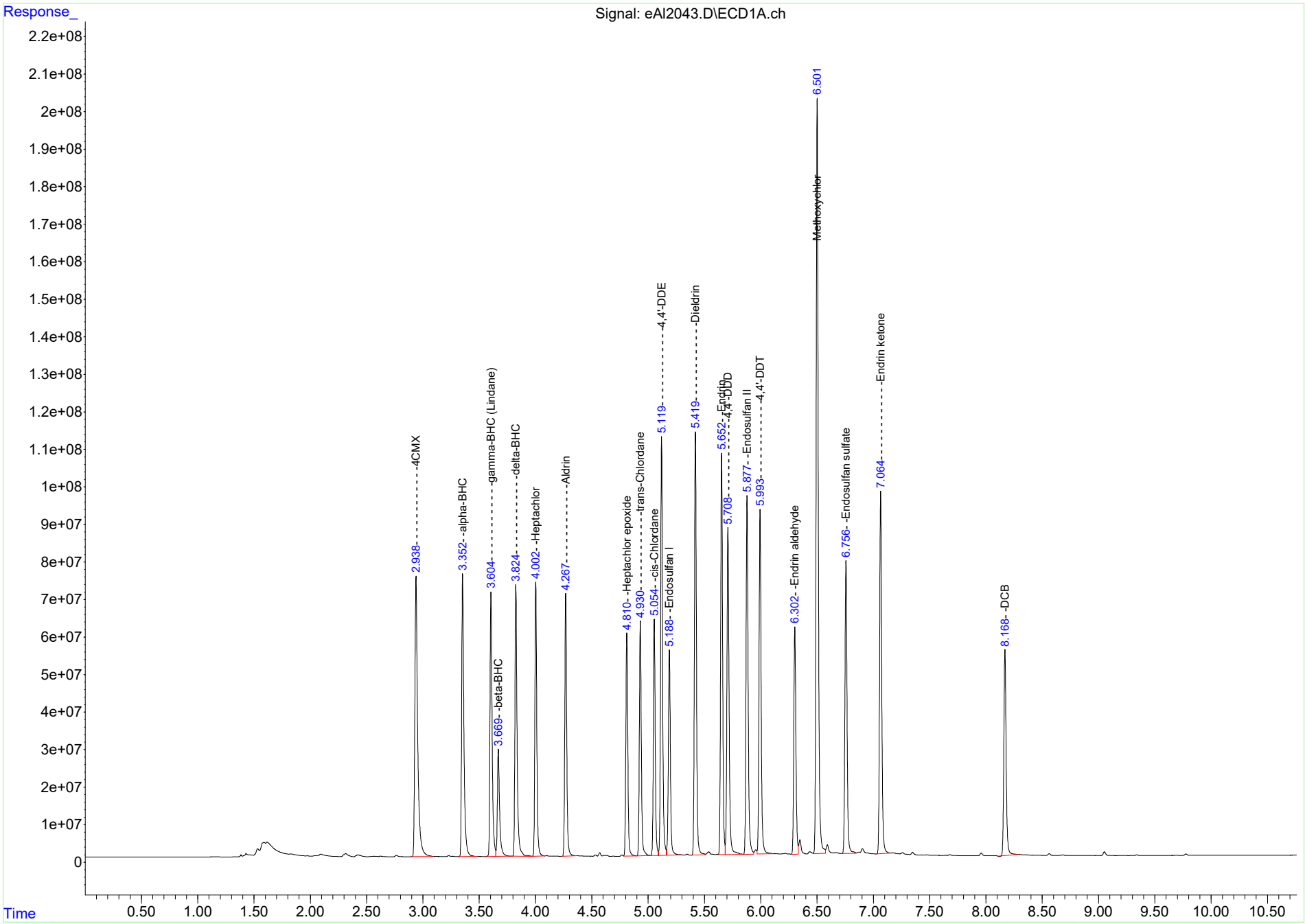
Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.938	2.938	0.000	1311368814	212.116	3.228	3.228	0.000	2243564624	200.570
DCB	8.168	8.168	0.000	781278134	198.823	9.289	9.289	0.000	1387210624	198.224
Target Compounds										
alpha-BHC	3.352	3.352	0.000	1040087508	107.516	3.743	3.743	0.000	1820611113	98.748
gamma-BHC (Lindane)	3.604	3.604	0.000	927919396	105.544	4.067	4.067	0.000	1629252693	97.761
Heptachlor	4.002	4.002	0.000	842543303	103.011	4.495	4.495	0.000	1479782302	95.421
Aldrin	4.268	4.268	0.000	819056400	104.482	4.820	4.820	0.000	1458790841	97.384
beta-BHC	3.670	3.670	0.000	395091528	98.514	4.133	4.133	0.000	670993912	92.655
delta-BHC	3.825	3.825	0.000	961699441	108.850	4.418	4.418	0.000	1627802814	97.534
Heptachlor epoxide	4.811	4.811	0.000	719919848	104.546	5.382	5.382	0.000	1261268463	96.383
trans-Chlordane	4.931	4.931	0.000	749581304	108.528	5.577	5.577	0.000	1336113550	102.363
cis-Chlordane	5.054	5.054	0.000	728240280	107.965	5.726	5.726	0.000	1305137287	102.511
4,4'-DDE	5.119	5.119	0.000	1354084916	215.056	5.877	5.877	0.000	2399683647	201.614
Endosulfan I	5.188	5.188	0.000	686996944	106.194	5.795	5.795	0.000	1199586924	100.336
Dieldrin	5.419	5.419	0.000	1378729365	208.290	6.082	6.082	0.000	2462149574	197.821
Endrin	5.652	5.652	0.000	1297031973	226.203	6.410	6.410	0.000	2259047550	208.960
Endosulfan II	5.878	5.878	0.000	1217497396	215.141	6.636	6.636	0.000	2153972596	203.682
4,4'-DDD	5.708	5.708	0.000	1152901824	222.106	6.495	6.495	0.000	2017643219	205.077
4,4'-DDT	5.993	5.993	0.000	1185664133	214.204	6.839	6.839	0.000	2108483589	206.170
Endrin aldehyde	6.302	6.302	0.000	770449901	171.599	6.994	6.994	0.000	1409691602	173.743
Methoxychlor	6.501	6.501	0.000	2629345944	979.629	7.585	7.585	0.000	4475117939	932.301
Endosulfan sulfate	6.757	6.757	0.000	1019777371	205.700	7.298	7.298	0.000	1747926746	197.181

Endrin ketone	7.065	7.065	0.000	1265284191	195.784	7.908	7.908	0.000	2260906352	190.352

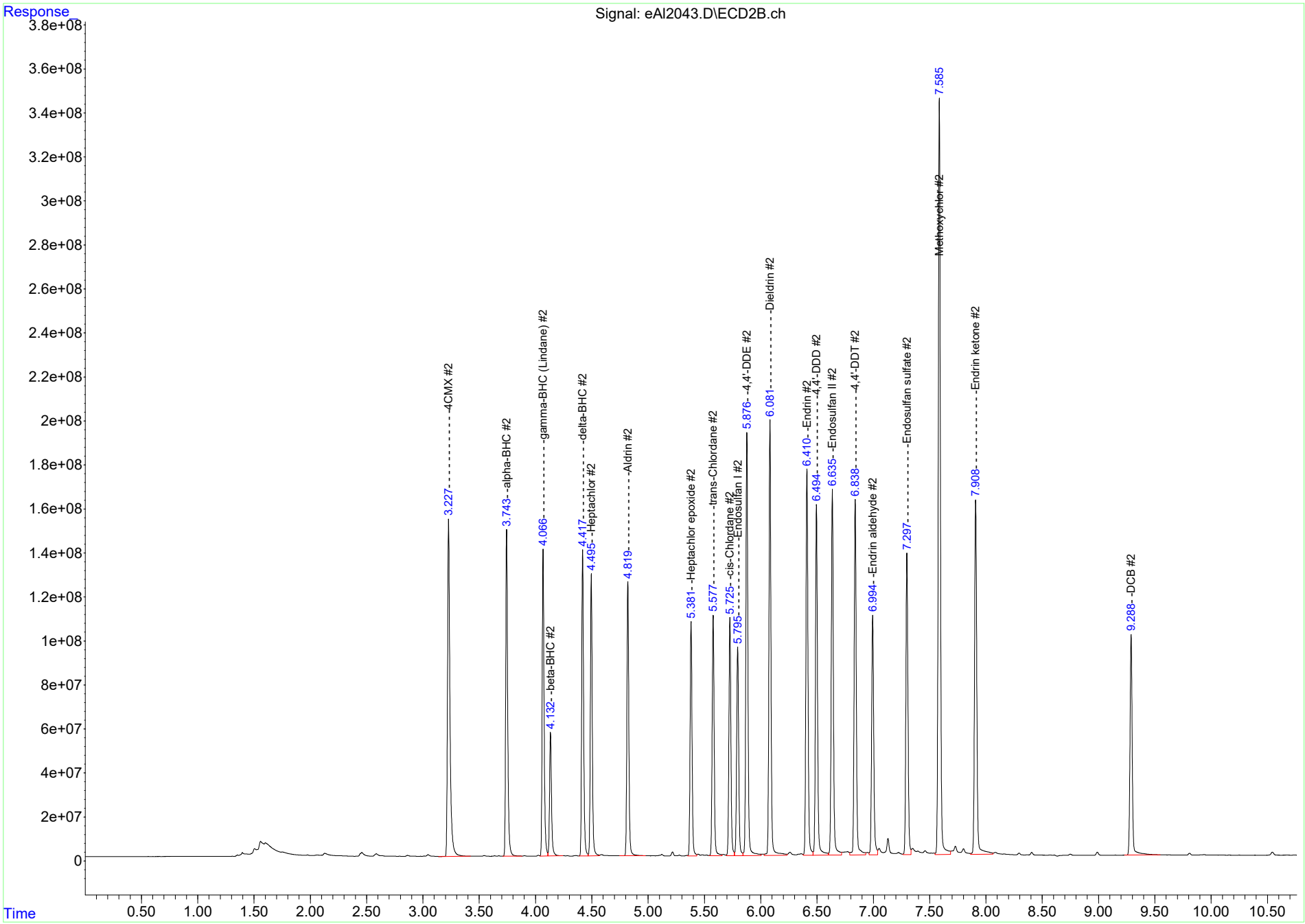
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2043.D



ECDA_PEST_120422.m Wed Dec 21 05:35:01 2022 Page: 3

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2043.D



Continuing Calibration Summary

Instrument ID: ECDAA.I_1

Client SDG: 2023-289

Injection Date: 20-DEC-22 18:31

Data File: 122022a\eAl2044.D

Init. Cal. Date(s): 01-DEC-22 07:14 - 01-DEC-22 08:20

Lab Sample ID WPE221215-20

Method: 122022a\ECDA_PEST_120422.m

Column ID: RTX-CLP

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Toxaphene	190367.25	205348.65	2000	7.87	20		Averaged
Toxaphene(2)	221049.18	239386.72	2000	8.3	20		Averaged
Toxaphene(3)	260115.55	279566.75	2000	7.48	20		Averaged
Toxaphene(4)	268552.83	293083.84	2000	9.13	20		Averaged
Toxaphene(5)	170772.84	190776.34	2000	11.71	20		Averaged

Continuing Calibration Summary

Instrument ID: ECDAA.I_2

Client SDG: 2023-289

Injection Date: 20-DEC-22 18:31

Data File: 122022a\eAl2044.D

Init. Cal. Date(s): 01-DEC-22 07:14 - 01-DEC-22 08:20

Lab Sample ID WPE221215-20

Method: 122022a\ECDA_PEST_120422.m

Column ID: RTX-CLP

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Toxaphene	522669.02	529205.8	2000	1.25	20		Averaged
Toxaphene(2)	301061.02	312344.92	2000	3.75	20		Averaged
Toxaphene(3)	399119.32	428502.63	2000	7.36	20		Averaged
Toxaphene(4)	471379.79	505298.72	2000	7.2	20		Averaged
Toxaphene(5)	465934.82	505339.06	2000	8.46	20		Averaged

Quantitation (Manual Int.) Report
GEL Laboratories, LLC

12/21/2022

12/22/2022

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2044.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Dec 2022 18:31 (#1); 20 Dec 2022 18:31 (#2)
Operator : JXM InstName : ECDA
Sample : |WPE221215-20|CCV|1|SVP|1|TOX-CCV
Misc : |MIX[Q]
ALS Vial : 4 Sample Multiplier: 1

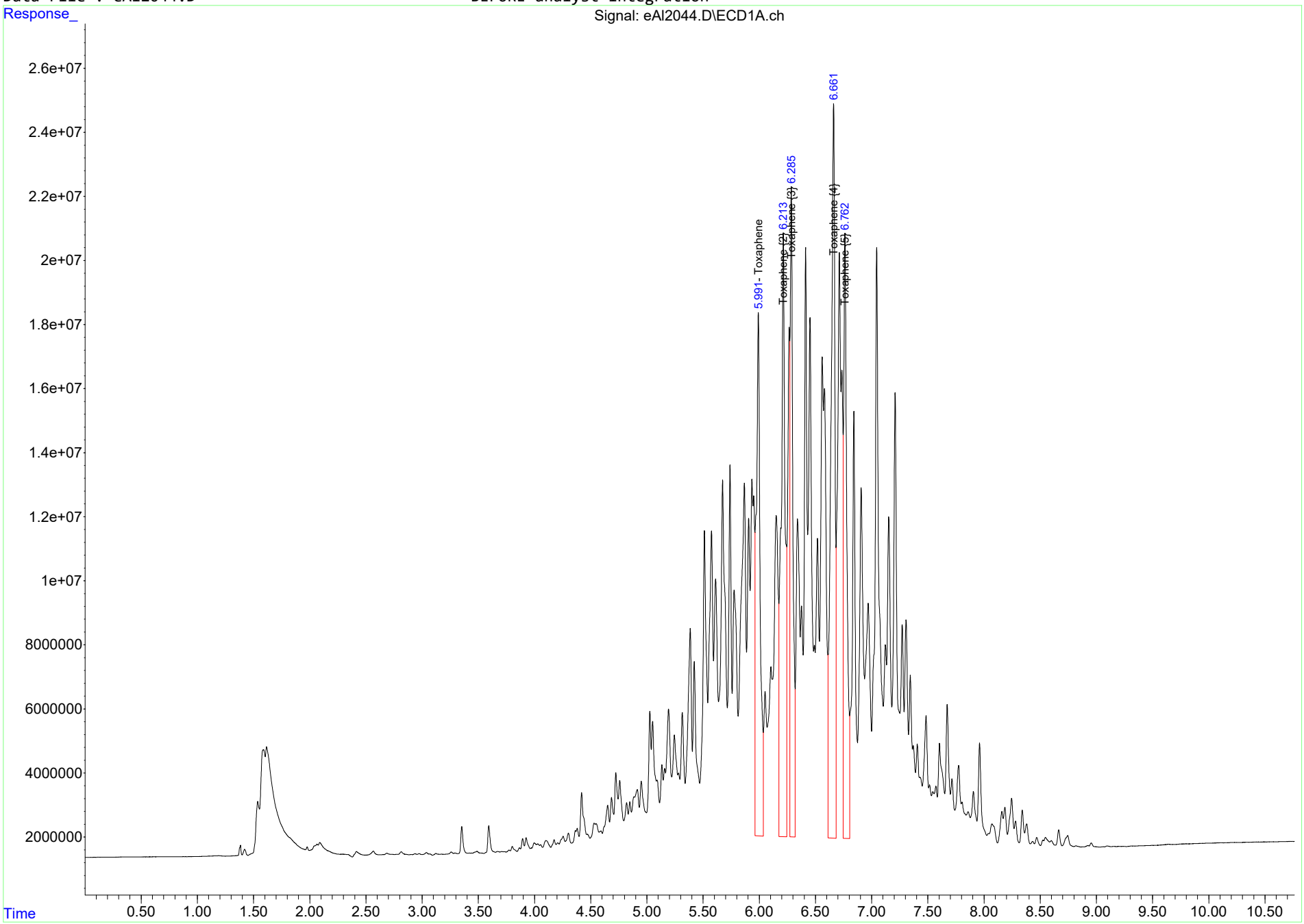
Quant Time: Dec 21 05:38:04 2022
Quant Method : D:\MSDCHEM\1\Data\122022a\ECDA_PEST_120422.m
Quant Title : ECD5 SubList :
QLast Update : Mon Dec 19 11:11:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
Target Compounds										
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Toxaphene	5.992	5.992	0.000	410697301	2157.395	6.722	6.722	0.000	1058411593	2025.013
Toxaphene {2}	6.214	6.214	0.000	478773431	2165.914	7.002	7.002	0.000	624689849	2074.961
Toxaphene {3}	6.285	6.285	0.000	559133509	2149.558m	7.242	7.242	0.000	857005264	2147.241m
Toxaphene {4}	6.661	6.661	0.000	586167688	2182.690	7.578	7.578	0.000	1010597439	2143.913
Toxaphene {5}	6.762	6.762	0.000	381552680	2234.270	7.632	7.632	0.000	1010678127	2169.141
Sum Toxaphene				2416324609	10889.827				4561382273	10560.269
Average Toxaphene					2177.965					2112.054

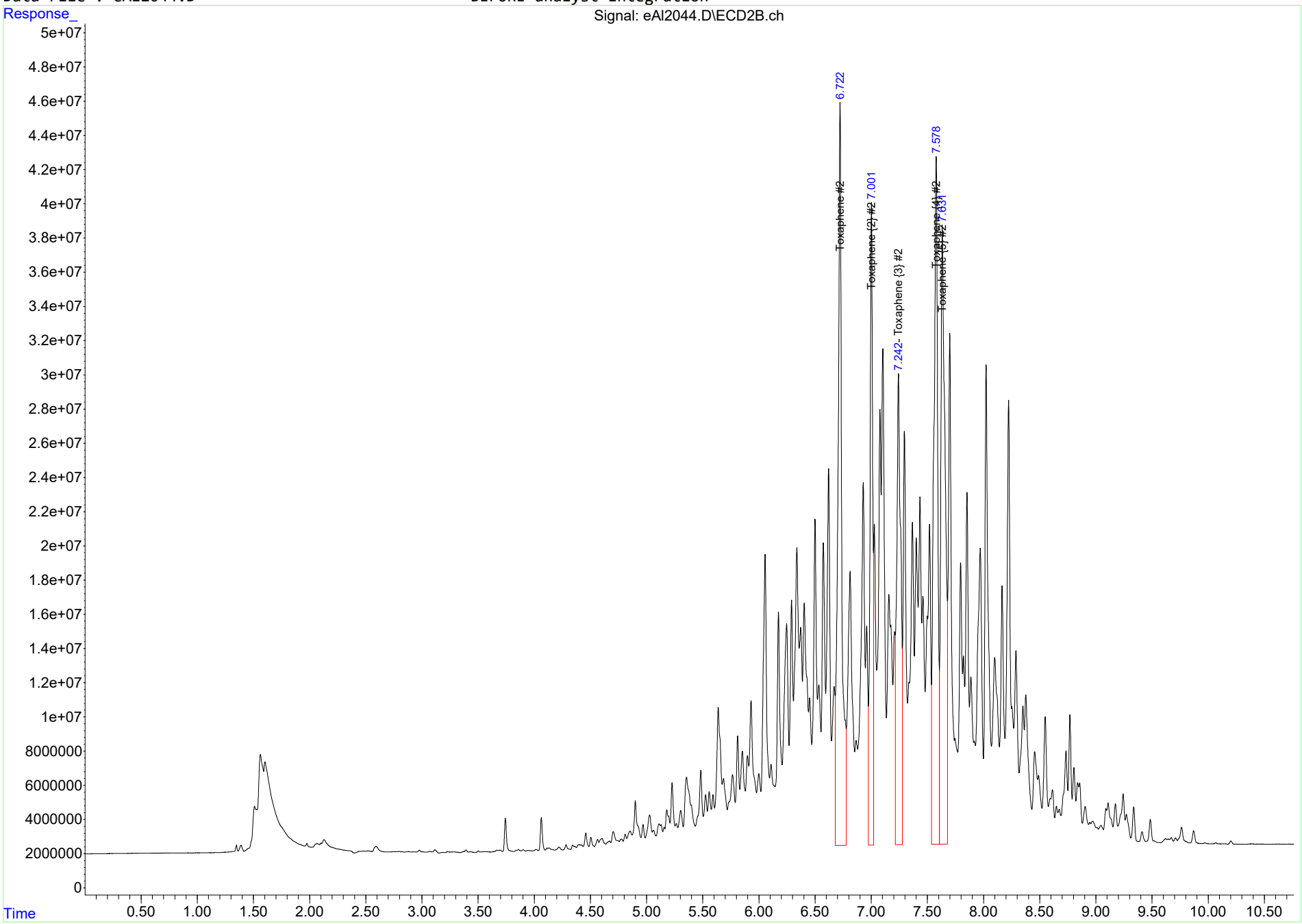
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2044.D BEFORE analyst integration



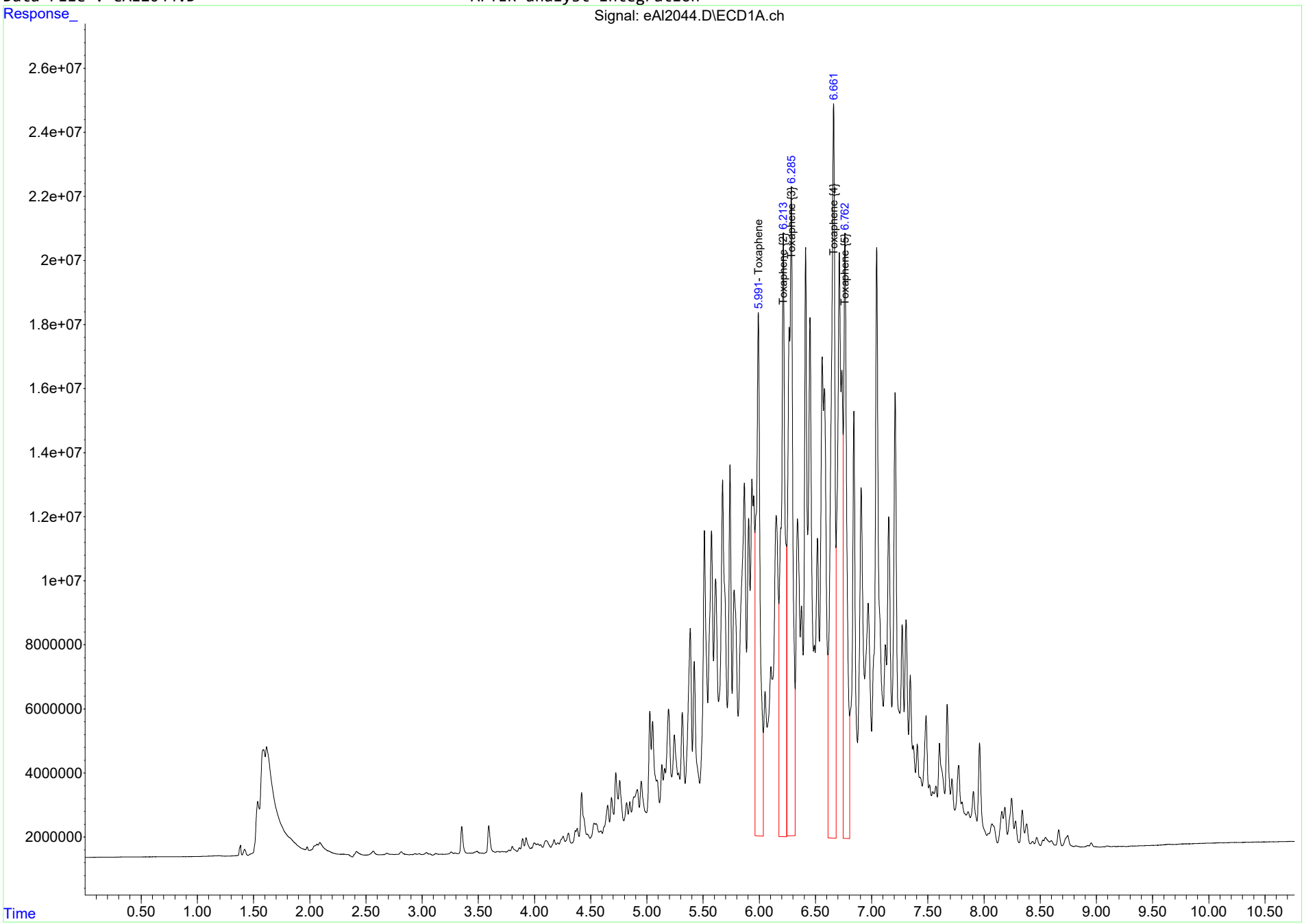
ECDA_PEST_120422.m Wed Dec 21 05:38:30 2022 Page: 2

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2044.D BEFORE analyst integration



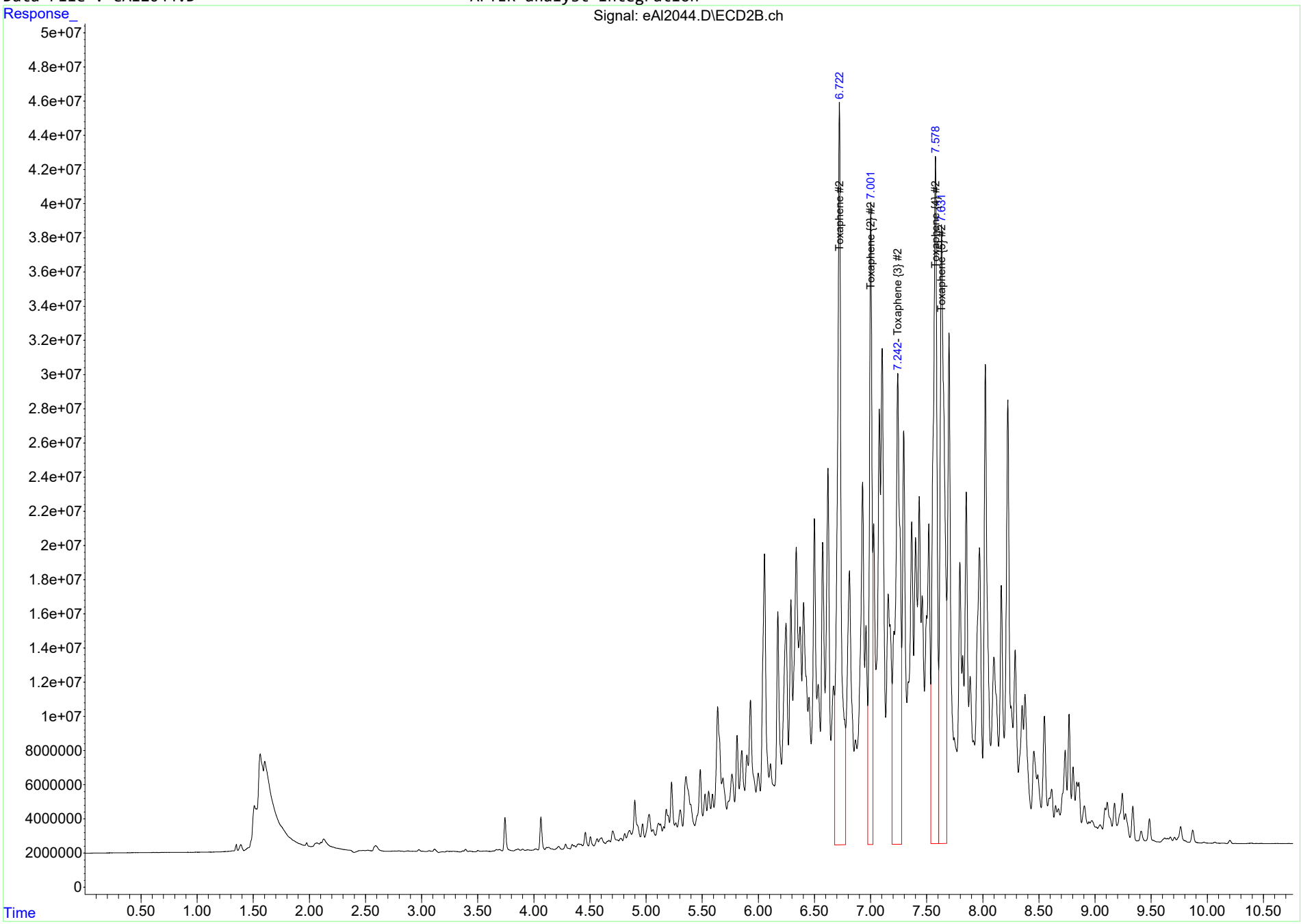
ECDA_PEST_120422.m Wed Dec 21 05:38:30 2022 Page: 3

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2044.D AFTER analyst integration



ECDA_PEST_120422.m Wed Dec 21 05:38:31 2022 Page: 4

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2044.D AFTER analyst integration



ECDA_PEST_120422.m Wed Dec 21 05:38:32 2022 Page: 5

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
Target Compounds										
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Toxaphene	5.996	5.992	-0.004	410697301	2157.395	6.725	6.722	-0.003	1058411593	2025.013
Toxaphene {2}	6.218	6.214	-0.004	478773431	2165.914	7.005	7.002	-0.003	624689849	2074.961
Toxaphene {3}	6.289	6.285	-0.004	358214141	1377.135	7.246	7.242	-0.004	713898086	1788.683
Toxaphene {4}	6.666	6.661	-0.005	586167688	2182.690	7.582	7.578	-0.004	1010597439	2143.913
Toxaphene {5}	6.767	6.762	-0.005	381552680	2234.270	7.636	7.632	-0.004	1010678127	2169.141
Sum Toxaphene				2215405241	10117.404				4418275095	10201.711
Average Toxaphene					2023.481					2040.342

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2044.D

Toxaphene {3} - Manual Integration ==	AB/AP	Toxaphene {3} #2 - Manual Integration ==	AB/AP

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2045.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Dec 2022 18:48 (#1); 20 Dec 2022 18:48 (#2)
Operator : JXM InstName : ECDA
Sample : |WPE221212-00|CCV|1|SVP|1|CHLOR-CCV
Misc : |MIX[V]
ALS Vial : 5 Sample Multiplier: 1

Jm 12/21/2022

JC 12/22/2022

Quant Time: Dec 21 05:39:32 2022
Quant Method : D:\MSDCHEM\1\Data\122022a\ECDA_PEST_120422.m
Quant Title : ECD5 SubList :
QLast Update : Mon Dec 19 11:11:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um Signal #2 Info : 250 um

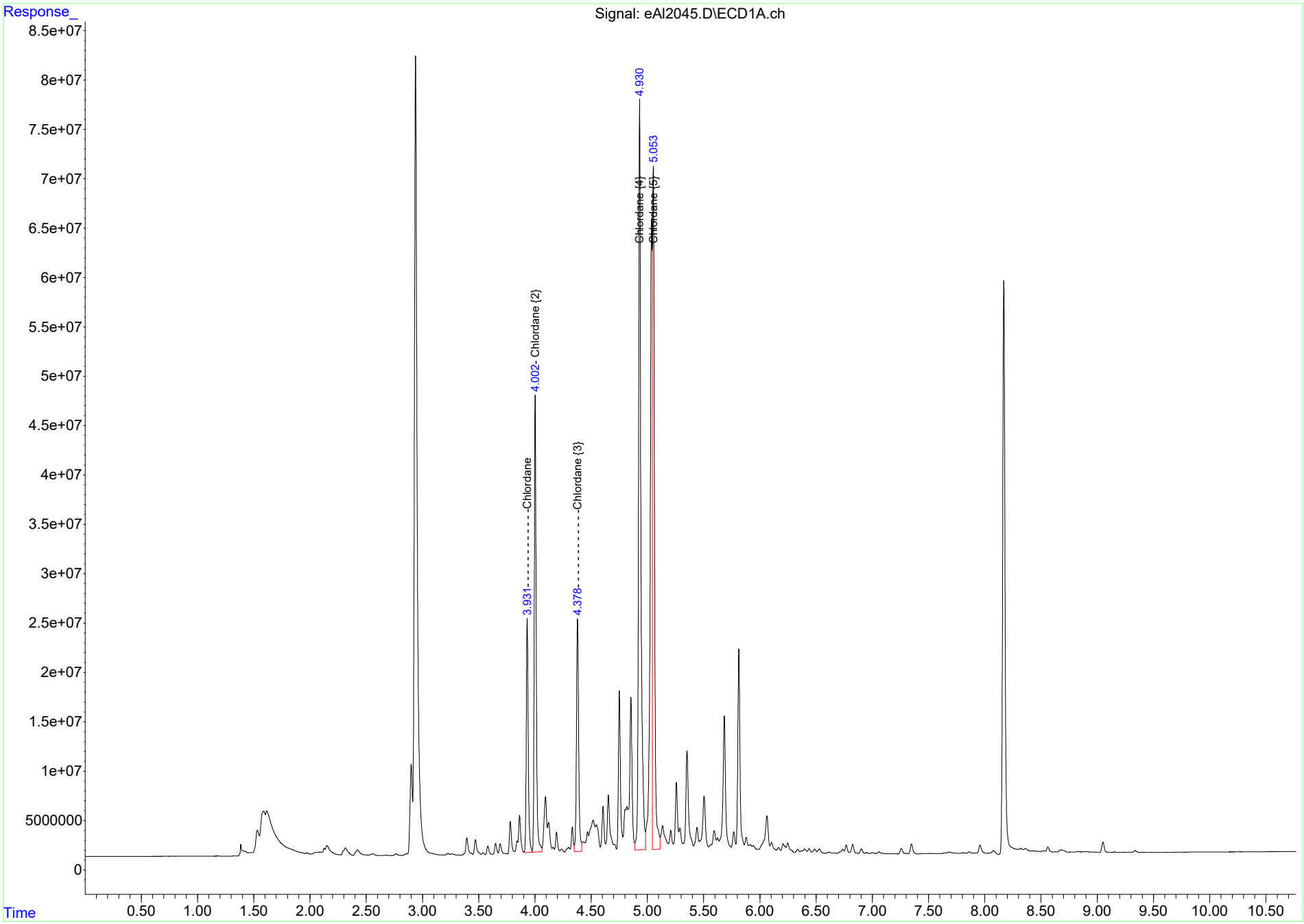
System Monitoring Compounds

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Chlordane	3.931	3.931	0.000	285754262	1177.192	4.353	4.353	0.000	534203532	1106.584
Chlordane {2}	4.002	4.002	0.000	558230306	1199.644	4.495	4.495	0.000	1026214637	1115.593
Chlordane {3}	4.378	4.378	0.000	315231628	1149.346	4.947	4.947	0.000	540409916	1070.964
Chlordane {4}	4.930	4.930	0.000	1108318415	1216.509	5.577	5.577	0.000	1767049533	1151.842
Chlordane {5}	5.053	5.053	0.000	881052377	1213.700	5.725	5.725	0.000	1482606237	1160.376
Sum Chlordane				3148586990	5956.391				5350483856	5605.358
Average Chlordane					1191.278					1121.072

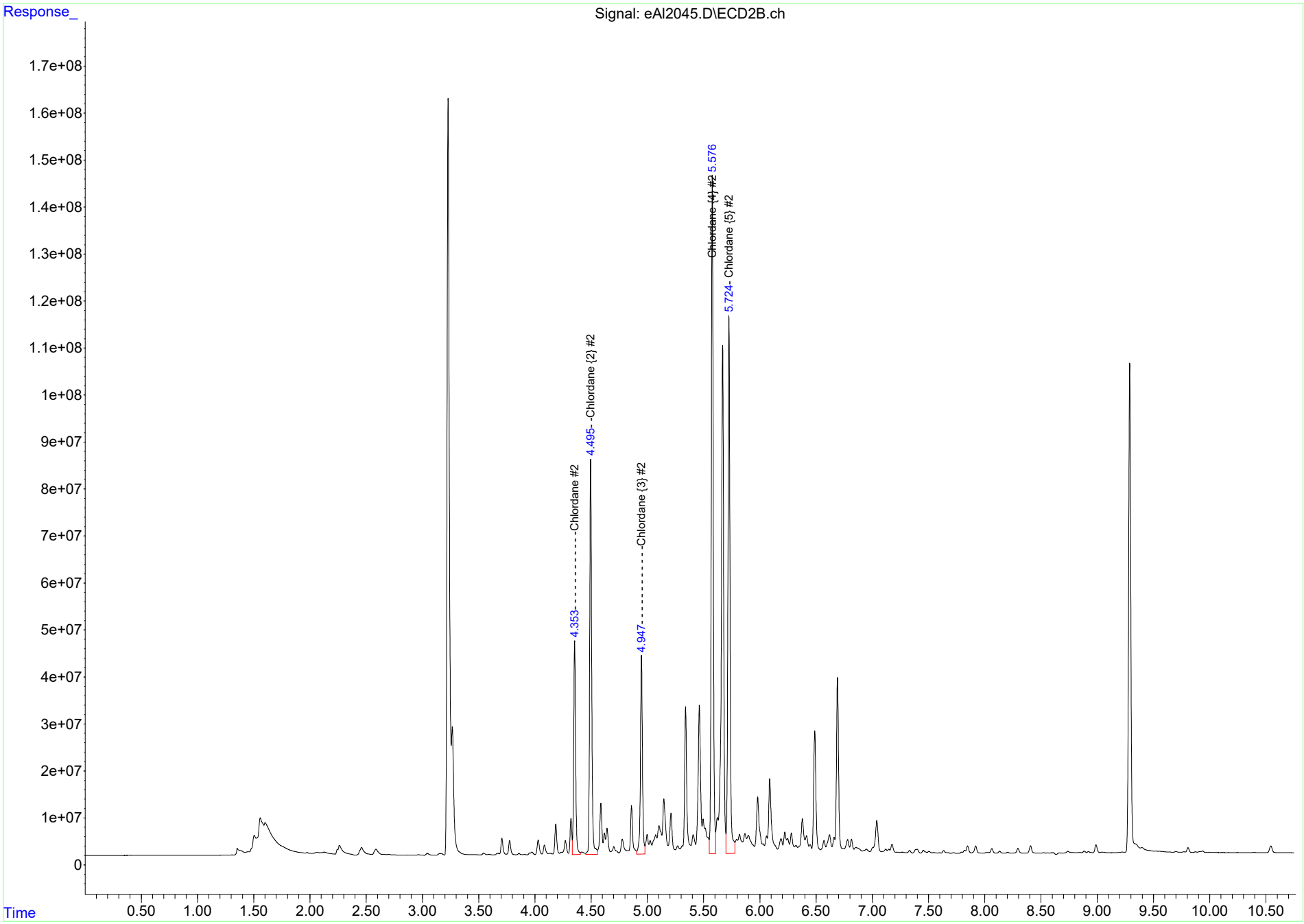
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2045.D



ECDA_PEST_120422.m Wed Dec 21 05:39:42 2022 Page: 2

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2045.D



ECDA_PEST_120422.m Wed Dec 21 05:39:43 2022 Page: 3

Continuing Calibration Summary

Instrument ID: ECDAA.I_1

Client SDG: 2023-289

Injection Date: 20-DEC-22 22:05

Data File: 122022a\eAl2058.D

Init. Cal. Date(s): 01-DEC-22 07:14 - 01-DEC-22 08:20

Lab Sample ID WPE221107-10

Method: 122022a\ECDA_PEST_120422.m

Column ID: RTX-CLP

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
4,4'-DDT	5535207.04	5771176.91	200	4.26	20		Averaged
Aldrin	7839246.68	8117869.27	100	3.55	20		Averaged
Dieldrin	6619287.16	6773741.02	200	2.33	20		Averaged
Endosulfan I	6469282.31	6779280.69	100	4.79	20		Averaged
Endosulfan II	5659063.44	5991693.19	200	5.88	20		Averaged
Endrin	5733941.25	5791713.19	200	1.01	20		Averaged
Heptachlor	8179139.42	8353610.41	100	2.13	20		Averaged
alpha-BHC	9673779.15	10251076.85	100	5.97	20		Averaged
beta-BHC	4010502.08	3904289.91	100	-2.65	20		Averaged
cis-Chlordane	6745157.77	7216970.98	100	6.99	20		Averaged
gamma-BHC (Lindane)	8791736.98	9197731.83	100	4.62	20		Averaged
trans-Chlordane	6906782.44	7422316.5	100	7.46	20		Averaged
4cmx(Surr)	6182321.84	6462399.59	200	4.53	20		Averaged
Decachlorobiphenyl(Surr)	3929511.97	3923523.75	200	-0.15	20		Averaged

Continuing Calibration Summary

Instrument ID: ECDAA.I_2

Client SDG: 2023-289

Injection Date: 20-DEC-22 22:05

Data File: 122022a\eAl2058.D

Init. Cal. Date(s): 01-DEC-22 07:14 - 01-DEC-22 08:20

Lab Sample ID WPE221107-10

Method: 122022a\ECDA_PEST_120422.m

Column ID: RTX-CLP

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
4,4'-DDT	10226894.91	9957368.11	200	-2.64	20		Averaged
Aldrin	14979735.29	14437745.19	100	-3.62	20		Averaged
Dieldrin	12446325.99	11986756.6	200	-3.69	20		Averaged
Endosulfan I	11955735.49	11847043.52	100	-0.91	20		Averaged
Endosulfan II	10575161.58	10730860.62	200	1.47	20		Averaged
Endrin	10810920.93	10242851.57	200	-5.25	20		Averaged
Heptachlor	15507923.11	14704324.12	100	-5.18	20		Averaged
alpha-BHC	18436854.55	18063361.42	100	-2.03	20		Averaged
beta-BHC	7241851.01	6740316.25	100	-6.93	20		Averaged
cis-Chlordane	12731662.34	12870097.31	100	1.09	20		Averaged
gamma-BHC (Lindane)	16665725.51	16149435.75	100	-3.1	20		Averaged
trans-Chlordane	13052659.37	13152098	100	0.76	20		Averaged
4cmx(Surr)	11185926.62	11105596.85	200	-0.72	20		Averaged
Decachlorobiphenyl(Surr)	6998183.51	6914371.7	200	-1.2	20		Averaged

JXM 12/21/2022

JC 12/22/2022

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2058.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Dec 2022 22:05 (#1); 20 Dec 2022 22:05 (#2)
Operator : JXM InstName : ECDA
Sample : |WPE221107-10|CCV|1|SVP|1|AB-CCV
Misc : |MIX[P]
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 21 05:42:22 2022
Quant Method : D:\MSDCHEM\1\Data\122022a\ECDA_PEST_120422.m
Quant Title : ECD5 SubList :
QLast Update : Mon Dec 19 11:11:48 2022
Response via : Initial Calibration
Integrator: ChemStation

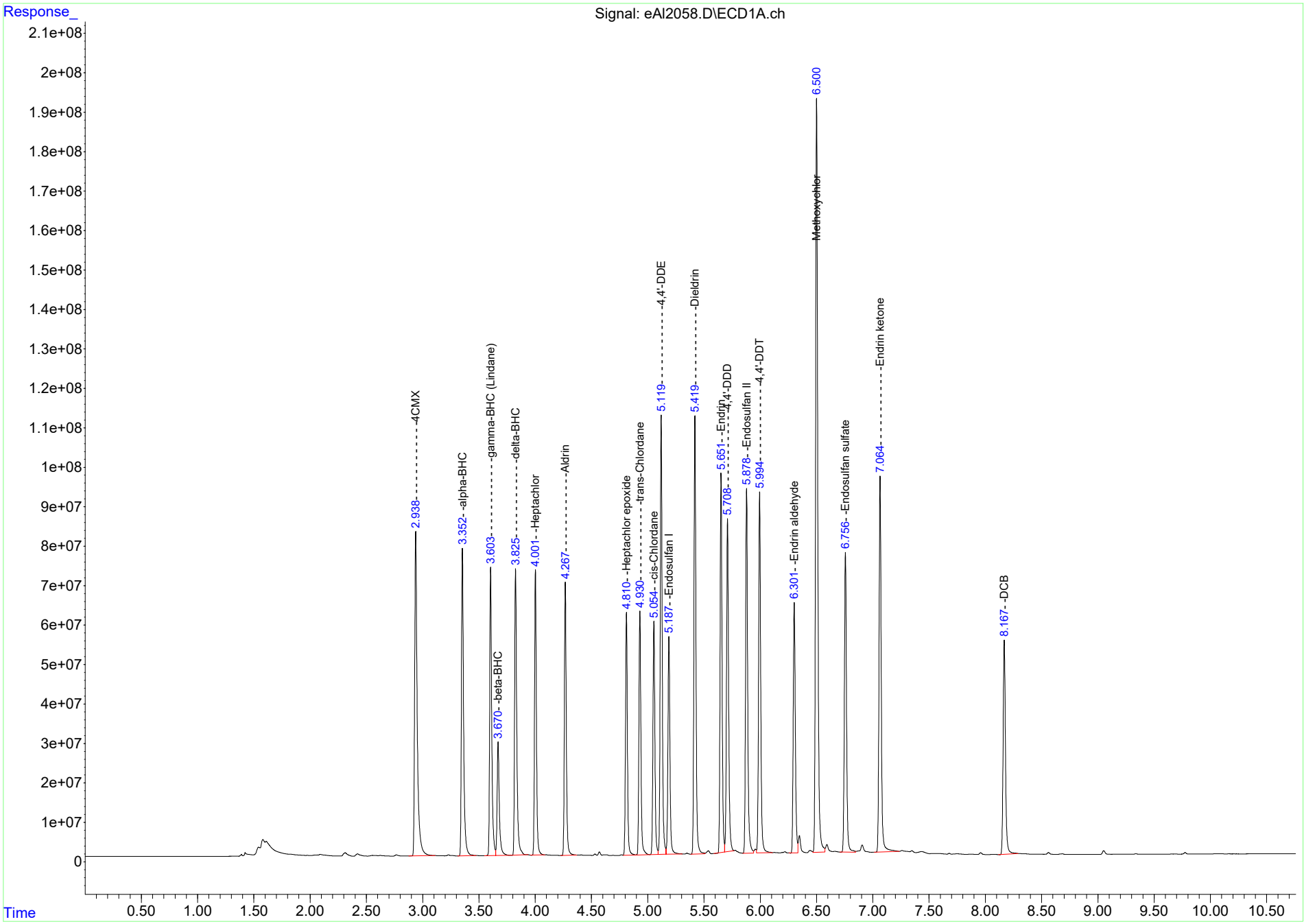
Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.938	2.938	0.000	1292479918	209.061	3.228	3.228	0.000	2221119370	198.564
DCB	8.168	8.168	0.000	784704750	199.695	9.289	9.287	-0.002	1382874339	197.605
Target Compounds										
alpha-BHC	3.352	3.353	0.001	1025107685	105.968	3.743	3.744	0.001	1806336142	97.974
gamma-BHC (Lindane)	3.604	3.603	-0.001	919773183	104.618	4.067	4.067	0.000	1614943575	96.902
Heptachlor	4.002	4.002	0.000	835361041	102.133	4.495	4.495	0.000	1470432412	94.818
Aldrin	4.268	4.267	-0.001	811786927	103.554	4.820	4.820	0.000	1443774519	96.382
beta-BHC	3.670	3.670	0.000	390428991	97.352	4.133	4.132	-0.001	674031625	93.074
delta-BHC	3.825	3.825	0.000	942208771	106.644	4.418	4.418	0.000	1637883057	98.138
Heptachlor epoxide	4.811	4.811	0.000	710722874	103.210	5.382	5.382	0.000	1261379682	96.391
trans-Chlordane	4.931	4.930	-0.001	742231650	107.464	5.577	5.577	0.000	1315209800	100.762
cis-Chlordane	5.054	5.055	0.001	721697098	106.995	5.726	5.726	0.000	1287009731	101.087
4,4'-DDE	5.119	5.119	0.000	1320489576	209.720	5.877	5.876	-0.001	2342870114	196.841
Endosulfan I	5.188	5.188	0.000	677928069	104.792	5.795	5.795	0.000	1184704352	99.091
Dieldrin	5.419	5.419	0.000	1354748203	204.667	6.082	6.081	-0.001	2397351320	192.615
Endrin	5.652	5.652	0.000	1158342637	202.015	6.410	6.410	0.000	2048570314	189.491
Endosulfan II	5.878	5.878	0.000	1198338638	211.756	6.636	6.635	-0.001	2146172123	202.945
4,4'-DDD	5.708	5.709	0.001	1086248330	209.266	6.495	6.495	0.000	1973710759	200.612
4,4'-DDT	5.993	5.994	0.001	1154235381	208.526	6.839	6.839	0.000	1991473622	194.729
Endrin aldehyde	6.302	6.302	0.000	814595603	181.431	6.994	6.993	-0.001	1473827170	181.648
Methoxychlor	6.501	6.500	-0.001	2534249543	944.199	7.585	7.585	0.000	4325373660	901.104
Endosulfan sulfate	6.757	6.756	-0.001	1004794517	202.678	7.298	7.298	0.000	1728632101	195.005

Endrin ketone	7.065	7.064	-0.001	1282835682	198.500	7.908	7.907	-0.001	2283491071	192.253

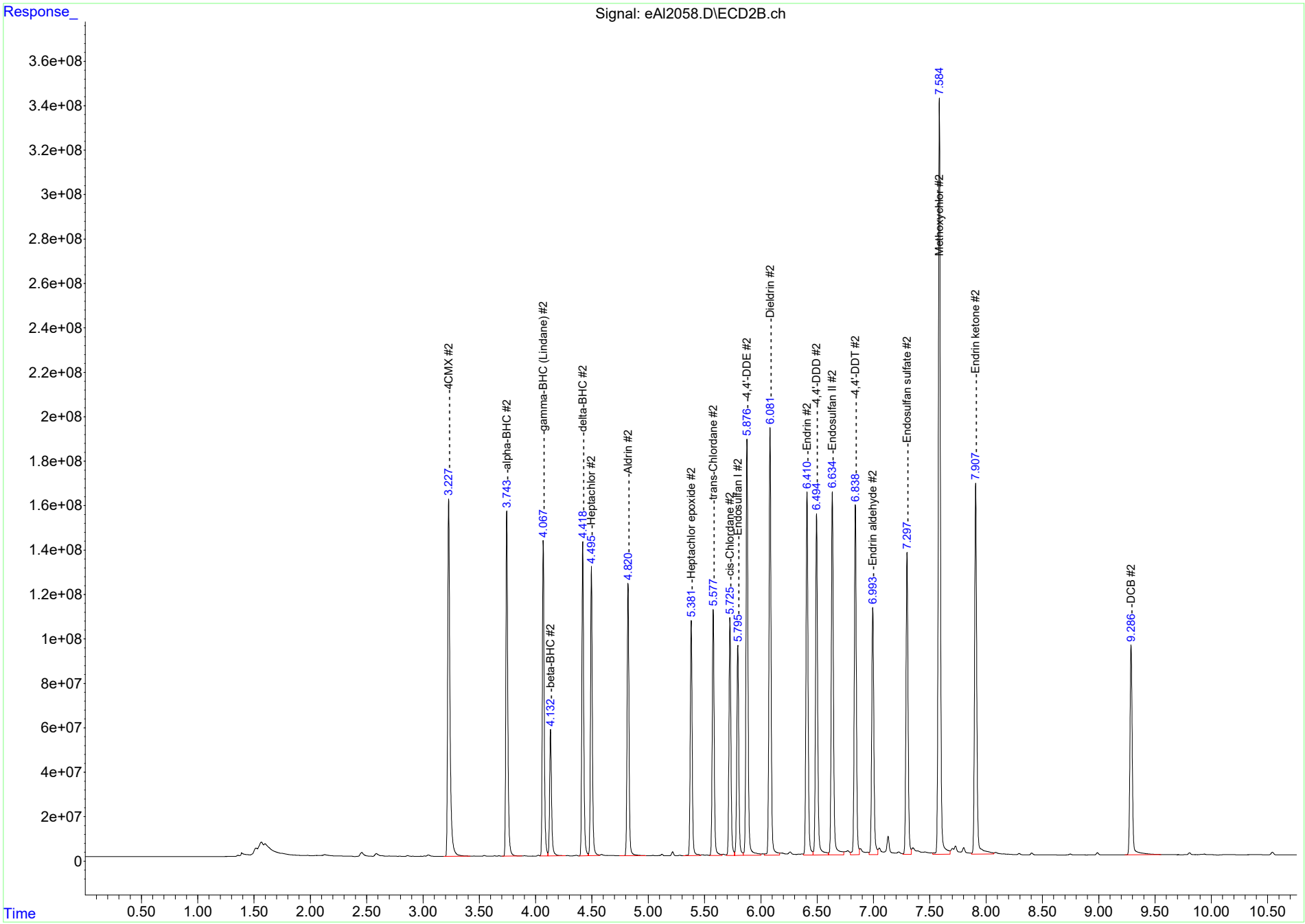
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2058.D



ECDA_PEST_120422.m Wed Dec 21 05:47:40 2022 Page: 3

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2058.D



Pesticide Breakdown Summary

Instrument ID: ECDAA.I_1

Data File: 122122\eAl2102.D

Lab Sample ID: WPE221122-99

Client Sample ID: PEM03

Client SDG: 2023-289

Injection Date: 21-DEC-22 06:46

Init. Cal. Date(s): 04-DEC-22 14:11 - 04-DEC-22 15:17

Method: D:\MSDCHEM\1\Data\122122\ECDA_PEST_120422.m

Quant Type: ESTD

Compound	Area	Compound	Area
Endrin	888474888	4,4'-DDE	2067525
Endrin aldehyde	38043558	4,4'-DDD	9319335
Endrin ketone	39380402	4,4'-DDT	1641600953

Endrin % Breakdown : 8.02 4,4'-DDT % Breakdown .69 Combined % Breakdown: 8.71

Pesticide Breakdown Summary

Instrument ID: ECDAA.I_2

Data File: 122122\eAl2102.D

Lab Sample ID: WPE221122-99

Client Sample ID: PEM03

Client SDG: 2023-289

Injection Date: 21-DEC-22 06:46

Init. Cal. Date(s): 04-DEC-22 14:11 - 04-DEC-22 15:17

Method: D:\MSDCHEM\1\Data\122122\ECDA_PEST_120422.m

Quant Type: ESTD

Compound	Area	Compound	Area
Endrin	1560640171	4,4'-DDE	3046879
Endrin aldehyde	78884299	4,4'-DDD	26316376
Endrin ketone	70321238	4,4'-DDT	2832740238

Endrin % Breakdown : 8.73 4,4'-DDT % Breakdown 1.0 Combined % Breakdown: 9.76

Quantitation Report
GEL Laboratories, LLC

JM 12/21/2022

JC 12/22/2022

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2102.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On   : 21 Dec 2022 06:46 (#1); 21 Dec 2022 06:46 (#2)
Operator : JXM   InstName : ECDA
Sample   : |WPE221122-99|PEM|1|SVP|1|PEM
Misc   : |MIX[P]
ALS Vial : 2   Sample Multiplier: 1

Quant Time: Dec 21 07:57:06 2022
Quant Method : D:\MSDCHEM\1\Data\122122\ECDA_PEST_120422.m
Quant Title : ECD5   SubList :
QLast Update : Mon Dec 19 11:11:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   : 1.0 ul
Signal #1 Phase : RTX-CLP1   Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um   Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
System Monitoring Compounds											
4CMX	2.938	2.937	-0.001	1381930918	223.529	3.227	3.228	0.001	2357270161	210.735	
DCB	8.167	8.167	0.000	815033054	207.413	9.287	9.286	-0.001	1436155701	205.218	

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	112%	105%
DCB	200.000	No Limits	104%	103%

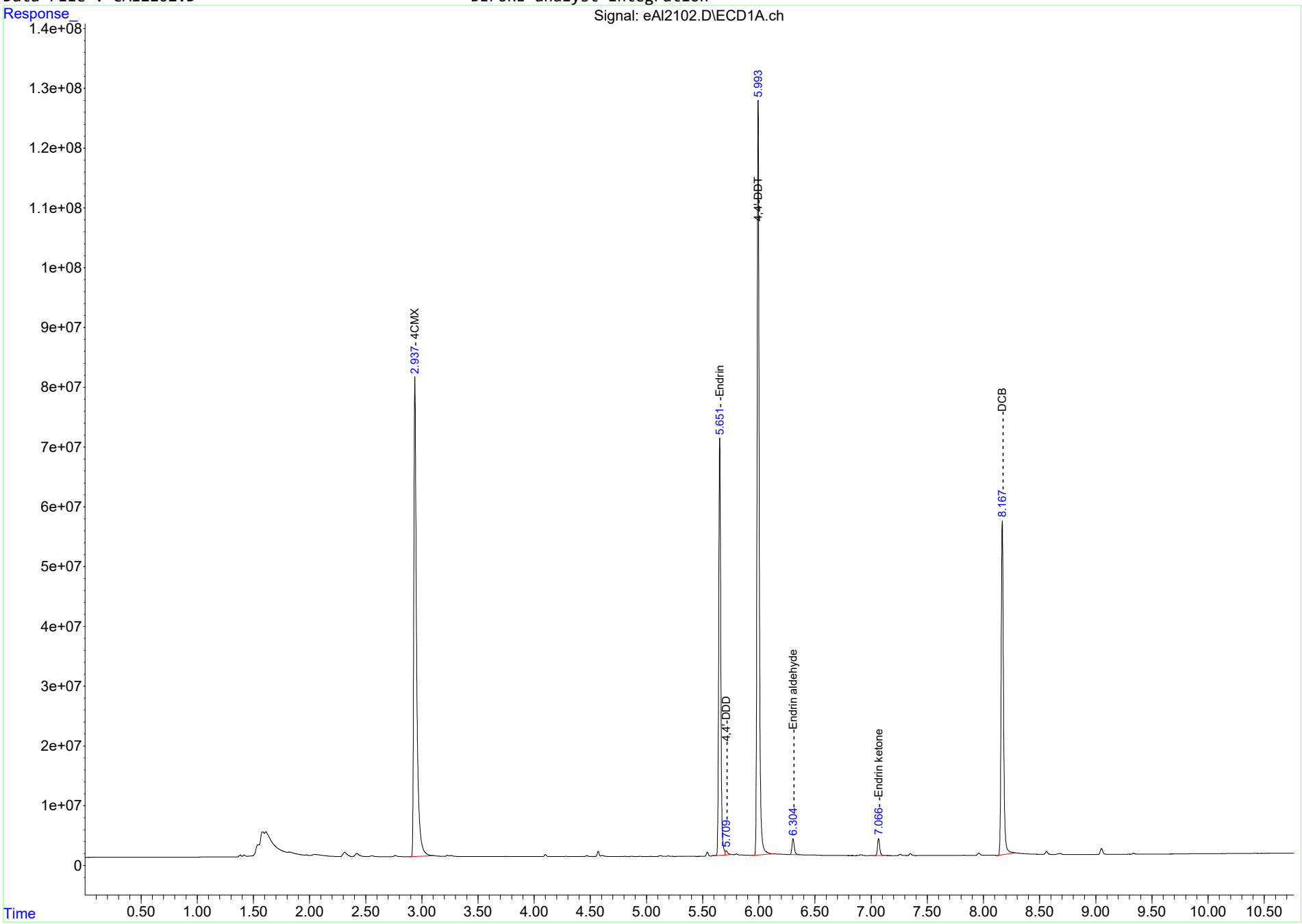
Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
alpha-BHC	3.352	0.000	-3.352	0	N.D.	3.743	0.000	-3.743	0	N.D.	
gamma-BHC (Lindane)	3.604	0.000	-3.604	0	N.D.	4.067	0.000	-4.067	0	N.D.	
Heptachlor	4.002	0.000	-4.002	0	N.D.	4.495	0.000	-4.495	0	N.D.	
Aldrin	4.267	0.000	-4.267	0	N.D.	4.820	4.802	-0.018f	3064867	0.205	#
beta-BHC	3.669	0.000	-3.669	0	N.D.	4.132	0.000	-4.132	0	N.D.	
delta-BHC	3.825	0.000	-3.825	0	N.D.	4.418	0.000	-4.418	0	N.D.	
Heptachlor epoxide	4.809	0.000	-4.809	0	N.D.	5.381	0.000	-5.381	0	N.D.	
trans-Chlordane	4.929	0.000	-4.929	0	N.D.	5.577	0.000	-5.577	0	N.D.	
cis-Chlordane	5.054	0.000	-5.054	0	N.D.	5.725	0.000	-5.725	0	N.D.	
4,4'-DDE	5.118	5.123	0.005	2067525	0.328m	5.877	5.878	0.001	3046879	0.256m	
Endosulfan I	5.187	0.000	-5.187	0	N.D.	5.794	0.000	-5.794	0	N.D.	
Dieldrin	5.419	0.000	-5.419	0	N.D.	6.081	0.000	-6.081	0	N.D.	
Endrin	5.651	5.652	0.001	888474888	154.950	6.409	6.410	0.001	1560640171	144.358	
Endosulfan II	5.877	0.000	-5.877	0	N.D.	6.635	6.654	0.019f	3158026	0.299	#
4,4'-DDD	5.707	5.709	0.002	9319335	1.795m	6.494	6.497	0.003	26316376	2.675m	

4,4'-DDT	5.992	5.994	0.002	1641600953	296.574	6.838	6.839	0.001	2832740238	276.989
Endrin aldehyde	6.301	6.305	0.004	38043558	8.473	6.992	6.995	0.003	78884299	9.722m
Methoxychlor	6.499	0.000	-6.499	0	N.D.	7.585	0.000	-7.585	0	N.D.
Endosulfan sulfate	6.755	0.000	-6.755	0	N.D.	7.297	0.000	-7.297	0	N.D.
Endrin ketone	7.062	7.066	0.004	39380402	6.094	7.907	7.908	0.001	70321238	5.921

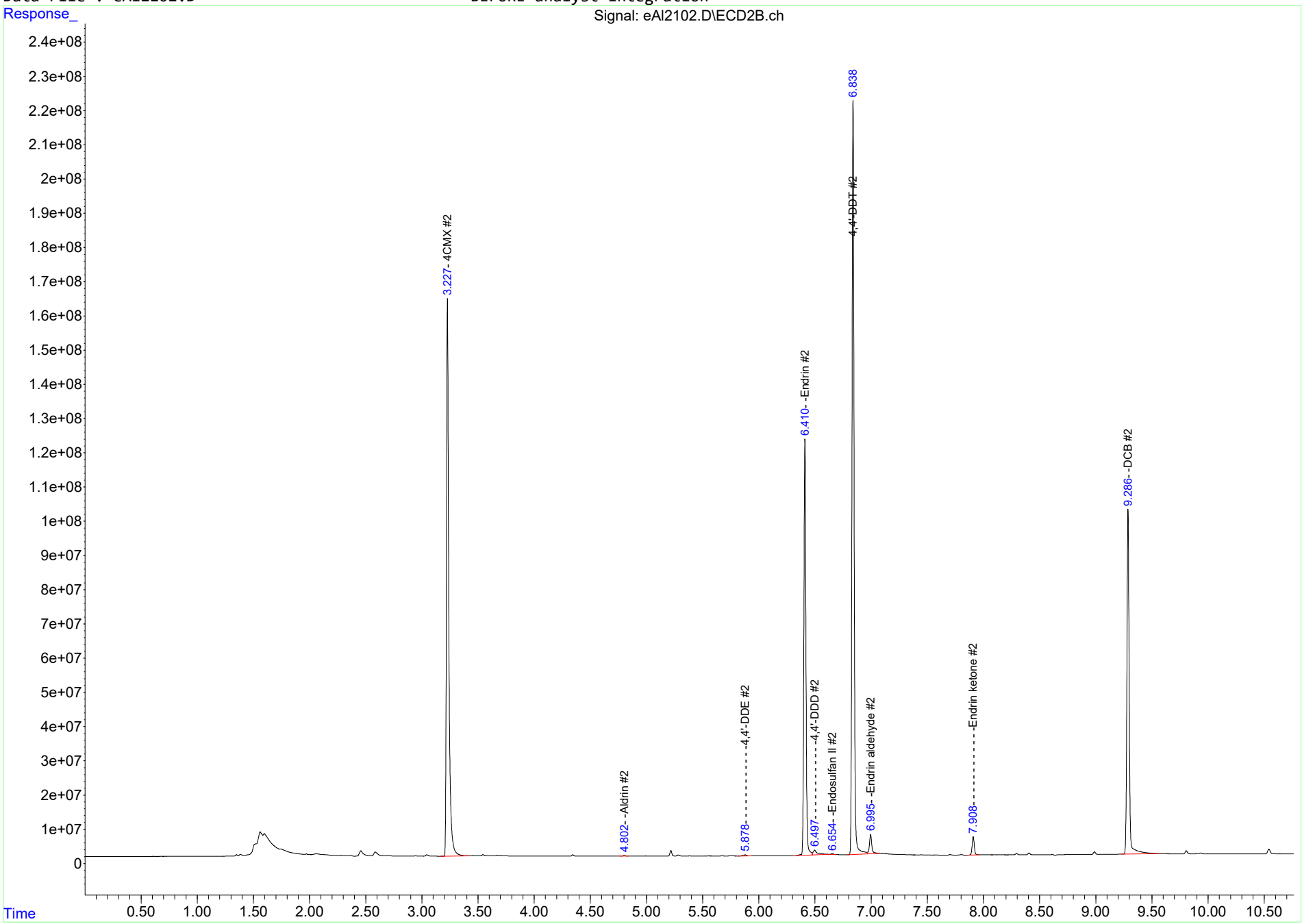
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2102.D BEFORE analyst integration



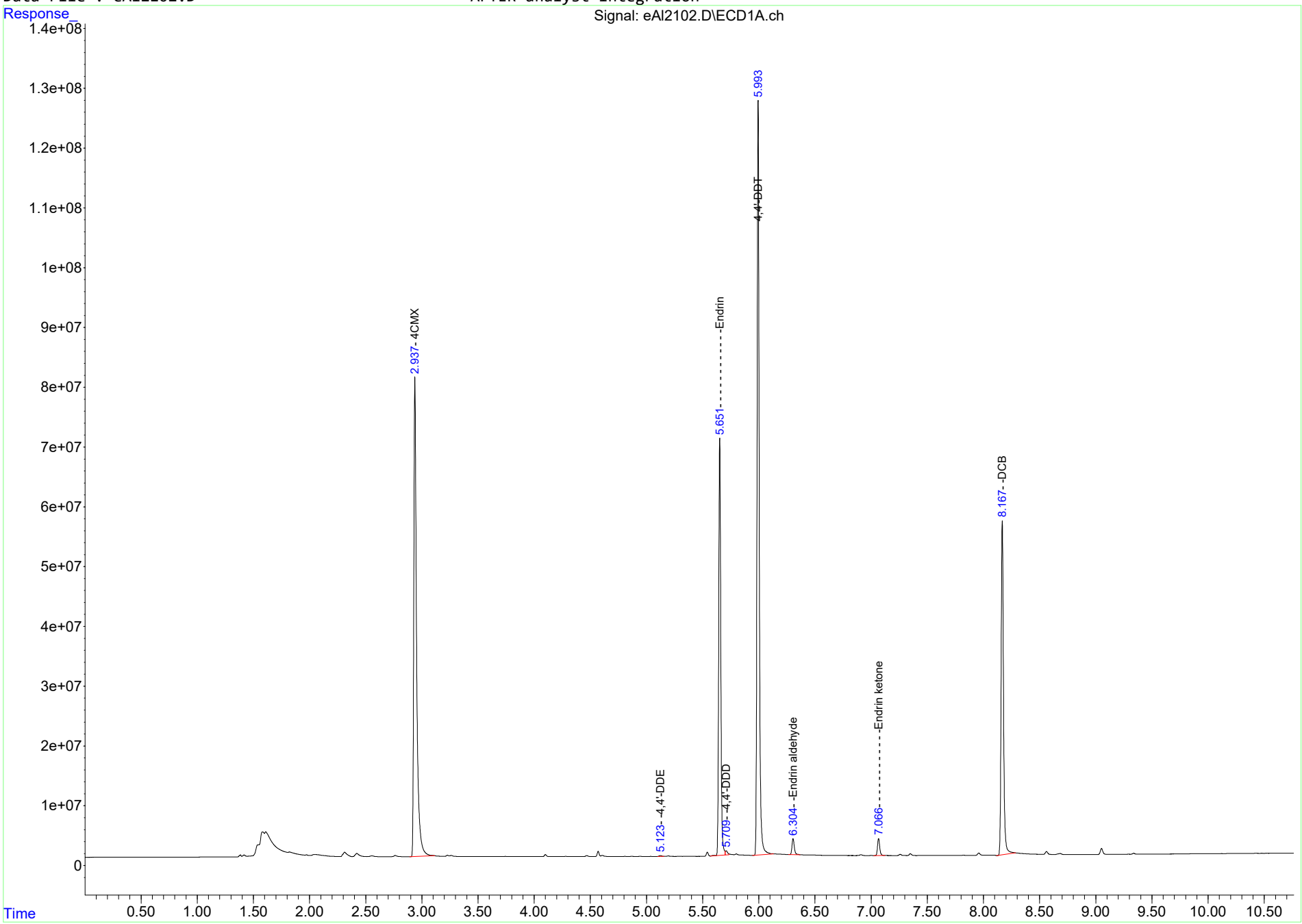
ECDA_PEST_120422.m Wed Dec 21 07:58:35 2022 Page: 3

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2102.D BEFORE analyst integration



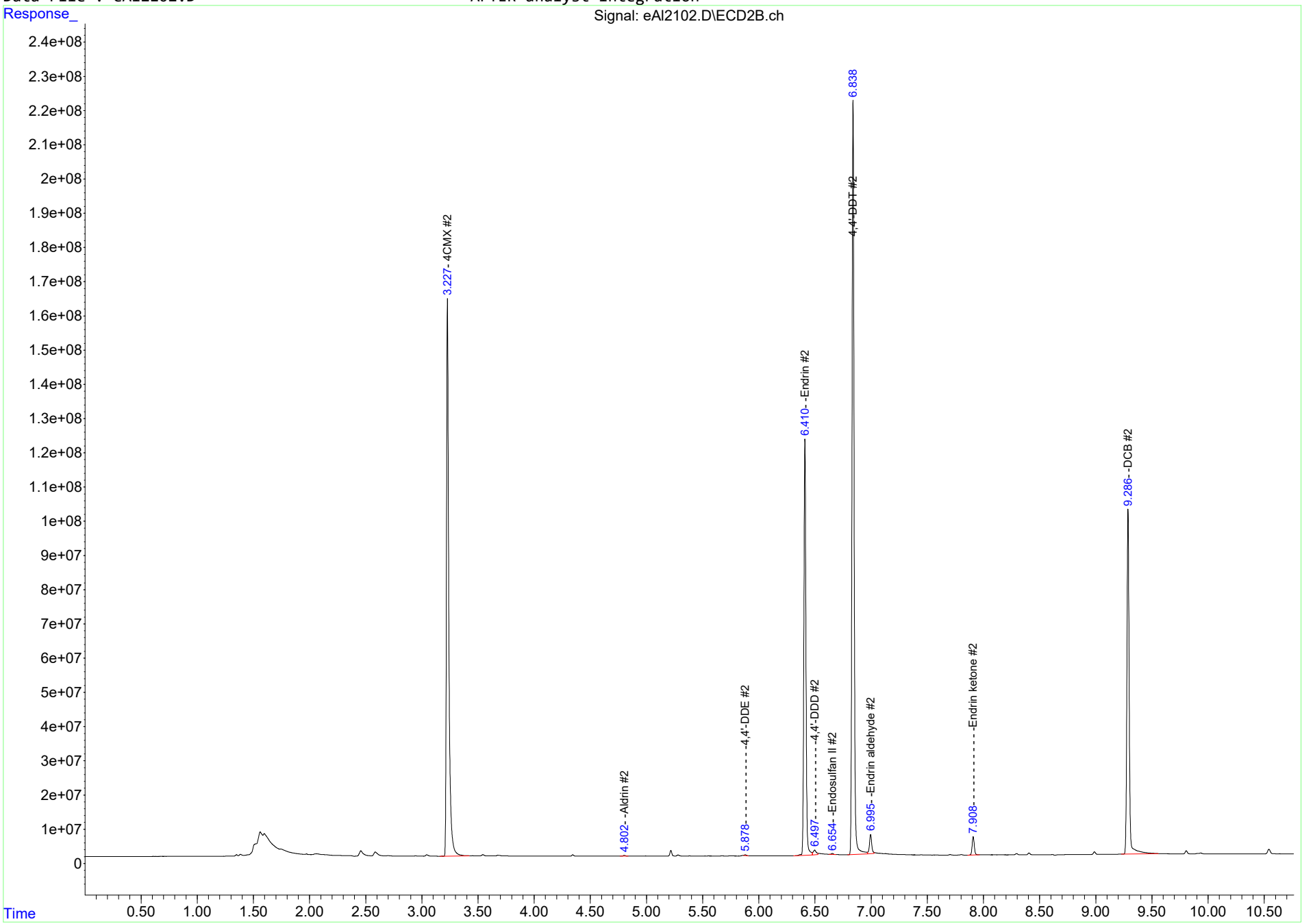
ECDA_PEST_120422.m Wed Dec 21 07:58:35 2022 Page: 4

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2102.D AFTER analyst integration



ECDA_PEST_120422.m Wed Dec 21 07:58:36 2022 Page: 5

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2102.D AFTER analyst integration



ECDA_PEST_120422.m Wed Dec 21 07:58:37 2022 Page: 6

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
System Monitoring Compounds											
4CMX	2.938	2.937	-0.001	1381930918	223.529	3.227	3.228	0.001	2357270161	210.735	
DCB	8.167	8.167	0.000	815033054	207.413	9.287	9.286	-0.001	1436155701	205.218	

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	112%	105%
DCB	200.000	No Limits	104%	103%
4CMX	200.000	No Limits	112%	105%
DCB	200.000	No Limits	104%	103%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
alpha-BHC	3.352	0.000	-3.352	0	N.D.	3.743	0.000	-3.743	0	N.D.	
gamma-BHC (Lindane)	3.604	0.000	-3.604	0	N.D.	4.067	0.000	-4.067	0	N.D.	
Heptachlor	4.002	0.000	-4.002	0	N.D.	4.495	0.000	-4.495	0	N.D.	
Aldrin	4.267	0.000	-4.267	0	N.D.	4.820	4.802	-0.018f	3064867	0.205	#
beta-BHC	3.669	0.000	-3.669	0	N.D.	4.132	0.000	-4.132	0	N.D.	
delta-BHC	3.825	0.000	-3.825	0	N.D.	4.418	0.000	-4.418	0	N.D.	
Heptachlor epoxide	4.809	0.000	-4.809	0	N.D.	5.381	0.000	-5.381	0	N.D.	
trans-Chlordane	4.929	0.000	-4.929	0	N.D.	5.577	0.000	-5.577	0	N.D.	
cis-Chlordane	5.054	0.000	-5.054	0	N.D.	5.725	0.000	-5.725	0	N.D.	
4,4'-DDE	5.118	0.000	-5.118	0	N.D.	5.877	5.879	0.002	7055301	0.593	#
Endosulfan I	5.187	0.000	-5.187	0	N.D.	5.794	0.000	-5.794	0	N.D.	
Dieldrin	5.419	0.000	-5.419	0	N.D.	6.081	0.000	-6.081	0	N.D.	
Endrin	5.651	5.652	0.001	888474888	154.950	6.409	6.410	0.001	1560640171	144.358	
Endosulfan II	5.877	0.000	-5.877	0	N.D.	6.635	6.654	0.019f	3158026	0.299	#
4,4'-DDD	5.707	5.710	0.003	10439835	2.011	6.494	6.498	0.004	36665261	3.727	#
4,4'-DDT	5.992	5.994	0.002	1641600953	296.574	6.838	6.839	0.001	2832740238	276.989	
Endrin aldehyde	6.301	6.305	0.004	38043558	8.473	6.992	6.995	0.003	83909284	10.342	
Methoxychlor	6.499	0.000	-6.499	0	N.D.	7.585	0.000	-7.585	0	N.D.	
Endosulfan sulfate	6.755	0.000	-6.755	0	N.D.	7.297	0.000	-7.297	0	N.D.	
Endrin ketone	7.062	7.066	0.004	39380402	6.094	7.907	7.908	0.001	70321238	5.921	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2102.D

4,4'-DDE - Manual Integration ==	AB/AP	4,4'-DDE #2 - Manual Integration ==	AB/AP
4,4'-DDD - Manual Integration ==	AB/AP	4,4'-DDD #2 - Manual Integration ==	AB/AP
		Endrin aldehyde #2 - Manual Integration ==	AB/AP

Continuing Calibration Summary

Instrument ID: ECDAA.I_1

Client SDG: 2023-289

Injection Date: 21-DEC-22 07:02

Data File: 122122\eAl2103.D

Init. Cal. Date(s): 01-DEC-22 07:14 - 01-DEC-22 08:20

Lab Sample ID WPE221107-10

Method: 122122\ECDA_PEST_120422.m

Column ID: RTX-CLP

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
4,4'-DDT	5535207.04	5979905.51	200	8.03	20		Averaged
Aldrin	7839246.68	8149363.35	100	3.96	20		Averaged
Dieldrin	6619287.16	6851120.29	200	3.5	20		Averaged
Endosulfan I	6469282.31	6763070.13	100	4.54	20		Averaged
Endosulfan II	5659063.44	6036479.4	200	6.67	20		Averaged
Endrin	5733941.25	6400694.74	200	11.63	20		Averaged
Heptachlor	8179139.42	8494913.01	100	3.86	20		Averaged
alpha-BHC	9673779.15	10308498.95	100	6.56	20		Averaged
beta-BHC	4010502.08	3933203.02	100	-1.93	20		Averaged
cis-Chlordane	6745157.77	7269569.88	100	7.77	20		Averaged
gamma-BHC (Lindane)	8791736.98	9211810.22	100	4.78	20		Averaged
trans-Chlordane	6906782.44	7451720.18	100	7.89	20		Averaged
4cmx(Surr)	6182321.84	6495696.55	200	5.07	20		Averaged
Decachlorobiphenyl(Surr)	3929511.97	3870319.23	200	-1.51	20		Averaged

Continuing Calibration Summary

Instrument ID: ECDAA.I_2

Client SDG: 2023-289

Injection Date: 21-DEC-22 07:02

Data File: 122122\eAl2103.D

Init. Cal. Date(s): 01-DEC-22 07:14 - 01-DEC-22 08:20

Lab Sample ID WPE221107-10

Method: 122122\ECDA_PEST_120422.m

Column ID: RTX-CLP

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
4,4'-DDT	10226894.91	10471539.05	200	2.39	20		Averaged
Aldrin	14979735.29	14515255.18	100	-3.1	20		Averaged
Dieldrin	12446325.99	12002604.17	200	-3.57	20		Averaged
Endosulfan I	11955735.49	11851699.59	100	-0.87	20		Averaged
Endosulfan II	10575161.58	10659390.57	200	0.8	20		Averaged
Endrin	10810920.93	11103059	200	2.7	20		Averaged
Heptachlor	15507923.11	14925748.52	100	-3.75	20		Averaged
alpha-BHC	18436854.55	18127862.25	100	-1.68	20		Averaged
beta-BHC	7241851.01	6735350.66	100	-6.99	20		Averaged
cis-Chlordane	12731662.34	12943934.5	100	1.67	20		Averaged
gamma-BHC (Lindane)	16665725.51	16159139.64	100	-3.04	20		Averaged
trans-Chlordane	13052659.37	13201513	100	1.14	20		Averaged
4cmx(Surr)	11185926.62	11133144.8	200	-0.47	20		Averaged
Decachlorobiphenyl(Surr)	6998183.51	6819743.84	200	-2.55	20		Averaged

Quantitation Report
GEL Laboratories, LLC

JXM 12/21/2022

JC 12/22/2022

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2103.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Dec 2022 07:02 (#1); 21 Dec 2022 07:02 (#2)
Operator : JXM InstName : ECDA
Sample : |WPE221107-10|CCV|1|SVP|1|AB-CCV
Misc : |MIX[P]
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 21 07:56:37 2022
Quant Method : D:\MSDCHEM\1\Data\122122\ECDA_PEST_120422.m
Quant Title : ECD5 SubList :
QLast Update : Mon Dec 19 11:11:48 2022
Response via : Initial Calibration
Integrator: ChemStation

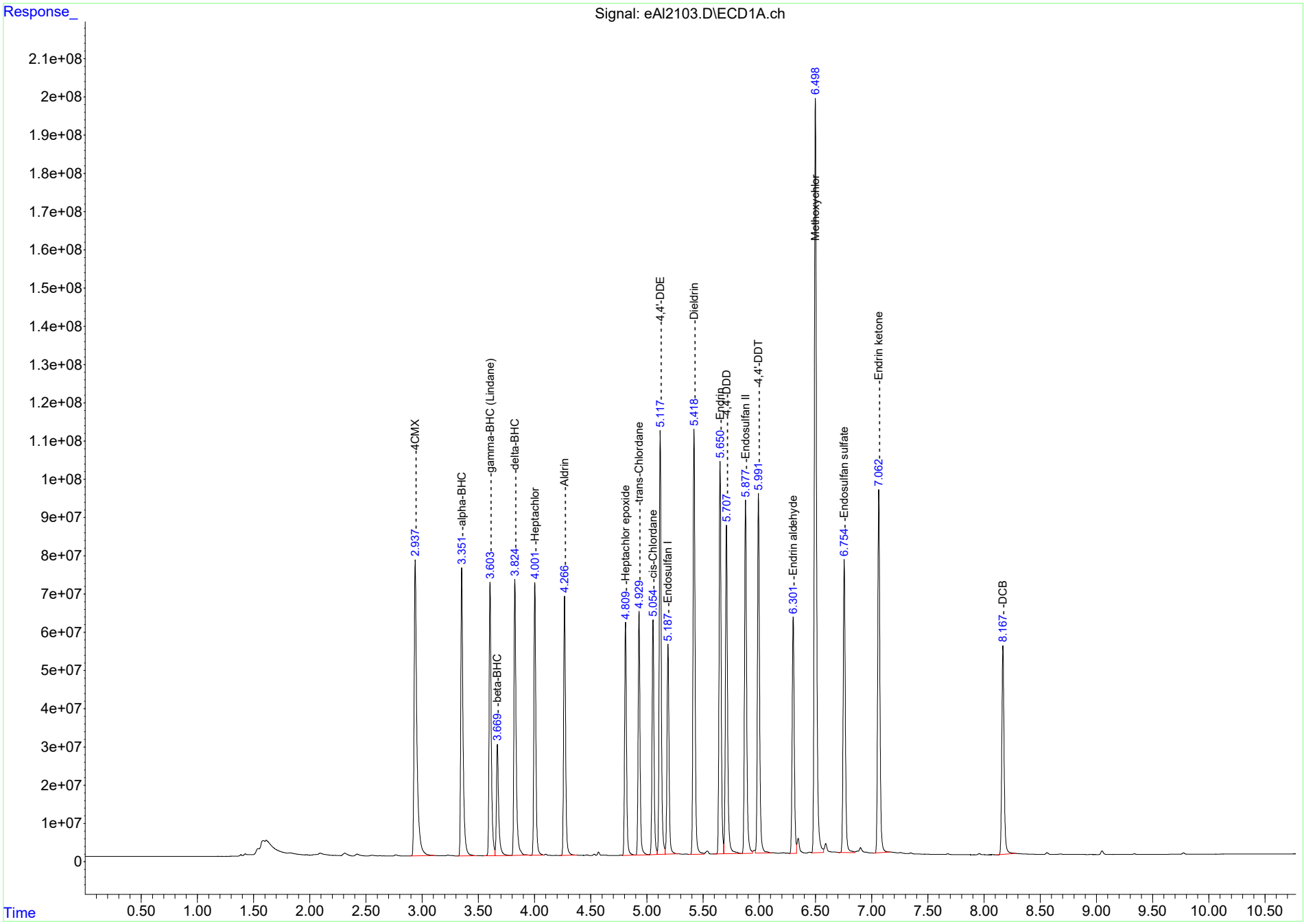
Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.938	2.938	0.000	1299139309	210.138	3.227	3.227	0.000	2226628960	199.056
DCB	8.167	8.167	0.000	774063846	196.987	9.287	9.287	0.000	1363948768	194.900
Target Compounds										
alpha-BHC	3.352	3.352	0.000	1030849895	106.561	3.743	3.743	0.000	1812786225	98.324
gamma-BHC (Lindane)	3.604	3.604	0.000	921181022	104.778	4.067	4.067	0.000	1615913964	96.960
Heptachlor	4.002	4.002	0.000	849491301	103.861	4.495	4.495	0.000	1492574852	96.246
Aldrin	4.267	4.267	0.000	814936335	103.956	4.820	4.820	0.000	1451525518	96.899
beta-BHC	3.669	3.669	0.000	393320302	98.073	4.132	4.132	0.000	673535066	93.006
delta-BHC	3.825	3.825	0.000	948772006	107.387	4.418	4.418	0.000	1623899533	97.300
Heptachlor epoxide	4.809	4.809	0.000	714608040	103.775	5.381	5.381	0.000	1262758335	96.497
trans-Chlordane	4.929	4.929	0.000	745172018	107.890	5.577	5.577	0.000	1320151300	101.140
cis-Chlordane	5.054	5.054	0.000	726956988	107.775	5.725	5.725	0.000	1294393450	101.667
4,4'-DDE	5.118	5.118	0.000	1339761456	212.781	5.877	5.877	0.000	2360201273	198.297
Endosulfan I	5.187	5.187	0.000	676307013	104.541	5.794	5.794	0.000	1185169959	99.130
Dieldrin	5.419	5.419	0.000	1370224058	207.005	6.081	6.081	0.000	2400520834	192.870
Endrin	5.651	5.651	0.000	1280138948	223.256	6.409	6.409	0.000	2220611800	205.404
Endosulfan II	5.877	5.877	0.000	1207295879	213.338	6.635	6.635	0.000	2131878113	201.593
4,4'-DDD	5.707	5.707	0.000	1140057768	219.632	6.494	6.494	0.000	1970987391	200.335
4,4'-DDT	5.992	5.992	0.000	1195981101	216.068	6.838	6.838	0.000	2094307809	204.784
Endrin aldehyde	6.301	6.301	0.000	787854692	175.476	6.992	6.992	0.000	1406497361	173.349
Methoxychlor	6.499	6.499	0.000	2635461616	981.908	7.585	7.585	0.000	4449555270	926.975
Endosulfan sulfate	6.755	6.755	0.000	1011882699	204.107	7.297	7.297	0.000	1720945694	194.138

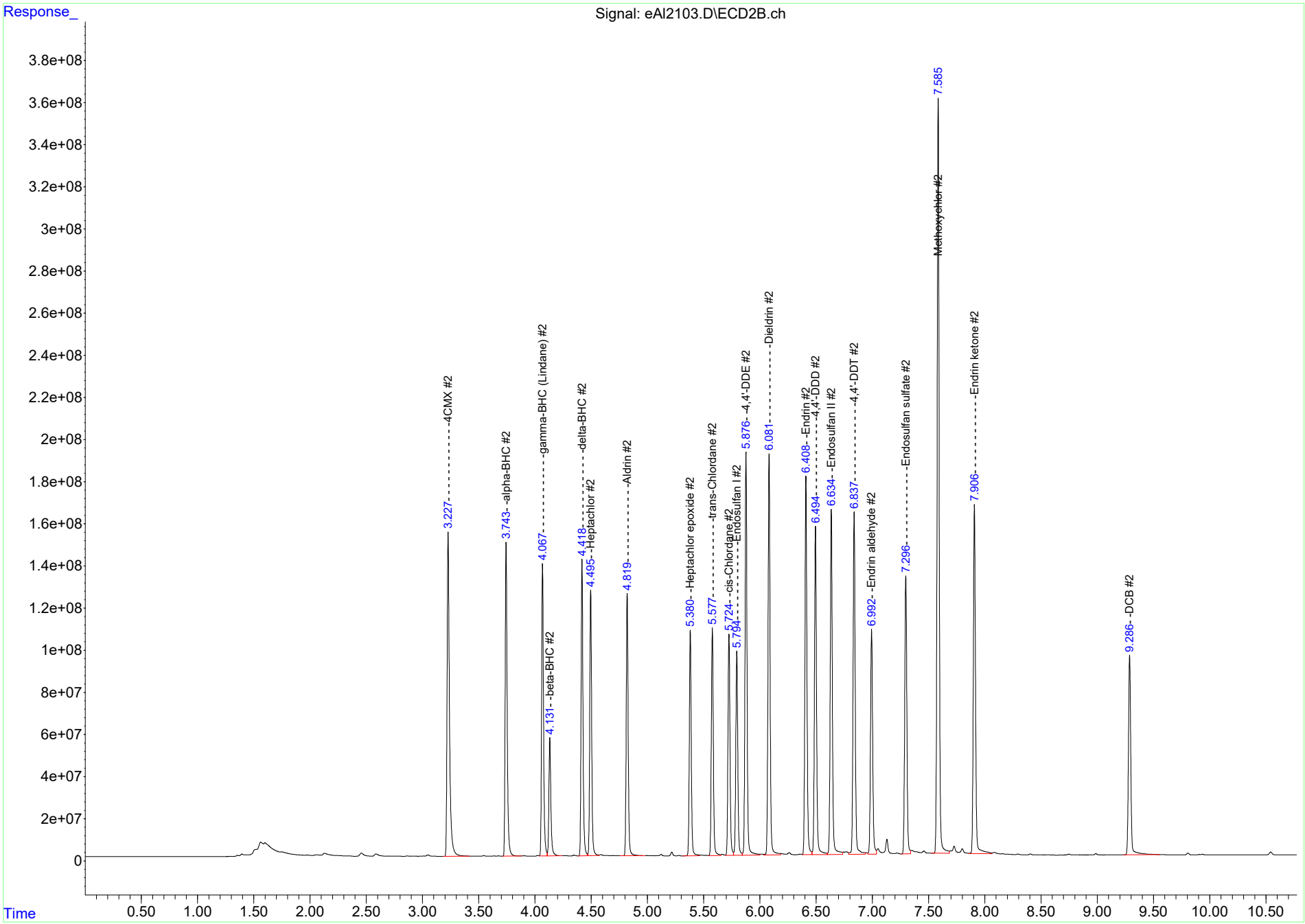
Endrin ketone	7.062	7.062	0.000	1255842472	194.323	7.907	7.907	0.000	2216943408	186.651

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2103.D



Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2103.D



Continuing Calibration Summary

Instrument ID: ECDAA.I_1

Client SDG: 2023-289

Injection Date: 21-DEC-22 07:19

Data File: 122122\eAl2104.D

Init. Cal. Date(s): 01-DEC-22 07:14 - 01-DEC-22 08:20

Lab Sample ID WPE221215-20

Method: 122122\ECDA_PEST_120422.m

Column ID: RTX-CLP

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Toxaphene	190367.25	196124.66	2000	3.02	20		Averaged
Toxaphene(2)	221049.18	232194.41	2000	5.04	20		Averaged
Toxaphene(3)	260115.55	277500.17	2000	6.68	20		Averaged
Toxaphene(4)	268552.83	279031.73	2000	3.9	20		Averaged
Toxaphene(5)	170772.84	179846.26	2000	5.31	20		Averaged

Continuing Calibration Summary

Instrument ID: ECDAA.I_2

Client SDG: 2023-289

Injection Date: 21-DEC-22 07:19

Data File: 122122\eAl2104.D

Init. Cal. Date(s): 01-DEC-22 07:14 - 01-DEC-22 08:20

Lab Sample ID WPE221215-20

Method: 122122\ECDA_PEST_120422.m

Column ID: RTX-CLP

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Toxaphene	522669.02	546158.96	2000	4.49	20		Averaged
Toxaphene(2)	301061.02	318758.72	2000	5.88	20		Averaged
Toxaphene(3)	399119.32	434317.44	2000	8.82	20		Averaged
Toxaphene(4)	471379.79	511686.83	2000	8.55	20		Averaged
Toxaphene(5)	465934.82	511097.73	2000	9.69	20		Averaged

Quantitation (Manual Int.) Report
GEL Laboratories, LLC

12/21/2022

12/22/2022

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2104.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Dec 2022 07:19 (#1); 21 Dec 2022 07:19 (#2)
Operator : JXM InstName : ECDA
Sample : |WPE221215-20|CCV|1|SVP|1|TOX-CCV
Misc : |MIX[Q]
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 21 08:01:09 2022
Quant Method : D:\MSDCHEM\1\Data\122122\ECDA_PEST_120422.m
Quant Title : ECD5 SubList :
QLast Update : Wed Dec 21 07:56:34 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um Signal #2 Info : 250 um

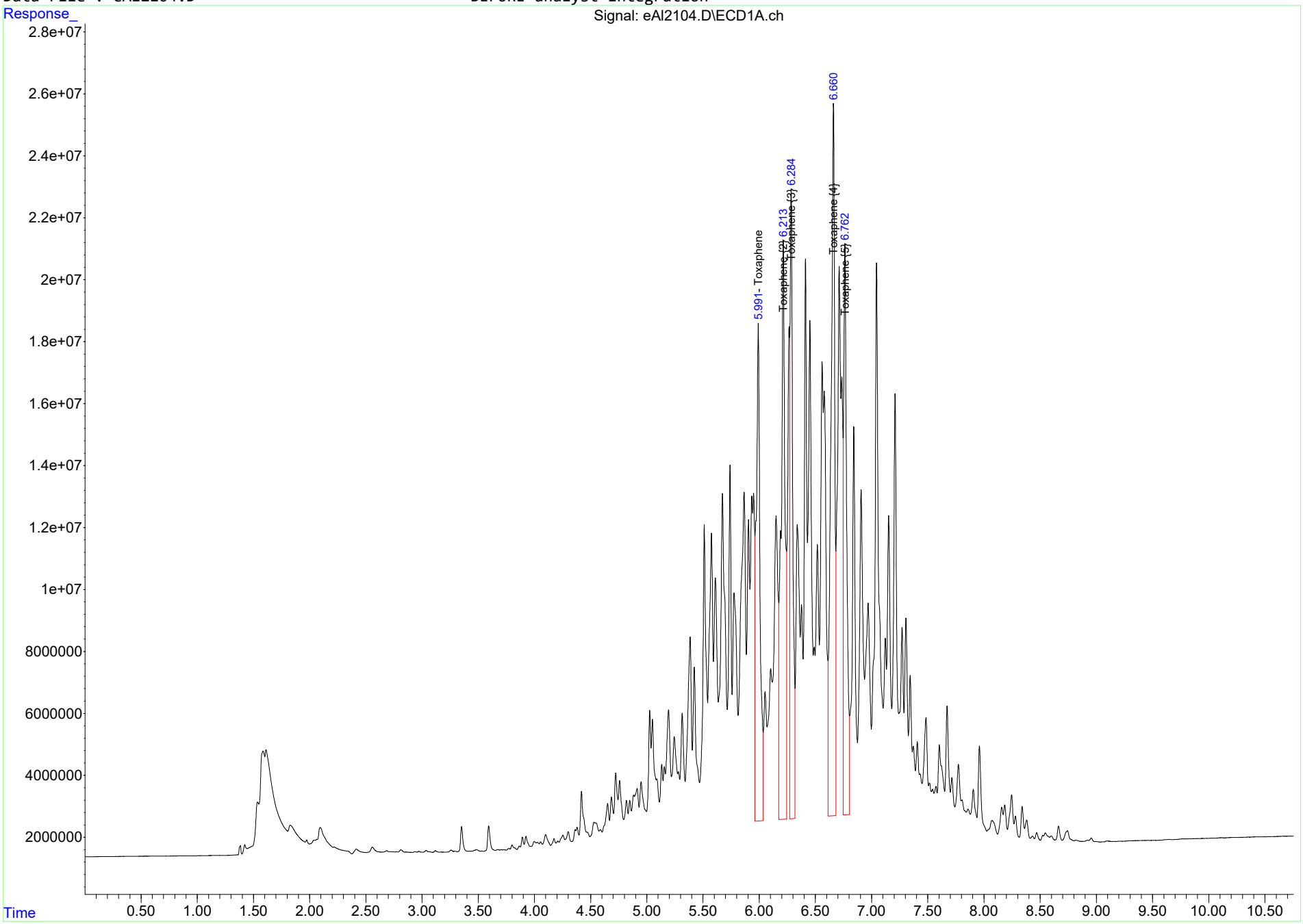
System Monitoring Compounds

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Toxaphene	5.991	5.991	0.000	392249319	2060.487	6.722	6.722	0.000	1092317929	2089.885
Toxaphene {2}	6.214	6.214	0.000	464388812	2100.839	7.001	7.001	0.000	637517430	2117.569
Toxaphene {3}	6.284	6.284	0.000	555000340	2133.668m	7.242	7.242	0.000	868634873	2176.379
Toxaphene {4}	6.660	6.660	0.000	558063461	2078.040	7.579	7.579	0.000	1023373660	2171.017
Toxaphene {5}	6.762	6.762	0.000	359692510	2106.263	7.631	7.631	0.000	1022195463	2193.859
Sum Toxaphene				2329394442	10479.298				4644039355	10748.709
Average Toxaphene					2095.860					2149.742

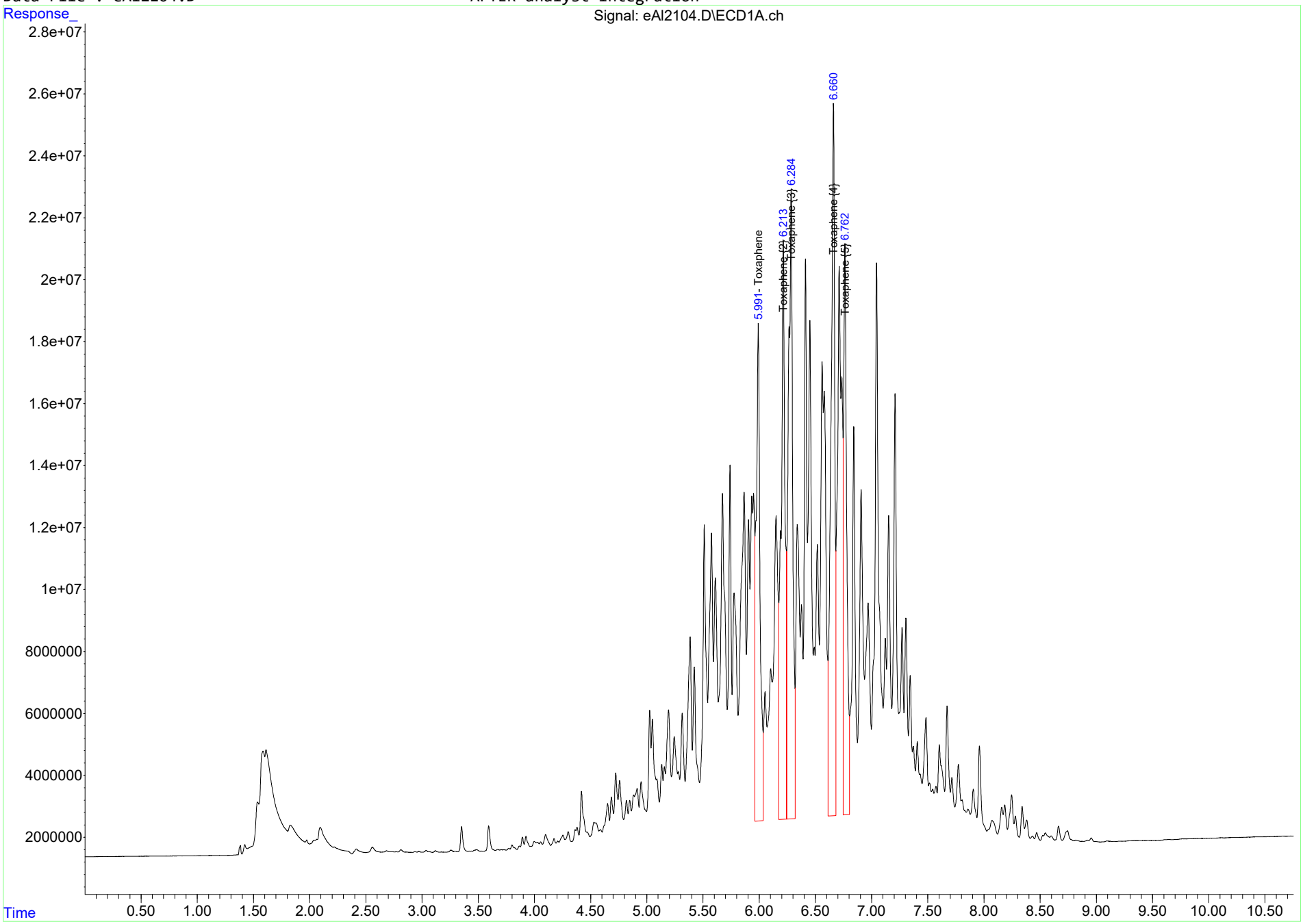
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2104.D BEFORE analyst integration



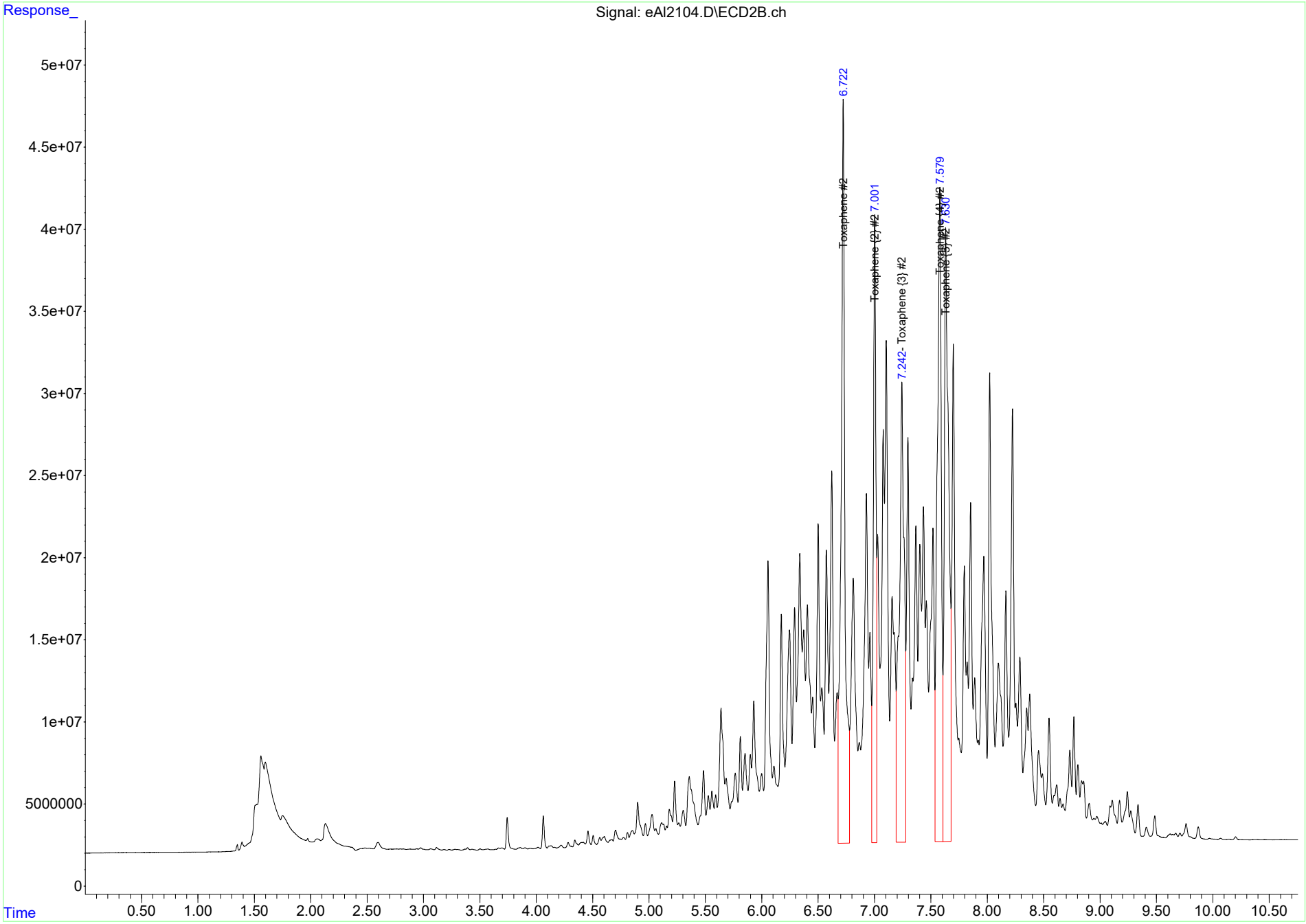
ECDA_PEST_120422.m Wed Dec 21 08:01:49 2022 Page: 2

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2104.D AFTER analyst integration



ECDA_PEST_120422.m Wed Dec 21 08:01:50 2022 Page: 3

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2104.D



ECDA_PEST_120422.m Wed Dec 21 08:01:51 2022 Page: 4

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
Target Compounds										
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Toxaphene	5.992	5.991	-0.001	392249319	2060.487	6.722	6.722	0.000	1092317929	2089.885
Toxaphene {2}	6.214	6.214	0.000	464388812	2100.839	7.002	7.001	-0.001	637517430	2117.569
Toxaphene {3}	6.285	6.284	-0.001	353246152	1358.035	7.242	7.242	0.000	868634873	2176.379
Toxaphene {4}	6.661	6.660	-0.001	558063461	2078.040	7.578	7.579	0.001	1023373660	2171.017
Toxaphene {5}	6.762	6.762	0.000	359692510	2106.263	7.632	7.631	-0.001	1022195463	2193.859
Sum Toxaphene				2127640253	9703.665				4644039355	10748.709
Average Toxaphene					1940.733					2149.742

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2104.D

Toxaphene {3} - Manual Integration == AB/AP

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2105.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Dec 2022 07:35 (#1); 21 Dec 2022 07:35 (#2)
Operator : JXM InstName : ECDA
Sample : |WPE221212-00|CCV|1|SVP|1|CHLOR-CCV
Misc : |MIX[V]
ALS Vial : 5 Sample Multiplier: 1

Jxm 12/21/2022

JC 12/22/2022

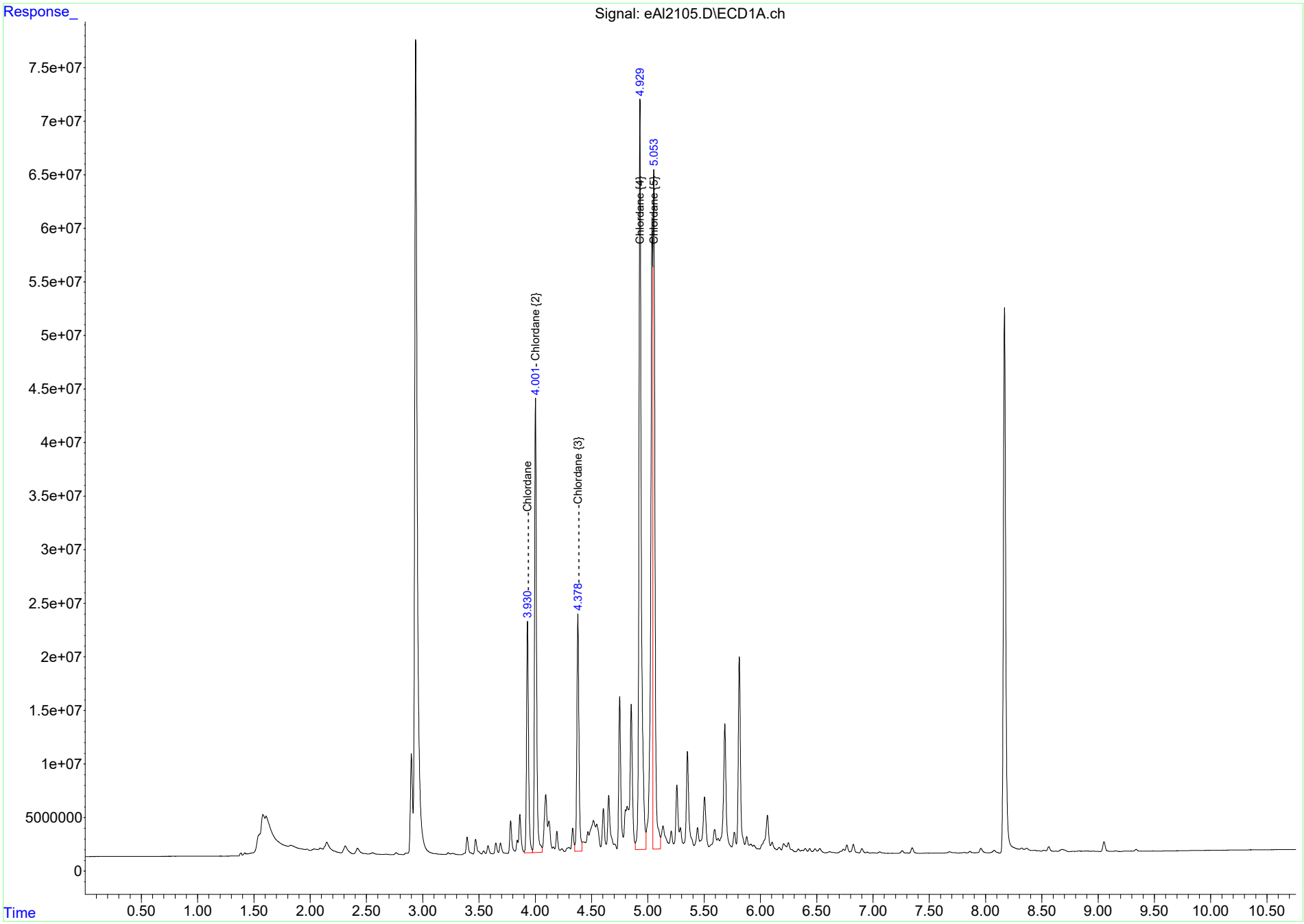
Quant Time: Dec 21 08:02:36 2022
Quant Method : D:\MSDCHEM\1\Data\122122\ECDA_PEST_120422.m
Quant Title : ECD5 SubList :
QLast Update : Mon Dec 19 11:11:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
Target Compounds										
Chlordane	3.930	3.930	0.000	256745626	1057.688	4.353	4.353	0.000	482405064	999.285
Chlordane {2}	4.002	4.002	0.000	502565912	1080.020	4.495	4.495	0.000	914141949	993.759
Chlordane {3}	4.378	4.378	0.000	283264913	1032.794	4.947	4.947	0.000	481982937	955.176
Chlordane {4}	4.930	4.930	0.000	993041752	1089.980	5.577	5.577	0.000	1589762631	1036.279
Chlordane {5}	5.053	5.053	0.000	793978242	1093.750	5.725	5.725	0.000	1328692664	1039.914
Sum Chlordane				2829596446	5354.233				4796985244	5024.412
Average Chlordane					1070.847					1004.882

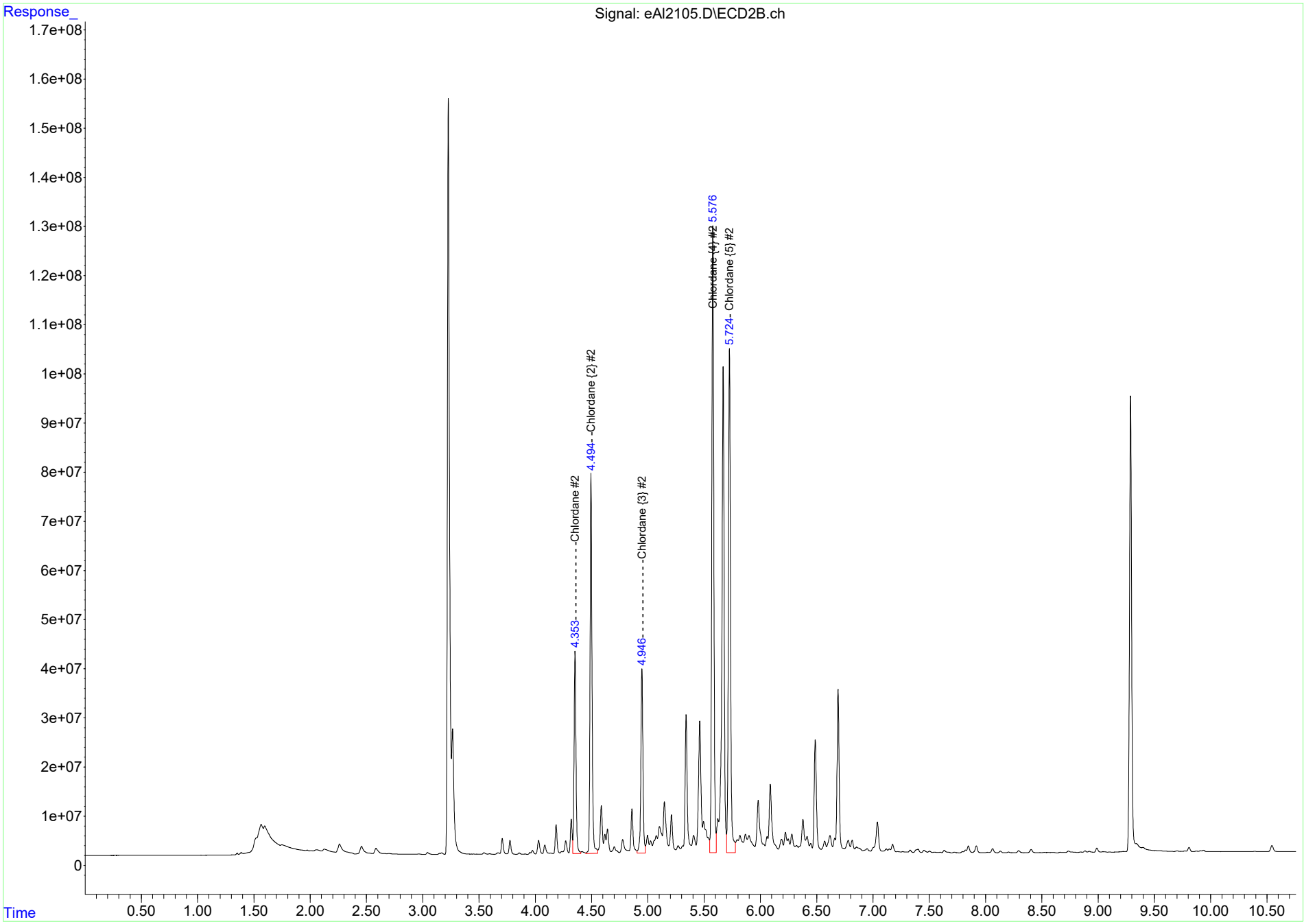
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2105.D



ECDA_PEST_120422.m Wed Dec 21 08:02:47 2022 Page: 2

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2105.D



ECDA_PEST_120422.m Wed Dec 21 08:02:48 2022 Page: 3

Continuing Calibration Summary

Instrument ID: ECDAA.I_1

Client SDG: 2023-289

Injection Date: 21-DEC-22 09:35

Data File: 122122\eAl2112.D

Init. Cal. Date(s): 01-DEC-22 07:14 - 01-DEC-22 08:20

Lab Sample ID WPE221107-10

Method: 122122\ECDA_PEST_120422.m

Column ID: RTX-CLP

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
4,4'-DDT	5535207.04	5961593.15	200	7.7	20		Averaged
Aldrin	7839246.68	8246530.78	100	5.2	20		Averaged
Dieldrin	6619287.16	6911416.98	200	4.41	20		Averaged
Endosulfan I	6469282.31	6879723	100	6.34	20		Averaged
Endosulfan II	5659063.44	6130690.88	200	8.33	20		Averaged
Endrin	5733941.25	5562602.86	200	-2.99	20		Averaged
Heptachlor	8179139.42	8489950.21	100	3.8	20		Averaged
alpha-BHC	9673779.15	10356265.67	100	7.06	20		Averaged
beta-BHC	4010502.08	3971899.29	100	-0.96	20		Averaged
cis-Chlordane	6745157.77	7356781.19	100	9.07	20		Averaged
gamma-BHC (Lindane)	8791736.98	9277561.29	100	5.53	20		Averaged
trans-Chlordane	6906782.44	7522856.32	100	8.92	20		Averaged
4cmx(Surr)	6182321.84	6495436.83	200	5.06	20		Averaged
Decachlorobiphenyl(Surr)	3929511.97	3952486.53	200	0.58	20		Averaged

Continuing Calibration Summary

Instrument ID: ECDAA.I_2

Client SDG: 2023-289

Injection Date: 21-DEC-22 09:35

Data File: 122122\eAl2112.D

Init. Cal. Date(s): 01-DEC-22 07:14 - 01-DEC-22 08:20

Lab Sample ID WPE221107-10

Method: 122122\ECDA_PEST_120422.m

Column ID: RTX-CLP

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
4,4'-DDT	10226894.91	10288301.39	200	0.6	20		Averaged
Aldrin	14979735.29	14713583.06	100	-1.78	20		Averaged
Dieldrin	12446325.99	12274601.14	200	-1.38	20		Averaged
Endosulfan I	11955735.49	12095624.53	100	1.17	20		Averaged
Endosulfan II	10575161.58	10941780.89	200	3.47	20		Averaged
Endrin	10810920.93	9864357.29	200	-8.76	20		Averaged
Heptachlor	15507923.11	15026818.67	100	-3.1	20		Averaged
alpha-BHC	18436854.55	18303732.63	100	-0.72	20		Averaged
beta-BHC	7241851.01	6826842.73	100	-5.73	20		Averaged
cis-Chlordane	12731662.34	13183967.04	100	3.55	20		Averaged
gamma-BHC (Lindane)	16665725.51	16356266.26	100	-1.86	20		Averaged
trans-Chlordane	13052659.37	13452577.09	100	3.06	20		Averaged
4cmx(Surr)	11185926.62	11191566	200	0.05	20		Averaged
Decachlorobiphenyl(Surr)	6998183.51	7008936.05	200	0.15	20		Averaged

Quantitation Report
GEL Laboratories, LLC

JXM 12/21/2022

JC 12/22/2022

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2112.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Dec 2022 09:35 (#1); 21 Dec 2022 09:35 (#2)
Operator : JXM InstName : ECDA
Sample : |WPE221107-10|CCV|1|SVP|1|AB-CCV
Misc : |MIX[P]
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 21 09:49:56 2022
Quant Method : D:\MSDCHEM\1\Data\122122\ECDA_PEST_120422.m
Quant Title : ECD5 SubList :
QLast Update : Mon Dec 19 11:11:48 2022
Response via : Initial Calibration
Integrator: ChemStation

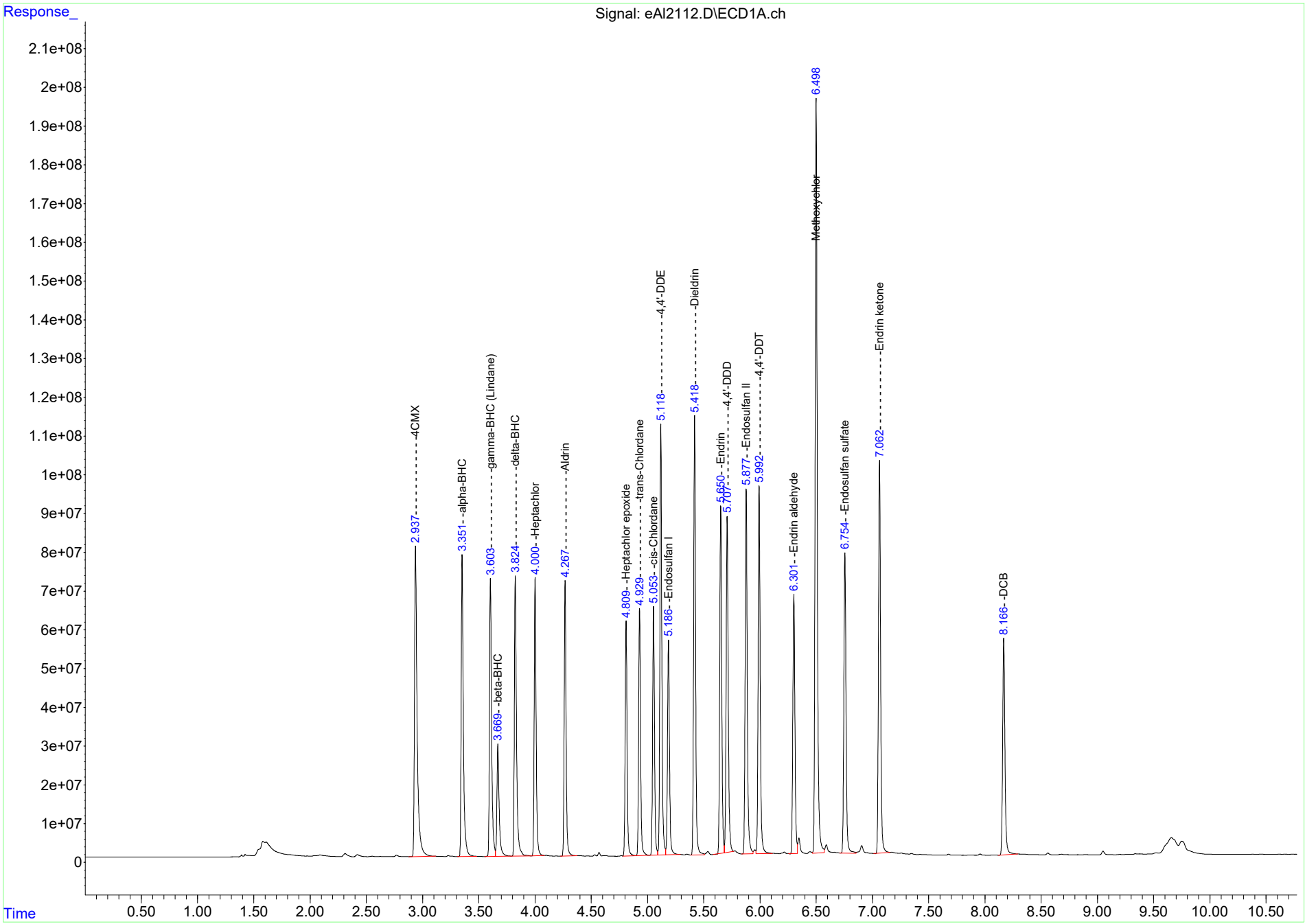
Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.938	2.937	-0.001	1299087365	210.129	3.227	3.228	0.001	2238313199	200.101
DCB	8.167	8.167	0.000	790497306	201.169	9.287	9.287	0.000	1401787209	200.307
Target Compounds										
alpha-BHC	3.352	3.352	0.000	1035626567	107.055	3.743	3.743	0.000	1830373263	99.278
gamma-BHC (Lindane)	3.604	3.603	-0.001	927756129	105.526	4.067	4.067	0.000	1635626626	98.143
Heptachlor	4.002	4.001	-0.001	848995021	103.800	4.495	4.496	0.001	1502681867	96.898
Aldrin	4.267	4.267	0.000	824653078	105.195	4.820	4.820	0.000	1471358306	98.223
beta-BHC	3.669	3.670	0.001	397189929	99.037	4.132	4.133	0.001	682684273	94.269
delta-BHC	3.825	3.824	-0.001	958675921	108.508	4.418	4.418	0.000	1664390630	99.726
Heptachlor epoxide	4.809	4.809	0.000	722173245	104.873	5.381	5.382	0.001	1290935933	98.650
trans-Chlordane	4.929	4.929	0.000	752285632	108.920	5.577	5.577	0.000	1345257709	103.064
cis-Chlordane	5.054	5.054	0.000	735678119	109.068	5.725	5.725	0.000	1318396704	103.553
4,4'-DDE	5.118	5.118	0.000	1355619438	215.300	5.877	5.876	-0.001	2401140304	201.736
Endosulfan I	5.187	5.187	0.000	687972300	106.344	5.794	5.794	0.000	1209562453	101.170
Dieldrin	5.419	5.419	0.000	1382283395	208.827	6.081	6.081	0.000	2454920227	197.241
Endrin	5.651	5.651	0.000	1112520572	194.024	6.409	6.409	0.000	1972871458	182.489
Endosulfan II	5.877	5.877	0.000	1226138175	216.668	6.635	6.634	-0.001	2188356178	206.934
4,4'-DDD	5.707	5.708	0.001	1112309464	214.286	6.494	6.494	0.000	2007440200	204.040
4,4'-DDT	5.992	5.992	0.000	1192318630	215.406	6.838	6.838	0.000	2057660277	201.201
Endrin aldehyde	6.301	6.301	0.000	862976706	192.207	6.992	6.992	0.000	1548977591	190.910
Methoxychlor	6.499	6.499	0.000	2608267733	971.776	7.585	7.585	0.000	4418783053	920.564
Endosulfan sulfate	6.755	6.755	0.000	1030678512	207.899	7.297	7.297	0.000	1754770213	197.953

Endrin ketone	7.062	7.063	0.001	1321994778	204.560	7.907	7.907	0.000	2354016564	198.191

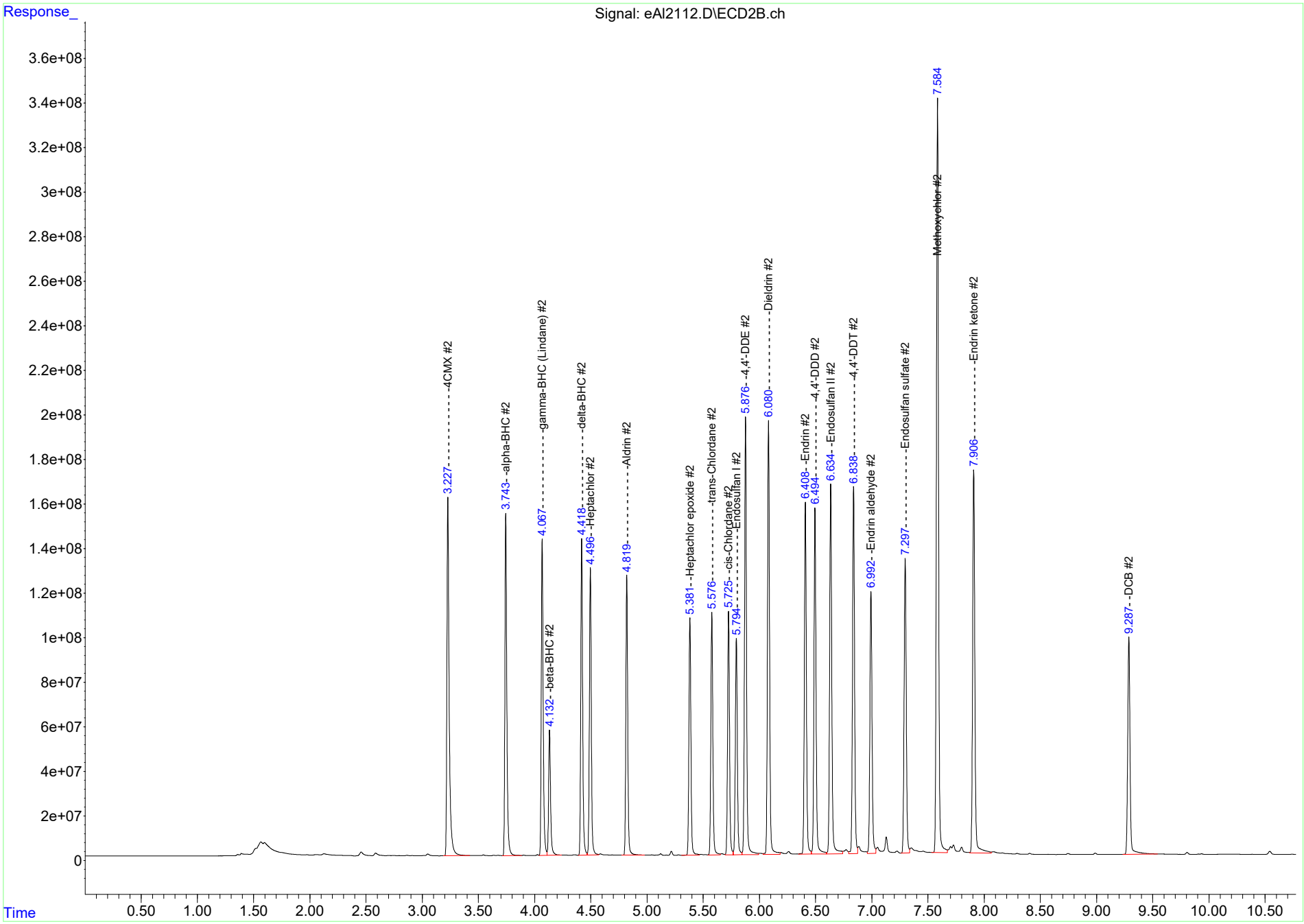
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2112.D



ECDA_PEST_120422.m Wed Dec 21 09:50:20 2022 Page: 3

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2112.D



Continuing Calibration Summary

Instrument ID: ECDAA.I_1

Client SDG: 2023-289

Injection Date: 21-DEC-22 13:19

Data File: 122122\eAl2123.D

Init. Cal. Date(s): 01-DEC-22 07:14 - 01-DEC-22 08:20

Lab Sample ID WPE221107-10

Method: 122122\ECDA_PEST_120422.m

Column ID: RTX-CLP

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
4,4'-DDT	5535207.04	5641776.64	200	1.93	20		Averaged
Aldrin	7839246.68	8265498.59	100	5.44	20		Averaged
Dieldrin	6619287.16	6944765.29	200	4.92	20		Averaged
Endosulfan I	6469282.31	6919086.71	100	6.95	20		Averaged
Endosulfan II	5659063.44	6211384.92	200	9.76	20		Averaged
Endrin	5733941.25	4865290.19	200	-15.15	20		Averaged
Heptachlor	8179139.42	8390758.53	100	2.59	20		Averaged
alpha-BHC	9673779.15	10413258.39	100	7.64	20		Averaged
beta-BHC	4010502.08	3979843.21	100	-0.76	20		Averaged
cis-Chlordane	6745157.77	7379172.15	100	9.4	20		Averaged
gamma-BHC (Lindane)	8791736.98	9283727.47	100	5.6	20		Averaged
trans-Chlordane	6906782.44	7559612.95	100	9.45	20		Averaged
4cmx(Surr)	6182321.84	6558254.45	200	6.08	20		Averaged
Decachlorobiphenyl(Surr)	3929511.97	3962137.79	200	0.83	20		Averaged

Continuing Calibration Summary

Instrument ID: ECDAA.I_2

Client SDG: 2023-289

Injection Date: 21-DEC-22 13:19

Data File: 122122\eAl2123.D

Init. Cal. Date(s): 01-DEC-22 07:14 - 01-DEC-22 08:20

Lab Sample ID WPE221107-10

Method: 122122\ECDA_PEST_120422.m

Column ID: RTX-CLP

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
4,4'-DDT	10226894.91	9829853.74	200	-3.88	20		Averaged
Aldrin	14979735.29	14848415.36	100	-0.88	20		Averaged
Dieldrin	12446325.99	12428504.31	200	-0.14	20		Averaged
Endosulfan I	11955735.49	12274174.24	100	2.66	20		Averaged
Endosulfan II	10575161.58	11131727.89	200	5.26	20		Averaged
Endrin	10810920.93	8667697.16	200	-19.82	20		Averaged
Heptachlor	15507923.11	15039237.12	100	-3.02	20		Averaged
alpha-BHC	18436854.55	18411547.1	100	-0.14	20		Averaged
beta-BHC	7241851.01	6898348.96	100	-4.74	20		Averaged
cis-Chlordane	12731662.34	13306539.43	100	4.52	20		Averaged
gamma-BHC (Lindane)	16665725.51	16462075.85	100	-1.22	20		Averaged
trans-Chlordane	13052659.37	13609495.13	100	4.27	20		Averaged
4cmx(Surr)	11185926.62	11319626.58	200	1.2	20		Averaged
Decachlorobiphenyl(Surr)	6998183.51	7107476.76	200	1.56	20		Averaged

Quantitation Report
GEL Laboratories, LLC

12/21/2022

12/22/2022

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2123.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Dec 2022 13:19 (#1); 21 Dec 2022 13:19 (#2)
Operator : JXM InstName : ECDA
Sample : |WPE221107-10|CCV|1|SVP|1|AB-CCV
Misc : |MIX[P]
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 21 13:43:59 2022
Quant Method : D:\MSDCHEM\1\Data\122122\ECDA_PEST_120422.m
Quant Title : ECD5 SubList :
QLast Update : Mon Dec 19 11:11:48 2022
Response via : Initial Calibration
Integrator: ChemStation

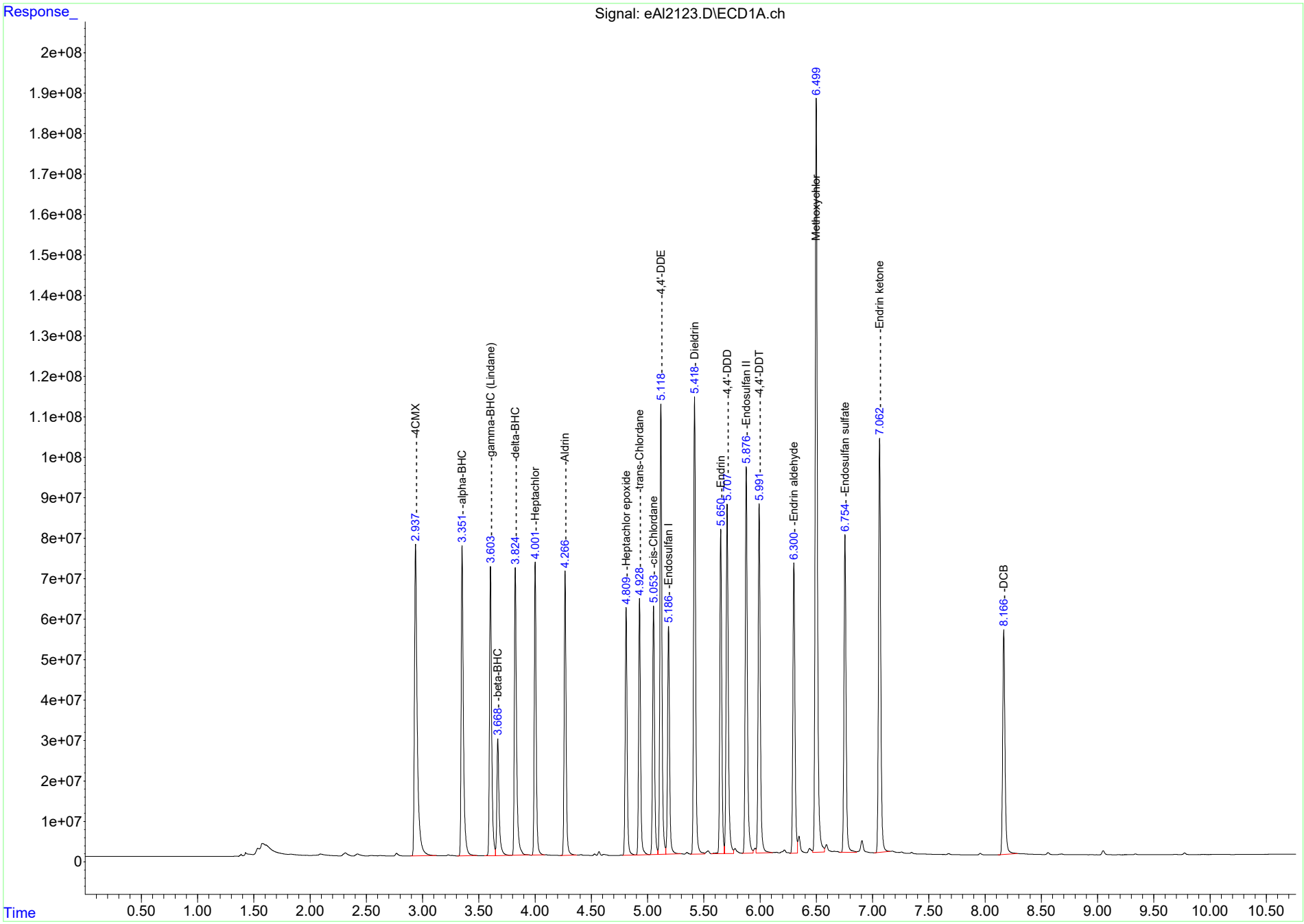
Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.938	2.938	0.000	1311650890	212.162	3.227	3.227	0.000	2263925315	202.391
DCB	8.167	8.166	-0.001	792427558	201.661	9.287	9.287	0.000	1421495351	203.123
Target Compounds										
alpha-BHC	3.352	3.351	-0.001	1041325839	107.644	3.743	3.743	0.000	1841154710	99.863
gamma-BHC (Lindane)	3.604	3.603	-0.001	928372747	105.596	4.067	4.067	0.000	1646207585	98.778
Heptachlor	4.002	4.001	-0.001	839075853	102.587	4.495	4.495	0.000	1503923712	96.978
Aldrin	4.267	4.267	0.000	826549859	105.437	4.820	4.820	0.000	1484841536	99.123
beta-BHC	3.669	3.669	0.000	397984321	99.236	4.132	4.132	0.000	689834896	95.257
delta-BHC	3.825	3.824	-0.001	949876560	107.512	4.418	4.418	0.000	1666470955	99.851
Heptachlor epoxide	4.809	4.809	0.000	725753723	105.393	5.381	5.381	0.000	1304612107	99.695
trans-Chlordane	4.929	4.929	0.000	755961295	109.452	5.577	5.577	0.000	1360949513	104.266
cis-Chlordane	5.054	5.053	-0.001	737917215	109.400	5.725	5.725	0.000	1330653943	104.515
4,4'-DDE	5.118	5.118	0.000	1355771678	215.324	5.877	5.877	0.000	2430801421	204.228
Endosulfan I	5.187	5.187	0.000	691908671	106.953	5.794	5.795	0.001	1227417424	102.663
Dieldrin	5.419	5.418	-0.001	1388953058	209.834	6.081	6.081	0.000	2485700861	199.714
Endrin	5.651	5.651	0.000	973058038	169.701	6.409	6.409	0.000	1733539432	160.351
Endosulfan II	5.877	5.877	0.000	1242276984	219.520	6.635	6.634	-0.001	2226345577	210.526
4,4'-DDD	5.707	5.707	0.000	1154471334	222.409	6.494	6.494	0.000	2064363922	209.826
4,4'-DDT	5.992	5.992	0.000	1128355328	203.851	6.838	6.838	0.000	1965970748	192.235
Endrin aldehyde	6.301	6.301	0.000	922894961	205.553	6.992	6.993	0.001	1665652543	205.290
Methoxychlor	6.499	6.499	0.000	2458276292	915.893	7.585	7.584	-0.001	4219580120	879.064
Endosulfan sulfate	6.755	6.755	0.000	1021977214	206.143	7.297	7.298	0.001	1764227808	199.020

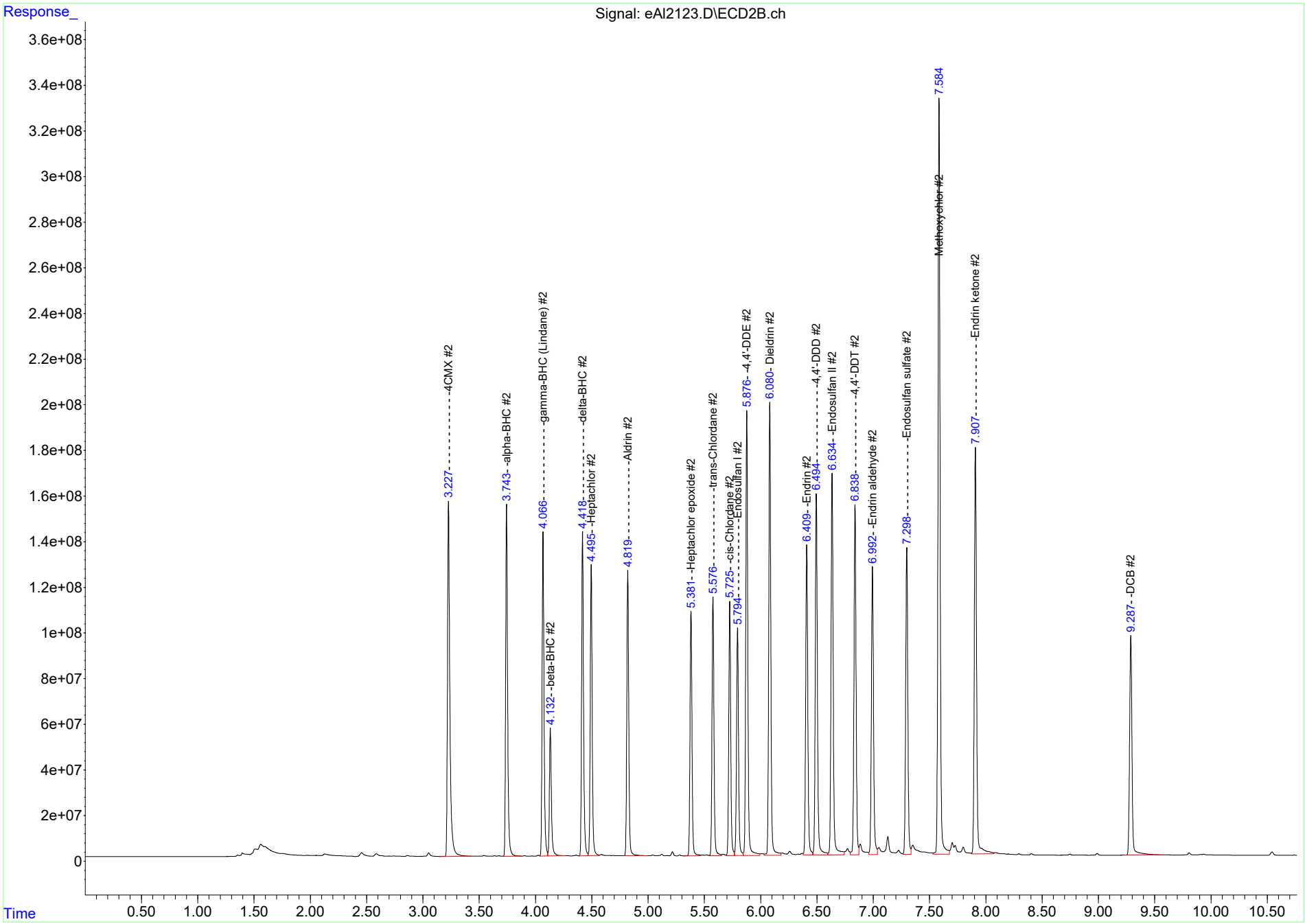
Endrin ketone	7.062	7.062	0.000	1372172711	212.324	7.907	7.907	0.000	2478273657	208.653

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2123.D



Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2123.D



Lab Name: GEL Laboratories LLC **Client SDG:** 2023-289

GC Column: RTX-CLP

Instrument ID: ECDAA.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

Mean Surrogate RT From Initial Calibration: **RT Range Based on Calibration Verification:**				2.94 2.91 2.97 #	8.18 8.15 8.21 #
File	**Sample Number**	**Lab Sample ID**	**Analysis Date**	**4cmx**	**Decachlorobiphenyl**
eAl0104.D	ICAL	WPE221201-41	01-DEC-22 07:14	NA	NA
eAl0105.D	ICAL	WPE221201-42	01-DEC-22 07:30	NA	NA
eAl0106.D	ICAL	WPE221201-43	01-DEC-22 07:47	NA	NA
eAl0107.D	ICAL	WPE221201-44	01-DEC-22 08:03	NA	NA
eAl0108.D	ICAL	IPE221024-40	01-DEC-22 08:20	NA	NA
eAl0109.D	ICV	WPE221014-20	01-DEC-22 08:36	NA	NA

Column used to flag retention time values with an asterisk.

Lab Name: GEL Laboratories LLC **Client SDG:** 2023-289

GC Column: RTX-CLP

Instrument ID: ECDAA.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

Mean Surrogate RT From Initial Calibration: **RT Range Based on Calibration Verification:**				3.23 3.2 3.26 #	9.28 9.25 9.31 #
File	**Sample Number**	**Lab Sample ID**	**Analysis Date**	**4cmx**	**Decachlorobiphenyl**
eAl0104.D	ICAL	WPE221201-41	01-DEC-22 07:14	NA	NA
eAl0105.D	ICAL	WPE221201-42	01-DEC-22 07:30	NA	NA
eAl0106.D	ICAL	WPE221201-43	01-DEC-22 07:47	NA	NA
eAl0107.D	ICAL	WPE221201-44	01-DEC-22 08:03	NA	NA
eAl0108.D	ICAL	IPE221024-40	01-DEC-22 08:20	NA	NA
eAl0109.D	ICV	WPE221014-20	01-DEC-22 08:36	NA	NA

Column used to flag retention time values with an asterisk.

Lab Name: GEL Laboratories LLC **Client SDG:** 2023-289

GC Column: RTX-CLP

Instrument ID: ECDAA.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

Mean Surrogate RT From Initial Calibration: **RT Range Based on Calibration Verification:**				2.95 2.92 2.98 #	8.19 8.16 8.22 #
File	**Sample Number**	**Lab Sample ID**	**Analysis Date**	**4cmx**	**Decachlorobiphenyl**
eAl0402.D	PEM	WPE221122-99	04-DEC-22 12:46	2.95	8.19
eAl0404.D	CCV	WPE221014-20	04-DEC-22 13:21	NA	NA
eAl0405.D	CCV	WPE220614-00	04-DEC-22 13:38	NA	NA
eAl0406.D	CCV	WPE221123-05	04-DEC-22 13:54	NA	NA
eAl0407.D	ICAL	WPE221203-01	04-DEC-22 14:11	2.95	8.19
eAl0408.D	ICAL	WPE221203-02	04-DEC-22 14:27	2.95	8.19
eAl0409.D	ICAL	WPE221203-03	04-DEC-22 14:44	2.95	8.19
eAl0410.D	ICAL	WPE221203-04	04-DEC-22 15:00	2.95	8.19
eAl0411.D	ICAL	IPE221203-11	04-DEC-22 15:17	2.95	8.19
eAl0412.D	ICV	WPE221203-10	04-DEC-22 15:33	2.95	8.19

Column used to flag retention time values with an asterisk.

Lab Name: GEL Laboratories LLC **Client SDG:** 2023-289

GC Column: RTX-CLP

Instrument ID: ECDAA.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

Mean Surrogate RT From Initial Calibration: **RT Range Based on Calibration Verification:**				3.23 3.2 3.26 #	9.29 9.26 9.32 #
File	**Sample Number**	**Lab Sample ID**	**Analysis Date**	**4cmx**	**Decachlorobiphenyl**
eAl0402.D	PEM	WPE221122-99	04-DEC-22 12:46	3.23	9.29
eAl0404.D	CCV	WPE221014-20	04-DEC-22 13:21	NA	NA
eAl0405.D	CCV	WPE220614-00	04-DEC-22 13:38	NA	NA
eAl0406.D	CCV	WPE221123-05	04-DEC-22 13:54	NA	NA
eAl0407.D	ICAL	WPE221203-01	04-DEC-22 14:11	3.23	9.29
eAl0408.D	ICAL	WPE221203-02	04-DEC-22 14:27	3.23	9.29
eAl0409.D	ICAL	WPE221203-03	04-DEC-22 14:44	3.23	9.29
eAl0410.D	ICAL	WPE221203-04	04-DEC-22 15:00	3.23	9.29
eAl0411.D	ICAL	IPE221203-11	04-DEC-22 15:17	3.23	9.29
eAl0412.D	ICV	WPE221203-10	04-DEC-22 15:33	3.23	9.29

Column used to flag retention time values with an asterisk.

Lab Name: GEL Laboratories LLC **Client SDG:** 2023-289

GC Column: RTX-CLP

Instrument ID: ECDAA.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

Mean Surrogate RT From Initial Calibration:				2.94	8.17
RT Range Based on Calibration Verification:				2.91 2.97 #	8.14 8.2 #
File	**Sample Number**	**Lab Sample ID**	**Analysis Date**	**4cmx**	**Decachlorobiphenyl**
eAl2041.D	CCB	WAR221005-99	20-DEC-22 17:42	2.94	8.17
eAl2042.D	PEM	WPE221122-99	20-DEC-22 17:58	2.94	8.17
eAl2043.D	CCV	WPE221107-10	20-DEC-22 18:15	2.94	8.17
eAl2044.D	CCV	WPE221215-20	20-DEC-22 18:31	NA	NA
eAl2045.D	CCV	WPE221212-00	20-DEC-22 18:48	NA	NA
eAl2046.D	CCV	WPE221123-05	20-DEC-22 19:04	NA	NA
eAl2048.D	MB	1205274607	20-DEC-22 19:20	2.94	8.17
eAl2049.D	BLK01LCS	1205274608	20-DEC-22 19:37	2.94	8.17
eAl2050.D	BLK01TLCS	1205274619	20-DEC-22 19:53	2.94	8.17
eAl2051.D	ZZZZZZZ	ZZZZZZZ	20-DEC-22 20:10	2.94	8.17
eAl2052.D	ZZZZZZZ	ZZZZZZZ	20-DEC-22 20:26	2.94	8.17
eAl2053.D	ZZZZZZZ	ZZZZZZZ	20-DEC-22 20:43	2.94	8.17
eAl2054.D	ZZZZZZZ	ZZZZZZZ	20-DEC-22 20:59	2.94	8.17
eAl2055.D	ZZZZZZZ	ZZZZZZZ	20-DEC-22 21:16	2.94	8.17
eAl2056.D	ZZZZZZZ	ZZZZZZZ	20-DEC-22 21:32	2.94	8.17
eAl2057.D	ZZZZZZZ	ZZZZZZZ	20-DEC-22 21:49	2.94	8.17
eAl2058.D	CCV	WPE221107-10	20-DEC-22 22:05	2.94	8.17

Column used to flag retention time values with an asterisk.

Lab Name: GEL Laboratories LLC **Client SDG:** 2023-289

GC Column: RTX-CLP

Instrument ID: ECDAA.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

Mean Surrogate RT From Initial Calibration:				3.23	9.29
RT Range Based on Calibration Verification:				3.2 3.26 #	9.26 9.32 #
File	**Sample Number**	**Lab Sample ID**	**Analysis Date**	**4cmx**	**Decachlorobiphenyl**
eAl2041.D	CCB	WAR221005-99	20-DEC-22 17:42	3.23	9.29
eAl2042.D	PEM	WPE221122-99	20-DEC-22 17:58	3.23	9.29
eAl2043.D	CCV	WPE221107-10	20-DEC-22 18:15	3.23	9.29
eAl2044.D	CCV	WPE221215-20	20-DEC-22 18:31	NA	NA
eAl2045.D	CCV	WPE221212-00	20-DEC-22 18:48	NA	NA
eAl2046.D	CCV	WPE221123-05	20-DEC-22 19:04	NA	NA
eAl2048.D	MB	1205274607	20-DEC-22 19:20	3.23	9.29
eAl2049.D	BLK01LCS	1205274608	20-DEC-22 19:37	3.23	9.29
eAl2050.D	BLK01TLCS	1205274619	20-DEC-22 19:53	3.23	9.29
eAl2051.D	ZZZZZZZ	ZZZZZZZ	20-DEC-22 20:10	3.23	9.29
eAl2052.D	ZZZZZZZ	ZZZZZZZ	20-DEC-22 20:26	3.23	9.29
eAl2053.D	ZZZZZZZ	ZZZZZZZ	20-DEC-22 20:43	3.23	9.29
eAl2054.D	ZZZZZZZ	ZZZZZZZ	20-DEC-22 20:59	3.23	9.29
eAl2055.D	ZZZZZZZ	ZZZZZZZ	20-DEC-22 21:16	3.23	9.29
eAl2056.D	ZZZZZZZ	ZZZZZZZ	20-DEC-22 21:32	3.23	9.29
eAl2057.D	ZZZZZZZ	ZZZZZZZ	20-DEC-22 21:49	3.23	9.29
eAl2058.D	CCV	WPE221107-10	20-DEC-22 22:05	3.23	9.29

Column used to flag retention time values with an asterisk.

Lab Name: GEL Laboratories LLC **Client SDG:** 2023-289

GC Column: RTX-CLP

Instrument ID: ECDAA.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

Mean Surrogate RT From Initial Calibration: **RT Range Based on Calibration Verification:**				2.94 2.91 2.97 #	8.17 8.14 8.2 #
File	**Sample Number**	**Lab Sample ID**	**Analysis Date**	**4cmx**	**Decachlorobiphenyl**
eAl2101.D	CCB	WAR221005-99	21-DEC-22 06:29	2.94	8.16
eAl2102.D	PEM	WPE221122-99	21-DEC-22 06:46	2.94	8.17
eAl2103.D	CCV	WPE221107-10	21-DEC-22 07:02	2.94	8.17
eAl2104.D	CCV	WPE221215-20	21-DEC-22 07:19	NA	NA
eAl2105.D	CCV	WPE221212-00	21-DEC-22 07:35	NA	NA
eAl2106.D	CCV	WPE221123-05	21-DEC-22 07:52	NA	NA
eAl2107.D	CCB	WAR221005-99	21-DEC-22 08:08	2.94	8.17
eAl2111.D	ZZZZZZZ	ZZZZZZZ	21-DEC-22 09:14	2.94	8.17
eAl2112.D	CCV	WPE221107-10	21-DEC-22 09:35	2.94	8.17
eAl2113.D	CCB	WAR221005-99	21-DEC-22 09:51	2.94	8.17
eAl2116.D	SMEB01-23-265371	604449002	21-DEC-22 10:56	2.95	8.17
eAl2117.D	SMEB01-23-265371MS	1205274611	21-DEC-22 11:16	2.95	8.17
eAl2118.D	SMEB01-23-265371MSD	1205274612	21-DEC-22 11:37	2.95	8.17
eAl2119.D	SMEB02-23-265372	604449006	21-DEC-22 11:57	2.95	8.16
eAl2120.D	SMEB03-23-265373	604449010	21-DEC-22 12:18	2.94	8.16
eAl2121.D	SMEB04-23-265374	604449014	21-DEC-22 12:38	2.94	8.16
eAl2122.D	SMEB05-23-265375	604449018	21-DEC-22 12:59	2.94	8.16
eAl2123.D	CCV	WPE221107-10	21-DEC-22 13:19	2.94	8.17

Column used to flag retention time values with an asterisk.

Lab Name: GEL Laboratories LLC **Client SDG:** 2023-289

GC Column: RTX-CLP

Instrument ID: ECDAA.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

Mean Surrogate RT From Initial Calibration:				3.23	9.29
RT Range Based on Calibration Verification:				3.2 3.26 #	9.26 9.32 #
File	**Sample Number**	**Lab Sample ID**	**Analysis Date**	**4cmx**	**Decachlorobiphenyl**
eAl2101.D	CCB	WAR221005-99	21-DEC-22 06:29	3.23	9.29
eAl2102.D	PEM	WPE221122-99	21-DEC-22 06:46	3.23	9.29
eAl2103.D	CCV	WPE221107-10	21-DEC-22 07:02	3.23	9.29
eAl2104.D	CCV	WPE221215-20	21-DEC-22 07:19	NA	NA
eAl2105.D	CCV	WPE221212-00	21-DEC-22 07:35	NA	NA
eAl2106.D	CCV	WPE221123-05	21-DEC-22 07:52	NA	NA
eAl2107.D	CCB	WAR221005-99	21-DEC-22 08:08	3.23	9.29
eAl2111.D	ZZZZZZZ	ZZZZZZZ	21-DEC-22 09:14	3.23	9.29
eAl2112.D	CCV	WPE221107-10	21-DEC-22 09:35	3.23	9.29
eAl2113.D	CCB	WAR221005-99	21-DEC-22 09:51	3.23	9.29
eAl2116.D	SMEB01-23-265371	604449002	21-DEC-22 10:56	3.23	9.29
eAl2117.D	SMEB01-23-265371MS	1205274611	21-DEC-22 11:16	3.23	9.29
eAl2118.D	SMEB01-23-265371MSD	1205274612	21-DEC-22 11:37	3.23	9.29
eAl2119.D	SMEB02-23-265372	604449006	21-DEC-22 11:57	3.23	9.29
eAl2120.D	SMEB03-23-265373	604449010	21-DEC-22 12:18	3.23	9.29
eAl2121.D	SMEB04-23-265374	604449014	21-DEC-22 12:38	3.23	9.29
eAl2122.D	SMEB05-23-265375	604449018	21-DEC-22 12:59	3.23	9.29
eAl2123.D	CCV	WPE221107-10	21-DEC-22 13:19	3.23	9.29

Column used to flag retention time values with an asterisk.

Quality Control Data

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**			**Matrix:**	**WATER**
Lab Sample ID:	**1205274607**				
Client Sample:	**QC for batch 2358000**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**MB for batch 2358000**	**Method:**	**SW846 3535A/8081B**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**2358002**	**Inst:**	**ECDAA.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 19:20**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 06:50**	**Aliquot:**	**1000 mL**	**Final Volume:**	**5 mL**
Data File:	**122022a\eAl2048.D**	**Column:**	**1 RTX-CLP**		
	122022a\eAl2048.D		**2 RTX-CLP**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
57-74-9	Chlordane	U	0.0765	ug/L	0.0765	0.250	1
319-84-6	alpha-BHC	U	0.00665	ug/L	0.00665	0.0200	1
58-89-9	gamma-BHC (Lindane)	U	0.00665	ug/L	0.00665	0.0200	1
76-44-8	Heptachlor	U	0.00665	ug/L	0.00665	0.0200	1
309-00-2	Aldrin	U	0.00665	ug/L	0.00665	0.0200	1
319-85-7	beta-BHC	U	0.00665	ug/L	0.00665	0.0200	1
5103-74-2	trans-Chlordane	U	0.00665	ug/L	0.00665	0.0200	1
5103-71-9	cis-Chlordane	U	0.00665	ug/L	0.00665	0.0200	1
959-98-8	Endosulfan I	U	0.00665	ug/L	0.00665	0.0200	1
60-57-1	Dieldrin	U	0.0100	ug/L	0.0100	0.0400	1
72-20-8	Endrin	U	0.0100	ug/L	0.0100	0.0400	1
33213-65-9	Endosulfan II	U	0.0100	ug/L	0.0100	0.0400	1
50-29-3	4,4'-DDT	U	0.0100	ug/L	0.0100	0.0400	1
8001-35-2	Toxaphene	U	0.150	ug/L	0.150	0.500	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
4cmx	0.677	1.00	ug/L	68	(27%-111%)
Decachlorobiphenyl	0.997	1.00	ug/L	100	(33%-129%)

Quantitation Report
GEL Laboratories, LLC

JM 12/21/2022

JC 12/22/2022

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2048.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On   : 20 Dec 2022 19:20 (#1); 20 Dec 2022 19:20 (#2)
Operator : JXM   InstName : ECDA
Sample   : |1205274607|2358002|1|SVP|1|MB|||
Misc   : |ECD5A1B_1L|WATER|QC A|MIX[P,Q,V,W]||
ALS Vial : 8   Sample Multiplier: 1

Quant Time: Dec 21 05:42:00 2022
Quant Method : D:\MSDCHEM\1\Data\122022a\ECDA_PEST_120422.m
Quant Title : ECD5   SubList :
QLast Update : Mon Dec 19 11:11:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   : 1.0 ul
Signal #1 Phase : RTX-CLP1   Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um   Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.938	2.941	0.003	847075877	137.016	3.228	3.228	0.000	1515496662	135.482
DCB	8.168	8.167	-0.001	791585238	201.446	9.289	9.287	-0.002	1395126401	199.356

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	69%	68%
DCB	200.000	No Limits	101%	100%

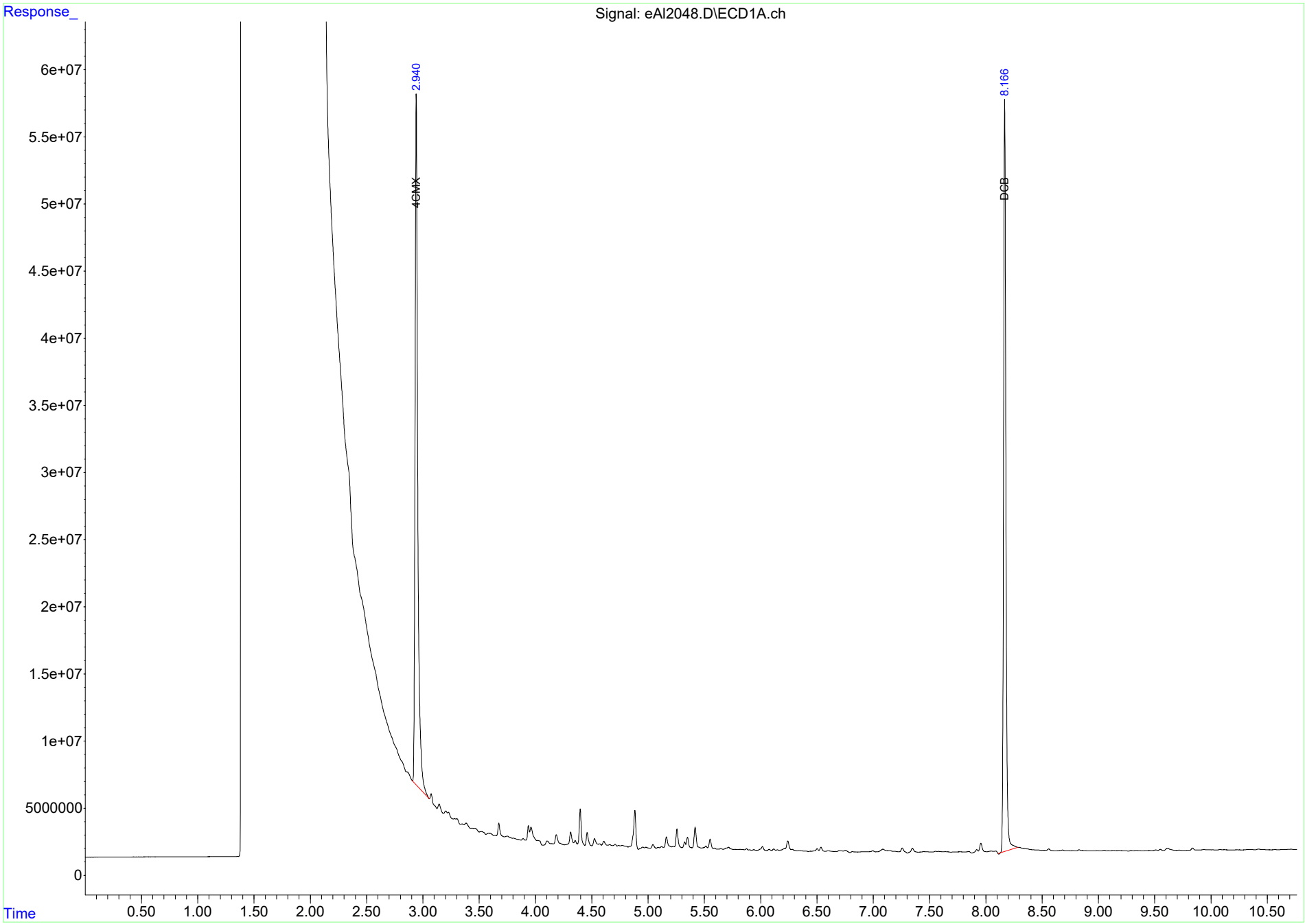
Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
alpha-BHC	3.352	0.000	-3.352	0	N.D. d	3.743	3.762	0.019f	29170323	N.D. d
gamma-BHC (Lindane)	3.604	0.000	-3.604	0	N.D. d	4.067	0.000	-4.067	0	N.D. d
Heptachlor	4.002	0.000	-4.002	0	N.D. d	4.495	4.511	0.016f	10153501	N.D. d
Aldrin	4.268	0.000	-4.268	0	N.D. d	4.820	0.000	-4.820	0	N.D. d
beta-BHC	3.670	3.675	0.005	10988717	N.D. d	4.133	0.000	-4.133	0	N.D. d
delta-BHC	3.825	0.000	-3.825	0	N.D. d	4.418	4.424	0.006	64628615	N.D. d
Heptachlor epoxide	4.811	0.000	-4.811	0	N.D. d	5.382	5.367	-0.015	15581212	N.D. d
trans-Chlordane	4.931	0.000	-4.931	0	N.D. d	5.577	0.000	-5.577	0	N.D. d
cis-Chlordane	5.054	0.000	-5.054	0	N.D. d	5.726	0.000	-5.726	0	N.D. d
4,4'-DDE	5.119	0.000	-5.119	0	N.D. d	5.877	5.876	-0.001	2190214	N.D. d
Endosulfan I	5.188	5.163	-0.025f	10306498	N.D. d	5.795	0.000	-5.795	0	N.D. d
Dieldrin	5.419	5.418	-0.001	19961908	N.D. d	6.082	6.080	-0.002	3407489	N.D. d
Endrin	5.652	0.000	-5.652	0	N.D. d	6.410	6.382	-0.028f	4185650	N.D. d
Endosulfan II	5.878	0.000	-5.878	0	N.D. d	6.636	0.000	-6.636	0	N.D. d
4,4'-DDD	5.708	0.000	-5.708	0	N.D. d	6.495	0.000	-6.495	0	N.D. d

4,4'-DDT	5.993	0.000	-5.993	0	N.D. d	6.839	0.000	-6.839	0	N.D. d
Endrin aldehyde	6.302	0.000	-6.302	0	N.D. d	6.994	6.995	0.001	7507028	N.D. d
Methoxychlor	6.501	0.000	-6.501	0	N.D. d	7.585	7.584	-0.001	4789880	N.D. d
Endosulfan sulfate	6.757	0.000	-6.757	0	N.D. d	7.298	0.000	-7.298	0	N.D. d
Endrin ketone	7.065	0.000	-7.065	0	N.D. d	7.908	7.907	-0.001	7156814	N.D. d
Hexachlorobenzene	3.230	0.000	-3.230	0	N.D. d	3.636	3.634	-0.002	3369291	N.D. d
Mirex	6.670	0.000	-6.670	0	N.D. d	7.884	7.907	0.023f	7156814	N.D. d
C-Nonachlor	5.685	0.000	-5.685	0	N.D. d	6.487	6.460	-0.027f	2506046	N.D. d
O-Chlordane	4.718	0.000	-4.718	0	N.D. d	5.290	5.285	-0.005	60533124	N.D. d
T-Nonachlor	5.037	0.000	-5.037	0	N.D. d	5.670	0.000	-5.670	0	N.D. d
2,4-DDE	4.795	0.000	-4.795	0	N.D. d	5.557	0.000	-5.557	0	N.D. d
2,4-DDD	5.289	0.000	-5.289	0	N.D. d	6.094	6.080	-0.014	3407489	N.D. d
2,4-DDT	5.542	5.551	0.009	8262992	N.D. d	6.425	0.000	-6.425	0	N.D. d
Chlordane	3.931	3.937	0.006	11049884	N.D. d	4.353	4.363	0.010	30999411	N.D. d
Chlordane {2}	4.002	0.000	-4.002	0	N.D. d	4.495	4.511	0.016f	10153501	N.D. d
Chlordane {3}	4.378	4.397	0.019f	31964973	N.D. d	4.947	4.929	-0.018f	3366778	N.D. d
Chlordane {4}	4.930	0.000	-4.930	0	N.D. d	5.577	0.000	-5.577	0	N.D. d
Chlordane {5}	5.053	0.000	-5.053	0	N.D. d	5.725	0.000	-5.725	0	N.D. d
Toxaphene	5.992	0.000	-5.992	0	N.D. d	6.722	0.000	-6.722	0	N.D. d
Toxaphene {2}	6.214	6.241	0.027f	10173373	N.D. d	7.002	6.995	-0.007	7507028	N.D. d
Toxaphene {3}	6.285	0.000	-6.285	0	N.D. d	7.242	0.000	-7.242	0	N.D. d
Toxaphene {4}	6.661	0.000	-6.661	0	N.D. d	7.578	7.584	0.006	4789880	N.D. d
Toxaphene {5}	6.762	0.000	-6.762	0	N.D. d	7.632	0.000	-7.632	0	N.D. d

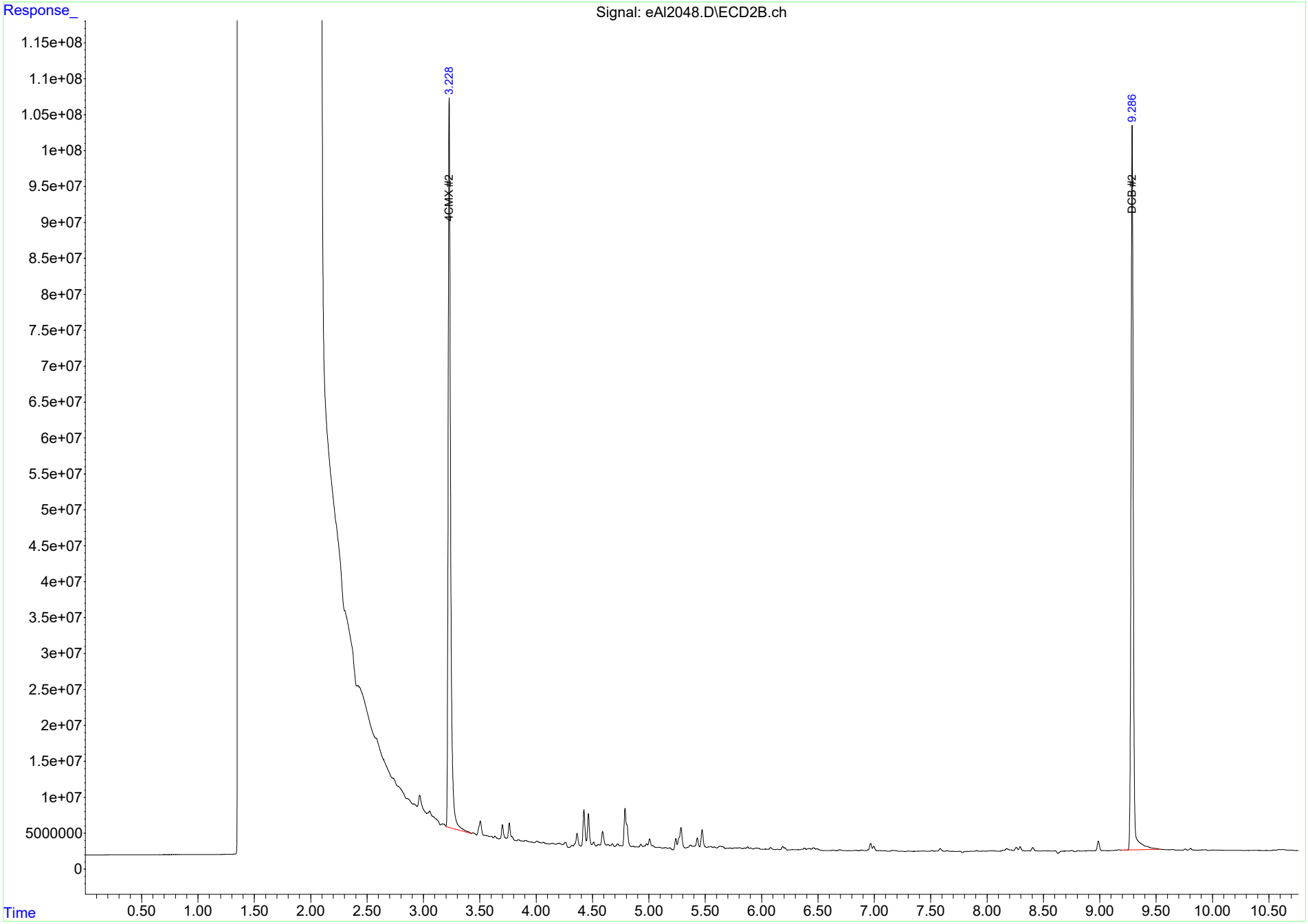
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2048.D



ECDA_PEST_120422.m Wed Dec 21 05:59:30 2022 Page: 3

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2048.D



The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
System Monitoring Compounds											
4CMX	2.938	2.941	0.003	847075877	137.016	3.228	3.228	0.000	1515496662	135.482	
DCB	8.168	8.167	-0.001	791585238	201.446	9.289	9.287	-0.002	1395126401	199.356	

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	69%	68%
DCB	200.000	No Limits	101%	100%
4CMX	200.000	No Limits	69%	68%
DCB	200.000	No Limits	101%	100%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
alpha-BHC	3.352	0.000	-3.352	0	N.D.	3.743	3.762	0.019f	29170323	1.582	
gamma-BHC (Lindane)	3.604	0.000	-3.604	0	N.D.	4.067	0.000	-4.067	0	N.D.	
Heptachlor	4.002	0.000	-4.002	0	N.D.	4.495	4.511	0.016f	10153501	<MDL	
Aldrin	4.268	0.000	-4.268	0	N.D.	4.820	0.000	-4.820	0	N.D.	
beta-BHC	3.670	3.675	0.005	10988717	2.740	4.133	0.000	-4.133	0	N.D.	#
delta-BHC	3.825	0.000	-3.825	0	N.D.	4.418	4.424	0.006	64628615	3.872	
Heptachlor epoxide	4.811	0.000	-4.811	0	N.D.	5.382	5.367	-0.015	15581212	1.191	
trans-Chlordane	4.931	0.000	-4.931	0	N.D.	5.577	0.000	-5.577	0	N.D.	
cis-Chlordane	5.054	0.000	-5.054	0	N.D.	5.726	0.000	-5.726	0	N.D.	
4,4'-DDE	5.119	0.000	-5.119	0	N.D.	5.877	5.876	-0.001	2190214	<MDL	
Endosulfan I	5.188	5.163	-0.025f	10306498	1.593	5.795	0.000	-5.795	0	N.D.	#
Dieldrin	5.419	5.418	-0.001	19961908	3.016	6.082	6.080	-0.002	3407489	<MDL	#
Endrin	5.652	0.000	-5.652	0	N.D.	6.410	6.382	-0.028f	4185650	<MDL	
Endosulfan II	5.878	0.000	-5.878	0	N.D.	6.636	0.000	-6.636	0	N.D.	
4,4'-DDD	5.708	0.000	-5.708	0	N.D.	6.495	0.000	-6.495	0	N.D.	
4,4'-DDT	5.993	0.000	-5.993	0	N.D.	6.839	0.000	-6.839	0	N.D.	
Endrin aldehyde	6.302	0.000	-6.302	0	N.D.	6.994	6.995	0.001	7507028	<MDL	
Methoxychlor	6.501	0.000	-6.501	0	N.D.	7.585	7.584	-0.001	4789880	<MDL	
Endosulfan sulfate	6.757	0.000	-6.757	0	N.D.	7.298	0.000	-7.298	0	N.D.	
Endrin ketone	7.065	0.000	-7.065	0	N.D.	7.908	7.907	-0.001	7156814	<MDL	
Hexachlorobenzene	3.230	0.000	-3.230	0	N.D.	3.636	3.634	-0.002	3369291	<MDL	
Mirex	6.670	0.000	-6.670	0	N.D.	7.884	7.907	0.023f	7156814	<MDL	
C-Nonachlor	5.685	0.000	-5.685	0	N.D.	6.487	6.460	-0.027f	2506046	<MDL	
O-Chlordane	4.718	0.000	-4.718	0	N.D.	5.290	5.285	-0.005	60533124	5.918	
T-Nonachlor	5.037	0.000	-5.037	0	N.D.	5.670	0.000	-5.670	0	N.D.	
2,4-DDE	4.795	0.000	-4.795	0	N.D.	5.557	0.000	-5.557	0	N.D.	
2,4-DDD	5.289	0.000	-5.289	0	N.D.	6.094	6.080	-0.014	3407489	<MDL	
2,4-DDT	5.542	5.551	0.009	8262992	2.060	6.425	0.000	-6.425	0	N.D.	#
Chlordane	3.931	3.937	0.006	11049884	45.521	4.353	4.363	0.010	30999411	64.214	
Chlordane {2}	4.002	0.000	-4.002	0	N.D.	4.495	4.511	0.016f	10153501	11.038	
Chlordane {3}	4.378	4.397	0.019f	31964973	116.545	4.947	4.929	-0.018f	3366778	6.672	
Chlordane {4}	4.930	0.000	-4.930	0	N.D.	5.577	0.000	-5.577	0	N.D.	
Chlordane {5}	5.053	0.000	-5.053	0	N.D.	5.725	0.000	-5.725	0	N.D.	
Sum Chlordane				43014856	162.066				44519689	81.924	#

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Average Chlordane					81.033					27.308 #
Toxaphene	5.992	0.000	-5.992	0	N.D.	6.722	0.000	-6.722	0	N.D.
Toxaphene {2}	6.214	6.241	0.027f	10173373	46.023	7.002	6.995	-0.007	7507028	24.935
Toxaphene {3}	6.285	0.000	-6.285	0	N.D.	7.242	0.000	-7.242	0	N.D.
Toxaphene {4}	6.661	0.000	-6.661	0	N.D.	7.578	7.584	0.006	4789880	10.161
Toxaphene {5}	6.762	0.000	-6.762	0	N.D.	7.632	0.000	-7.632	0	N.D.
Sum Toxaphene				10173373	46.023				12296908	35.097
Average Toxaphene					46.023					<MDL

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2048.D

alpha-BHC #2 -	Deletion ==		DNC/RT
Heptachlor #2 -	Deletion ==		DNC/RT
beta-BHC -	Deletion ==	DNC/RT	
delta-BHC #2 -	Deletion ==		DNC/RT
Heptachlor epoxide #2 -	Deletion ==		DNC/RT
4,4'-DDE #2 -	Deletion ==		DNC/RT
Endosulfan I -	Deletion ==	DNC/RT	
Dieldrin Both -	Deletion ==	DNC/RT	
Endrin #2 -	Deletion ==		DNC/RT
Endrin aldehyde #2 -	Deletion ==		DNC/RT
Methoxychlor #2 -	Deletion ==		DNC/RT
Endrin ketone #2 -	Deletion ==		DNC/RT
Hexachlorobenzene #2 -	Deletion ==		DNC/RT
Mirex #2 -	Deletion ==		DNC/RT
C-Nonachlor #2 -	Deletion ==		DNC/RT
O-Chlordane #2 -	Deletion ==		DNC/RT
2,4-DDD #2 -	Deletion ==		DNC/RT
2,4-DDT -	Deletion ==	DNC/RT	
Chlordane Multi -	Deletion ==	DMP	
Toxaphene Multi -	Deletion ==	DMP	

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**			**Matrix:**	**WATER**
Lab Sample ID:	**1205274608**				
Client Sample:	**QC for batch 2358000**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**LCS for batch 2358000**	**Method:**	**SW846 3535A/8081B**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**2358002**	**Inst:**	**ECDAA.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 19:37**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 06:50**	**Aliquot:**	**1000 mL**	**Final Volume:**	**5 mL**
Data File:	**122022a\eAl2049.D**	**Column:**	**1 RTX-CLP**		
	122022a\eAl2049.D		**2 RTX-CLP**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
57-74-9	Chlordane	U	0.0765	ug/L	0.0765	0.250	1
319-84-6	alpha-BHC		0.504	ug/L	0.00665	0.0200	1
58-89-9	gamma-BHC (Lindane)		0.500	ug/L	0.00665	0.0200	2
76-44-8	Heptachlor		0.422	ug/L	0.00665	0.0200	2
309-00-2	Aldrin		0.457	ug/L	0.00665	0.0200	2
319-85-7	beta-BHC		0.499	ug/L	0.00665	0.0200	2
5103-74-2	trans-Chlordane		0.465	ug/L	0.00665	0.0200	1
5103-71-9	cis-Chlordane		0.460	ug/L	0.00665	0.0200	2
959-98-8	Endosulfan I		0.471	ug/L	0.00665	0.0200	2
60-57-1	Dieldrin		1.31	ug/L	0.0100	0.0400	2
72-20-8	Endrin		1.45	ug/L	0.0100	0.0400	2
33213-65-9	Endosulfan II		1.25	ug/L	0.0100	0.0400	2
50-29-3	4,4'-DDT		1.38	ug/L	0.0100	0.0400	2
8001-35-2	Toxaphene	U	0.150	ug/L	0.150	0.500	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
4cmx	0.853	1.00	ug/L	85	(27%-111%)
Decachlorobiphenyl	1.03	1.00	ug/L	103	(33%-129%)

Quantitation Report
GEL Laboratories, LLC

Jm 12/21/2022

JC 12/22/2022

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2049.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On   : 20 Dec 2022 19:37 (#1); 20 Dec 2022 19:37 (#2)
Operator : JXM   InstName : ECDA
Sample   : |1205274608|2358002|1|SVP|1|LCS|||
Misc   : |ECD5A1B_1L|WATER|QC A|MIX[P,Q,V,W]||
ALS Vial : 9   Sample Multiplier: 1

Quant Time: Dec 21 05:42:03 2022
Quant Method : D:\MSDCHEM\1\Data\122022a\ECDA_PEST_120422.m
Quant Title : ECD5   SubList :
QLast Update : Mon Dec 19 11:11:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   : 1.0 ul
Signal #1 Phase : RTX-CLP1   Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um   Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.938	2.941	0.003	1081943352	175.006	3.228	3.229	0.001	1908309745	170.599
DCB	8.168	8.167	-0.001	816134418	207.694	9.289	9.287	-0.002	1439394808	205.681

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	88%	85%
DCB	200.000	No Limits	104%	103%

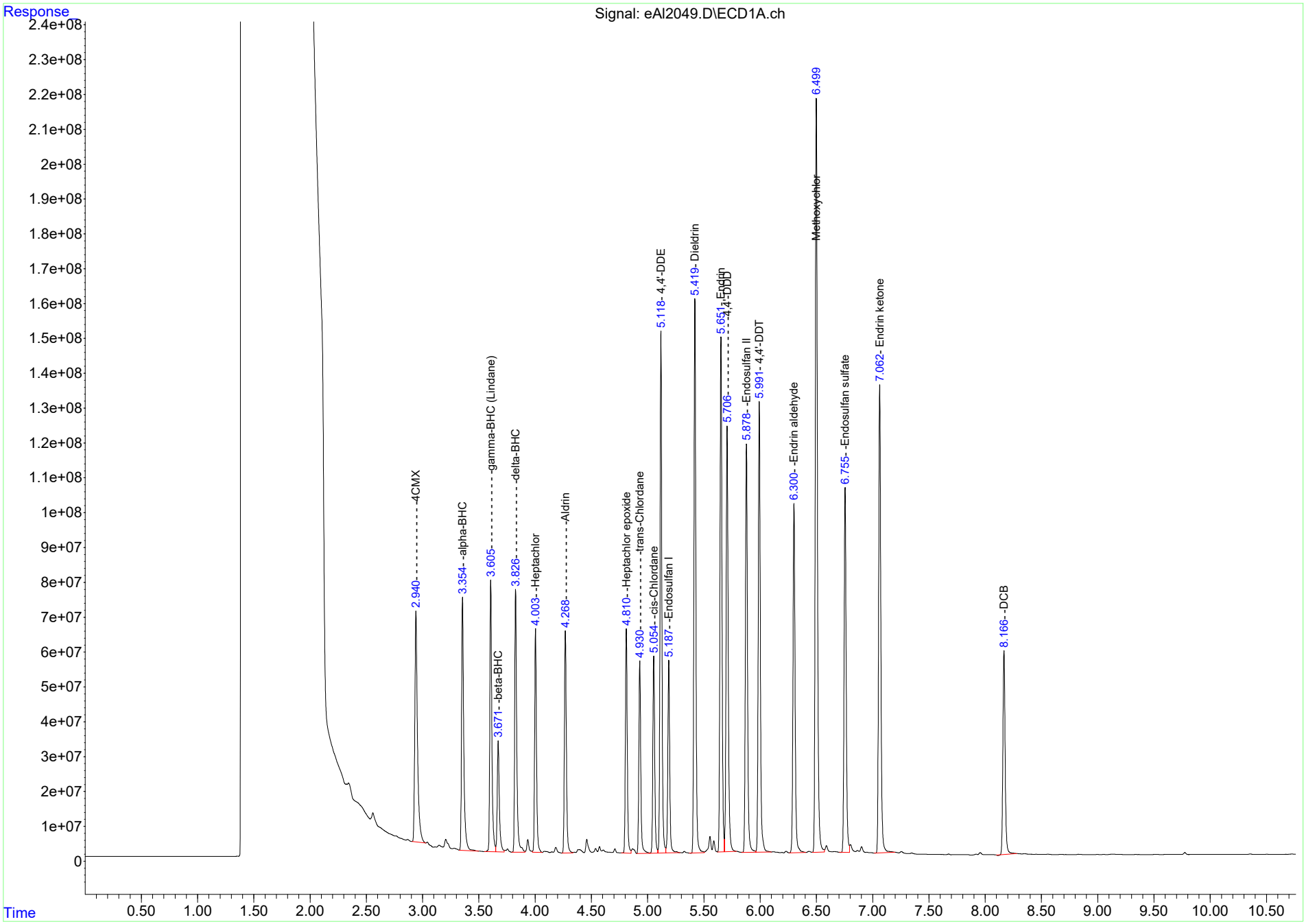
Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
alpha-BHC	3.352	3.355	0.003	975283714	100.817	3.743	3.744	0.001	1905246844	103.339
gamma-BHC (Lindane)	3.604	3.605	0.001	948706270	107.909	4.067	4.068	0.001	1665021734	99.907
Heptachlor	4.002	4.003	0.001	721082989	88.161	4.495	4.496	0.001	1307631927	84.320
Aldrin	4.268	4.268	0.000	768414254	98.021	4.820	4.820	0.000	1369357534	91.414
beta-BHC	3.670	3.672	0.002	417718167	104.156	4.133	4.133	0.000	722332615	99.744
delta-BHC	3.825	3.826	0.001	949435834	107.462	4.418	4.419	0.001	1615924161	96.822
Heptachlor epoxide	4.811	4.811	0.000	731384667	106.211	5.382	5.381	-0.001	1309414827	100.062
trans-Chlordane	4.931	4.930	-0.001	642646269	93.046	5.577	5.577	0.000	1270527772	97.339
cis-Chlordane	5.054	5.054	0.000	656388013	97.312	5.726	5.725	-0.001	1171492535	92.014
4,4'-DDE	5.119	5.118	-0.001	1733853228	275.371	5.877	5.876	-0.001	2806396742	235.785
Endosulfan I	5.188	5.187	-0.001	647022026	100.014	5.795	5.793	-0.002	1125871334	94.170
Dieldrin	5.419	5.420	0.001	1882219923	284.354	6.082	6.081	-0.001	3254057888	261.447
Endrin	5.652	5.651	-0.001	1802580889	314.370	6.410	6.409	-0.001	3124611708	289.024
Endosulfan II	5.878	5.878	0.000	1499688465	265.006	6.636	6.633	-0.003	2634252970	249.098
4,4'-DDD	5.708	5.706	-0.002	1563143068	301.139	6.495	6.493	-0.002	2727512383	277.229

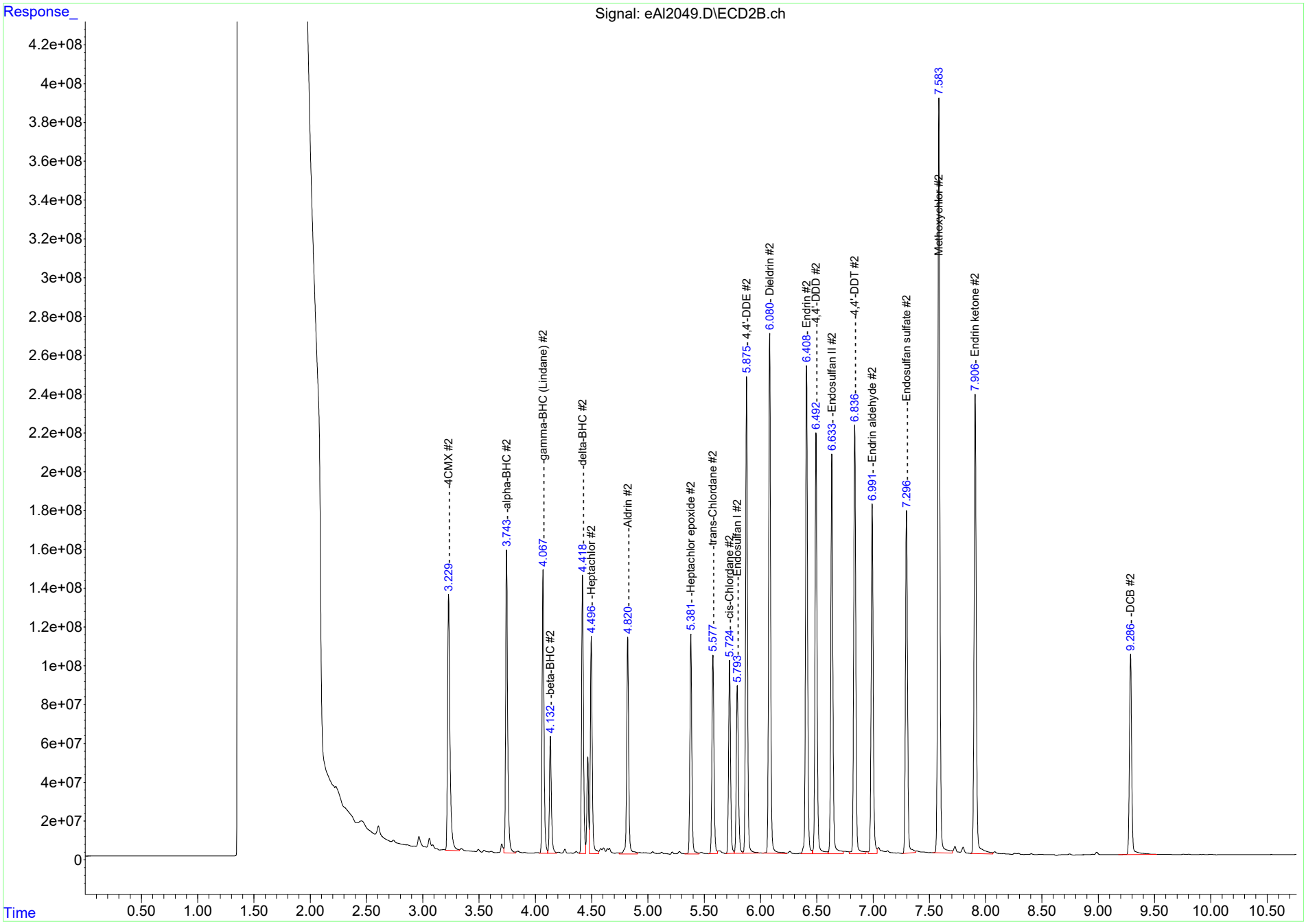
4,4'-DDT	5.993	5.992	-0.001	1629005610	294.299	6.839	6.837	-0.002	2821931269	275.932
Endrin aldehyde	6.302	6.300	-0.002	1277613454	284.558	6.994	6.992	-0.002	2274138874	280.285
Methoxychlor	6.501	6.499	-0.002	2815936680	1049.148	7.585	7.584	-0.001	4834255603	1007.120
Endosulfan sulfate	6.757	6.755	-0.002	1337250960	269.737	7.298	7.297	-0.001	2265337008	255.550
Endrin ketone	7.065	7.062	-0.003	1825379971	282.451	7.908	7.906	-0.002	3173867025	267.217
Hexachlorobenzene	3.230	3.206	-0.024f	53105347	N.D. d	3.636	3.608	-0.028f	10410756	N.D. d
Mirex	6.670	0.000	-6.670	0	N.D. d	7.884	7.906	0.022f	3173867025	N.D. d
C-Nonachlor	5.685	5.706	0.021f	1563143068	N.D. d	6.487	6.493	0.006	2727512383	N.D. d
O-Chlordane	4.718	4.709	-0.009	12029809	N.D. d	5.290	5.281	-0.009	22922294	N.D. d
T-Nonachlor	5.037	5.054	0.017f	656388013	N.D. d	5.670	0.000	-5.670	0	N.D. d
2,4-DDE	4.795	4.811	0.016f	731384667	N.D. d	5.557	5.577	0.020f	1270527772	N.D. d
2,4-DDD	5.289	0.000	-5.289	0	N.D. d	6.094	6.081	-0.013	3254057888	N.D. d
2,4-DDT	5.542	5.554	0.012	66175164	N.D. d	6.425	6.409	-0.016f	3124611708	N.D. d
Chlordane	3.931	3.935	0.004	47995980	N.D. d	4.353	4.362	0.009	17884652	N.D. d
Chlordane {2}	4.002	4.003	0.001	721082989	N.D. d	4.495	4.496	0.001	1307631927	N.D. d
Chlordane {3}	4.378	4.382	0.004	8757671	N.D. d	4.947	4.926	-0.021f	17458654	N.D. d
Chlordane {4}	4.930	4.930	0.000	642646269	N.D. d	5.577	5.577	0.000	1270527772	N.D. d
Chlordane {5}	5.053	5.054	0.001	656388013	N.D. d	5.725	5.725	0.000	1171492535	N.D. d
Toxaphene	5.992	5.992	0.000	1629005610	N.D. d	6.722	6.741	0.019f	34953935	N.D. d
Toxaphene {2}	6.214	6.229	0.015f	5203189	N.D. d	7.002	6.992	-0.010	2274138874	N.D. d
Toxaphene {3}	6.285	6.300	0.015f	1277613454	N.D. d	7.242	0.000	-7.242	0	N.D. d
Toxaphene {4}	6.661	0.000	-6.661	0	N.D. d	7.578	7.584	0.006	4834255603	N.D. d
Toxaphene {5}	6.762	6.755	-0.007	1337250960	N.D. d	7.632	0.000	-7.632	0	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2049.D



Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2049.D



The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
System Monitoring Compounds											
4CMX	2.938	2.941	0.003	1081943352	175.006	3.228	3.229	0.001	1908309745	170.599	
DCB	8.168	8.167	-0.001	816134418	207.694	9.289	9.287	-0.002	1439394808	205.681	

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	88%	85%
DCB	200.000	No Limits	104%	103%
4CMX	200.000	No Limits	88%	85%
DCB	200.000	No Limits	104%	103%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
alpha-BHC	3.352	3.355	0.003	975283714	100.817	3.743	3.744	0.001	1905246844	103.339	
gamma-BHC (Lindane)	3.604	3.605	0.001	948706270	107.909	4.067	4.068	0.001	1665021734	99.907	
Heptachlor	4.002	4.003	0.001	721082989	88.161	4.495	4.496	0.001	1307631927	84.320	
Aldrin	4.268	4.268	0.000	768414254	98.021	4.820	4.820	0.000	1369357534	91.414	
beta-BHC	3.670	3.672	0.002	417718167	104.156	4.133	4.133	0.000	722332615	99.744	
delta-BHC	3.825	3.826	0.001	949435834	107.462	4.418	4.419	0.001	1615924161	96.822	
Heptachlor epoxide	4.811	4.811	0.000	731384667	106.211	5.382	5.381	-0.001	1309414827	100.062	
trans-Chlordane	4.931	4.930	-0.001	642646269	93.046	5.577	5.577	0.000	1270527772	97.339	
cis-Chlordane	5.054	5.054	0.000	656388013	97.312	5.726	5.725	-0.001	1171492535	92.014	
4,4'-DDE	5.119	5.118	-0.001	1733853228	275.371	5.877	5.876	-0.001	2806396742	235.785	
Endosulfan I	5.188	5.187	-0.001	647022026	100.014	5.795	5.793	-0.002	1125871334	94.170	
Dieldrin	5.419	5.420	0.001	1882219923	284.354	6.082	6.081	-0.001	3254057888	261.447	
Endrin	5.652	5.651	-0.001	1802580889	314.370	6.410	6.409	-0.001	3124611708	289.024	
Endosulfan II	5.878	5.878	0.000	1499688465	265.006	6.636	6.633	-0.003	2634252970	249.098	
4,4'-DDD	5.708	5.706	-0.002	1563143068	301.139	6.495	6.493	-0.002	2727512383	277.229	
4,4'-DDT	5.993	5.992	-0.001	1629005610	294.299	6.839	6.837	-0.002	2821931269	275.932	
Endrin aldehyde	6.302	6.300	-0.002	1277613454	284.558	6.994	6.992	-0.002	2274138874	280.285	
Methoxychlor	6.501	6.499	-0.002	2815936680	1049.148	7.585	7.584	-0.001	4834255603	1007.120	
Endosulfan sulfate	6.757	6.755	-0.002	1337250960	269.737	7.298	7.297	-0.001	2265337008	255.550	
Endrin ketone	7.065	7.062	-0.003	1825379971	282.451	7.908	7.906	-0.002	3173867025	267.217	
Hexachlorobenzene	3.230	3.206	-0.024f	53105347	7.589	3.636	3.608	-0.028f	10410756	<MDL	#
Mirex	6.670	0.000	-6.670	0	N.D.	7.884	7.906	0.022f	3173867025	425.927	
C-Nonachlor	5.685	5.706	0.021f	1563143068	251.431	6.487	6.493	0.006	2727512383	231.782	
O-Chlordane	4.718	4.709	-0.009	12029809	2.173	5.290	5.281	-0.009	22922294	2.241	
T-Nonachlor	5.037	5.054	0.017f	656388013	109.258	5.670	0.000	-5.670	0	N.D.	#
2,4-DDE	4.795	4.811	0.016f	731384667	191.747	5.557	5.577	0.020f	1270527772	176.568	
2,4-DDD	5.289	0.000	-5.289	0	N.D.	6.094	6.081	-0.013	3254057888	510.581	
2,4-DDT	5.542	5.554	0.012	66175164	16.495	6.425	6.409	-0.016f	3124611708	419.004	A#
Chlordane	3.931	3.935	0.004	47995980	197.724	4.353	4.362	0.009	17884652	37.047	
Chlordane {2}	4.002	4.003	0.001	721082989	1549.616	4.495	4.496	0.001	1307631927	1421.520	
Chlordane {3}	4.378	4.382	0.004	8757671	31.931	4.947	4.926	-0.021f	17458654	34.599	
Chlordane {4}	4.930	4.930	0.000	642646269	705.380	5.577	5.577	0.000	1270527772	828.187	
Chlordane {5}	5.053	5.054	0.001	656388013	904.212	5.725	5.725	0.000	1171492535	916.880	
Sum Chlordane				2076870921	3388.863				3784995541	3238.233	

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Average Chlordane					677.773					647.647
Toxaphene	5.992	5.992	0.000	1629005610	8557.174 A	6.722	6.741	0.019f	34953935	66.876
Toxaphene {2}	6.214	6.229	0.015f	5203189	23.539	7.002	6.992	-0.010	2274138874	7553.747 A
Toxaphene {3}	6.285	6.300	0.015f	1277613454	4911.715 A	7.242	0.000	-7.242	0	N.D.
Toxaphene {4}	6.661	0.000	-6.661	0	N.D.	7.578	7.584	0.006	4834255603	10255.543 A
Toxaphene {5}	6.762	6.755	-0.007	1337250960	7830.583 A	7.632	0.000	-7.632	0	N.D.
Sum Toxaphene				4249073213	21323.010				7143348412	17876.166
Average Toxaphene					5330.753					5958.722

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2049.D

Hexachlorobenzene	Both	-	Deletion ==	DNC/RT	Mirex #2	-	Deletion ==	DNC/RT
C-Nonachlor	Both	-	Deletion ==	DNC/RT				
O-Chlordane	Both	-	Deletion ==	DNC/RT				
T-Nonachlor		-	Deletion ==	DNC/RT				
2,4-DDE	Both	-	Deletion ==	DNC/RT				
2,4-DDT	Both	-	Deletion ==	DNC/RT	2,4-DDD #2	-	Deletion ==	DNC/RT
Chlordane	Multi	-	Deletion ==	DMP				
Toxaphene	Multi	-	Deletion ==	DMP				

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**			**Matrix:**	**WATER**
Lab Sample ID:	**1205274619**				
Client Sample:	**QC for batch 2358000**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**LCS for batch 2358000**	**Method:**	**SW846 3535A/8081B**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**2358002**	**Inst:**	**ECDAA.I**	**Dilution:**	**1**
Run Date:	**12/20/2022 19:53**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 06:50**	**Aliquot:**	**1000 mL**	**Final Volume:**	**5 mL**
Data File:	**122022a\eAl2050.D**	**Column:**	**1 RTX-CLP**		
	122022a\eAl2050.D		**2 RTX-CLP**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
57-74-9	Chlordane	U	0.0765	ug/L	0.0765	0.250	1
319-84-6	alpha-BHC	U	0.00665	ug/L	0.00665	0.0200	1
58-89-9	gamma-BHC (Lindane)	U	0.00665	ug/L	0.00665	0.0200	1
76-44-8	Heptachlor	U	0.00665	ug/L	0.00665	0.0200	1
309-00-2	Aldrin	U	0.00665	ug/L	0.00665	0.0200	1
319-85-7	beta-BHC	U	0.00665	ug/L	0.00665	0.0200	1
5103-74-2	trans-Chlordane	U	0.00665	ug/L	0.00665	0.0200	1
5103-71-9	cis-Chlordane	U	0.00665	ug/L	0.00665	0.0200	1
959-98-8	Endosulfan I	U	0.00665	ug/L	0.00665	0.0200	1
60-57-1	Dieldrin	U	0.0100	ug/L	0.0100	0.0400	1
72-20-8	Endrin	U	0.0100	ug/L	0.0100	0.0400	1
33213-65-9	Endosulfan II	U	0.0100	ug/L	0.0100	0.0400	1
50-29-3	4,4'-DDT	U	0.0100	ug/L	0.0100	0.0400	1
8001-35-2	Toxaphene		3.41	ug/L	0.150	0.500	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
Decachlorobiphenyl	0.905	1.00	ug/L	90	(33%-129%)
4cmx	0.845	1.00	ug/L	84	(27%-111%)

JM 12/21/2022

JC 12/22/2022

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2050.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On   : 20 Dec 2022 19:53 (#1); 20 Dec 2022 19:53 (#2)
Operator : JXM   InstName : ECDA
Sample   : |1205274619|2358002|1|SVP|1|LCS|||
Misc   : |ECD5A1B_1L|WATER|QC A|MIX[P,Q,V,W]||
ALS Vial : 10   Sample Multiplier: 1

Quant Time: Dec 21 05:42:05 2022
Quant Method : D:\MSDCHEM\1\Data\122022a\ECDA_PEST_120422.m
Quant Title : ECD5   SubList :
QLast Update : Mon Dec 19 11:11:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   : 1.0 ul
Signal #1 Phase : RTX-CLP1   Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um   Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.938	2.940	0.002	1097591885	177.537	3.228	3.228	0.000	1889918072	168.955
DCB	8.168	8.166	-0.002	711148993	180.976	9.289	9.287	-0.002	1300001332	185.763

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	89%	84%
DCB	200.000	No Limits	90%	93%

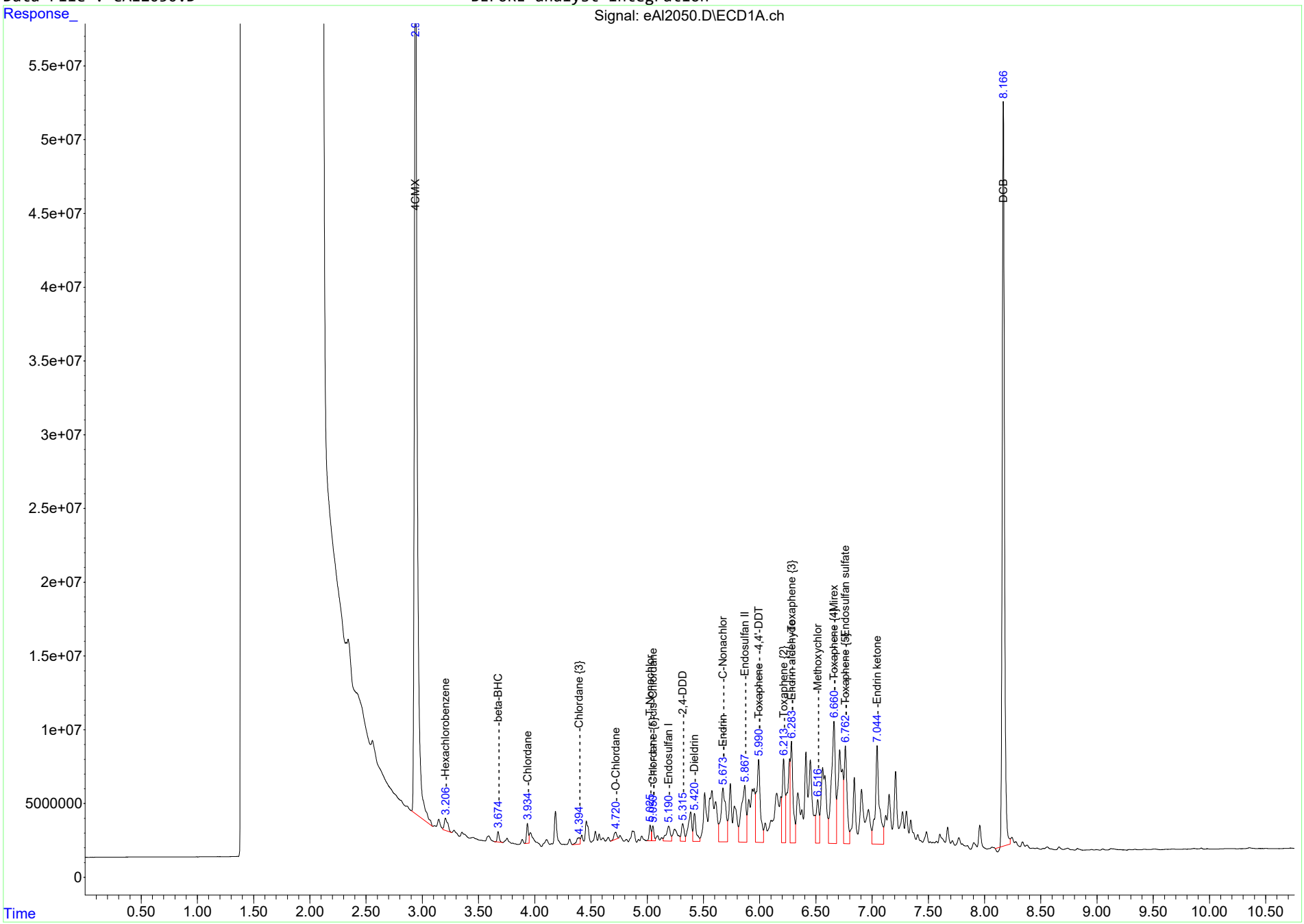
Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
alpha-BHC	3.352	0.000	-3.352	0	N.D. d	3.743	3.760	0.017f	27385519	N.D. d
gamma-BHC (Lindane)	3.604	0.000	-3.604	0	N.D. d	4.067	4.063	-0.004	13872492	N.D. d
Heptachlor	4.002	0.000	-4.002	0	N.D. d	4.495	4.499	0.004	17241270	N.D. d
Aldrin	4.268	0.000	-4.268	0	N.D. d	4.820	4.806	-0.014	48788850	N.D. d
beta-BHC	3.670	3.674	0.004	8324779	N.D. d	4.133	4.142	0.009	20788986	N.D. d
delta-BHC	3.825	0.000	-3.825	0	N.D. d	4.418	4.426	0.008	23423232	N.D. d
Heptachlor epoxide	4.811	0.000	-4.811	0	N.D. d	5.382	5.376	-0.006	24515561	N.D. d
trans-Chlordane	4.931	0.000	-4.931	0	N.D. d	5.577	5.590	0.013	34924365	N.D. d
cis-Chlordane	5.054	5.050	-0.004	12761130	N.D. d	5.726	0.000	-5.726	0	N.D. d
4,4'-DDE	5.119	0.000	-5.119	0	N.D. d	5.877	5.898	0.021f	25839688	N.D. d
Endosulfan I	5.188	5.190	0.002	25262961	N.D. d	5.795	5.807	0.012	77363341	N.D. d
Dieldrin	5.419	5.421	0.002	32618831	N.D. d	6.082	6.107	0.025f	32954472	N.D. d
Endrin	5.652	5.673	0.021f	108463798	N.D. d	6.410	6.404	-0.006	99723974	N.D. d
Endosulfan II	5.878	5.867	-0.011	112485855	N.D. d	6.636	6.620	-0.016f	157009513	N.D. d
4,4'-DDD	5.708	0.000	-5.708	0	N.D. d	6.495	6.499	0.004	127197955	N.D. d

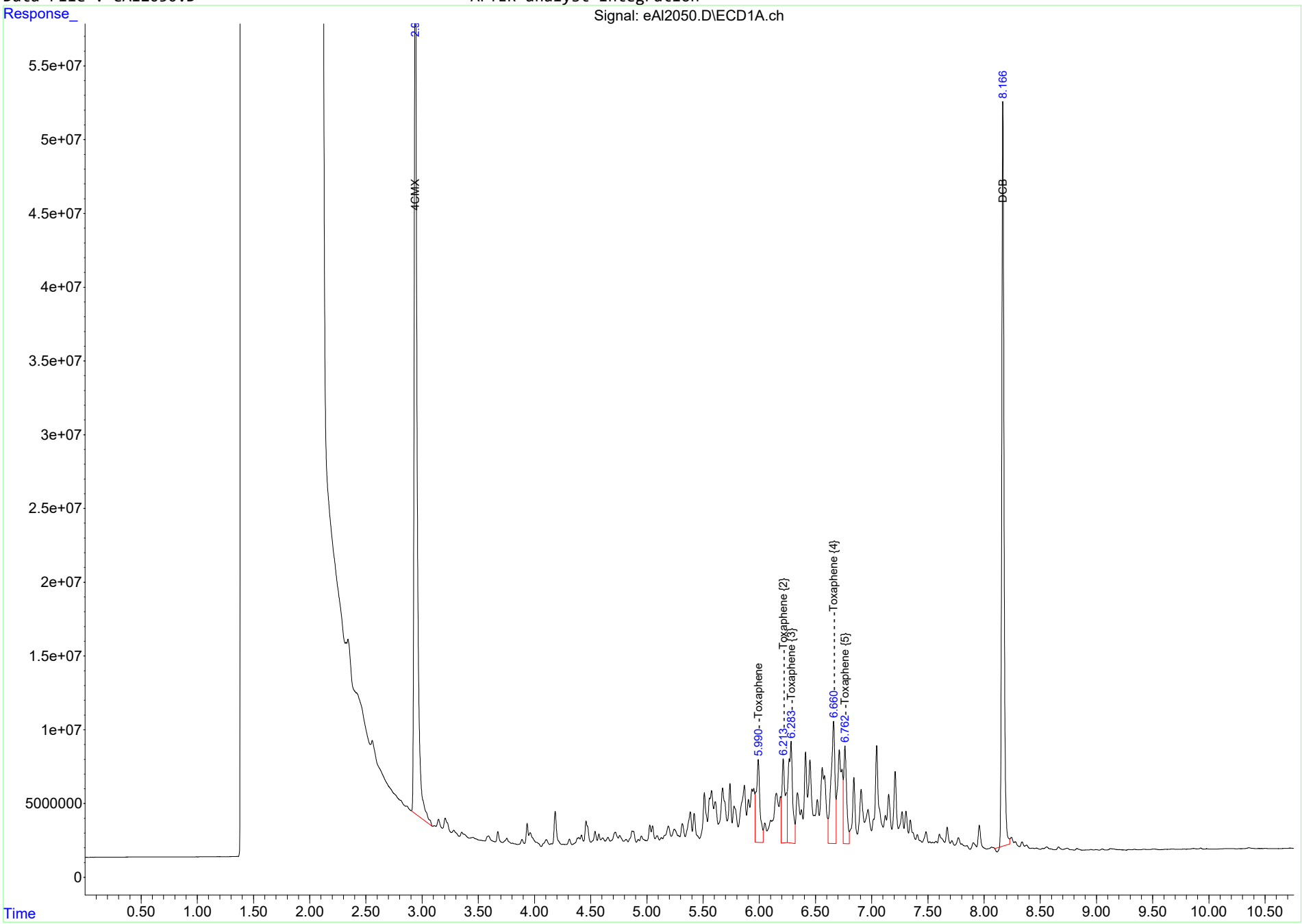
4,4'-DDT	5.993	5.991	-0.002	132158131	N.D. d	6.839	6.865	0.026f	27748983	N.D. d
Endrin aldehyde	6.302	6.283	-0.019f	113273588	N.D. d	6.994	7.000	0.006	235238281	N.D. d
Methoxychlor	6.501	6.516	0.015	53351320	N.D. d	7.585	7.577	-0.008	377603886	N.D. d
Endosulfan sulfate	6.757	6.762	0.005	120873345	N.D. d	7.298	7.295	-0.003	153298586	N.D. d
Endrin ketone	7.065	7.045	-0.020f	163790008	N.D. d	7.908	7.887	-0.021f	78776864	N.D. d
Hexachlorobenzene	3.230	3.205	-0.025f	18046869	N.D. d	3.636	3.608	-0.028f	6878398	N.D. d
Mirex	6.670	6.661	-0.009	201210049	N.D. d	7.884	7.887	0.003	78776864	N.D. d
C-Nonachlor	5.685	5.673	-0.012	108463798	N.D. d	6.487	6.499	0.012	127197955	N.D. d
O-Chlordane	4.718	4.720	0.002	8696957	N.D. d	5.290	5.281	-0.009	14678515	N.D. d
T-Nonachlor	5.037	5.026	-0.011	12029873	N.D. d	5.670	5.684	0.014	24044207	N.D. d
2,4-DDE	4.795	0.000	-4.795	0	N.D. d	5.557	5.556	-0.001	16376641	N.D. d
2,4-DDD	5.289	5.316	0.027f	20789550	N.D. d	6.094	6.107	0.013	32954472	N.D. d
2,4-DDT	5.542	0.000	-5.542	0	N.D. d	6.425	6.404	-0.021f	99723974	N.D. d
Chlordane	3.931	3.935	0.004	14925655	N.D. d	4.353	4.362	0.009	22866775	N.D. d
Chlordane {2}	4.002	0.000	-4.002	0	N.D. d	4.495	4.499	0.004	17241270	N.D. d
Chlordane {3}	4.378	4.395	0.017f	9161018	N.D. d	4.947	4.966	0.019f	7003098	N.D. d
Chlordane {4}	4.930	0.000	-4.930	0	N.D. d	5.577	5.590	0.013	34924365	N.D. d
Chlordane {5}	5.053	5.050	-0.003	12761130	N.D. d	5.725	0.000	-5.725	0	N.D. d
Toxaphene	5.992	5.991	-0.001	132158131	694.227	6.722	6.721	-0.001	376289533	719.938
Toxaphene {2}	6.214	6.213	-0.001	128333970	580.567m	7.002	7.000	-0.002	235238281	781.364
Toxaphene {3}	6.285	6.282	-0.003	176400918	678.164m	7.242	7.241	-0.001	301777473	756.108
Toxaphene {4}	6.661	6.661	0.000	201210049	749.238	7.578	7.577	-0.001	377603886	801.061
Toxaphene {5}	6.762	6.762	0.000	120873345	707.802	7.632	7.630	-0.002	370596484	795.383
Sum Toxaphene				758976412	3409.999				1661505656	3853.854
Average Toxaphene					682.000					770.771

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2050.D BEFORE analyst integration

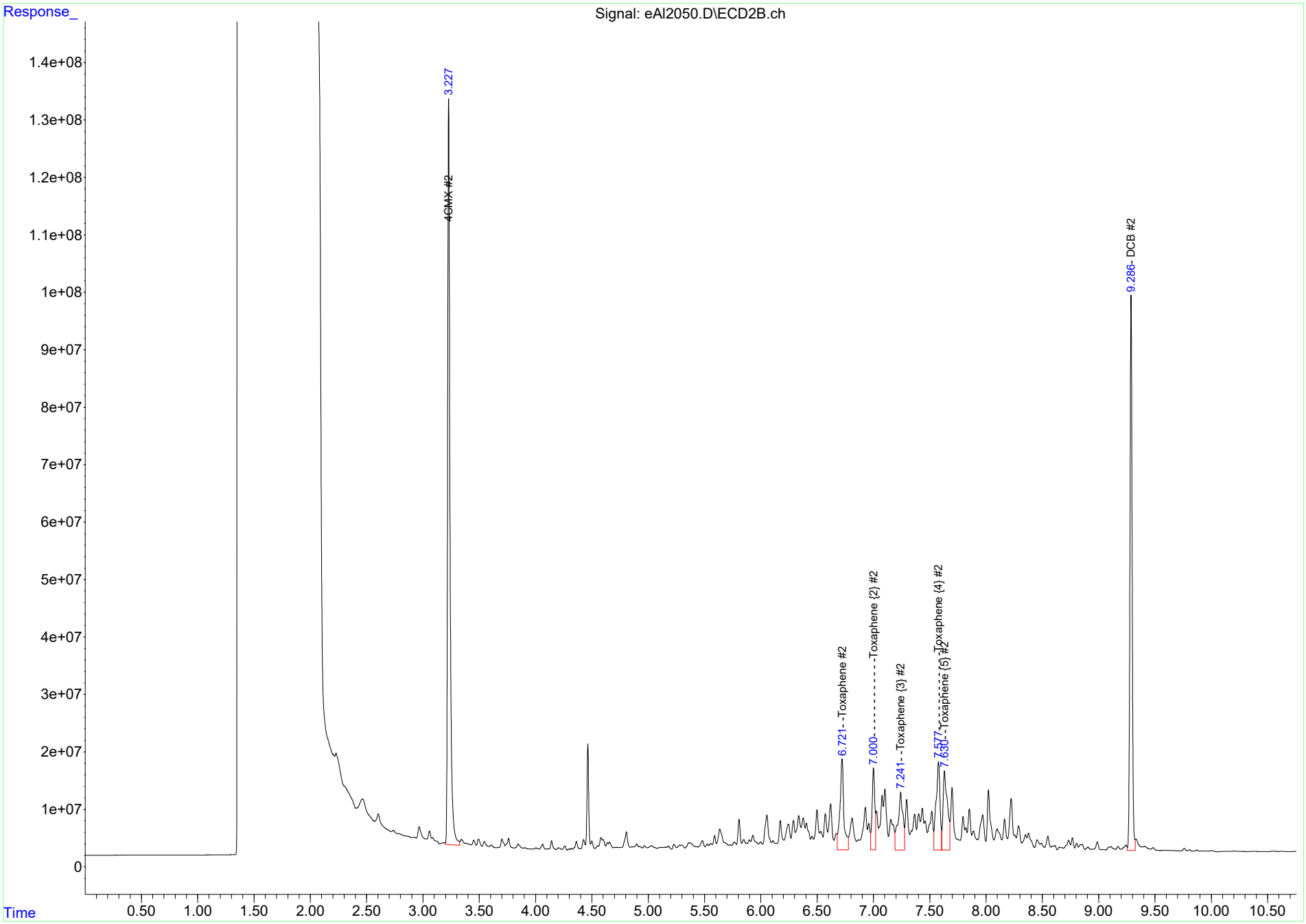


Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2050.D AFTER analyst integration



ECDA_PEST_120422.m Wed Dec 21 06:04:12 2022 Page: 4

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2050.D



The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
System Monitoring Compounds											
4CMX	2.938	2.940	0.002	1097591885	177.537	3.228	3.228	0.000	1889918072	168.955	
DCB	8.168	8.166	-0.002	711148993	180.976	9.289	9.287	-0.002	1300001332	185.763	

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	89%	84%
DCB	200.000	No Limits	90%	93%
4CMX	200.000	No Limits	89%	84%
DCB	200.000	No Limits	90%	93%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
alpha-BHC	3.352	0.000	-3.352	0	N.D.	3.743	3.760	0.017f	27385519	1.485	
gamma-BHC (Lindane)	3.604	0.000	-3.604	0	N.D.	4.067	4.063	-0.004	13872492	<MDL	
Heptachlor	4.002	0.000	-4.002	0	N.D.	4.495	4.499	0.004	17241270	1.112	
Aldrin	4.268	0.000	-4.268	0	N.D.	4.820	4.806	-0.014	48788850	3.257	
beta-BHC	3.670	3.674	0.004	8324779	2.076	4.133	4.142	0.009	20788986	2.871	
delta-BHC	3.825	0.000	-3.825	0	N.D.	4.418	4.426	0.008	23423232	1.403	
Heptachlor epoxide	4.811	0.000	-4.811	0	N.D.	5.382	5.376	-0.006	24515561	1.873	
trans-Chlordane	4.931	0.000	-4.931	0	N.D.	5.577	5.590	0.013	34924365	2.676	
cis-Chlordane	5.054	5.050	-0.004	12761130	1.892	5.726	0.000	-5.726	0	N.D.	#
4,4'-DDE	5.119	0.000	-5.119	0	N.D.	5.877	5.898	0.021f	25839688	2.171	
Endosulfan I	5.188	5.190	0.002	25262961	3.905	5.795	5.807	0.012	77363341	6.471	#
Dieldrin	5.419	5.421	0.002	32618831	4.928	6.082	6.107	0.025f	32954472	2.648	#
Endrin	5.652	5.673	0.021f	108463798	18.916	6.410	6.404	-0.006	99723974	9.224	#
Endosulfan II	5.878	5.867	-0.011	112485855	19.877	6.636	6.620	-0.016f	157009513	14.847	
4,4'-DDD	5.708	0.000	-5.708	0	N.D.	6.495	6.499	0.004	127197955	12.929	
4,4'-DDT	5.993	5.991	-0.002	132158131	23.876	6.839	6.865	0.026f	27748983	2.713	#
Endrin aldehyde	6.302	6.283	-0.019f	113273588	25.229	6.994	7.000	0.006	235238281	28.993	
Methoxychlor	6.501	6.516	0.015	53351320	19.877	7.585	7.577	-0.008	377603886	78.666	#
Endosulfan sulfate	6.757	6.762	0.005	120873345	24.381	7.298	7.295	-0.003	153298586	17.293	
Endrin ketone	7.065	7.045	-0.020f	163790008	25.344	7.908	7.887	-0.021f	78776864	6.632	#
Hexachlorobenzene	3.230	3.205	-0.025f	18046869	2.579	3.636	3.608	-0.028f	6878398	<MDL	#
Mirex	6.670	6.661	-0.009	201210049	48.014	7.884	7.887	0.003	78776864	10.572	#
C-Nonachlor	5.685	5.673	-0.012	108463798	17.446	6.487	6.499	0.012	127197955	10.809	#
O-Chlordane	4.718	4.720	0.002	8696957	1.571	5.290	5.281	-0.009	14678515	1.435	
T-Nonachlor	5.037	5.026	-0.011	12029873	2.002	5.670	5.684	0.014	24044207	2.152	
2,4-DDE	4.795	0.000	-4.795	0	N.D.	5.557	5.556	-0.001	16376641	2.276	
2,4-DDD	5.289	5.316	0.027f	20789550	6.155	6.094	6.107	0.013	32954472	5.171	
2,4-DDT	5.542	0.000	-5.542	0	N.D.	6.425	6.404	-0.021f	99723974	13.373	
Chlordane	3.931	3.935	0.004	14925655	61.488	4.353	4.362	0.009	22866775	47.368	
Chlordane {2}	4.002	0.000	-4.002	0	N.D.	4.495	4.499	0.004	17241270	18.743	
Chlordane {3}	4.378	4.395	0.017f	9161018	33.401	4.947	4.966	0.019f	7003098	13.878	
Chlordane {4}	4.930	0.000	-4.930	0	N.D.	5.577	5.590	0.013	34924365	22.765	
Chlordane {5}	5.053	5.050	-0.003	12761130	17.579	5.725	0.000	-5.725	0	N.D.	
Sum Chlordane				36847802	112.468				82035507	102.754	

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Average Chlordane					37.489					25.689
Toxaphene	5.992	5.991	-0.001	132158131	694.227	6.722	6.721	-0.001	376289533	719.938
Toxaphene {2}	6.214	6.213	-0.001	95659322	432.751	7.002	7.000	-0.002	235238281	781.364
Toxaphene {3}	6.285	6.283	-0.002	113273588	435.474	7.242	7.241	-0.001	301777473	756.108
Toxaphene {4}	6.661	6.661	0.000	201210049	749.238	7.578	7.577	-0.001	377603886	801.061
Toxaphene {5}	6.762	6.762	0.000	120873345	707.802	7.632	7.630	-0.002	370596484	795.383
Sum Toxaphene				663174435	3019.493				1661505656	3853.854
Average Toxaphene					603.899					770.771

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2050.D

beta-BHC	Both	Deletion ==	DNC/RT
cis-Chlordane	-	Deletion ==	DNC/RT
Endosulfan I	Both	Deletion ==	DNC/RT
Dieldrin	Both	Deletion ==	DNC/RT
Endrin	Both	Deletion ==	DNC/RT
Endosulfan II	Both	Deletion ==	DNC/RT
4,4'-DDT	Both	Deletion ==	DNC/RT
Endrin aldehyde	Both	Deletion ==	DNC/RT
Methoxychlor	Both	Deletion ==	DNC/RT
Endosulfan sulfate	Both	Deletion ==	DNC/RT
Endrin ketone	Both	Deletion ==	DNC/RT
Hexachlorobenzene	Both	Deletion ==	DNC/RT
Mirex	Both	Deletion ==	DNC/RT
C-Nonachlor	Both	Deletion ==	DNC/RT
O-Chlordane	Both	Deletion ==	DNC/RT
T-Nonachlor	Both	Deletion ==	DNC/RT
2,4-DDD	Both	Deletion ==	DNC/RT
Chlordane	Multi	Deletion ==	DMP
Toxaphene {2}	-	Manual Integration ==	AB/AP
Toxaphene {3}	-	Manual Integration ==	AB/AP
alpha-BHC #2	-	Deletion ==	DNC/RT
gamma-BHC (Lindane) #2	-	Deletion ==	DNC/RT
Heptachlor #2	-	Deletion ==	DNC/RT
Aldrin #2	-	Deletion ==	DNC/RT
delta-BHC #2	-	Deletion ==	DNC/RT
Heptachlor epoxide #2	-	Deletion ==	DNC/RT
trans-Chlordane #2	-	Deletion ==	DNC/RT
4,4'-DDE #2	-	Deletion ==	DNC/RT
4,4'-DDD #2	-	Deletion ==	DNC/RT
2,4-DDE #2	-	Deletion ==	DNC/RT
2,4-DDT #2	-	Deletion ==	DNC/RT

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**1205274611**	**Date Received:**	**12/16/2022 09:15**		
Client Sample:	**QC for batch 2358000**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265371MS**	**Method:**	**SW846 3535A/8081B**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**2358002**	**Inst:**	**ECDAA.I**	**Dilution:**	**20**
Run Date:	**12/21/2022 11:16**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 06:50**	**Aliquot:**	**900 mL**	**Final Volume:**	**5 mL**
Data File:	**122122\eAl2117.D**	**Column:**	**1 RTX-CLP**		
	122122\eAl2117.D		**2 RTX-CLP**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
57-74-9	Chlordane	U	1.70	ug/L	1.70	5.56	1
319-84-6	alpha-BHC	J	0.358	ug/L	0.148	0.444	1
58-89-9	gamma-BHC (Lindane)	J	0.413	ug/L	0.148	0.444	1
76-44-8	Heptachlor	J	0.269	ug/L	0.148	0.444	1
309-00-2	Aldrin	U	0.148	ug/L	0.148	0.444	1
319-85-7	beta-BHC	JP	0.350	ug/L	0.148	0.444	1
5103-74-2	trans-Chlordane	J	0.269	ug/L	0.148	0.444	1
5103-71-9	cis-Chlordane	J	0.292	ug/L	0.148	0.444	1
959-98-8	Endosulfan I	J	0.261	ug/L	0.148	0.444	1
60-57-1	Dieldrin	J	0.851	ug/L	0.222	0.889	1
72-20-8	Endrin	J	0.852	ug/L	0.222	0.889	1
33213-65-9	Endosulfan II	J	0.778	ug/L	0.222	0.889	1
50-29-3	4,4'-DDT	J	0.447	ug/L	0.222	0.889	1
8001-35-2	Toxaphene	U	3.33	ug/L	3.33	11.1	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
Decachlorobiphenyl	0.577	1.11	ug/L	52	(33%-129%)
4cmx	0.728	1.11	ug/L	66	(27%-111%)

Quantitation Report
GEL Laboratories, LLC

Jxm 12/21/2022

JC 12/22/2022

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2117.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On   : 21 Dec 2022 11:16 (#1); 21 Dec 2022 11:16 (#2)
Operator : JXM   InstName : ECDA
Sample   : |1205274611|2358002|20|SVP|1|MS|||
Misc   : |ECD5A1B_1L|WATER|QC A|MIX[P,Q,V,W]||
ALS Vial : 17   Sample Multiplier: 20

Quant Time: Dec 21 11:38:56 2022
Quant Method : D:\MSDCHEM\1\Data\122122\ECDA_PEST_120422.m
Quant Title : ECD5   SubList :
QLast Update : Mon Dec 19 11:11:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   : 1.0 ul
Signal #1 Phase : RTX-CLP1   Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um   Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
System Monitoring Compounds											
4CMX	2.938	2.950	0.012	93384019	302.100	3.227	3.226	-0.001	73329633	131.111	#
DCB	8.167	8.166	-0.001	20406406	103.862	9.287	9.287	0.000	37615782	107.502	

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	151%	66%
DCB	200.000	No Limits	52%	54%

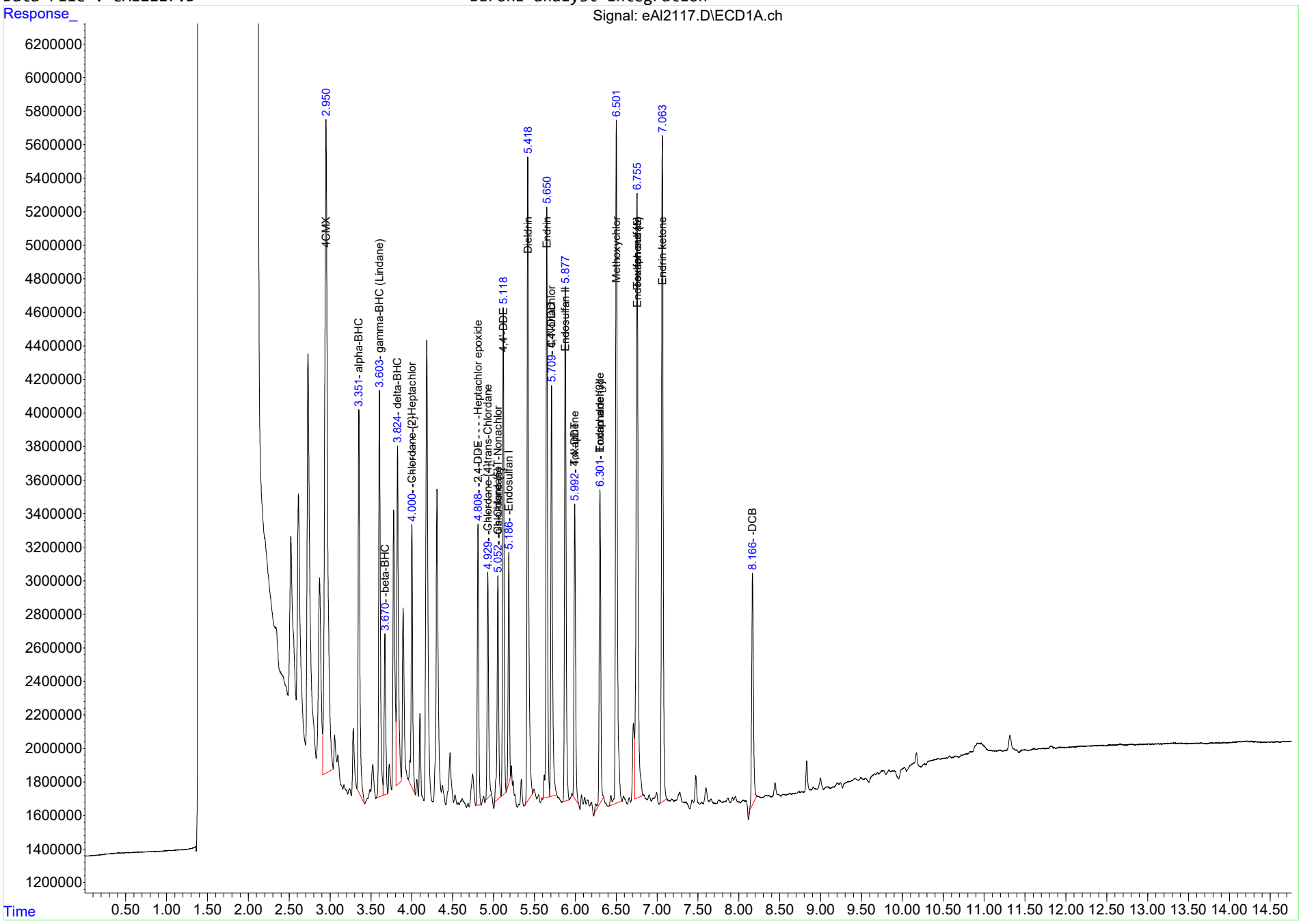
Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
alpha-BHC	3.352	3.351	-0.001	31199222	3.225	3.743	3.742	-0.001	68952775	3.740	
gamma-BHC (Lindane)	3.604	3.603	-0.001	32698406	3.719	4.067	4.065	-0.002	74028206	4.442	
Heptachlor	4.002	4.000	-0.002	19810261	2.422	4.495	4.494	-0.001	38966521	2.513	
Aldrin	4.267	4.293	0.026f	3156304	<MDL m	4.820	4.800	-0.020f	9656328	<MDL	#
beta-BHC	3.669	3.670	0.001	12626439	3.148	4.132	4.127	-0.005	73556791	10.157	#
delta-BHC	3.825	3.825	0.000	28322375	3.206	4.418	4.417	-0.001	53856853	3.227	
Heptachlor epoxide	4.809	4.809	0.000	19849488	2.883	5.381	5.380	-0.001	42441444	3.243	
trans-Chlordane	4.929	4.929	0.000	16722527	2.421	5.577	5.576	-0.001	32721536	2.507	
cis-Chlordane	5.054	5.052	-0.002	17746594	2.631	5.725	5.724	-0.001	36345624	2.855	
4,4'-DDE	5.118	5.118	0.000	34491007	5.478	5.877	5.876	-0.001	73941423	6.212	
Endosulfan I	5.187	5.186	-0.001	15195927	2.349	5.794	5.793	-0.001	41106543	3.438	
Dieldrin	5.419	5.418	-0.001	50713695	7.662	6.081	6.080	-0.001	90707104	7.288	
Endrin	5.651	5.651	0.000	43973903	7.669	6.409	6.409	0.000	85123158	7.874	
Endosulfan II	5.877	5.877	0.000	39622118	7.002	6.635	6.634	-0.001	77295280	7.309	
4,4'-DDD	5.707	5.709	0.002	32932963	6.345	6.494	6.495	0.001	70023469	7.117	

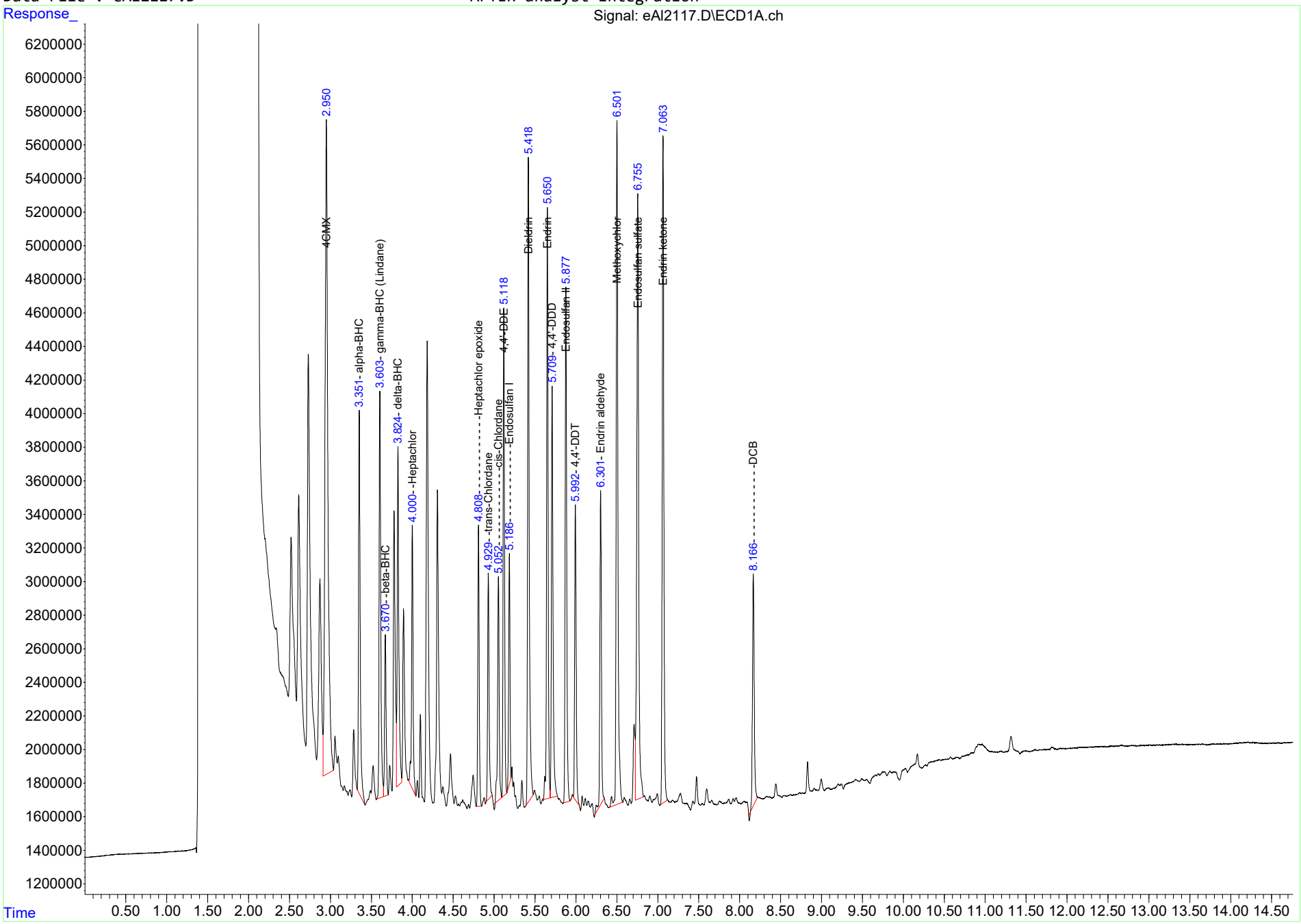
4,4'-DDT	5.992	5.993	0.001	22289982	4.027	6.838	6.838	0.000	45977891	4.496
Endrin aldehyde	6.301	6.302	0.001	24609298	5.481	6.992	6.993	0.001	50347155	6.205
Methoxychlor	6.499	6.502	0.003	59288440	22.089	7.585	7.585	0.000	106223018	22.129
Endosulfan sulfate	6.755	6.755	0.000	58231952	11.746	7.297	7.297	0.000	70852293	7.993
Endrin ketone	7.062	7.064	0.002	53146514	8.224	7.907	7.907	0.000	99866729	8.408
Hexachlorobenzene	3.230	0.000	-3.230	0	N.D. d	3.636	3.607	-0.029f	14224851	N.D. d
Mirex	6.671	0.000	-6.671	0	N.D. d	7.885	7.907	0.022f	99866729	N.D. d
C-Nonachlor	5.685	5.709	0.024f	32932963	N.D. d	6.486	6.495	0.009	70023469	N.D. d
O-Chlordane	4.718	0.000	-4.718	0	N.D. d	5.289	0.000	-5.289	0	N.D. d
T-Nonachlor	5.039	5.052	0.013	17746594	N.D. d	5.669	0.000	-5.669	0	N.D. d
2,4-DDE	4.796	4.809	0.013	19849488	N.D. d	5.556	5.576	0.020f	32721536	N.D. d
2,4-DDD	5.290	0.000	-5.290	0	N.D. d	6.094	6.080	-0.014	90707104	N.D. d
2,4-DDT	5.543	0.000	-5.543	0	N.D. d	6.425	6.409	-0.016f	85123158	N.D. d
Chlordane	3.930	0.000	-3.930	0	N.D. d	4.353	4.338	-0.015	28862588	N.D. d
Chlordane {2}	4.002	4.000	-0.002	19810261	N.D. d	4.495	4.494	-0.001	38966521	N.D. d
Chlordane {3}	4.378	0.000	-4.378	0	N.D. d	4.947	4.947	0.000	5734220	N.D. d
Chlordane {4}	4.930	4.929	-0.001	16722527	N.D. d	5.577	5.576	-0.001	32721536	N.D. d
Chlordane {5}	5.053	5.052	-0.001	17746594	N.D. d	5.725	5.724	-0.001	36345624	N.D. d
Toxaphene	5.991	5.993	0.002	22289982	N.D. d	6.722	0.000	-6.722	0	N.D. d
Toxaphene {2}	6.214	0.000	-6.214	0	N.D. d	7.001	6.993	-0.008	50347155	N.D. d
Toxaphene {3}	6.284	6.302	0.018f	24609298	N.D. d	7.242	0.000	-7.242	0	N.D. d
Toxaphene {4}	6.660	0.000	-6.660	0	N.D. d	7.579	7.585	0.006	106223018	N.D. d
Toxaphene {5}	6.762	6.755	-0.007	58231952	N.D. d	7.631	0.000	-7.631	0	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2117.D BEFORE analyst integration

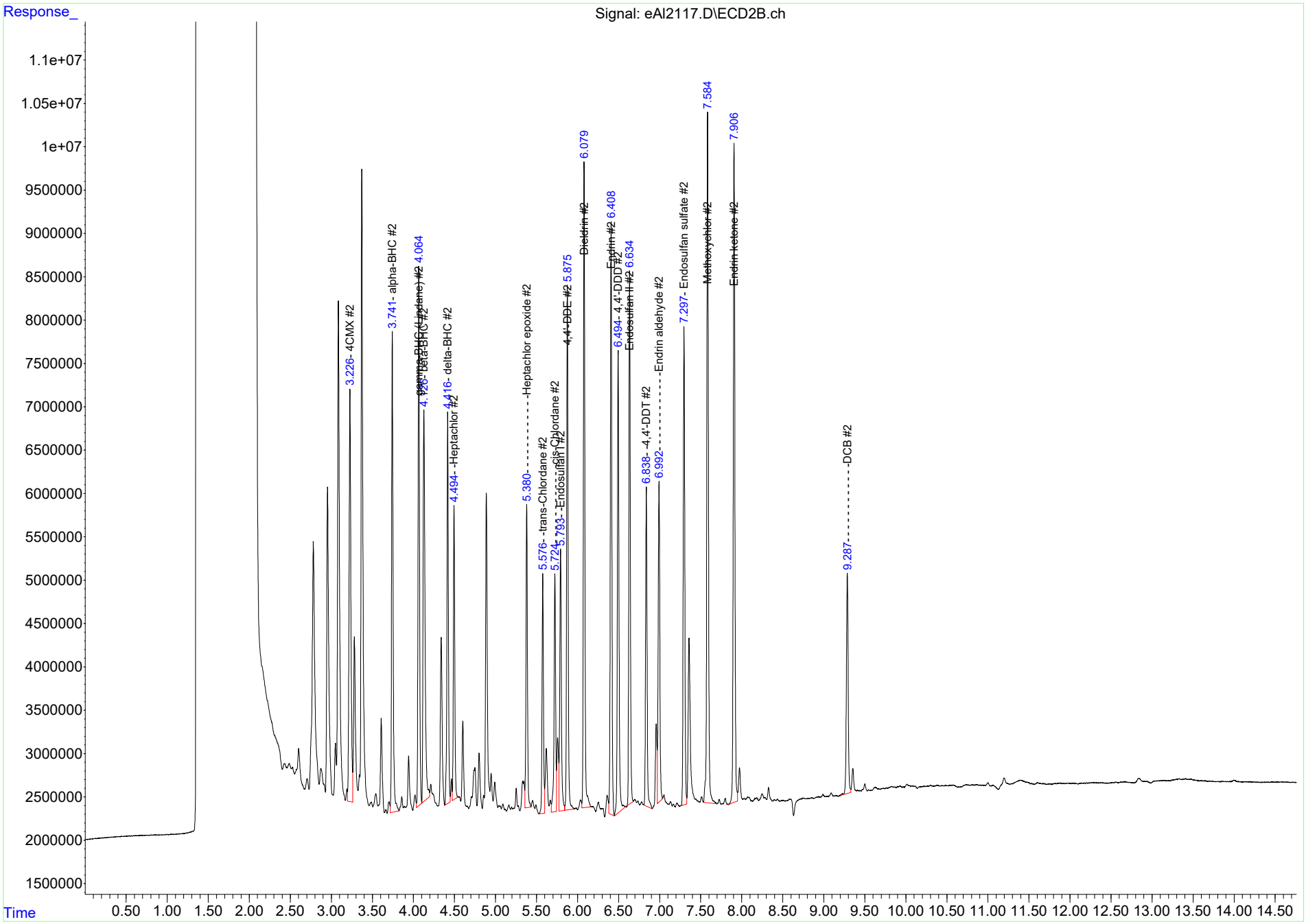


Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2117.D AFTER analyst integration



ECDA_PEST_120422.m Wed Dec 21 11:44:52 2022 Page: 4

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2117.D



The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
System Monitoring Compounds											
4CMX	2.938	2.950	0.012	93384019	302.100	3.227	3.226	-0.001	73329633	131.111	#
DCB	8.167	8.166	-0.001	20406406	103.862	9.287	9.287	0.000	37615782	107.502	

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	151%	66%
DCB	200.000	No Limits	52%	54%
4CMX	200.000	No Limits	151%	66%
DCB	200.000	No Limits	52%	54%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
alpha-BHC	3.352	3.351	-0.001	31199222	3.225	3.743	3.742	-0.001	68952775	3.740	
gamma-BHC (Lindane)	3.604	3.603	-0.001	32698406	3.719	4.067	4.065	-0.002	74028206	4.442	
Heptachlor	4.002	4.000	-0.002	19810261	2.422	4.495	4.494	-0.001	38966521	2.513	
Aldrin	4.267	0.000	-4.267	0	N.D.	4.820	4.800	-0.020f	9656328	<MDL	
beta-BHC	3.669	3.670	0.001	12626439	3.148	4.132	4.127	-0.005	73556791	10.157	#
delta-BHC	3.825	3.825	0.000	28322375	3.206	4.418	4.417	-0.001	53856853	3.227	
Heptachlor epoxide	4.809	4.809	0.000	19849488	2.883	5.381	5.380	-0.001	42441444	3.243	
trans-Chlordane	4.929	4.929	0.000	16722527	2.421	5.577	5.576	-0.001	32721536	2.507	
cis-Chlordane	5.054	5.052	-0.002	17746594	2.631	5.725	5.724	-0.001	36345624	2.855	
4,4'-DDE	5.118	5.118	0.000	34491007	5.478	5.877	5.876	-0.001	73941423	6.212	
Endosulfan I	5.187	5.186	-0.001	15195927	2.349	5.794	5.793	-0.001	41106543	3.438	
Dieldrin	5.419	5.418	-0.001	50713695	7.662	6.081	6.080	-0.001	90707104	7.288	
Endrin	5.651	5.651	0.000	43973903	7.669	6.409	6.409	0.000	85123158	7.874	
Endosulfan II	5.877	5.877	0.000	39622118	7.002	6.635	6.634	-0.001	77295280	7.309	
4,4'-DDD	5.707	5.709	0.002	32932963	6.345	6.494	6.495	0.001	70023469	7.117	
4,4'-DDT	5.992	5.993	0.001	22289982	4.027	6.838	6.838	0.000	45977891	4.496	
Endrin aldehyde	6.301	6.302	0.001	24609298	5.481	6.992	6.993	0.001	50347155	6.205	
Methoxychlor	6.499	6.502	0.003	59288440	22.089	7.585	7.585	0.000	106223018	22.129	
Endosulfan sulfate	6.755	6.755	0.000	58231952	11.746	7.297	7.297	0.000	70852293	7.993	
Endrin ketone	7.062	7.064	0.002	53146514	8.224	7.907	7.907	0.000	99866729	8.408	
Hexachlorobenzene	3.230	0.000	-3.230	0	N.D.	3.636	3.607	-0.029f	14224851	<MDL	
Mirex	6.671	0.000	-6.671	0	N.D.	7.885	7.907	0.022f	99866729	13.402	
C-Nonachlor	5.685	5.709	0.024f	32932963	5.297	6.486	6.495	0.009	70023469	5.951	
O-Chlordane	4.718	0.000	-4.718	0	N.D.	5.289	0.000	-5.289	0	N.D.	
T-Nonachlor	5.039	5.052	0.013	17746594	2.954	5.669	0.000	-5.669	0	N.D.	#
2,4-DDE	4.796	4.809	0.013	19849488	5.204	5.556	5.576	0.020f	32721536	4.547	
2,4-DDD	5.290	0.000	-5.290	0	N.D.	6.094	6.080	-0.014	90707104	14.232	
2,4-DDT	5.543	0.000	-5.543	0	N.D.	6.425	6.409	-0.016f	85123158	11.415	
Chlordane	3.930	0.000	-3.930	0	N.D.	4.353	4.338	-0.015	28862588	59.788	
Chlordane {2}	4.002	4.000	-0.002	19810261	42.572	4.495	4.494	-0.001	38966521	42.360	
Chlordane {3}	4.378	0.000	-4.378	0	N.D.	4.947	4.947	0.000	5734220	11.364	
Chlordane {4}	4.930	4.929	-0.001	16722527	18.355	5.577	5.576	-0.001	32721536	21.329	
Chlordane {5}	5.053	5.052	-0.001	17746594	24.447	5.725	5.724	-0.001	36345624	28.446	
Sum Chlordane				54279382	85.374				142630489	163.288	#

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Average Chlordane					28.458					32.658
Toxaphene	5.991	5.993	0.002	22289982	117.089	6.722	0.000	-6.722	0	N.D.
Toxaphene {2}	6.214	0.000	-6.214	0	N.D.	7.001	6.993	-0.008	50347155	167.232
Toxaphene {3}	6.284	6.302	0.018f	24609298	94.609	7.242	0.000	-7.242	0	N.D.
Toxaphene {4}	6.660	0.000	-6.660	0	N.D.	7.579	7.585	0.006	106223018	225.345
Toxaphene {5}	6.762	6.755	-0.007	58231952	340.991	7.631	0.000	-7.631	0	N.D.
Sum Toxaphene				105131232	552.689				156570174	392.577
Average Toxaphene					184.230					196.289

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2117.D

Aldrin - Manual Integration == AB/AP

C-Nonachlor Both - Deletion == DNC/RT
T-Nonachlor - Deletion == DNC/RT
2,4-DDE Both - Deletion == DNC/RT

Chlordane Multi - Deletion == DMP
Toxaphene Multi - Deletion == DMP

Hexachlorobenzene #2 - Deletion == DNC/RT
Mirex #2 - Deletion == DNC/RT

2,4-DDD #2 - Deletion == DNC/RT
2,4-DDT #2 - Deletion == DNC/RT

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**1205274612**	**Date Received:**	**12/16/2022 09:15**		
Client Sample:	**QC for batch 2358000**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265371MSD**	**Method:**	**SW846 3535A/8081B**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**2358002**	**Inst:**	**ECDAA.I**	**Dilution:**	**20**
Run Date:	**12/21/2022 11:37**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/19/2022 06:50**	**Aliquot:**	**900 mL**	**Final Volume:**	**5 mL**
Data File:	**122122\eAl2118.D**	**Column:**	**1 RTX-CLP**		
	122122\eAl2118.D		**2 RTX-CLP**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
57-74-9	Chlordane	U	1.70	ug/L	1.70	5.56	1
319-84-6	alpha-BHC	J	0.225	ug/L	0.148	0.444	1
58-89-9	gamma-BHC (Lindane)	J	0.252	ug/L	0.148	0.444	1
76-44-8	Heptachlor	J	0.192	ug/L	0.148	0.444	1
309-00-2	Aldrin	U	0.148	ug/L	0.148	0.444	1
319-85-7	beta-BHC	JP	0.248	ug/L	0.148	0.444	1
5103-74-2	trans-Chlordane	J	0.185	ug/L	0.148	0.444	1
5103-71-9	cis-Chlordane	J	0.212	ug/L	0.148	0.444	1
959-98-8	Endosulfan I	J	0.210	ug/L	0.148	0.444	1
60-57-1	Dieldrin	J	0.592	ug/L	0.222	0.889	1
72-20-8	Endrin	J	0.607	ug/L	0.222	0.889	1
33213-65-9	Endosulfan II	J	0.541	ug/L	0.222	0.889	1
50-29-3	4,4'-DDT	J	0.353	ug/L	0.222	0.889	1
8001-35-2	Toxaphene	U	3.33	ug/L	3.33	11.1	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
Decachlorobiphenyl	0.560	1.11	ug/L	50	(33%-129%)
4cmx	0.493	1.11	ug/L	44	(27%-111%)

Quantitation Report
GEL Laboratories, LLC

JM 12/21/2022

JC 12/22/2022

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2118.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On   : 21 Dec 2022 11:37 (#1); 21 Dec 2022 11:37 (#2)
Operator : JXM   InstName : ECDA
Sample   : |1205274612|2358002|20|SVP|1|MSD|||
Misc   : |ECD5A1B_1L|WATER|QC A|MIX[P,Q,V,W]||
ALS Vial : 18   Sample Multiplier: 20

Quant Time: Dec 21 11:51:59 2022
Quant Method : D:\MSDCHEM\1\Data\122122\ECDA_PEST_120422.m
Quant Title : ECD5   SubList :
QLast Update : Mon Dec 19 11:11:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   : 1.0 ul
Signal #1 Phase : RTX-CLP1   Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um   Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
System Monitoring Compounds											
4CMX	2.938	2.952	0.014	59112658	191.231	3.227	3.228	0.001	49597172	88.678	#
DCB	8.167	8.165	-0.002	19810776	100.831m	9.287	9.286	-0.001	30687855	87.702	

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	96%	44%
DCB	200.000	No Limits	50%	44%

Target Compounds

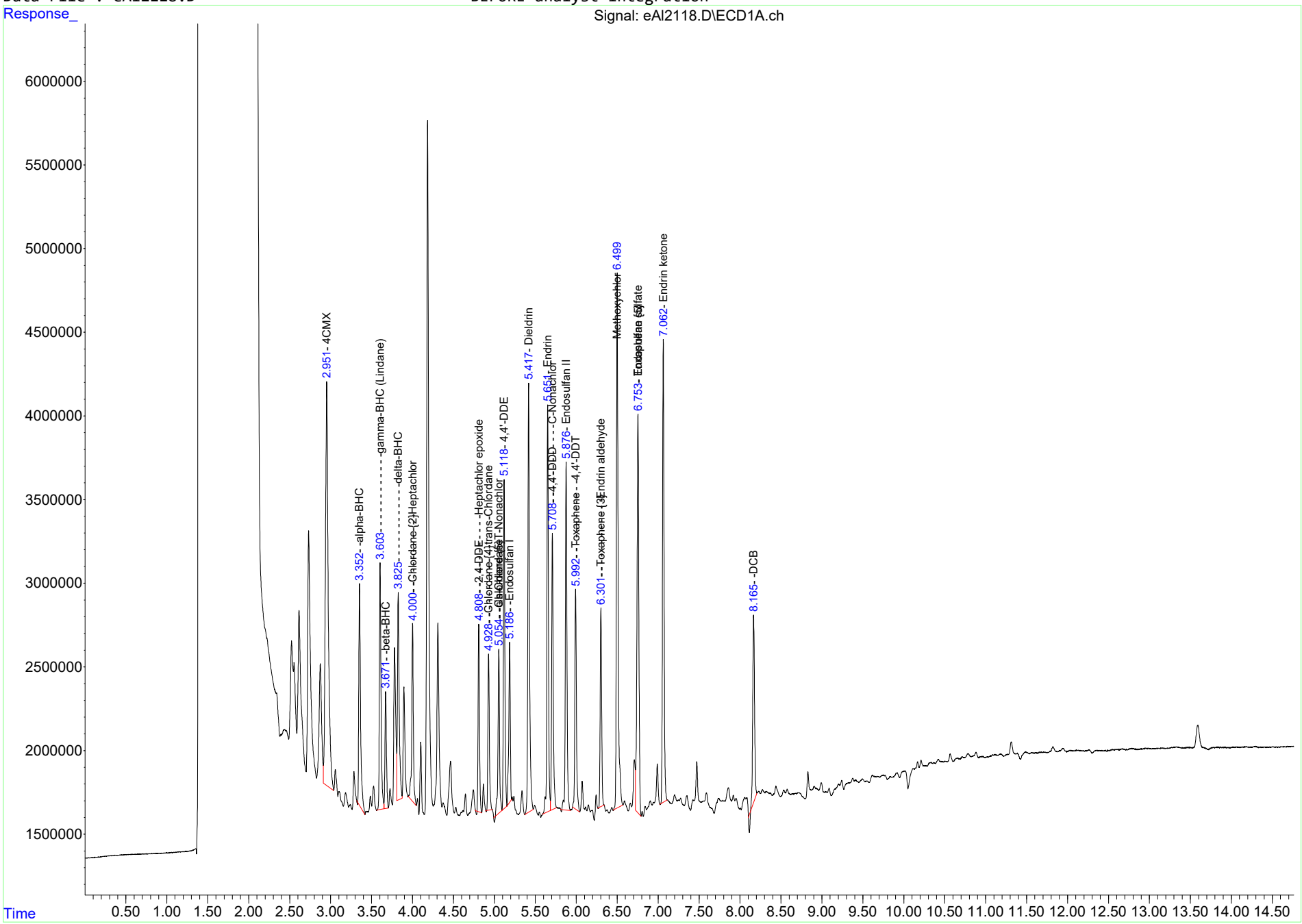
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
alpha-BHC	3.352	3.352	0.000	19554632	2.021	3.743	3.743	0.000	43139664	2.340	
gamma-BHC (Lindane)	3.604	3.604	0.000	19955971	2.270	4.067	4.065	-0.002	47518153	2.851	
Heptachlor	4.002	4.001	-0.001	14112179	1.725	4.495	4.495	0.000	27369913	1.765	
Aldrin	4.267	4.285	0.018f	829381	<MDL m	4.820	4.805	-0.015	12837976	<MDL m	#
beta-BHC	3.669	3.671	0.002	8959643	2.234	4.132	4.130	-0.002	44453446	6.138	#
delta-BHC	3.825	3.825	0.000	18476592	2.091	4.418	4.418	0.000	35446198	2.124	
Heptachlor epoxide	4.809	4.809	0.000	13180510	1.914	5.381	5.381	0.000	28962677	2.213	
trans-Chlordane	4.929	4.929	0.000	11493471	1.664	5.577	5.576	-0.001	23694393	1.815	
cis-Chlordane	5.054	5.054	0.000	12860107	1.907	5.725	5.725	0.000	23129678	1.817	
4,4'-DDE	5.118	5.119	0.001	23542869	3.739	5.877	5.876	-0.001	48607965	4.084	
Endosulfan I	5.187	5.186	-0.001	12255679	1.894	5.794	5.794	0.000	25338811	2.119	#
Dieldrin	5.419	5.418	-0.001	35255055	5.326	6.081	6.081	0.000	60196802	4.837	
Endrin	5.651	5.651	0.000	31302551	5.459	6.409	6.409	0.000	57855547	5.352	
Endosulfan II	5.877	5.876	-0.001	27578618	4.873	6.635	6.634	-0.001	53384759	5.048	
4,4'-DDD	5.707	5.708	0.001	21841620	4.208	6.494	6.494	0.000	46463553	4.723	

4,4'-DDT	5.992	5.992	0.000	17602390	3.180	6.838	6.838	0.000	37792650	3.695
Endrin aldehyde	6.301	6.301	0.000	14907127	3.320	6.992	6.992	0.000	31792345	3.918
Methoxychlor	6.499	6.500	0.001	44315647	16.511	7.585	7.585	0.000	81067379	16.889
Endosulfan sulfate	6.755	6.754	-0.001	37264552	7.517	7.297	7.297	0.000	44936915	5.069
Endrin ketone	7.062	7.063	0.001	35372291	5.473	7.907	7.907	0.000	67340392	5.670
Hexachlorobenzene	3.230	0.000	-3.230	0	N.D. d	3.636	3.609	-0.027f	10001779	N.D. d
Mirex	6.671	0.000	-6.671	0	N.D. d	7.885	7.907	0.022f	67340392	N.D. d
C-Nonachlor	5.685	5.708	0.023f	21841620	N.D. d	6.486	6.494	0.008	46463553	N.D. d
O-Chlordane	4.718	0.000	-4.718	0	N.D. d	5.289	0.000	-5.289	0	N.D. d
T-Nonachlor	5.039	5.054	0.015f	12860107	N.D. d	5.669	0.000	-5.669	0	N.D. d
2,4-DDE	4.796	4.809	0.013	13180510	N.D. d	5.556	5.576	0.020f	23694393	N.D. d
2,4-DDD	5.290	0.000	-5.290	0	N.D. d	6.094	6.081	-0.013	60196802	N.D. d
2,4-DDT	5.543	0.000	-5.543	0	N.D. d	6.425	6.409	-0.016f	57855547	N.D. d
Chlordane	3.930	0.000	-3.930	0	N.D. d	4.353	4.341	-0.012	21253111	N.D. d
Chlordane {2}	4.002	4.001	-0.001	14112179	N.D. d	4.495	4.495	0.000	27369913	N.D. d
Chlordane {3}	4.378	0.000	-4.378	0	N.D. d	4.947	0.000	-4.947	0	N.D. d
Chlordane {4}	4.930	4.929	-0.001	11493471	N.D. d	5.577	5.576	-0.001	23694393	N.D. d
Chlordane {5}	5.053	5.054	0.001	12860107	N.D. d	5.725	5.725	0.000	23129678	N.D. d
Toxaphene	5.991	5.992	0.001	17602390	N.D. d	6.722	0.000	-6.722	0	N.D. d
Toxaphene {2}	6.214	0.000	-6.214	0	N.D. d	7.001	6.992	-0.009	31792345	N.D. d
Toxaphene {3}	6.284	6.301	0.017f	14907127	N.D. d	7.242	0.000	-7.242	0	N.D. d
Toxaphene {4}	6.660	0.000	-6.660	0	N.D. d	7.579	7.585	0.006	81067379	N.D. d
Toxaphene {5}	6.762	6.754	-0.008	37264552	N.D. d	7.631	0.000	-7.631	0	N.D. d

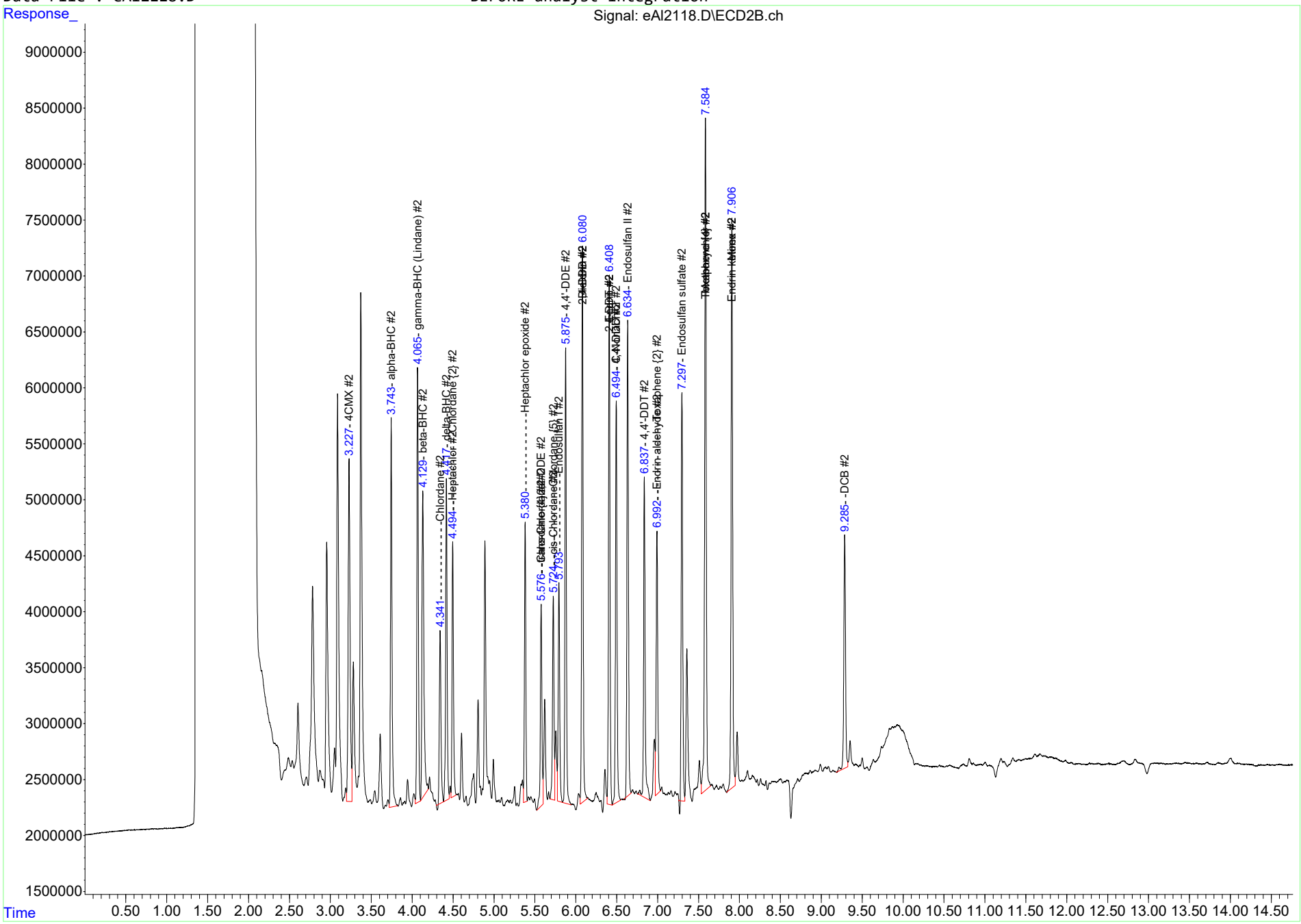
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2118.D

BEFORE analyst integration

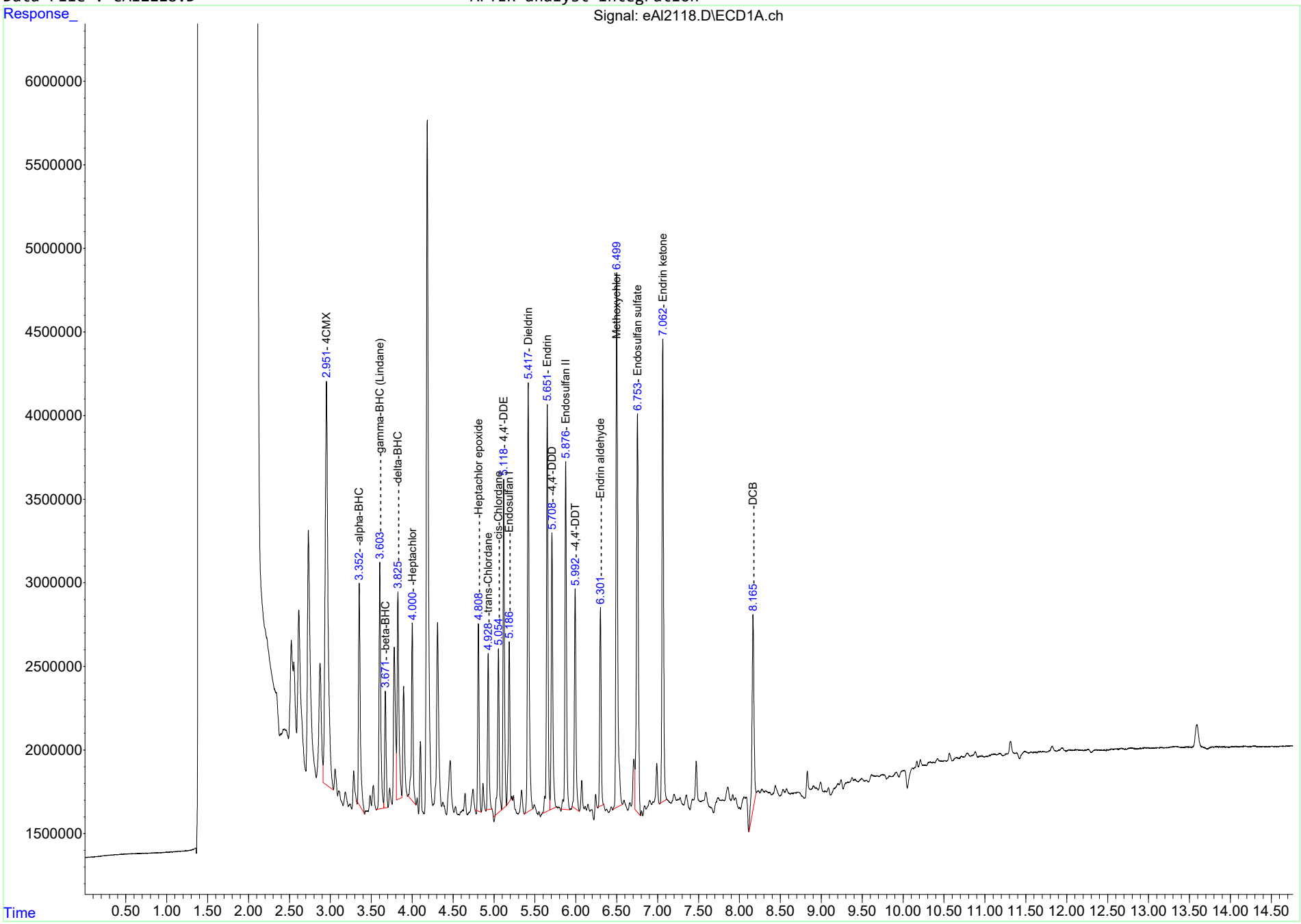


Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2118.D BEFORE analyst integration

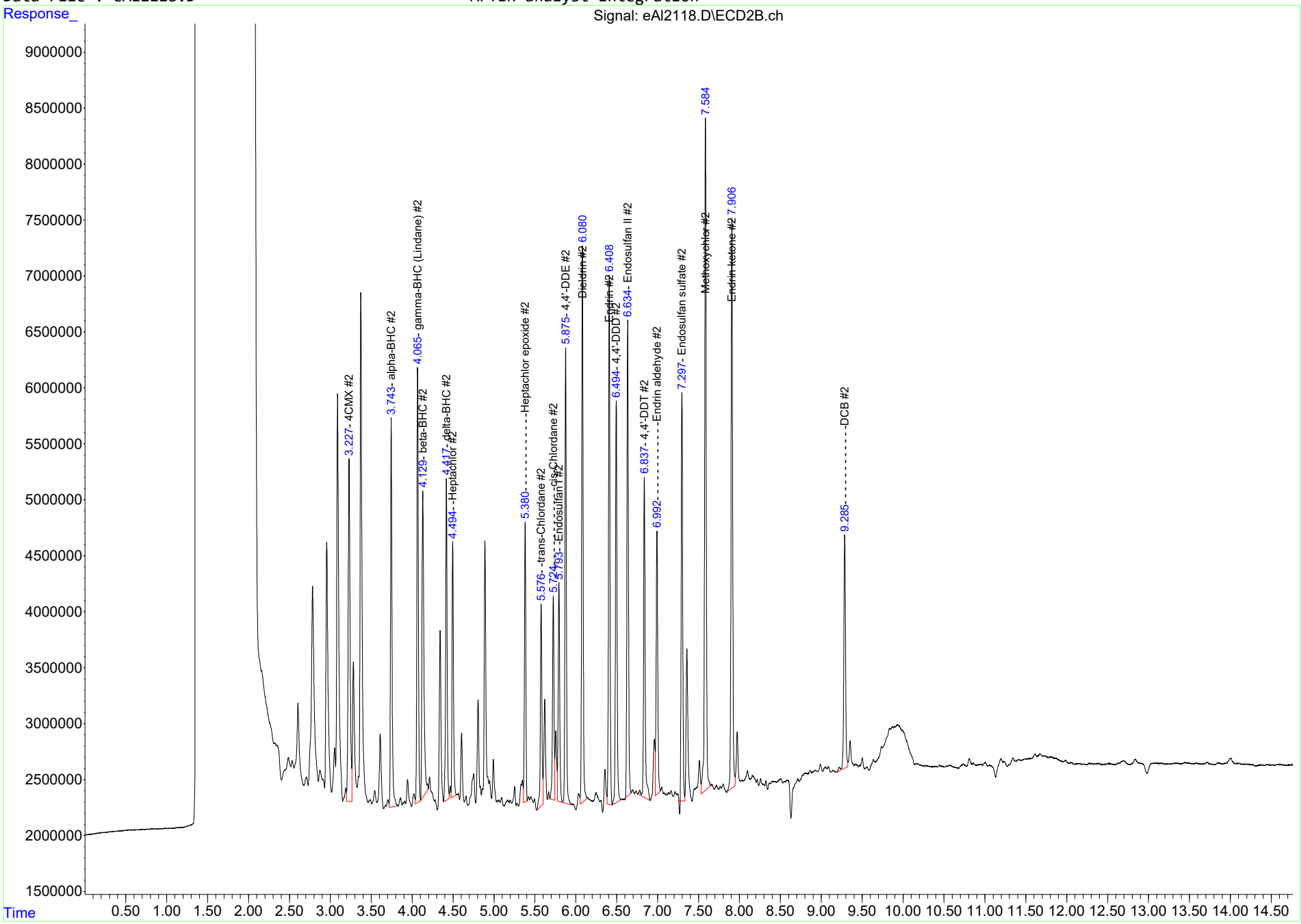


ECDA_PEST_120422.m Wed Dec 21 11:53:11 2022 Page: 4

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2118.D AFTER analyst integration



Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2118.D AFTER analyst integration



ECDA_PEST_120422.m Wed Dec 21 11:53:12 2022 Page: 6

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
System Monitoring Compounds											
4CMX	2.938	2.952	0.014	59112658	191.231	3.227	3.228	0.001	49597172	88.678	#
DCB	8.167	8.165	-0.002	16374610	83.342	9.287	9.286	-0.001	30687855	87.702	

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	96%	44%
DCB	200.000	No Limits	50%	44%
4CMX	200.000	No Limits	96%	44%
DCB	200.000	No Limits	42%	44%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
alpha-BHC	3.352	3.352	0.000	19554632	2.021	3.743	3.743	0.000	43139664	2.340	
gamma-BHC (Lindane)	3.604	3.604	0.000	19955971	2.270	4.067	4.065	-0.002	47518153	2.851	
Heptachlor	4.002	4.001	-0.001	14112179	1.725	4.495	4.495	0.000	27369913	1.765	
Aldrin	4.267	0.000	-4.267	0	N.D.	4.820	4.805	-0.015	14408591	<MDL	
beta-BHC	3.669	3.671	0.002	8959643	2.234	4.132	4.130	-0.002	44453446	6.138	#
delta-BHC	3.825	3.825	0.000	18476592	2.091	4.418	4.418	0.000	35446198	2.124	
Heptachlor epoxide	4.809	4.809	0.000	13180510	1.914	5.381	5.381	0.000	28962677	2.213	
trans-Chlordane	4.929	4.929	0.000	11493471	1.664	5.577	5.576	-0.001	23694393	1.815	
cis-Chlordane	5.054	5.054	0.000	12860107	1.907	5.725	5.725	0.000	23129678	1.817	
4,4'-DDE	5.118	5.119	0.001	23542869	3.739	5.877	5.876	-0.001	48607965	4.084	
Endosulfan I	5.187	5.186	-0.001	12255679	1.894	5.794	5.794	0.000	25338811	2.119	#
Dieldrin	5.419	5.418	-0.001	35255055	5.326	6.081	6.081	0.000	60196802	4.837	
Endrin	5.651	5.651	0.000	31302551	5.459	6.409	6.409	0.000	57855547	5.352	
Endosulfan II	5.877	5.876	-0.001	27578618	4.873	6.635	6.634	-0.001	53384759	5.048	
4,4'-DDD	5.707	5.708	0.001	21841620	4.208	6.494	6.494	0.000	46463553	4.723	
4,4'-DDT	5.992	5.992	0.000	17602390	3.180	6.838	6.838	0.000	37792650	3.695	
Endrin aldehyde	6.301	6.301	0.000	14907127	3.320	6.992	6.992	0.000	31792345	3.918	
Methoxychlor	6.499	6.500	0.001	44315647	16.511	7.585	7.585	0.000	81067379	16.889	
Endosulfan sulfate	6.755	6.754	-0.001	37264552	7.517	7.297	7.297	0.000	44936915	5.069	
Endrin ketone	7.062	7.063	0.001	35372291	5.473	7.907	7.907	0.000	67340392	5.670	
Hexachlorobenzene	3.230	0.000	-3.230	0	N.D.	3.636	3.609	-0.027f	10001779	<MDL	
Mirex	6.671	0.000	-6.671	0	N.D.	7.885	7.907	0.022f	67340392	9.037	
C-Nonachlor	5.685	5.708	0.023f	21841620	3.513	6.486	6.494	0.008	46463553	3.948	
O-Chlordane	4.718	0.000	-4.718	0	N.D.	5.289	0.000	-5.289	0	N.D.	
T-Nonachlor	5.039	5.054	0.015f	12860107	2.141	5.669	0.000	-5.669	0	N.D.	#
2,4-DDE	4.796	4.809	0.013	13180510	3.456	5.556	5.576	0.020f	23694393	3.293	
2,4-DDD	5.290	0.000	-5.290	0	N.D.	6.094	6.081	-0.013	60196802	9.445	
2,4-DDT	5.543	0.000	-5.543	0	N.D.	6.425	6.409	-0.016f	57855547	7.758	
Chlordane	3.930	0.000	-3.930	0	N.D.	4.353	4.341	-0.012	21253111	44.025	
Chlordane {2}	4.002	4.001	-0.001	14112179	30.327	4.495	4.495	0.000	27369913	29.754	
Chlordane {3}	4.378	0.000	-4.378	0	N.D.	4.947	0.000	-4.947	0	N.D.	
Chlordane {4}	4.930	4.929	-0.001	11493471	12.615	5.577	5.576	-0.001	23694393	15.445	
Chlordane {5}	5.053	5.054	0.001	12860107	17.716	5.725	5.725	0.000	23129678	18.103	
Sum Chlordane				38465757	60.658				95447095	107.326	#

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Average Chlordane					20.219					26.832
Toxaphene	5.991	5.992	0.001	17602390	92.465	6.722	0.000	-6.722	0	N.D.
Toxaphene {2}	6.214	0.000	-6.214	0	N.D.	7.001	6.992	-0.009	31792345	105.601
Toxaphene {3}	6.284	6.301	0.017f	14907127	57.310	7.242	0.000	-7.242	0	N.D.
Toxaphene {4}	6.660	0.000	-6.660	0	N.D.	7.579	7.585	0.006	81067379	171.979
Toxaphene {5}	6.762	6.754	-0.008	37264552	218.211	7.631	0.000	-7.631	0	N.D.
Sum Toxaphene				69774069	367.986				112859724	277.580
Average Toxaphene					122.662					138.790

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2118.D

DCB	- Manual Integration ==	AB/AP	Aldrin #2	- Manual Integration ==	AB/AP
Aldrin	- Manual Integration ==	AB/AP	Hexachlorobenzene #2	- Deletion ==	DNC/RT
			Mirex #2	- Deletion ==	DNC/RT
C-Nonachlor Both	- Deletion ==	DNC/RT			
T-Nonachlor	- Deletion ==	DNC/RT			
2,4-DDE Both	- Deletion ==	DNC/RT			
			2,4-DDD #2	- Deletion ==	DNC/RT
			2,4-DDT #2	- Deletion ==	DNC/RT
Chlordane Multi	- Deletion ==	DMP			
Toxaphene Multi	- Deletion ==	DMP			

Quantitation Report
GEL Laboratories, LLC

JM 12/21/2022

JC 12/22/2022

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2041.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On   : 20 Dec 2022 17:42 (#1); 20 Dec 2022 17:42 (#2)
Operator : JXM   InstName : ECDA
Sample   : |WAR221005-99|BLANK|1|SVP|1|BLANK
Misc   : |MIX[P]
ALS Vial : 1   Sample Multiplier: 1

Quant Time: Dec 21 05:37:15 2022
Quant Method : D:\MSDCHEM\1\Data\122022a\ECDA_PEST_120422.m
Quant Title : ECD5   SubList :
QLast Update : Mon Dec 19 11:11:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   : 1.0 ul
Signal #1 Phase : RTX-CLP1   Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um   Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.938	2.937	-0.001	1252165460	202.540	3.228	3.227	-0.001	2150475398	192.248
DCB	8.168	8.167	-0.001	728660239	185.433	9.289	9.287	-0.002	1290732707	184.438

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	101%	96%
DCB	200.000	No Limits	93%	92%

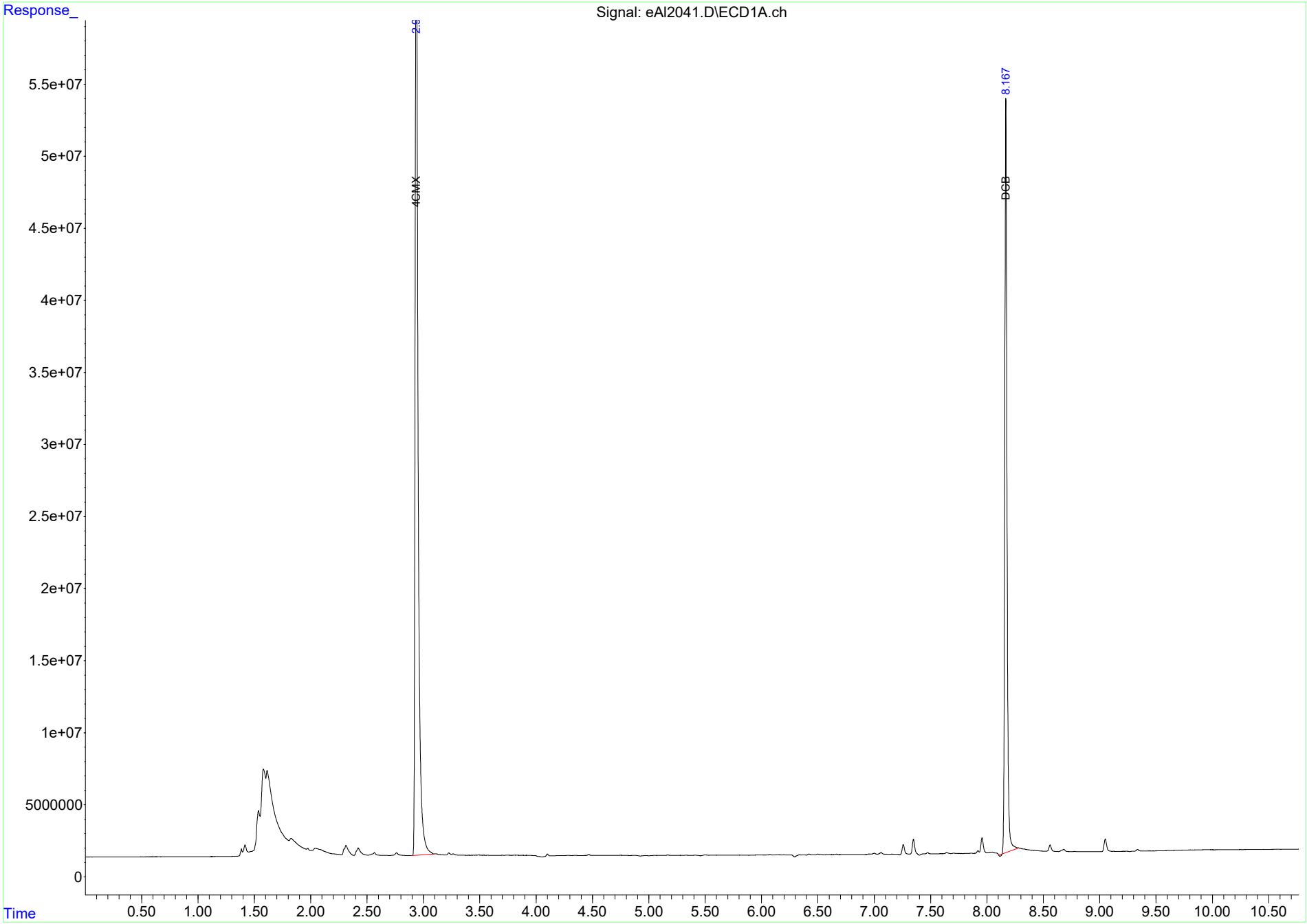
Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
alpha-BHC	3.352	0.000	-3.352	0	N.D.	3.743	0.000	-3.743	0	N.D.
gamma-BHC (Lindane)	3.604	0.000	-3.604	0	N.D.	4.067	0.000	-4.067	0	N.D.
Heptachlor	4.002	0.000	-4.002	0	N.D.	4.495	0.000	-4.495	0	N.D.
Aldrin	4.268	0.000	-4.268	0	N.D.	4.820	0.000	-4.820	0	N.D.
beta-BHC	3.670	0.000	-3.670	0	N.D.	4.133	0.000	-4.133	0	N.D.
delta-BHC	3.825	0.000	-3.825	0	N.D.	4.418	0.000	-4.418	0	N.D.
Heptachlor epoxide	4.811	0.000	-4.811	0	N.D.	5.382	0.000	-5.382	0	N.D.
trans-Chlordane	4.931	0.000	-4.931	0	N.D.	5.577	0.000	-5.577	0	N.D.
cis-Chlordane	5.054	0.000	-5.054	0	N.D.	5.726	0.000	-5.726	0	N.D.
4,4'-DDE	5.119	0.000	-5.119	0	N.D.	5.877	0.000	-5.877	0	N.D.
Endosulfan I	5.188	0.000	-5.188	0	N.D.	5.795	0.000	-5.795	0	N.D.
Dieldrin	5.419	0.000	-5.419	0	N.D.	6.082	0.000	-6.082	0	N.D.
Endrin	5.652	0.000	-5.652	0	N.D.	6.410	0.000	-6.410	0	N.D.
Endosulfan II	5.878	0.000	-5.878	0	N.D.	6.636	0.000	-6.636	0	N.D.
4,4'-DDD	5.708	0.000	-5.708	0	N.D.	6.495	0.000	-6.495	0	N.D.

4,4'-DDT	5.993	0.000	-5.993	0	N.D.	6.839	0.000	-6.839	0	N.D.
Endrin aldehyde	6.302	0.000	-6.302	0	N.D.	6.994	0.000	-6.994	0	N.D.
Methoxychlor	6.501	0.000	-6.501	0	N.D.	7.585	0.000	-7.585	0	N.D.
Endosulfan sulfate	6.757	0.000	-6.757	0	N.D.	7.298	0.000	-7.298	0	N.D.
Endrin ketone	7.065	0.000	-7.065	0	N.D.	7.908	0.000	-7.908	0	N.D.

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122022a\
Data File : eAl2041.D



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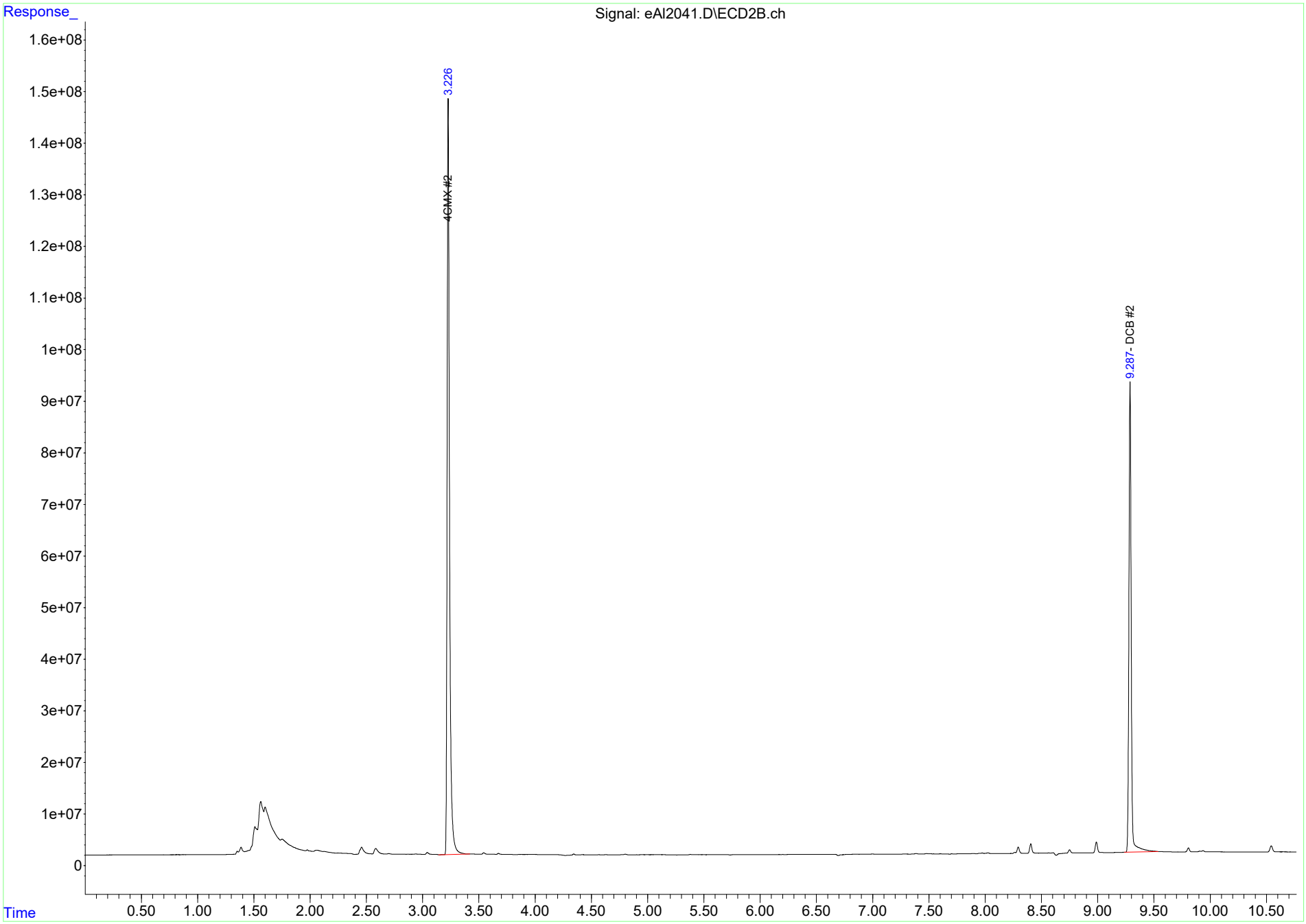
Data File : eAl2041.D



ECDA_PEST_120422.m Wed Dec 21 05:37:25 2022 Page: 4

Quantitation Report
GEL Laboratories, LLC

JM 12/21/2022

JC 12/22/2022

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2101.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On   : 21 Dec 2022 06:29 (#1); 21 Dec 2022 06:29 (#2)
Operator : JXM   InstName : ECDA
Sample   : |WAR221005-99|BLANK|1|SVP|1|BLANK
Misc   : |MIX[P]
ALS Vial : 1   Sample Multiplier: 1

Quant Time: Dec 21 07:57:03 2022
Quant Method : D:\MSDCHEM\1\Data\122122\ECDA_PEST_120422.m
Quant Title : ECD5   SubList :
QLast Update : Mon Dec 19 11:11:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   : 1.0 ul
Signal #1 Phase : RTX-CLP1   Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um   Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.938	2.936	-0.002	1237265747	200.130	3.227	3.227	0.000	2131828180	190.581
DCB	8.167	8.164	-0.003	728696448	185.442	9.287	9.286	-0.001	1285574277	183.701

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	100%	95%
DCB	200.000	No Limits	93%	92%

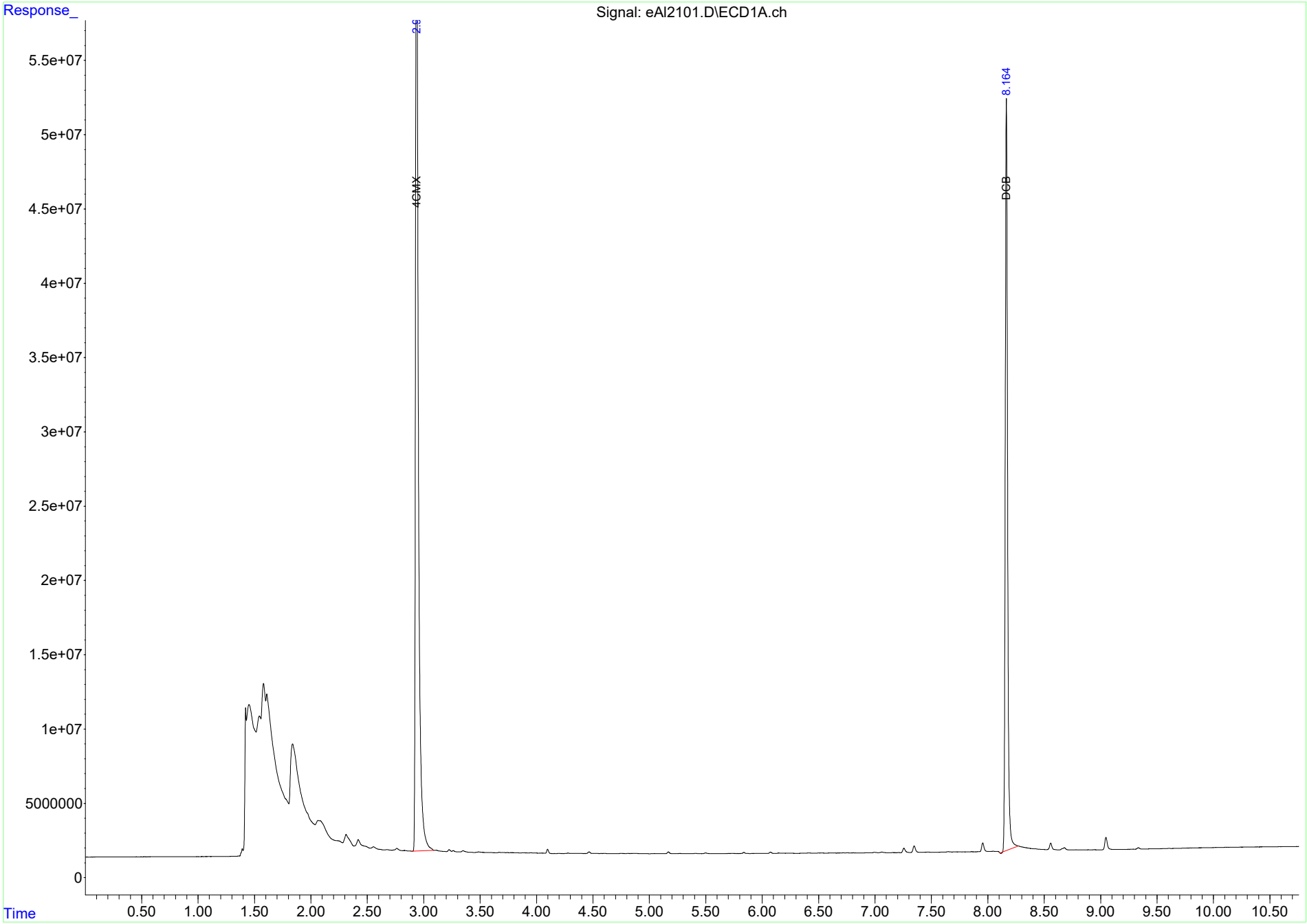
Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
alpha-BHC	3.352	0.000	-3.352	0	N.D.	3.743	0.000	-3.743	0	N.D.
gamma-BHC (Lindane)	3.604	0.000	-3.604	0	N.D.	4.067	0.000	-4.067	0	N.D.
Heptachlor	4.002	0.000	-4.002	0	N.D.	4.495	0.000	-4.495	0	N.D.
Aldrin	4.267	0.000	-4.267	0	N.D.	4.820	0.000	-4.820	0	N.D.
beta-BHC	3.669	0.000	-3.669	0	N.D.	4.132	0.000	-4.132	0	N.D.
delta-BHC	3.825	0.000	-3.825	0	N.D.	4.418	0.000	-4.418	0	N.D.
Heptachlor epoxide	4.809	0.000	-4.809	0	N.D.	5.381	0.000	-5.381	0	N.D.
trans-Chlordane	4.929	0.000	-4.929	0	N.D.	5.577	0.000	-5.577	0	N.D.
cis-Chlordane	5.054	0.000	-5.054	0	N.D.	5.725	0.000	-5.725	0	N.D.
4,4'-DDE	5.118	0.000	-5.118	0	N.D.	5.877	0.000	-5.877	0	N.D.
Endosulfan I	5.187	0.000	-5.187	0	N.D.	5.794	0.000	-5.794	0	N.D.
Dieldrin	5.419	0.000	-5.419	0	N.D.	6.081	0.000	-6.081	0	N.D.
Endrin	5.651	0.000	-5.651	0	N.D.	6.409	0.000	-6.409	0	N.D.
Endosulfan II	5.877	0.000	-5.877	0	N.D.	6.635	0.000	-6.635	0	N.D.
4,4'-DDD	5.707	0.000	-5.707	0	N.D.	6.494	0.000	-6.494	0	N.D.

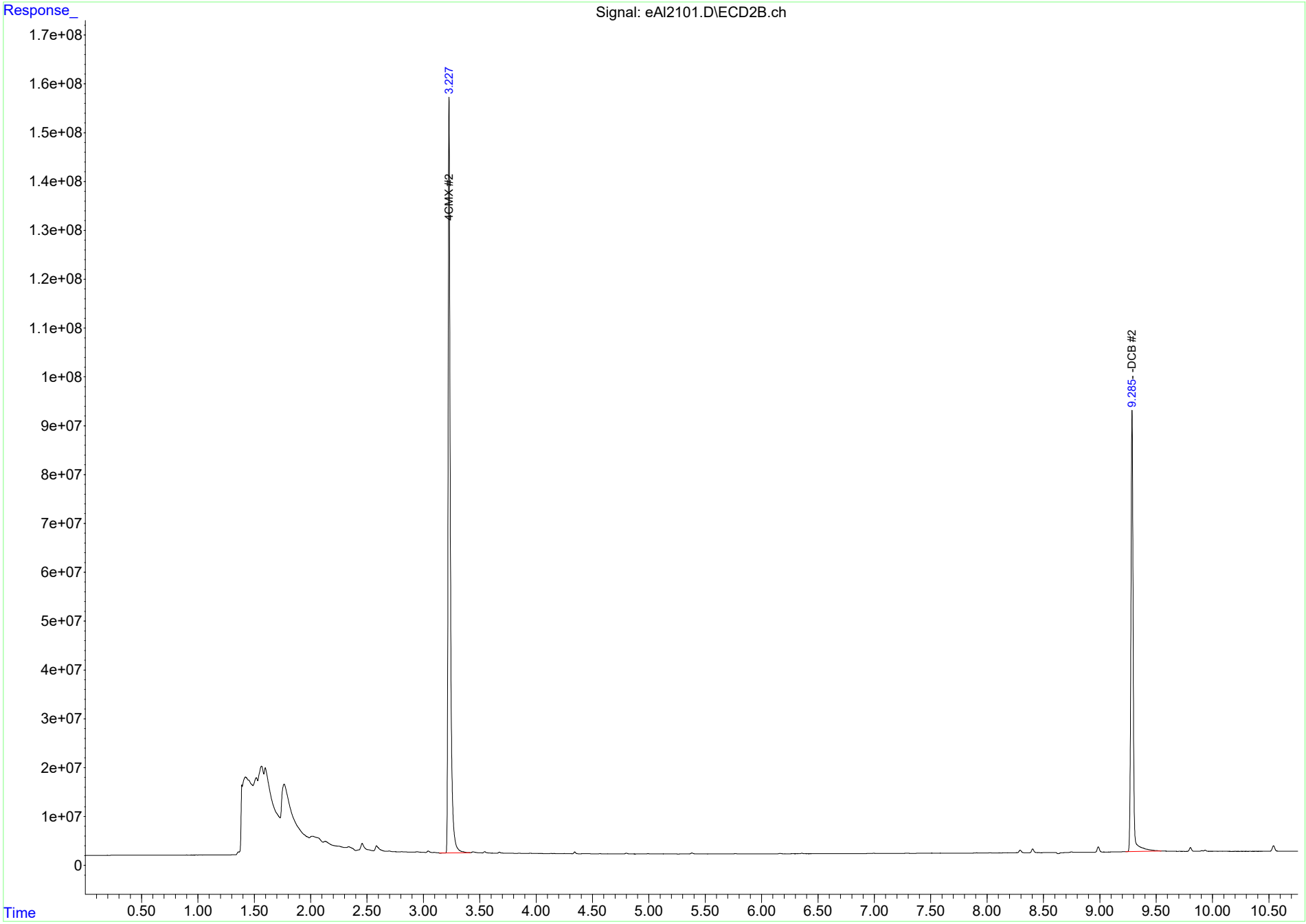
4,4'-DDT	5.992	0.000	-5.992	0	N.D.	6.838	0.000	-6.838	0	N.D.
Endrin aldehyde	6.301	0.000	-6.301	0	N.D.	6.992	0.000	-6.992	0	N.D.
Methoxychlor	6.499	0.000	-6.499	0	N.D.	7.585	0.000	-7.585	0	N.D.
Endosulfan sulfate	6.755	0.000	-6.755	0	N.D.	7.297	0.000	-7.297	0	N.D.
Endrin ketone	7.062	0.000	-7.062	0	N.D.	7.907	0.000	-7.907	0	N.D.

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2101.D



Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2101.D



ECDA_PEST_120422.m Wed Dec 21 07:59:20 2022 Page: 4

Quantitation Report
GEL Laboratories, LLC

JM 12/21/2022

JC 12/22/2022

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2113.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On   : 21 Dec 2022 09:51 (#1); 21 Dec 2022 09:51 (#2)
Operator : JXM   InstName : ECDA
Sample   : |WAR221005-99|BLANK|1|SVP|1|BLANK
Misc   : |MIX[P]
ALS Vial : 13   Sample Multiplier: 1

Quant Time: Dec 21 10:14:33 2022
Quant Method : D:\MSDCHEM\1\Data\122122\ECDA_PEST_120422.m
Quant Title : ECD5   SubList :
QLast Update : Mon Dec 19 11:11:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   : 1.0 ul
Signal #1 Phase : RTX-CLP1   Signal #2 Phase: RTX-CLP2
Signal #1 Info : 250 um   Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.938	2.938	0.000	1287290106	208.221	3.227	3.227	0.000	2218646199	198.343
DCB	8.167	8.167	0.000	771231477	196.266	9.287	9.288	0.001	1297225176	185.366

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	104%	99%
DCB	200.000	No Limits	98%	93%

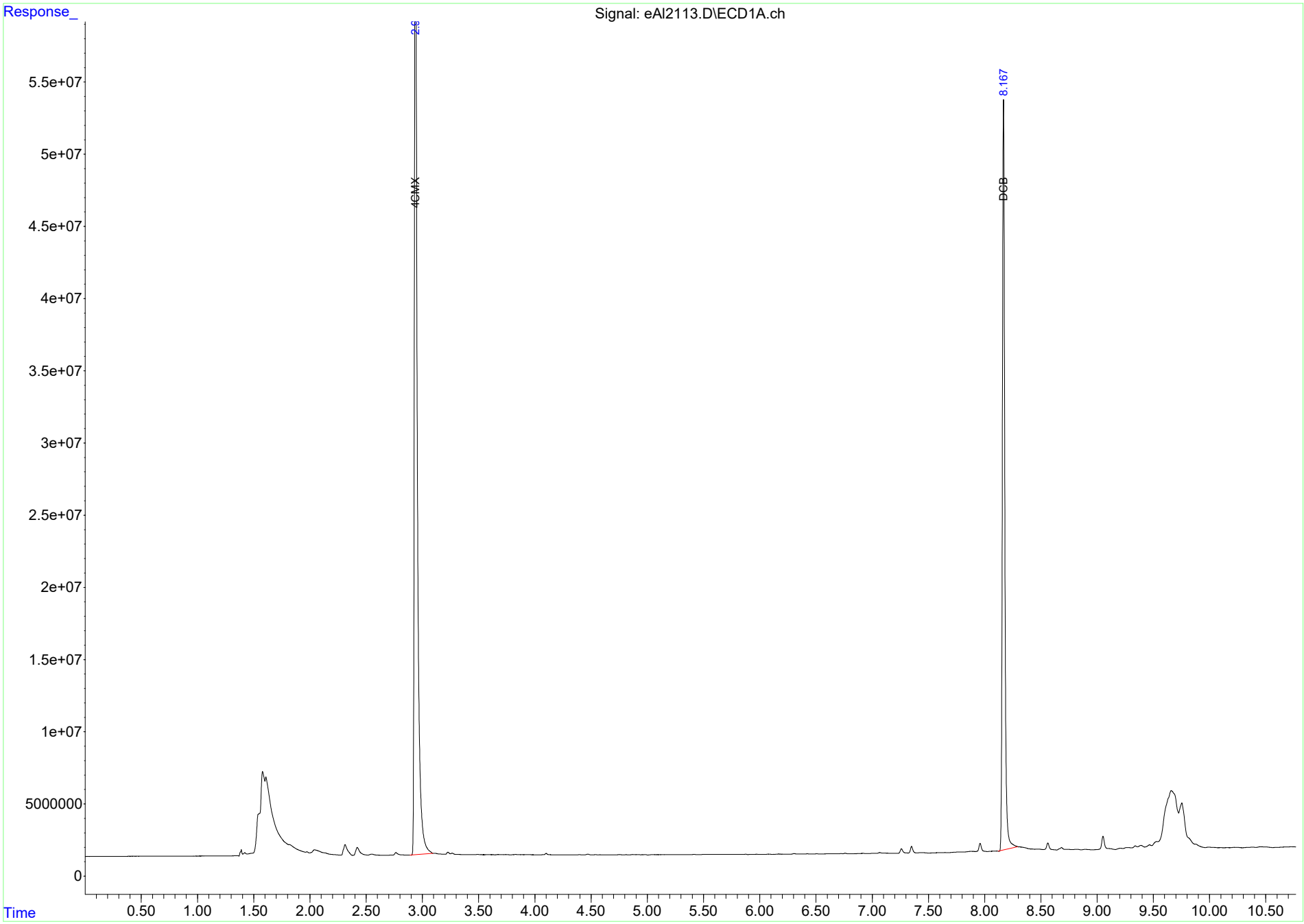
Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
alpha-BHC	3.352	0.000	-3.352	0	N.D.	3.743	0.000	-3.743	0	N.D.
gamma-BHC (Lindane)	3.604	0.000	-3.604	0	N.D.	4.067	0.000	-4.067	0	N.D.
Heptachlor	4.002	0.000	-4.002	0	N.D.	4.495	0.000	-4.495	0	N.D.
Aldrin	4.267	0.000	-4.267	0	N.D.	4.820	0.000	-4.820	0	N.D.
beta-BHC	3.669	0.000	-3.669	0	N.D.	4.132	0.000	-4.132	0	N.D.
delta-BHC	3.825	0.000	-3.825	0	N.D.	4.418	0.000	-4.418	0	N.D.
Heptachlor epoxide	4.809	0.000	-4.809	0	N.D.	5.381	0.000	-5.381	0	N.D.
trans-Chlordane	4.929	0.000	-4.929	0	N.D.	5.577	0.000	-5.577	0	N.D.
cis-Chlordane	5.054	0.000	-5.054	0	N.D.	5.725	0.000	-5.725	0	N.D.
4,4'-DDE	5.118	0.000	-5.118	0	N.D.	5.877	0.000	-5.877	0	N.D.
Endosulfan I	5.187	0.000	-5.187	0	N.D.	5.794	0.000	-5.794	0	N.D.
Dieldrin	5.419	0.000	-5.419	0	N.D.	6.081	0.000	-6.081	0	N.D.
Endrin	5.651	0.000	-5.651	0	N.D.	6.409	0.000	-6.409	0	N.D.
Endosulfan II	5.877	0.000	-5.877	0	N.D.	6.635	0.000	-6.635	0	N.D.
4,4'-DDD	5.707	0.000	-5.707	0	N.D.	6.494	0.000	-6.494	0	N.D.

4,4'-DDT	5.992	0.000	-5.992	0	N.D.	6.838	0.000	-6.838	0	N.D.
Endrin aldehyde	6.301	0.000	-6.301	0	N.D.	6.992	0.000	-6.992	0	N.D.
Methoxychlor	6.499	0.000	-6.499	0	N.D.	7.585	0.000	-7.585	0	N.D.
Endosulfan sulfate	6.755	0.000	-6.755	0	N.D.	7.297	0.000	-7.297	0	N.D.
Endrin ketone	7.062	0.000	-7.062	0	N.D.	7.907	0.000	-7.907	0	N.D.

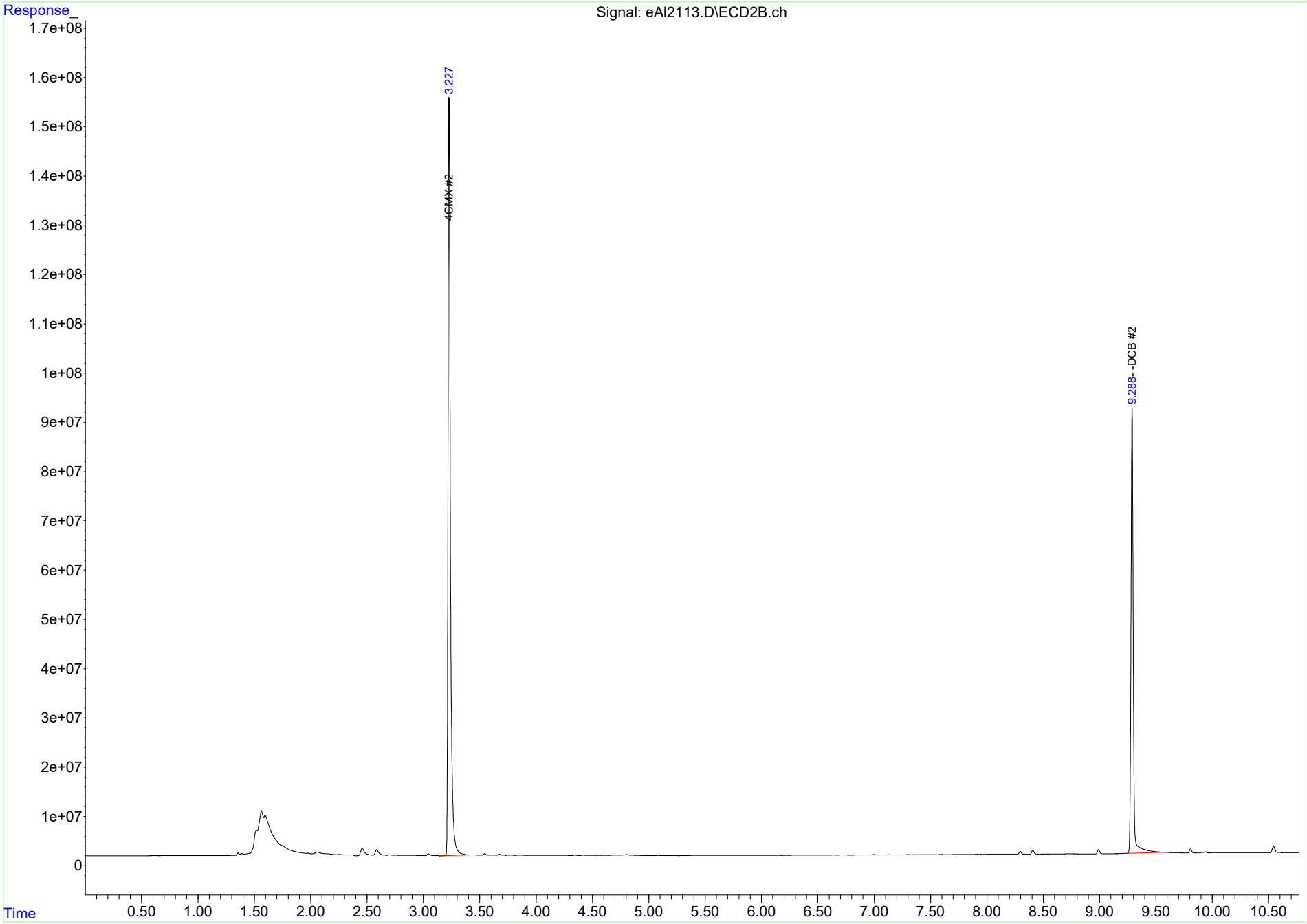
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2113.D



ECDA_PEST_120422.m Wed Dec 21 10:14:56 2022 Page: 3

Data Path : D:\MSDCHEM\1\Data\122122\
Data File : eAl2113.D



ECDA_PEST_120422.m Wed Dec 21 10:14:56 2022 Page: 4

Miscellaneous

Prep Logbook

Solid-Phase Extraction

Batch ID: 2358000 **Verified by:** _____
Analyst: Lakia White
Method: SW846 3535A

Lab SOP: GL-OA-E-070 REV# 11
Instrument: Semi-Volatiles Manual

Sample ID	Prep Date	Initial Wt (g)	Final Wt (g)	Initial Volume (mL)	Ph 1	Ph 2	Final Volume (mL)	Prepped Factor (mL/mL)
1205274607 MB	19-DEC-2022 06:50:00			1000	7	1	5	0.005
1205274608 LCS	19-DEC-2022 06:50:00			1000	7	1	5	0.005
1205274619 LCS	19-DEC-2022 06:50:00			1000	7	1	5	0.005
603527006 - 2	19-DEC-2022 06:50:00	1556.2	511.07	1045.13	7	1	5	0.00478
603527007 - 2	19-DEC-2022 06:50:00	1565.46	513.23	1052.23	7	1	5	0.00475
603527008 - 2	19-DEC-2022 06:50:00	1560.45	514.27	1046.18	7	1	5	0.00478
603877001 - 2	19-DEC-2022 06:50:00	1456.16	443.69	1012.47	7	1	5	0.00494
604211001	19-DEC-2022 06:50:00			1000	7	1	5	0.005
604398029	19-DEC-2022 06:50:00	1562.77	510.13	1052.64	7	1	5	0.00475
604398030	19-DEC-2022 06:50:00	1566.67	516.68	1049.99	7	1	5	0.00476
604398031	19-DEC-2022 06:50:00	1560	509.41	1050.59	7	1	5	0.00476
604398032	19-DEC-2022 06:50:00	1560.46	505.15	1055.31	7	1	5	0.00474
604398033	19-DEC-2022 06:50:00			1000	7	1	5	0.005
1205274609 MS (604398033)	19-DEC-2022 06:50:00			1000	7	1	5	0.005
1205274610 MSD (604398033)	19-DEC-2022 06:50:00			1000	7	1	5	0.005
604398034	19-DEC-2022 06:50:00	1562.1	511.89	1050.21	7	1	5	0.00476
604449002	19-DEC-2022 06:50:00			1000	10	1	5	0.005
1205274611 MS (604449002)	19-DEC-2022 06:50:00			900	10	1	5	0.00556
1205274612 MSD (604449002)	19-DEC-2022 06:50:00			900	10	1	5	0.00556
604449006	19-DEC-2022 06:50:00	1502.06	443.5	1058.56	10	1	5	0.00472
604449010	19-DEC-2022 06:50:00	1561.66	441.44	1120.22	10	1	5	0.00446
604449014	19-DEC-2022 06:50:00	1490.56	439.47	1051.09	10	1	5	0.00476
604449018	19-DEC-2022 06:50:00	1469.97	447.39	1022.58	10	1	5	0.00489

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1205274608	PESTSPIKE	WE221118-16	1	mL
LCS	1205274619	Toxaphene TCLP LCS	WE221118-02	2	mL
MS	1205274609	PESTSPIKE	WE221118-16	1	mL
MS	1205274611	PESTSPIKE	WE221118-16	1	mL
MSD	1205274610	PESTSPIKE	WE221118-16	1	mL
MSD	1205274612	PESTSPIKE	WE221118-16	1	mL
SURR	All	PEST SURROGATE 1000 UG/L	WE221020-09	1	mL

Comments:

Turbovap #: 1,2,3,4
Cartridge Lot #: 070798-CO
Final Solvent: Hexane
Verified By: Carlethea Bing

Samples 604211001,604449002,its MS/MSD, 604449006, 604449010, 604449014, and 604449018, contained sediments.

Prep Logbook

Batch ID: **2358000** **Verified by:** _____
Analyst: **Lakia White**
Method: **SW846 3535A**

Lab SOP: **GL-OA-E-070 REV# 11**
Instrument: **Semi-Volatiles Manual**

Sample ID	Prep Date	Initial Wt (g)	Final Wt (g)	Initial Volume (mL)	Ph 1	Ph 2	Final Volume (mL)	Prepped Factor (mL/mL)
REGNT All	Methylene Chloride			3483519		100 mL		
REGNT All	Acetone			3518410-B4		5 mL		
REGNT All	Hexane			3527680		10 mL		
REGNT All	Sulfuric Acid 1:1 H2SO4/H2O			3648652		15 mL		
SOURC All	SODIUM SULFATE			3493987		30 g		

ORGANIC RUN LOG - INSTRUMENT ID#ECDA

GEL ORGANIC RUN LOG 120122

DATE: 1-Dec-22 METHOD: See Data OPERATOR: JXM REVIEWED BY: _____

REVIEWED DATE: _____

Internal Std ID: _____

Calibration & QC Information:

Initial Calibration Dates: See Calibration History and Standards Log

Initial Calibration Std ID's: See Calibration History and Standards Log

GEL SOP: GL-OA-E-041

Solvent Lot: _____

Sequence Number: 120122

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Dil. Factor	AS Slot #	Analyst	Comments
12/01/2022	06:25	eAI0101.D	WAR221005-99	BLANK	BLANK	1	1	JXM	
12/01/2022	06:41	eAI0102.D	WPE221122-99	PEM	PEM	1	2	JXM	
12/01/2022	06:57	eAI0103.D	WPE221107-10	AB-CCV	CCV	1	3	JXM	
12/01/2022	07:14	eAI0104.D	WPE221201-41	TOX-1	ICAL	1	4	JXM	
12/01/2022	07:30	eAI0105.D	WPE221201-42	TOX-2	ICAL	1	5	JXM	
12/01/2022	07:47	eAI0106.D	WPE221201-43	TOX-3	ICAL	1	6	JXM	
12/01/2022	08:03	eAI0107.D	WPE221201-44	TOX-4	ICAL	1	7	JXM	
12/01/2022	08:20	eAI0108.D	IPE221024-40	TOX-5	ICAL	1	8	JXM	
12/01/2022	08:36	eAI0109.D	WPE221014-20	TOX-ICV	ICV	1	9	JXM	
12/01/2022	08:53	eAI0110.D	WPE221201-21	CHLOR-1	ICAL	1	10	JXM	
12/01/2022	09:09	eAI0111.D	WPE221201-22	CHLOR-2	ICAL	1	11	JXM	
12/01/2022	09:26	eAI0112.D	WPE221201-23	CHLOR-3	ICAL	1	12	JXM	
12/01/2022	09:42	eAI0113.D	WPE221201-24	CHLOR-4	ICAL	1	13	JXM	
12/01/2022	09:59	eAI0114.D	IPE220614-01	CHLOR-5	ICAL	1	14	JXM	
12/01/2022	10:15	eAI0115.D	WPE220614-00	CHLOR-ICV	ICV	1	15	JXM	
12/01/2022	10:31	eAI0116.D	WPE221201-31	GAPA-1	ICAL	1	16	JXM	
12/01/2022	10:48	eAI0117.D	WPE221201-32	GAPA-2	ICAL	1	17	JXM	
12/01/2022	11:04	eAI0118.D	WPE221201-33	GAPA-3	ICAL	1	18	JXM	
12/01/2022	11:21	eAI0119.D	WPE221201-34	GAPA-4	ICAL	1	19	JXM	
12/01/2022	11:37	eAI0120.D	IPE220825-01	GAPA-5	ICAL	1	20	JXM	
12/01/2022	11:54	eAI0121.D	WPE221123-05	GAPA-ICV	ICV	1	21	JXM	
12/01/2022	12:10	eAI0122.D	WAR221005-99	BLANK	BLANK	1	22	JXM	
12/01/2022	12:27	eAI0123.D	600355006	WSRB	2348914	1	23	JXM	
12/01/2022	12:47	eAI0124.D	600390007	WSRB	2348914	5	24	JXM	
12/01/2022	13:08	eAI0125.D	1205257625	MS	2348914	5	25	JXM	
12/01/2022	13:28	eAI0126.D	1205257626	MSD	2348914	5	26	JXM	
12/01/2022	13:49	eAI0127.D	WPE221107-10	AB-CCV	CCV	1	27	JXM	
12/01/2022	14:05	eAI0128.D	WAR221005-99	BLANK	BLANK	1	28	JXM	

ORGANIC RUN LOG - INSTRUMENT ID#ECDA

Jxm 12/05/2022

GEL ORGANIC RUN LOG 120422

DATE: 4-Dec-22 METHOD: See Data OPERATOR: JXM REVIEWED BY: _____

REVIEWED DATE: _____

Internal Std ID: _____

Calibration & QC Information:

Solvent Lot: _____

Initial Calibration Dates: See Calibration History and Standards Log

Initial Calibration Std ID's: See Calibration History and Standards Log

Sequence Number: 120422

GEL SOP: GL-OA-E-041

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Dil. Factor	AS Slot #	Analyst	Comments
12/04/2022	12:30	eAI0401.D	WAR221005-99	BLANK	BLANK	1	1	JXM	
12/04/2022	12:46	eAI0402.D	WPE221122-99	PEM	PEM	1	2	JXM	
12/04/2022	13:02	eAI0403.D	WPE221107-10	AB-CCV	CCV	1	3	JXM	
12/04/2022	13:21	eAI0404.D	WPE221014-20	TOX-CCV	CCV	1	4	JXM	
12/04/2022	13:38	eAI0405.D	WPE220614-00	CHLOR-CCV	CCV	1	5	JXM	
12/04/2022	13:54	eAI0406.D	WPE221123-05	GAPA-CCV	CCV	1	6	JXM	
12/04/2022	14:11	eAI0407.D	WPE221203-01	AB-1	ICAL	1	7	JXM	
12/04/2022	14:27	eAI0408.D	WPE221203-02	AB-2	ICAL	1	8	JXM	
12/04/2022	14:44	eAI0409.D	WPE221203-03	AB-3	ICAL	1	9	JXM	
12/04/2022	15:00	eAI0410.D	WPE221203-04	AB-4	ICAL	1	10	JXM	
12/04/2022	15:17	eAI0411.D	IPE221203-11	AB-5	ICAL	1	11	JXM	
12/04/2022	15:33	eAI0412.D	WPE221203-10	AB-ICV	ICV	1	12	JXM	
12/04/2022	15:50	eAI0413.D	WAR221005-99	BLANK	BLANK	1	13	JXM	
12/04/2022	16:06	eAI0414.D	1205258216	MB	2349321	1	14	JXM	
12/04/2022	16:22	eAI0415.D	1205258217	LCS	2349321	1	15	JXM	
12/04/2022	16:39	eAI0416.D	598575013	PTQA	2349321	20	16	JXM	
12/04/2022	16:59	eAI0417.D	598575013	PTQA	2349321	10	17	JXM	
12/04/2022	17:20	eAI0418.D	WPE221107-10	AB-CCV	CCV	1	18	JXM	
12/04/2022	17:36	eAI0419.D	WAR221005-99	BLANK	BLANK	1	19	JXM	
12/04/2022	17:53	eAI0420.D	1205260442	MB	2350453	1	20	JXM	
12/04/2022	18:09	eAI0421.D	1205260443	LCS	2350453	1	21	JXM	
12/04/2022	18:26	eAI0422.D	601871001	UCOR	2350453	1	22	JXM	
12/04/2022	18:46	eAI0423.D	601871002	UCOR	2350453	1	23	JXM	
12/04/2022	19:07	eAI0424.D	1205260444	MS	2350453	1	24	JXM	
12/04/2022	19:27	eAI0425.D	1205260445	MSD	2350453	1	25	JXM	
12/04/2022	19:48	eAI0426.D	601871003	UCOR	2350453	1	26	JXM	
12/04/2022	20:08	eAI0427.D	601871004	UCOR	2350453	1	27	JXM	
12/04/2022	20:29	eAI0428.D	601871005	UCOR	2350453	1	28	JXM	

GEL ORGANIC RUN LOG 120422

12/04/2022 20:49	eAI0429.D	601871007	UCOR	2350453	1	29	JXM	
12/04/2022 21:09	eAI0430.D	WPE221107-10	AB-CCV	CCV	1	30	JXM	
12/04/2022 21:26	eAI0431.D	WAR221005-99	BLANK	BLANK	1	31	JXM	
12/04/2022 21:42	eAI0432.D	601871008	UCOR	2350453	1	32	JXM	
12/04/2022 22:03	eAI0433.D	601871009	UCOR	2350453	1	33	JXM	
12/04/2022 22:23	eAI0434.D	601871010	UCOR	2350453	1	34	JXM	
12/04/2022 22:44	eAI0435.D	601871011	UCOR	2350453	1	35	JXM	
12/04/2022 23:04	eAI0436.D	601871012	UCOR	2350453	1	36	JXM	
12/04/2022 23:25	eAI0437.D	601871013	UCOR	2350453	1	37	JXM	
12/04/2022 23:45	eAI0438.D	601871014	UCOR	2350453	1	38	JXM	
12/05/2022 00:06	eAI0439.D	601871015	UCOR	2350453	1	39	JXM	
12/05/2022 00:26	eAI0440.D	601871016	UCOR	2350453	1	40	JXM	
12/05/2022 00:47	eAI0441.D	601871017	UCOR	2350453	1	41	JXM	
12/05/2022 01:07	eAI0442.D	WPE221107-10	AB-CCV	CCV	1	42	JXM	
12/05/2022 01:24	eAI0443.D	WAR221005-99	BLANK	BLANK	1	43	JXM	

ORGANIC RUN LOG - INSTRUMENT ID#ECDA

JXM 12/21/2022

GEL ORGANIC RUN LOG 122022A

DATE: 20-Dec-22 METHOD: See Data OPERATOR: JXM REVIEWED BY: _____

REVIEWED DATE: _____

Internal Std ID: _____

Calibration & QC Information:

Initial Calibration Dates: See Calibration History and Standards Log

Initial Calibration Std ID's: See Calibration History and Standards Log

GEL SOP: GL-OA-E-041

Solvent Lot: _____

Sequence Number: 122022A

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Dil. Factor	AS Slot #	Analyst	Comments
12/20/2022	17:42	eAl2041.D	WAR221005-99	BLANK	BLANK	1	1	JXM	
12/20/2022	17:58	eAl2042.D	WPE221122-99	PEM	PEM	1	2	JXM	
12/20/2022	18:15	eAl2043.D	WPE221107-10	AB-CCV	CCV	1	3	JXM	
12/20/2022	18:31	eAl2044.D	WPE221215-20	TOX-CCV	CCV	1	4	JXM	
12/20/2022	18:48	eAl2045.D	WPE221212-00	CHLOR-CCV	CCV	1	5	JXM	
12/20/2022	19:04	eAl2046.D	WPE221123-05	GAPA-CCV	CCV	1	6	JXM	
12/20/2022	19:20	eAl2048.D	1205274607	MB	2358002	1	8	JXM	
12/20/2022	19:37	eAl2049.D	1205274608	LCS	2358002	1	9	JXM	
12/20/2022	19:53	eAl2050.D	1205274619	LCS	2358002	1	10	JXM	
12/20/2022	20:10	eAl2051.D	603527006	CPRC	2358002	1	11	JXM	
12/20/2022	20:26	eAl2052.D	603527007	CPRC	2358002	1	12	JXM	
12/20/2022	20:43	eAl2053.D	603527008	CPRC	2358002	1	13	JXM	
12/20/2022	20:59	eAl2054.D	604398029	CPRC	2358002	1	14	JXM	
12/20/2022	21:16	eAl2055.D	604398030	CPRC	2358002	1	15	JXM	
12/20/2022	21:32	eAl2056.D	604398031	CPRC	2358002	1	16	JXM	
12/20/2022	21:49	eAl2057.D	604398032	CPRC	2358002	1	17	JXM	
12/20/2022	22:05	eAl2058.D	WPE221107-10	AB-CCV	CCV	1	18	JXM	
12/20/2022	22:22	eAl2060.D	604398033	CPRC	2358002	1	20	JXM	
12/20/2022	22:38	eAl2061.D	1205274609	MS	2358002	1	21	JXM	
12/20/2022	22:55	eAl2062.D	1205274610	MSD	2358002	1	22	JXM	
12/20/2022	23:11	eAl2063.D	604398034	CPRC	2358002	1	23	JXM	
12/20/2022	23:28	eAl2064.D	WPE221107-10	AB-CCV	CCV	1	24	JXM	
12/20/2022	23:44	eAl2066.D	603877001	UCOR	2358002	1	26	JXM	
12/21/2022	00:00	eAl2067.D	WPE221107-10	AB-CCV	CCV	1	27	JXM	
12/21/2022	00:17	eAl2068.D	WAR221005-99	BLANK	BLANK	1	28	JXM	
12/21/2022	00:33	eAl2069.D	604449002	TNSL	2358002	10	29	JXM	
12/21/2022	00:50	eAl2070.D	1205274611	MS	2358002	10	30	JXM	
12/21/2022	01:06	eAl2071.D	1205274612	MSD	2358002	10	31	JXM	

GEL ORGANIC RUN LOG 122022A

12/21/2022 01:23	eAI2072.D	604449006	TNSL	2358002	10	32	JXM	
12/21/2022 01:39	eAI2073.D	604449010	TNSL	2358002	10	33	JXM	
12/21/2022 01:56	eAI2074.D	604449014	TNSL	2358002	10	34	JXM	
12/21/2022 02:12	eAI2075.D	604449018	TNSL	2358002	10	35	JXM	
12/21/2022 02:29	eAI2076.D	WPE221107-10	AB-CCV	CCV	1	36	JXM	DDT and Meth low on both columns
12/21/2022 02:45	eAI2077.D	WAR221005-99	BLANK	BLANK	1	37	JXM	
12/21/2022 03:02	eAI2078.D	604211001	GEEL	2358002	1	38	JXM	
12/21/2022 03:18	eAI2079.D	WPE221107-10	AB-CCV	CCV	1	39	JXM	DDT and Meth low on both columns
12/21/2022 03:35	eAI2080.D	WAR221005-99	BLANK	BLANK	1	40	JXM	
12/21/2022 03:51	eAI2081.D	604376001	INSG	2357995	1	41	JXM	
12/21/2022 04:08	eAI2082.D	604376002	INSG	2357995	1	42	JXM	
12/21/2022 04:24	eAI2083.D	604376003	INSG	2357995	1	43	JXM	
12/21/2022 04:41	eAI2084.D	604376004	INSG	2357995	1	44	JXM	
12/21/2022 04:57	eAI2085.D	604376005	INSG	2357995	1	45	JXM	
12/21/2022 05:13	eAI2086.D	604376006	INSG	2357995	1	46	JXM	
12/21/2022 05:30	eAI2087.D	WPE221107-10	AB-CCV	CCV	1	47	JXM	Endrin, DDT and Meth low on both columns
12/21/2022 05:48	eAI2088.D	WAR221005-99	BLANK	BLANK	1	48	JXM	

ORGANIC RUN LOG - INSTRUMENT ID#ECDA

GEL ORGANIC RUN LOG 122122

DATE: 21-Dec-22 METHOD: See Data OPERATOR: JXM REVIEWED BY: _____

REVIEWED DATE: _____

Internal Std ID: _____

Calibration & QC Information:

Initial Calibration Dates: See Calibration History and Standards Log

Initial Calibration Std ID's: See Calibration History and Standards Log

GEL SOP: GL-OA-E-041

Solvent Lot: _____

Sequence Number: 122122

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Dil. Factor	AS Slot #	Analyst	Comments
12/21/2022	06:29	eAI2101.D	WAR221005-99	BLANK	BLANK	1	1	JXM	
12/21/2022	06:46	eAI2102.D	WPE221122-99	PEM	PEM	1	2	JXM	
12/21/2022	07:02	eAI2103.D	WPE221107-10	AB-CCV	CCV	1	3	JXM	
12/21/2022	07:19	eAI2104.D	WPE221215-20	TOX-CCV	CCV	1	4	JXM	
12/21/2022	07:35	eAI2105.D	WPE221212-00	CHLOR-CCV	CCV	1	5	JXM	
12/21/2022	07:52	eAI2106.D	WPE221123-05	GAPA-CCV	CCV	1	6	JXM	
12/21/2022	08:08	eAI2107.D	WAR221005-99	BLANK	BLANK	1	7	JXM	
12/21/2022	08:25	eAI2108.D	1205274607	MB	2358002	1	8	JXM	
12/21/2022	08:41	eAI2109.D	1205274608	LCS	2358002	1	9	JXM	
12/21/2022	08:58	eAI2110.D	1205274619	LCS	2358002	1	10	JXM	
12/21/2022	09:14	eAI2111.D	604211001	GEEL	2358002	5	11	JXM	
12/21/2022	09:35	eAI2112.D	WPE221107-10	AB-CCV	CCV	1	12	JXM	pass
12/21/2022	09:51	eAI2113.D	WAR221005-99	BLANK	BLANK	1	13	JXM	
12/21/2022	10:07	eAI2114.D	604449002	TNSL	2358002	10	14	JXM	use
12/21/2022	10:28	eAI2115.D	1205274611	MS	2358002	10	15	JXM	use
12/21/2022	10:56	eAI2116.D	604449002	TNSL	2358002	20	16	JXM	use
12/21/2022	11:16	eAI2117.D	1205274611	MS	2358002	20	17	JXM	use
12/21/2022	11:37	eAI2118.D	1205274612	MSD	2358002	20	18	JXM	use
12/21/2022	11:57	eAI2119.D	604449006	TNSL	2358002	10	19	JXM	use
12/21/2022	12:18	eAI2120.D	604449010	TNSL	2358002	10	20	JXM	use
12/21/2022	12:38	eAI2121.D	604449014	TNSL	2358002	10	21	JXM	use
12/21/2022	12:59	eAI2122.D	604449018	TNSL	2358002	20	22	JXM	use
12/21/2022	13:19	eAI2123.D	WPE221107-10	AB-CCV	CCV	1	23	JXM	pass
12/21/2022	13:36	eAI2124.D	WAR221005-99	BLANK	BLANK	1	24	JXM	

PCB Analysis

Case Narrative

GC Semivolatile PCB
Technical Case Narrative
Triad National Security, LLC
SDG #: 2023-289
Work Order #: 604449

Product: **Analysis of The Analysis of Polychlorinated Biphenyls by GC/ECD by ECD**
Analytical Method: SW846 3535A/8082A
Analytical Procedure: GL-OA-E-040 REV# 25
Analytical Batch: 2359880

Preparation Method: SW846 3535A
Preparation Procedure: GL-OA-E-037 REV# 8
Preparation Batch: 2359875

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
604449002	SMEB01-23-265371
604449004	SMEB01-23-265381
604449006	SMEB02-23-265372
604449008	SMEB02-23-265382
604449010	SMEB03-23-265373
604449012	SMEB03-23-265383
604449014	SMEB04-23-265374
604449016	SMEB04-23-265384
604449018	SMEB05-23-265375
604449020	SMEB05-23-265385
1205278292	Method Blank (MB)
1205278293	Laboratory Control Sample (LCS)
1205278294	604449004(SMEB01-23-265381) Matrix Spike (MS)
1205278295	604449004(SMEB01-23-265381) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Quality Control (QC) Information

Surrogate Recoveries
Samples (See Below) did not meet acceptance criteria for surrogate recovery due to dilution.

Sample	Analyte	Value
604449004 (SMEB01-23-265381)	4cmx	24* (26%-108%)
	Decachlorobiphenyl	31* (32%-135%)
604449008 (SMEB02-23-265382)	4cmx	25* (26%-108%)
	Decachlorobiphenyl	29* (32%-135%)
604449010 (SMEB03-23-265373)	4cmx	20* (26%-108%)
	4cmx	24* (26%-108%)
	Decachlorobiphenyl	19* (32%-135%)
	Decachlorobiphenyl	20* (32%-135%)
604449012 (SMEB03-23-265383)	4cmx	23* (26%-108%)
	4cmx	25* (26%-108%)
	Decachlorobiphenyl	19* (32%-135%)
	Decachlorobiphenyl	20* (32%-135%)
604449018 (SMEB05-23-265375)	4cmx	11* (26%-108%)
	4cmx	8* (26%-108%)
	Decachlorobiphenyl	11* (32%-135%)
	Decachlorobiphenyl	9* (32%-135%)
604449020 (SMEB05-23-265385)	4cmx	21* (26%-108%)
	Decachlorobiphenyl	26* (32%-135%)
	Decachlorobiphenyl	30* (32%-135%)

Technical Information

Preparation/Analytical Method Verification
All samples and QC in this batch were cleaned using alumina in order to remove oil and other high molecular weight interferences. All samples and QC in this batch were cleaned with activated copper in order to remove sulfur. All reported analyte detections in client and quality control samples were within the established retention time windows. Reported analyte concentrations were confirmed on dissimilar columns.

Sample Dilutions
Samples 1205278294 (SMEB01-23-265381MS), 1205278295 (SMEB01-23-265381MSD), 604449002 (SMEB01-23-265371), 604449004 (SMEB01-23-265381), 604449006 (SMEB02-23-265372), 604449008 (SMEB02-23-265382), 604449010 (SMEB03-23-265373), 604449012 (SMEB03-23-265383), 604449014 (SMEB04-23-265374), 604449016 (SMEB04-23-265384), 604449018 (SMEB05-23-265375) and 604449020 (SMEB05-23-265385) were diluted due to large amounts of sulfur in the samples. The extract of the samples was in dark green appearance.

Sample Re-extraction/Re-analysis
The following samples were rerun due to additional sulfur cleanup needed. 1205278294 (SMEB01-23-265381MS), 1205278295 (SMEB01-23-265381MSD), 604449002 (SMEB01-23-265371), 604449004 (SMEB01-23-265381), 604449018 (SMEB05-23-265375) and 604449020 (SMEB05-23-265385).

Miscellaneous Information

Manual integrations
Samples 1205278293 (LCS), 1205278294 (SMEB01-23-265381MS), 1205278295 (SMEB01-23-265381MSD) and 604449004 (SMEB01-23-265381) required manual integration to correctly position the baseline as set in the calibration standard injections.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Qualifier Definition Report
for

TNSL001 Triad National Security, LLC (620266)

Client SDG: 2023-289 GEL Work Order: 604449

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria
** Analyte is a surrogate compound
J Value is estimated
U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

DL Indicates that sample is diluted.
RA Indicates that sample is re-analyzed without re-extraction.
RE Indicates that sample is re-extracted.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature: Jimin Cao **Name: Jimin Cao**

Date: 23 DEC 2022 **Title: Data Validator**

Sample Data Summary

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**604449002**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265371**	**Method:**	**SW846 3535A/8082A**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**2359880**	**Inst:**	**ECD8A.I**	**Dilution:**	**10**
Run Date:	**12/23/2022 07:38**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/22/2022 05:48**	**Aliquot:**	**1042.7 mL**	**Final Volume:**	**1 mL**
Data File:	**122322\e8l2312.D**	**Column:**	**1 Description: RTX-CLP**		
	122322\e8l2312.D		**2 PEST2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	0.319	ug/L	0.319	0.959	1
11104-28-2	Aroclor-1221	U	0.319	ug/L	0.319	0.959	1
11141-16-5	Aroclor-1232	U	0.319	ug/L	0.319	0.959	1
53469-21-9	Aroclor-1242	U	0.319	ug/L	0.319	0.959	1
12672-29-6	Aroclor-1248	U	0.319	ug/L	0.319	0.959	1
11097-69-1	Aroclor-1254	U	0.319	ug/L	0.319	0.959	1
11096-82-5	Aroclor-1260	U	0.319	ug/L	0.319	0.959	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
4cmx	0.0529	0.192	ug/L	28	(26%-108%)
Decachlorobiphenyl	0.0621	0.192	ug/L	32	(32%-135%)

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**604449004**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265381**	**Method:**	**SW846 3535A/8082A**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**2359880**	**Inst:**	**ECD8A.I**	**Dilution:**	**10**
Run Date:	**12/23/2022 07:58**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/22/2022 05:48**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**122322\e8l2313.D**	**Column:**	**1 Description: RTX-CLP**		
	122322\e8l2313.D		**2 PEST2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	0.333	ug/L	0.333	1.00	1
11104-28-2	Aroclor-1221	U	0.333	ug/L	0.333	1.00	1
11141-16-5	Aroclor-1232	U	0.333	ug/L	0.333	1.00	1
53469-21-9	Aroclor-1242	U	0.333	ug/L	0.333	1.00	1
12672-29-6	Aroclor-1248	U	0.333	ug/L	0.333	1.00	1
11097-69-1	Aroclor-1254	U	0.333	ug/L	0.333	1.00	1
11096-82-5	Aroclor-1260	U	0.333	ug/L	0.333	1.00	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%		Acceptable Limits
4cmx	0.0480	0.200	ug/L	24	*	(26%-108%)
Decachlorobiphenyl	0.0625	0.200	ug/L	31	*	(32%-135%)

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:36**	**Matrix:**	**W**
Lab Sample ID:	**604449006**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB02-23-265372**	**Method:**	**SW846 3535A/8082A**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**2359880**	**Inst:**	**ECD8A.I**	**Dilution:**	**10**
Run Date:	**12/22/2022 17:33**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/22/2022 05:48**	**Aliquot:**	**1043.34 mL**	**Final Volume:**	**1 mL**
Data File:	**122222\e8l2230.D**	**Column:**	**1 Description: RTX-CLP**		
	122222\e8l2230.D		**2 PEST2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	0.319	ug/L	0.319	0.958	1
11104-28-2	Aroclor-1221	U	0.319	ug/L	0.319	0.958	1
11141-16-5	Aroclor-1232	U	0.319	ug/L	0.319	0.958	1
53469-21-9	Aroclor-1242	U	0.319	ug/L	0.319	0.958	1
12672-29-6	Aroclor-1248	U	0.319	ug/L	0.319	0.958	1
11097-69-1	Aroclor-1254	U	0.319	ug/L	0.319	0.958	1
11096-82-5	Aroclor-1260	U	0.319	ug/L	0.319	0.958	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
4cmx	0.103	0.192	ug/L	54	(26%-108%)
Decachlorobiphenyl	0.0721	0.192	ug/L	38	(32%-135%)

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:36**	**Matrix:**	**W**
Lab Sample ID:	**604449008**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB02-23-265382**	**Method:**	**SW846 3535A/8082A**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**2359880**	**Inst:**	**ECD8A.I**	**Dilution:**	**10**
Run Date:	**12/22/2022 17:52**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/22/2022 05:48**	**Aliquot:**	**1040.61 mL**	**Final Volume:**	**1 mL**
Data File:	**122222\e8l2231.D**	**Column:**	**1 Description: RTX-CLP**		
	122222\e8l2231.D		**2 PEST2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	0.320	ug/L	0.320	0.961	1
11104-28-2	Aroclor-1221	U	0.320	ug/L	0.320	0.961	1
11141-16-5	Aroclor-1232	U	0.320	ug/L	0.320	0.961	1
53469-21-9	Aroclor-1242	U	0.320	ug/L	0.320	0.961	1
12672-29-6	Aroclor-1248	U	0.320	ug/L	0.320	0.961	1
11097-69-1	Aroclor-1254	U	0.320	ug/L	0.320	0.961	1
11096-82-5	Aroclor-1260	U	0.320	ug/L	0.320	0.961	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%		Acceptable Limits
4cmx	0.0480	0.192	ug/L	25	*	(26%-108%)
Decachlorobiphenyl	0.0562	0.192	ug/L	29	*	(32%-135%)

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:35**	**Matrix:**	**W**
Lab Sample ID:	**604449010**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB03-23-265373**	**Method:**	**SW846 3535A/8082A**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**2359880**	**Inst:**	**ECD8A.I**	**Dilution:**	**10**
Run Date:	**12/22/2022 18:12**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/22/2022 05:48**	**Aliquot:**	**1102.46 mL**	**Final Volume:**	**1 mL**
Data File:	**122222\e8l2232.D**	**Column:**	**1 Description: RTX-CLP**		
	122222\e8l2232.D		**2 PEST2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	0.302	ug/L	0.302	0.907	1
11104-28-2	Aroclor-1221	U	0.302	ug/L	0.302	0.907	1
11141-16-5	Aroclor-1232	U	0.302	ug/L	0.302	0.907	1
53469-21-9	Aroclor-1242	U	0.302	ug/L	0.302	0.907	1
12672-29-6	Aroclor-1248	U	0.302	ug/L	0.302	0.907	1
11097-69-1	Aroclor-1254	U	0.302	ug/L	0.302	0.907	1
11096-82-5	Aroclor-1260	U	0.302	ug/L	0.302	0.907	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%		Acceptable Limits
4cmx	0.0434	0.181	ug/L	24	*	(26%-108%)
Decachlorobiphenyl	0.0366	0.181	ug/L	20	*	(32%-135%)

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:35**	**Matrix:**	**W**
Lab Sample ID:	**604449012**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB03-23-265383**	**Method:**	**SW846 3535A/8082A**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**2359880**	**Inst:**	**ECD8A.I**	**Dilution:**	**10**
Run Date:	**12/22/2022 18:31**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/22/2022 05:48**	**Aliquot:**	**1106.39 mL**	**Final Volume:**	**1 mL**
Data File:	**122222\e8l2233.D**	**Column:**	**1 Description: RTX-CLP**		
	122222\e8l2233.D		**2 PEST2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	0.301	ug/L	0.301	0.904	1
11104-28-2	Aroclor-1221	U	0.301	ug/L	0.301	0.904	1
11141-16-5	Aroclor-1232	U	0.301	ug/L	0.301	0.904	1
53469-21-9	Aroclor-1242	U	0.301	ug/L	0.301	0.904	1
12672-29-6	Aroclor-1248	U	0.301	ug/L	0.301	0.904	1
11097-69-1	Aroclor-1254	U	0.301	ug/L	0.301	0.904	1
11096-82-5	Aroclor-1260	U	0.301	ug/L	0.301	0.904	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%		Acceptable Limits
4cmx	0.0456	0.181	ug/L	25	*	(26%-108%)
Decachlorobiphenyl	0.0345	0.181	ug/L	19	*	(32%-135%)

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:01**	**Matrix:**	**W**
Lab Sample ID:	**604449014**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB04-23-265374**	**Method:**	**SW846 3535A/8082A**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**2359880**	**Inst:**	**ECD8A.I**	**Dilution:**	**10**
Run Date:	**12/22/2022 19:15**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/22/2022 05:48**	**Aliquot:**	**1056.4 mL**	**Final Volume:**	**1 mL**
Data File:	**122222\e8l2236.D**	**Column:**	**1 Description: RTX-CLP**		
	122222\e8l2236.D		**2 PEST2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	0.315	ug/L	0.315	0.947	1
11104-28-2	Aroclor-1221	U	0.315	ug/L	0.315	0.947	1
11141-16-5	Aroclor-1232	U	0.315	ug/L	0.315	0.947	1
53469-21-9	Aroclor-1242	U	0.315	ug/L	0.315	0.947	1
12672-29-6	Aroclor-1248	U	0.315	ug/L	0.315	0.947	1
11097-69-1	Aroclor-1254	U	0.315	ug/L	0.315	0.947	1
11096-82-5	Aroclor-1260	U	0.315	ug/L	0.315	0.947	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
4cmx	0.0707	0.189	ug/L	37	(26%-108%)
Decachlorobiphenyl	0.0725	0.189	ug/L	38	(32%-135%)

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:01**	**Matrix:**	**W**
Lab Sample ID:	**604449016**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB04-23-265384**	**Method:**	**SW846 3535A/8082A**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**2359880**	**Inst:**	**ECD8A.I**	**Dilution:**	**10**
Run Date:	**12/22/2022 19:34**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/22/2022 05:48**	**Aliquot:**	**1037.82 mL**	**Final Volume:**	**1 mL**
Data File:	**122222\e8l2237.D**	**Column:**	**1 Description: RTX-CLP**		
	122222\e8l2237.D		**2 PEST2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	0.321	ug/L	0.321	0.964	1
11104-28-2	Aroclor-1221	U	0.321	ug/L	0.321	0.964	1
11141-16-5	Aroclor-1232	U	0.321	ug/L	0.321	0.964	1
53469-21-9	Aroclor-1242	U	0.321	ug/L	0.321	0.964	1
12672-29-6	Aroclor-1248	U	0.321	ug/L	0.321	0.964	1
11097-69-1	Aroclor-1254	U	0.321	ug/L	0.321	0.964	1
11096-82-5	Aroclor-1260	U	0.321	ug/L	0.321	0.964	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
4cmx	0.0680	0.193	ug/L	35	(26%-108%)
Decachlorobiphenyl	0.0698	0.193	ug/L	36	(32%-135%)

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:12**	**Matrix:**	**W**
Lab Sample ID:	**604449018**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB05-23-265375**	**Method:**	**SW846 3535A/8082A**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**2359880**	**Inst:**	**ECD8A.I**	**Dilution:**	**10**
Run Date:	**12/23/2022 08:56**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/22/2022 05:48**	**Aliquot:**	**1016.06 mL**	**Final Volume:**	**1 mL**
Data File:	**122322\e8l2316.D**	**Column:**	**1 Description: RTX-CLP**		
	122322\e8l2316.D		**2 PEST2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	0.328	ug/L	0.328	0.984	1
11104-28-2	Aroclor-1221	U	0.328	ug/L	0.328	0.984	1
11141-16-5	Aroclor-1232	U	0.328	ug/L	0.328	0.984	1
53469-21-9	Aroclor-1242	U	0.328	ug/L	0.328	0.984	1
12672-29-6	Aroclor-1248	U	0.328	ug/L	0.328	0.984	1
11097-69-1	Aroclor-1254	U	0.328	ug/L	0.328	0.984	1
11096-82-5	Aroclor-1260	U	0.328	ug/L	0.328	0.984	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%		Acceptable Limits
4cmx	0.0223	0.197	ug/L	11	*	(26%-108%)
Decachlorobiphenyl	0.0186	0.197	ug/L	9	*	(32%-135%)

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:12**	**Matrix:**	**W**
Lab Sample ID:	**604449020**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB05-23-265385**	**Method:**	**SW846 3535A/8082A**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**2359880**	**Inst:**	**ECD8A.I**	**Dilution:**	**10**
Run Date:	**12/23/2022 09:15**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/22/2022 05:48**	**Aliquot:**	**988.88 mL**	**Final Volume:**	**1 mL**
Data File:	**122322\e8l2317.D**	**Column:**	**1 Description: RTX-CLP**		
	122322\e8l2317.D		**2 PEST2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	0.337	ug/L	0.337	1.01	1
11104-28-2	Aroclor-1221	U	0.337	ug/L	0.337	1.01	1
11141-16-5	Aroclor-1232	U	0.337	ug/L	0.337	1.01	1
53469-21-9	Aroclor-1242	U	0.337	ug/L	0.337	1.01	1
12672-29-6	Aroclor-1248	U	0.337	ug/L	0.337	1.01	1
11097-69-1	Aroclor-1254	U	0.337	ug/L	0.337	1.01	1
11096-82-5	Aroclor-1260	U	0.337	ug/L	0.337	1.01	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%		Acceptable Limits
4cmx	0.0523	0.202	ug/L	26		(26%-108%)
Decachlorobiphenyl	0.0528	0.202	ug/L	26	*	(32%-135%)

Quality Control Summary

Surrogate Recovery Report

SDG Number: 2023-289

Matrix Type: LIQUID

Sample ID	Client ID	4CMX 1 %REC #		4CMX 2 %REC #		DCB 1 %REC #		DCB 2 %REC #	
1205278292	MB for batch 2359875	59		62		88		88	
1205278293	LCS for batch 2359875	63		65		91		90	
604449006	SMEB02-23-265372	54	D	66	D	38	D	38	D
604449008	SMEB02-23-265382	25 *	D	35	D	29 *	D	32	D
604449010	SMEB03-23-265373	24 *	D	20 *	D	20 *	D	19 *	D
604449012	SMEB03-23-265383	25 *	D	23 *	D	19 *	D	20 *	D
604449014	SMEB04-23-265374	37	D	31	D	38	D	42	D
604449016	SMEB04-23-265384	35	D	29	D	36	D	38	D
604449002	SMEB01-23-265371	28	D	30	D	32	D	36	D
604449004	SMEB01-23-265381	24 *	D	29	D	31 *	D	33	D
1205278294	SMEB01-23-265381MS	31	D	31	D	32	D	34	D
1205278295	SMEB01-23-265381MSD	29	D	37	D	39	D	41	D
604449018	SMEB05-23-265375	11 *	D	8 *	D	9 *	D	11 *	D
604449020	SMEB05-23-265385	26	D	21 *	D	26 *	D	30 *	D

Surrogate		Parmname	Acceptance Limits
4CMX	=	4cmx	(26%-108%)
DCB	=	Decachlorobiphenyl	(32%-135%)

* Recovery outside Acceptance Limits

\# Column to be used to flag recovery values

D Sample Diluted

Quality Control Summary
Spike Recovery Report

SDG Number: 2023-289
Sample Type: Laboratory Control Sample
Client ID: LCS for batch 2359875
Matrix: WATER
Lab Sample ID 1205278293
Instrument: ECD8A.I
Analysis Date: 12/22/2022 16:03
Dilution: 1
Analyst: JXM
Prep Batch ID: 2359875
Inj. Vol: 1 uL
Batch ID: 2359880

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L	Spike Conc. ug/L	Recovery %	Acceptance Limits
12674-11-2	LCS	Aroclor-1016	1.00	0.0	0.742	74	38-102
11096-82-5	LCS	Aroclor-1260	1.00	0.0	0.836	84	36-106

Quality Control Summary
Spike Recovery Report

SDG Number: **2023-289**
Sample Type: **Matrix Spike**
Client ID: **SMEB01-23-265381MS**
Matrix: **W**
Lab Sample ID **1205278294**
Instrument: **ECD8A.I**
Analysis Date: **12/23/2022 08:17**
Dilution: **10**
Analyst: **JXM**
Prep Batch ID: **2359875**
Inj. Vol: **1 uL**
Batch ID: **2359880**

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits
12674-11-2	MS	Aroclor-1016	1.11	0.000	U	0.709	64	33-107
11096-82-5	MS	Aroclor-1260	1.11	0.000	U	0.462	42	33-119

Quality Control Summary
Spike Recovery Report

SDG Number: 2023-289
Sample Type: Matrix Spike Duplicate
Client ID: SMEB01-23-265381MSD
Matrix: W
Lab Sample ID 1205278295
Instrument: ECD8A.I
Analysis Date: 12/23/2022 08:36
Dilution: 10
Analyst: JXM
Prep Batch ID: 2359875
Inj. Vol: 1 uL
Batch ID: 2359880

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
12674-11-2	MSD	Aroclor-1016	1.11	0.000	U	0.724	65	33-107	2	0-27
11096-82-5	MSD	Aroclor-1260	1.11	0.000	U	0.519	47	33-119	11	0-29

Method Blank Summary

SDG Number:	**2023-289**	**Client:**	**TNSL001**	**Matrix:**	**WATER**
Client ID:	**MB for batch 2359875**	**Instrument ID:**	**ECD8A.I_1** **ECD8A.I_2**	**Data File:**	**122222\e8l2224.D** **122222\e8l2224.D**
Lab Sample ID:	**1205278292**			**Analyzed:**	**12/22/22 15:51**
Column:	**Description: RTX-CLP PEST2**	**Prep Date:**	**12/22/2022 05:48**		

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 2359875	1205278293	122222\e8l2225.D	12/22/22	1603
02	SMEB02-23-265372	604449006	122222\e8l2230.D	12/22/22	1733
03	SMEB02-23-265382	604449008	122222\e8l2231.D	12/22/22	1752
04	SMEB03-23-265373	604449010	122222\e8l2232.D	12/22/22	1812
05	SMEB03-23-265383	604449012	122222\e8l2233.D	12/22/22	1831
06	SMEB04-23-265374	604449014	122222\e8l2236.D	12/22/22	1915
07	SMEB04-23-265384	604449016	122222\e8l2237.D	12/22/22	1934
08	SMEB01-23-265371	604449002	122322\e8l2312.D	12/23/22	0738
09	SMEB01-23-265381	604449004	122322\e8l2313.D	12/23/22	0758
10	SMEB01-23-265381MS	1205278294	122322\e8l2314.D	12/23/22	0817
11	SMEB01-23-265381MSD	1205278295	122322\e8l2315.D	12/23/22	0836
12	SMEB05-23-265375	604449018	122322\e8l2316.D	12/23/22	0856
13	SMEB05-23-265385	604449020	122322\e8l2317.D	12/23/22	0915

Identification Summary

SDG Number: 2023-289 **Client ID:** LCS for batch 2359875

Lab Sample ID: 1205278293

Data File:	122222\e8l2225.D	**Data File:**	122222\e8l2225.D
Inst:	ECD8A.I_1	**Inst:**	ECD8A.I_2
Column:	Description: RTX-CLP	**Column:**	PEST2
Analyzed:	22-DEC-22 16:03	**Analyzed:**	22-DEC-22 16:03

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1016							5.59
Column 1	1	3.07	3.04 - 3.1	.73		ug/L	
	2	3.42	3.39 - 3.45	.767		ug/L	
	3	3.52	3.49 - 3.55	.75		ug/L	
	4	3.66	3.63 - 3.69	.718		ug/L	
	5	3.82	3.79 - 3.85	.746		ug/L	
					.742		
Column 2	1	3.54	3.51 - 3.57	.747		ug/L	
	2	3.9	3.87 - 3.93	.815		ug/L	
	3	4	3.97 - 4.03	.788		ug/L	
	4	4.08	4.05 - 4.11	.813		ug/L	
	5	4.35	4.32 - 4.38	.762		ug/L	
					.785		
Aroclor-1260							4.68
Column 1	1	4.7	4.67 - 4.73	.859		ug/L	
	2	4.89	4.87 - 4.93	.901		ug/L	
	3	5.17	5.14 - 5.2	.729		ug/L	
	4	5.56	5.53 - 5.59	.777		ug/L	
	5	5.76	5.73 - 5.79	.915		ug/L	
					.836		
Column 2	1	5.26	5.23 - 5.29	.868		ug/L	
	2	5.41	5.38 - 5.44	.84		ug/L	
	3	5.73	5.7 - 5.76	.727		ug/L	
	4	6.11	6.08 - 6.14	.768		ug/L	
	5	6.37	6.34 - 6.4	.787		ug/L	
					.798		

Identification Summary

SDG Number: 2023-289 **Client ID:** SMEB01-23-265381MS

Lab Sample ID: 1205278294

Data File:	**122322\e8l2314.D**	**Data File:**	**122322\e8l2314.D**
Inst:	**ECD8A.I_1**	**Inst:**	**ECD8A.I_2**
Column:	**Description: RTX-CLP**	**Column:**	**PEST2**
Analyzed:	**23-DEC-22 08:17**	**Analyzed:**	**23-DEC-22 08:17**

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1016							9.55
Column 1	1	3.06	3.04 - 3.1	.672		ug/L	
	2	3.42	3.39 - 3.45	.801		ug/L	
	3	3.52	3.49 - 3.55	.794		ug/L	
	4	3.66	3.63 - 3.69	.577		ug/L	
	5	3.82	3.79 - 3.85	.699		ug/L	
					.709		
Column 2	1	3.54	3.51 - 3.57	.606		ug/L	
	2	3.9	3.87 - 3.93	.95		ug/L	
	3	4	3.97 - 4.03	.593		ug/L	
	4	4.07	4.05 - 4.11	.524		ug/L	
	5	4.35	4.32 - 4.38	.547		ug/L	
					.644		
Aroclor-1260							5
Column 1	1	4.7	4.67 - 4.73	.48		ug/L	
	2	4.89	4.87 - 4.93	.564		ug/L	
	3	5.17	5.14 - 5.2	.387		ug/L	
	4	5.56	5.53 - 5.59	.4		ug/L	
	5	5.75	5.73 - 5.79	.481		ug/L	
					.462		
Column 2	1	5.26	5.23 - 5.29	.527		ug/L	
	2	5.41	5.38 - 5.44	.652		ug/L	
	3	5.72	5.7 - 5.76	.417		ug/L	
	4	6.11	6.08 - 6.14	.407		ug/L	
	5	6.37	6.34 - 6.4	.427		ug/L	
					.486		

Identification Summary

SDG Number: 2023-289 **Client ID:** SMEB01-23-265381MSD

Lab Sample ID: 1205278295

Data File:	122322\e8l2315.D	**Data File:**	122322\e8l2315.D
Inst:	ECD8A.I_1	**Inst:**	ECD8A.I_2
Column:	Description: RTX-CLP	**Column:**	PEST2
Analyzed:	23-DEC-22 08:36	**Analyzed:**	23-DEC-22 08:36

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1016							7.55
Column 1	1	3.06	3.04 - 3.1	.635		ug/L	
	2	3.42	3.39 - 3.45	.809		ug/L	
	3	3.52	3.49 - 3.55	.815		ug/L	
	4	3.66	3.63 - 3.69	.585		ug/L	
	5	3.82	3.79 - 3.85	.775		ug/L	
					.724		
Column 2	1	3.54	3.51 - 3.57	.631		ug/L	
	2	3.9	3.87 - 3.93	.999		ug/L	
	3	4	3.97 - 4.03	.611		ug/L	
	4	4.07	4.05 - 4.11	.528		ug/L	
	5	4.35	4.32 - 4.38	.588		ug/L	
					.671		
Aroclor-1260							5.66
Column 1	1	4.7	4.67 - 4.73	.554		ug/L	
	2	4.89	4.87 - 4.93	.606		ug/L	
	3	5.17	5.14 - 5.2	.459		ug/L	
	4	5.56	5.53 - 5.59	.44		ug/L	
	5	5.76	5.73 - 5.79	.535		ug/L	
					.519		
Column 2	1	5.26	5.23 - 5.29	.602		ug/L	
	2	5.41	5.38 - 5.44	.706		ug/L	
	3	5.72	5.7 - 5.76	.469		ug/L	
	4	6.11	6.08 - 6.14	.472		ug/L	
	5	6.37	6.34 - 6.4	.495		ug/L	
					.549		

Sample Data

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:36**	**Matrix:**	**W**
Lab Sample ID:	**604449006**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB02-23-265372**	**Method:**	**SW846 3535A/8082A**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**2359880**	**Inst:**	**ECD8A.I**	**Dilution:**	**10**
Run Date:	**12/22/2022 17:33**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/22/2022 05:48**	**Aliquot:**	**1043.34 mL**	**Final Volume:**	**1 mL**
Data File:	**122222\e8l2230.D**	**Column:**	**1 Description: RTX-CLP**		
	122222\e8l2230.D		**2 PEST2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	0.319	ug/L	0.319	0.958	1
11104-28-2	Aroclor-1221	U	0.319	ug/L	0.319	0.958	1
11141-16-5	Aroclor-1232	U	0.319	ug/L	0.319	0.958	1
53469-21-9	Aroclor-1242	U	0.319	ug/L	0.319	0.958	1
12672-29-6	Aroclor-1248	U	0.319	ug/L	0.319	0.958	1
11097-69-1	Aroclor-1254	U	0.319	ug/L	0.319	0.958	1
11096-82-5	Aroclor-1260	U	0.319	ug/L	0.319	0.958	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
4cmx	0.103	0.192	ug/L	54	(26%-108%)
Decachlorobiphenyl	0.0721	0.192	ug/L	38	(32%-135%)

Quantitation Report
GEL Laboratories, LLC

Jxm 12/23/2022

JC 12/23/2022

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2230.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On   : 22 Dec 2022 17:33 (#1); 22 Dec 2022 17:33 (#2)
Operator : JXM   InstName : ECD8
Sample   : |604449006|2359880|10|SVA|1|TNSL|||
Misc   : |ECD5A2A_1L|WATER|SMEB02-23-265372|||
ALS Vial : 30   Sample Multiplier: 10

Quant Time: Dec 23 04:59:36 2022
Quant Method : D:\MSDCHEM\1\DATA\122222\ECD8_8082_122022.m
Quant Title : ECD8   SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1   Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um   Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.502	2.500	-0.002	67590691	107.145	2.815	2.814	-0.001	67693144	132.427
DCB	6.513	6.510	-0.003	36312155	75.198	7.181	7.179	-0.002	23956463	76.233

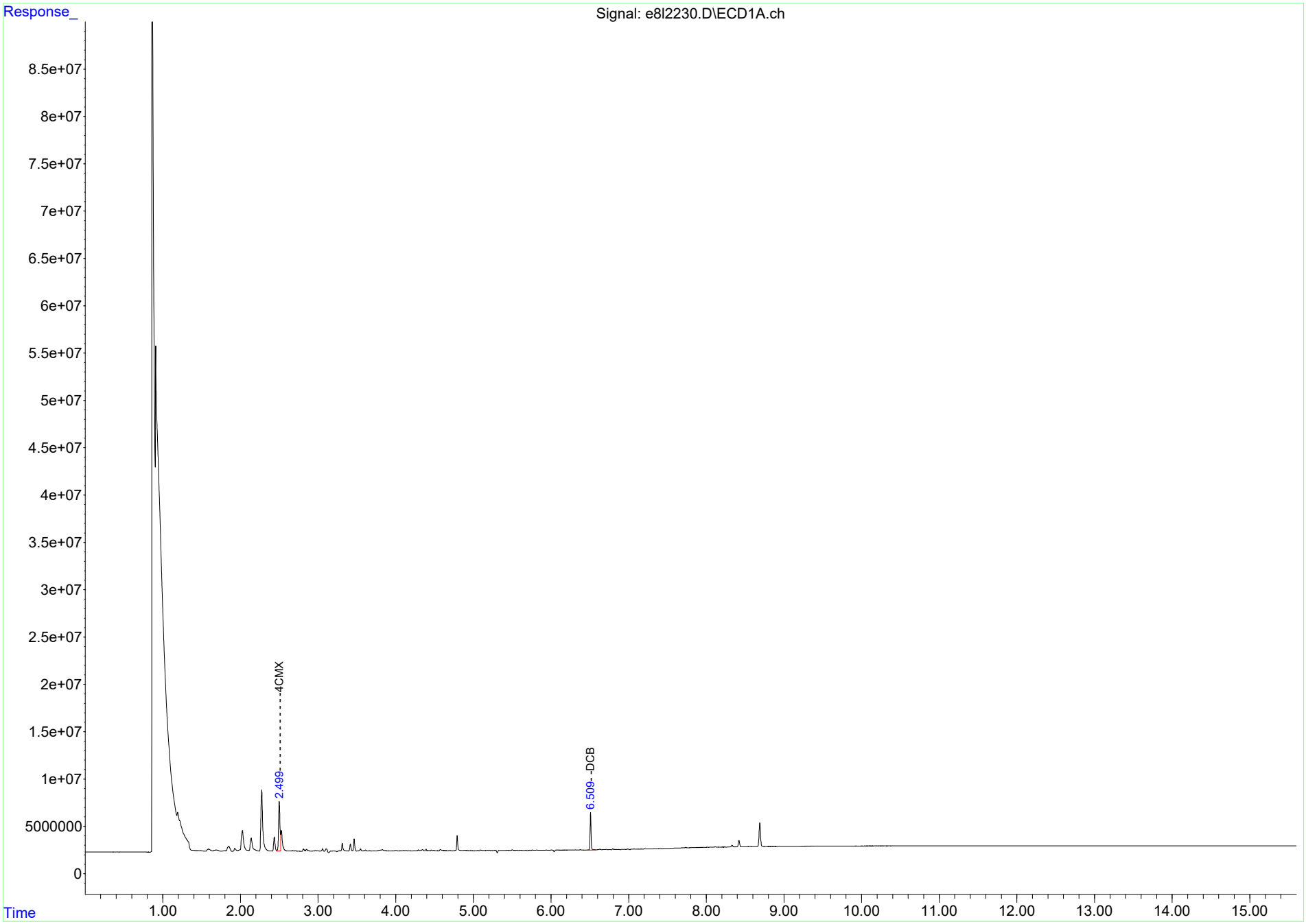
Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	54%	66%
DCB	200.000	No Limits	38%	38%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2

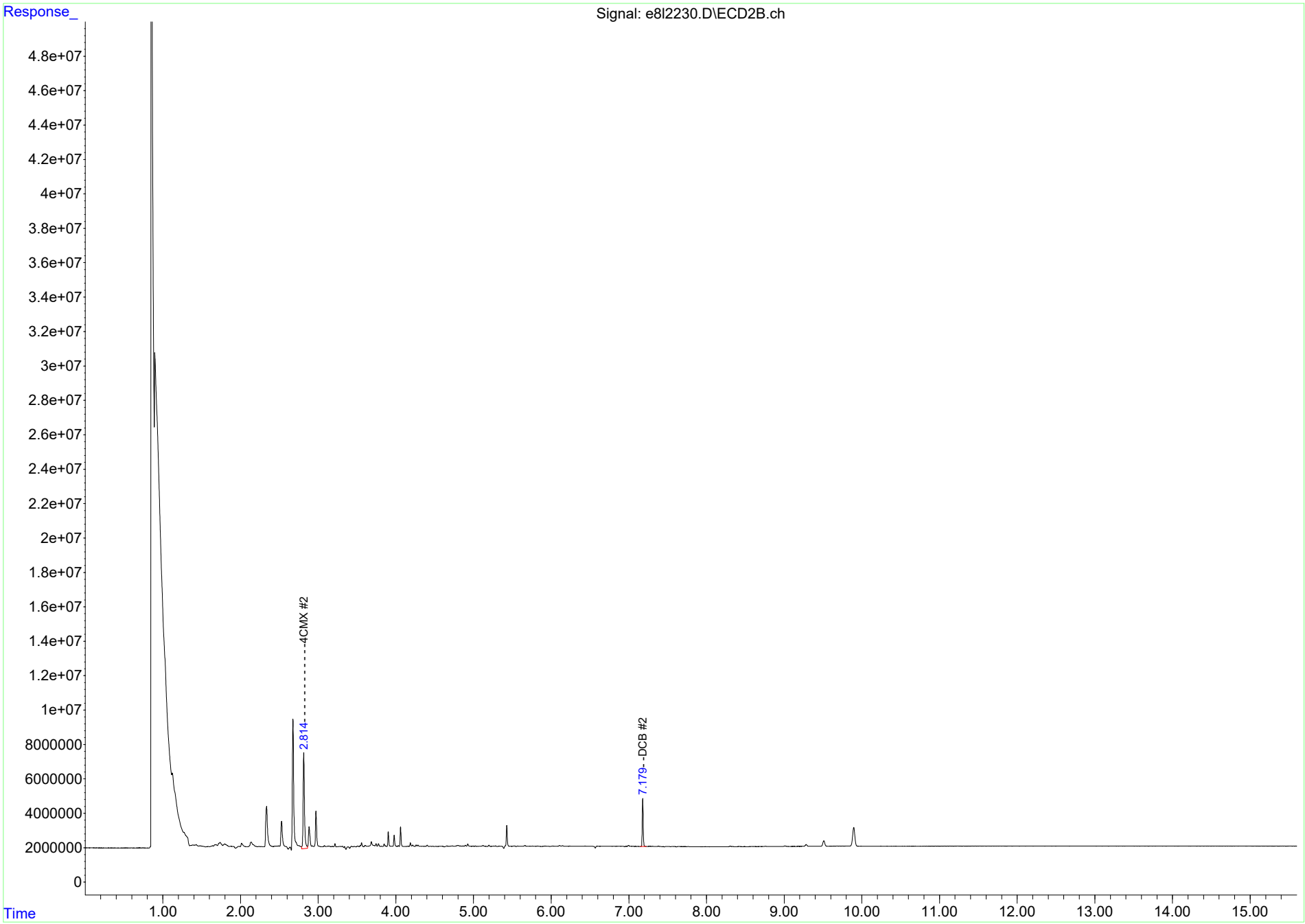
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2230.D



ECD8_8082_122022.m Fri Dec 23 05:04:36 2022 Page: 2

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2230.D



ECD8_8082_122022.m Fri Dec 23 05:04:36 2022 Page: 3

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.502	2.500	-0.002	67590691	107.145	2.815	2.814	-0.001	67693144	132.427
DCB	6.513	6.510	-0.003	36312155	75.198	7.181	7.179	-0.002	23956463	76.233

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	54%	66%
DCB	200.000	No Limits	38%	38%
4CMX	200.000	No Limits	54%	66%
DCB	200.000	No Limits	38%	38%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016	3.068	3.058	-0.010	4148836	18.069	3.542	3.558	0.016f	5219387	47.426
Aroclor-1016 {2}	3.423	3.416	-0.007	7878586	28.304	3.899	3.902	0.003	7091668	36.274
Aroclor-1016 {3}	3.522	3.546	0.024f	2115819	11.004	3.999	3.978	-0.021f	5370398	39.286
Aroclor-1016 {4}	3.659	0.000	-3.659	0	N.D.	4.076	4.061	-0.015f	9353814	106.870
Aroclor-1016 {5}	3.824	3.828	0.004	1143287	8.181	4.348	0.000	-4.348	0	N.D.
Sum Aroclor-1016				15286529	65.558				27035267	229.856 #
Average Aroclor-1016					<MDL					57.464
Aroclor-1221	2.642	0.000	-2.642	0	N.D.	3.055	3.079	0.024f	389888	9.021
Aroclor-1221 {3}	2.791	2.811	0.020f	2838459	20.602	3.220	3.216	-0.004	2141404	21.295
Sum Aroclor-1221				2838459	20.602				2531293	30.316
Average Aroclor-1221					<MDL					<MDL
Aroclor-1232	3.066	3.058	-0.008	4148836	44.537	3.540	3.558	0.018f	5219387	108.812
Aroclor-1232 {2}	3.421	3.416	-0.005	7878586	71.448	3.897	3.902	0.005	7091668	97.023
Aroclor-1232 {3}	3.520	3.546	0.026f	2115819	28.380	3.998	3.978	-0.020f	5370398	98.545
Aroclor-1232 {4}	3.658	0.000	-3.658	0	N.D.	4.075	4.061	-0.014	9353814	263.833
Aroclor-1232 {5}	3.822	3.828	0.006	1143287	22.886	4.346	0.000	-4.346	0	N.D.
Sum Aroclor-1232				15286529	167.250				27035267	568.213 #
Average Aroclor-1232					41.813					142.053 #
Aroclor-1242	3.067	3.058	-0.009	4148836	22.794	3.542	3.558	0.016f	5219387	59.572
Aroclor-1242 {2}	3.423	3.416	-0.007	7878586	36.269	3.898	3.902	0.004	7091668	47.033
Aroclor-1242 {3}	3.521	3.546	0.025f	2115819	14.027	3.999	3.978	-0.021f	5370398	49.524
Aroclor-1242 {4}	3.659	0.000	-3.659	0	N.D.	4.076	4.061	-0.015f	9353814	135.700
Aroclor-1242 {5}	3.823	3.828	0.005	1143287	10.292	4.347	0.000	-4.347	0	N.D.
Sum Aroclor-1242				15286529	83.382				27035267	291.829 #
Average Aroclor-1242					<MDL					72.957
Aroclor-1248	3.423	3.416	-0.007	7878586	69.888	3.898	3.902	0.004	7091668	94.111
Aroclor-1248 {3}	3.822	3.828	0.006	1143287	7.206	4.347	0.000	-4.347	0	N.D.
Aroclor-1248 {5}	4.290	4.290	0.000	1102403	7.643	4.823	0.000	-4.823	0	N.D.
Sum Aroclor-1248				10124276	84.738				7091668	94.111
Average Aroclor-1248					<MDL					94.111

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1254	4.099	0.000	-4.099	0	N.D.	4.655	4.656	0.001	113976	0.686
Aroclor-1254 {2}	4.286	4.290	0.004	1102403	4.104	4.790	4.793	0.003	490450	2.713
Aroclor-1254 {3}	4.571	4.577	0.006	1398171	4.037	5.123	5.123	0.000	632392	2.353
Aroclor-1254 {4}	4.767	4.767	0.000	470110	1.868	5.284	0.000	-5.284	0	N.D.
Aroclor-1254 {5}	4.896	0.000	-4.896	0	N.D.	5.407	5.428	0.021f	13114754	107.981
Sum Aroclor-1254				2970683	10.008				14351572	113.732 #
Average Aroclor-1254					<MDL					<MDL
Aroclor-1260 {2}	4.896	0.000	-4.896	0	N.D.	5.409	5.428	0.019f	13114754	64.245
Sum Aroclor-1260				0	N.D.				13114754	64.245
Average Aroclor-1260					N.D.					64.245
Aroclor-1262 {2}	4.894	0.000	-4.894	0	N.D.	5.407	5.428	0.021f	13114754	98.615
Sum Aroclor-1262				0	N.D.				13114754	98.615
Average Aroclor-1262					N.D.					98.615
Aroclor-1268 {5}	6.380	0.000	-6.380	0	N.D.	6.997	6.997	0.000	284049	0.262
Sum Aroclor-1268				0	N.D.				284049	0.262
Average Aroclor-1268					N.D.					<MDL
4,4' DDT	5.114	5.092	-0.022f	725241	<MDL	5.659	0.000	-5.659	0	N.D. #
4,4' DDD	4.919	0.000	-4.919	0	N.D.	5.437	5.428	-0.009	13114754	8.561 #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Reasons for Analyst Intervention

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2230.D

Aroclor-1016	Multi -	Deletion ==	DMP
Aroclor-1221	Multi -	Deletion ==	DMP
Aroclor-1232	Multi -	Deletion ==	DMP
Aroclor-1242	Multi -	Deletion ==	DMP
Aroclor-1248	Multi -	Deletion ==	DMP
Aroclor-1254	Multi -	Deletion ==	DMP
Aroclor-1260	Multi -	Deletion ==	DMP
Aroclor-1262	Multi -	Deletion ==	DMP
Aroclor-1268	Multi -	Deletion ==	DMP
4,4' DDT	-	Deletion ==	DMP
4,4' DDD #2	-	Deletion ==	DMP

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:36**	**Matrix:**	**W**
Lab Sample ID:	**604449008**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB02-23-265382**	**Method:**	**SW846 3535A/8082A**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**2359880**	**Inst:**	**ECD8A.I**	**Dilution:**	**10**
Run Date:	**12/22/2022 17:52**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/22/2022 05:48**	**Aliquot:**	**1040.61 mL**	**Final Volume:**	**1 mL**
Data File:	**122222\e8l2231.D**	**Column:**	**1 Description: RTX-CLP**		
	122222\e8l2231.D		**2 PEST2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	0.320	ug/L	0.320	0.961	1
11104-28-2	Aroclor-1221	U	0.320	ug/L	0.320	0.961	1
11141-16-5	Aroclor-1232	U	0.320	ug/L	0.320	0.961	1
53469-21-9	Aroclor-1242	U	0.320	ug/L	0.320	0.961	1
12672-29-6	Aroclor-1248	U	0.320	ug/L	0.320	0.961	1
11097-69-1	Aroclor-1254	U	0.320	ug/L	0.320	0.961	1
11096-82-5	Aroclor-1260	U	0.320	ug/L	0.320	0.961	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%		Acceptable Limits
4cmx	0.0480	0.192	ug/L	25	*	(26%-108%)
Decachlorobiphenyl	0.0562	0.192	ug/L	29	*	(32%-135%)

Quantitation Report
GEL Laboratories, LLC

Jxm 12/23/2022

JC 12/23/2022

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2231.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On   : 22 Dec 2022 17:52 (#1); 22 Dec 2022 17:52 (#2)
Operator : JXM   InstName : ECD8
Sample   : |604449008|2359880|10|SVA|1|TNSL|||
Misc   : |ECD5A2A_1L|WATER|SMEB02-23-265382|||
ALS Vial : 31   Sample Multiplier: 10

Quant Time: Dec 23 04:59:38 2022
Quant Method : D:\MSDCHEM\1\DATA\122222\ECD8_8082_122022.m
Quant Title : ECD8   SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1   Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um   Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.502	2.498	-0.004	31505586	49.943	2.815	2.812	-0.003	35986562	70.400
DCB	6.513	6.509	-0.004	28245715	58.493	7.181	7.178	-0.003	19912756	63.365

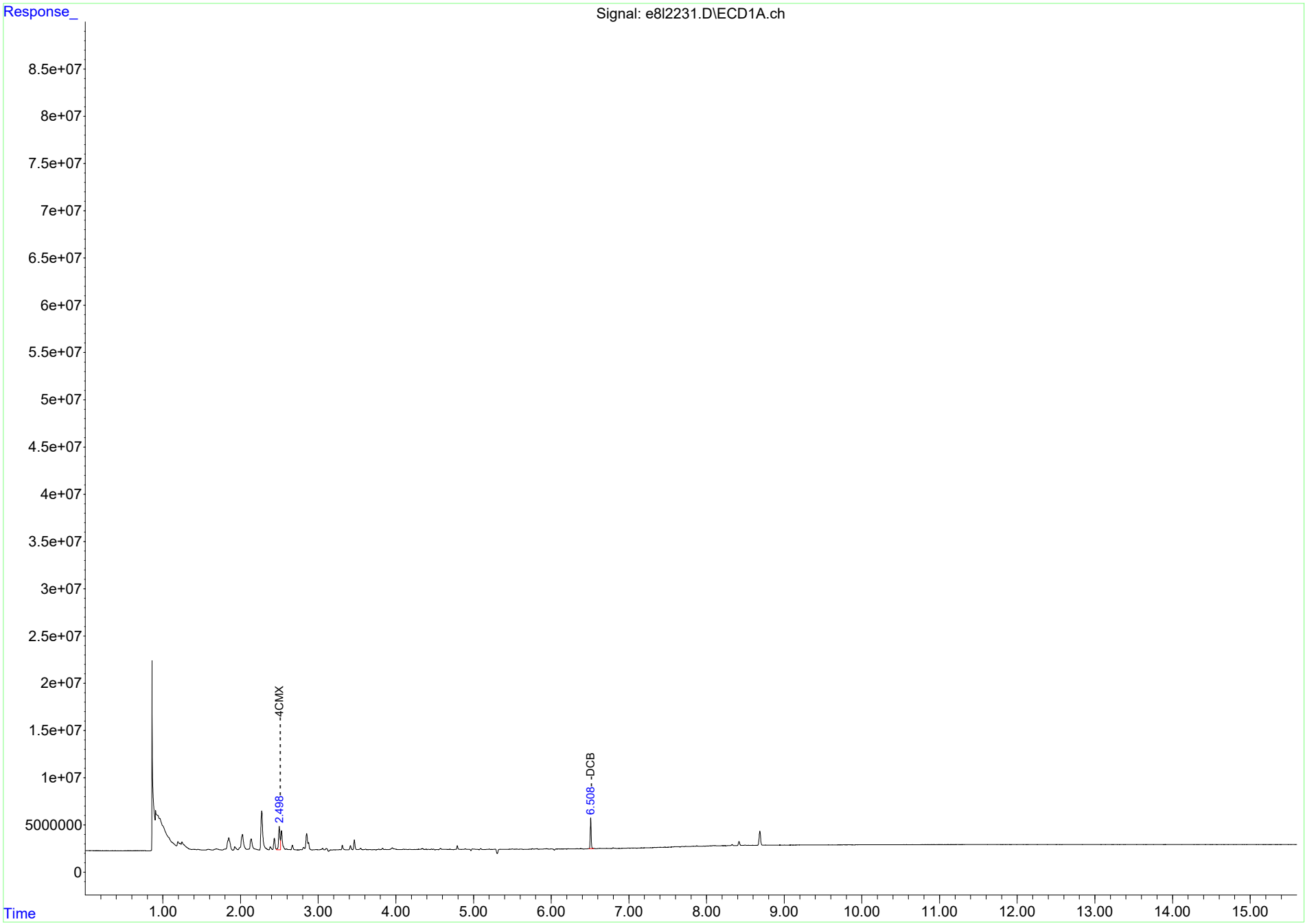
Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	25%	35%
DCB	200.000	No Limits	29%	32%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2

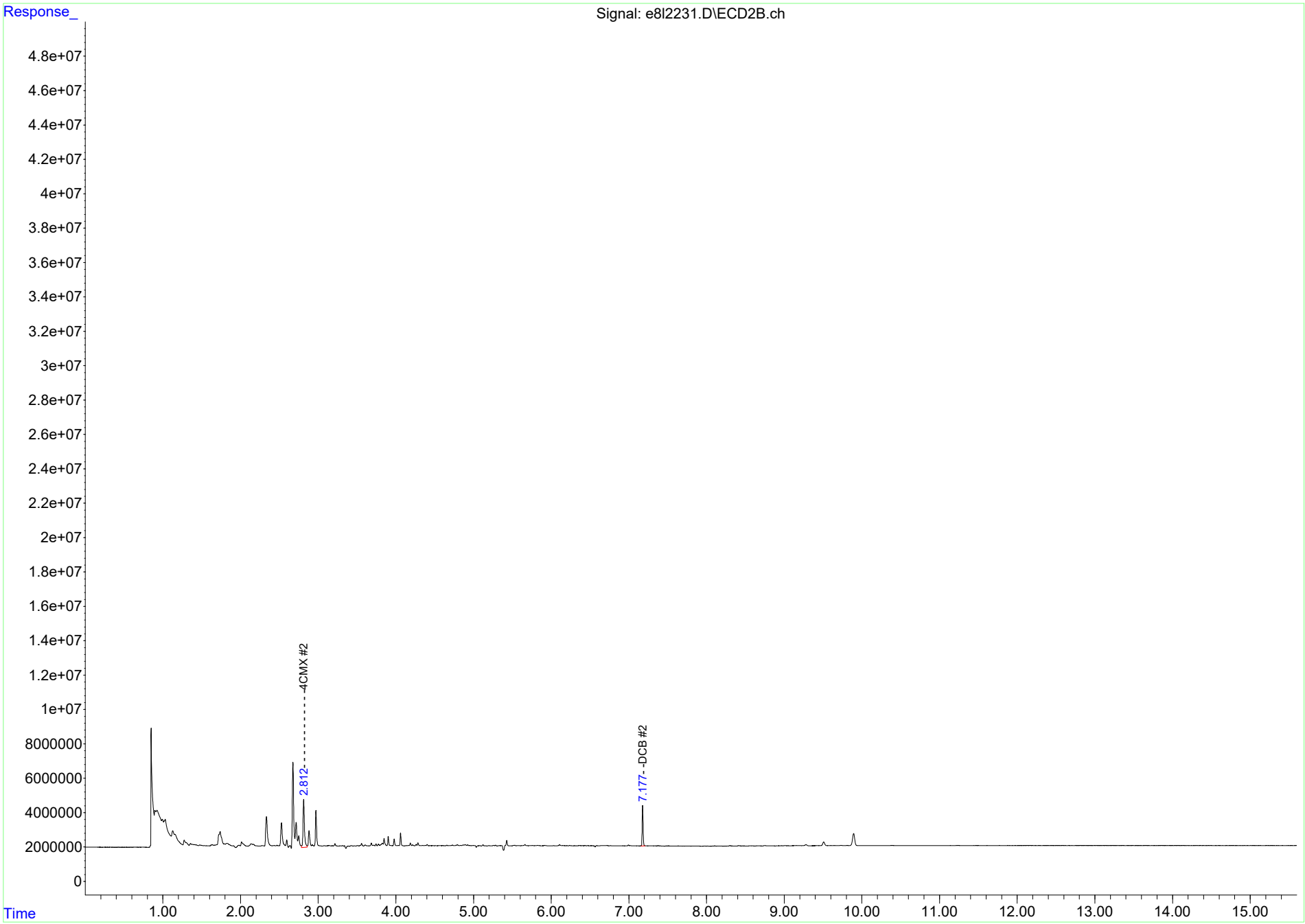
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2231.D



ECD8_8082_122022.m Fri Dec 23 05:05:19 2022 Page: 2

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2231.D



ECD8_8082_122022.m Fri Dec 23 05:05:19 2022 Page: 3

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
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Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.502	2.498	-0.004	31505586	49.943	2.815	2.812	-0.003	35986562	70.400
DCB	6.513	6.509	-0.004	28245715	58.493	7.181	7.178	-0.003	19912756	63.365

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	25%	35%
DCB	200.000	No Limits	29%	32%
4CMX	200.000	No Limits	25%	35%
DCB	200.000	No Limits	29%	32%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016	3.068	3.057	-0.011	3803826	16.566	3.542	3.557	0.015	1699161	15.440
Aroclor-1016 {2}	3.423	3.415	-0.008	4504908	16.184	3.899	3.901	0.002	4341156	22.205
Aroclor-1016 {3}	3.522	3.545	0.023f	1748053	9.091	3.999	3.977	-0.022f	3247750	23.758
Aroclor-1016 {4}	3.659	0.000	-3.659	0	N.D.	4.076	4.060	-0.016f	6145652	70.216
Aroclor-1016 {5}	3.824	3.827	0.003	1325608	9.485	4.348	0.000	-4.348	0	N.D.
Sum Aroclor-1016				11382395	51.327				15433718	131.619 #
Average Aroclor-1016					<MDL					<MDL
Aroclor-1221	2.642	2.667	0.025f	5200744	86.301	3.055	0.000	-3.055	0	N.D.
Aroclor-1221 {3}	2.791	2.811	0.020f	3991802	28.973	3.220	3.215	-0.005	2805768	27.902
Sum Aroclor-1221				9192546	115.274				2805768	27.902 #
Average Aroclor-1221					57.637					<MDL
Aroclor-1232	3.066	3.057	-0.009	3803826	40.833	3.540	3.557	0.017f	1699161	35.424
Aroclor-1232 {2}	3.421	3.415	-0.006	4504908	40.853	3.897	3.901	0.004	4341156	59.392
Aroclor-1232 {3}	3.520	3.545	0.025f	1748053	23.447	3.998	3.977	-0.021f	3247750	59.595
Aroclor-1232 {4}	3.658	0.000	-3.658	0	N.D.	4.075	4.060	-0.015	6145652	173.344
Aroclor-1232 {5}	3.822	3.827	0.005	1325608	26.536	4.346	0.000	-4.346	0	N.D.
Sum Aroclor-1232				11382395	131.669				15433718	327.755 #
Average Aroclor-1232					<MDL					81.939
Aroclor-1242	3.067	3.057	-0.010	3803826	20.899	3.542	3.557	0.015	1699161	19.394
Aroclor-1242 {2}	3.423	3.415	-0.008	4504908	20.738	3.898	3.901	0.003	4341156	28.791
Aroclor-1242 {3}	3.521	3.545	0.024f	1748053	11.589	3.999	3.977	-0.022f	3247750	29.950
Aroclor-1242 {4}	3.659	0.000	-3.659	0	N.D.	4.076	4.060	-0.016f	6145652	89.158
Aroclor-1242 {5}	3.823	3.827	0.004	1325608	11.933	4.347	0.000	-4.347	0	N.D.
Sum Aroclor-1242				11382395	65.159				15433718	167.292 #
Average Aroclor-1242					<MDL					41.823
Aroclor-1248	3.423	3.415	-0.008	4504908	39.961	3.898	3.901	0.003	4341156	57.610
Aroclor-1248 {3}	3.822	3.827	0.005	1325608	8.356	4.347	0.000	-4.347	0	N.D.
Sum Aroclor-1248				5830516	48.317				4341156	57.610
Average Aroclor-1248					<MDL					57.610

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1254	4.099	4.098	-0.001	388446	1.843	4.655	0.000	-4.655	0	N.D.
Aroclor-1254 {3}	4.571	4.573	0.002	1171587	3.383	5.123	5.122	-0.001	1036646	3.857
Aroclor-1254 {4}	4.767	4.790	0.023f	3753347	14.911	5.284	0.000	-5.284	0	N.D.
Aroclor-1254 {5}	4.896	4.893	-0.003	631327	2.303	5.407	5.427	0.020f	10151449	83.582
Sum Aroclor-1254				5944707	22.439				11188095	87.439 #
Average Aroclor-1254					<MDL					43.720
Aroclor-1260 {2}	4.896	4.893	-0.003	631327	1.773	5.409	5.427	0.018f	10151449	49.729
Aroclor-1260 {4}	5.560	0.000	-5.560	0	N.D.	6.108	6.107	-0.001	585456	1.576
Aroclor-1260 {5}	5.758	5.758	0.000	348587	1.437	6.368	0.000	-6.368	0	N.D.
Sum Aroclor-1260				979913	3.210				10736905	51.305 #
Average Aroclor-1260					<MDL					<MDL
Aroclor-1262 {2}	4.894	4.893	-0.001	631327	2.934	5.407	5.427	0.020f	10151449	76.333
Aroclor-1262 {4}	5.559	0.000	-5.559	0	N.D.	6.107	6.107	0.000	585456	1.786
Aroclor-1262 {5}	5.779	5.758	-0.021f	348587	1.634	6.362	0.000	-6.362	0	N.D.
Sum Aroclor-1262				979913	4.567				10736905	78.118 #
Average Aroclor-1262					<MDL					39.059
Aroclor-1268	5.778	5.758	-0.020f	348587	0.483	6.359	0.000	-6.359	0	N.D.
Aroclor-1268 {3}	5.939	0.000	-5.939	0	N.D.	6.572	6.579	0.007	510419	1.361
Sum Aroclor-1268				348587	0.483				510419	1.361 #
Average Aroclor-1268					<MDL					<MDL
4,4' DDT	5.114	5.092	-0.022f	1322970	<MDL	5.659	5.662	0.003	605308	0.705
4,4' DDD	4.919	0.000	-4.919	0	N.D.	5.437	5.427	-0.010	10151449	6.627 #
4,4' DDE	4.494	4.518	0.024	135929	0.033	5.024	0.000	-5.024	0	N.D. #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Reasons for Analyst Intervention

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2231.D

Aroclor-1016	Multi	-	Deletion ==	DMP			
Aroclor-1221	Multi	-	Deletion ==	DMP			
Aroclor-1232	Multi	-	Deletion ==	DMP			
Aroclor-1242	Multi	-	Deletion ==	DMP			
Aroclor-1248	Multi	-	Deletion ==	DMP			
Aroclor-1254	Multi	-	Deletion ==	DMP			
Aroclor-1260	Multi	-	Deletion ==	DMP			
Aroclor-1262	Multi	-	Deletion ==	DMP			
Aroclor-1268	Multi	-	Deletion ==	DMP			
4,4' DDT	Both	-	Deletion ==	DMP	4,4' DDD #2	-	Deletion == DMP
4,4' DDE		-	Deletion ==	DMP			

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:35**	**Matrix:**	**W**
Lab Sample ID:	**604449010**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB03-23-265373**	**Method:**	**SW846 3535A/8082A**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**2359880**	**Inst:**	**ECD8A.I**	**Dilution:**	**10**
Run Date:	**12/22/2022 18:12**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/22/2022 05:48**	**Aliquot:**	**1102.46 mL**	**Final Volume:**	**1 mL**
Data File:	**122222\e8l2232.D**	**Column:**	**1 Description: RTX-CLP**		
	122222\e8l2232.D		**2 PEST2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	0.302	ug/L	0.302	0.907	1
11104-28-2	Aroclor-1221	U	0.302	ug/L	0.302	0.907	1
11141-16-5	Aroclor-1232	U	0.302	ug/L	0.302	0.907	1
53469-21-9	Aroclor-1242	U	0.302	ug/L	0.302	0.907	1
12672-29-6	Aroclor-1248	U	0.302	ug/L	0.302	0.907	1
11097-69-1	Aroclor-1254	U	0.302	ug/L	0.302	0.907	1
11096-82-5	Aroclor-1260	U	0.302	ug/L	0.302	0.907	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%		Acceptable Limits
4cmx	0.0434	0.181	ug/L	24	*	(26%-108%)
Decachlorobiphenyl	0.0366	0.181	ug/L	20	*	(32%-135%)

Quantitation Report
GEL Laboratories, LLC

Jm 12/23/2022

JC 12/23/2022

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2232.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On   : 22 Dec 2022 18:12 (#1); 22 Dec 2022 18:12 (#2)
Operator : JXM   InstName : ECD8
Sample   : |604449010|2359880|10|SVA|1|TNSL|||
Misc   : |ECD5A2A_1L|WATER|SMEB03-23-265373|||
ALS Vial : 32   Sample Multiplier: 10

Quant Time: Dec 23 04:59:40 2022
Quant Method : D:\MSDCHEM\1\DATA\122222\ECD8_8082_122022.m
Quant Title : ECD8   SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1   Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um   Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.502	2.499	-0.003	30209882	47.889	2.815	2.814	-0.001	20215134	39.546
DCB	6.513	6.509	-0.004	19503200	40.389	7.181	7.178	-0.003	12050533	38.347

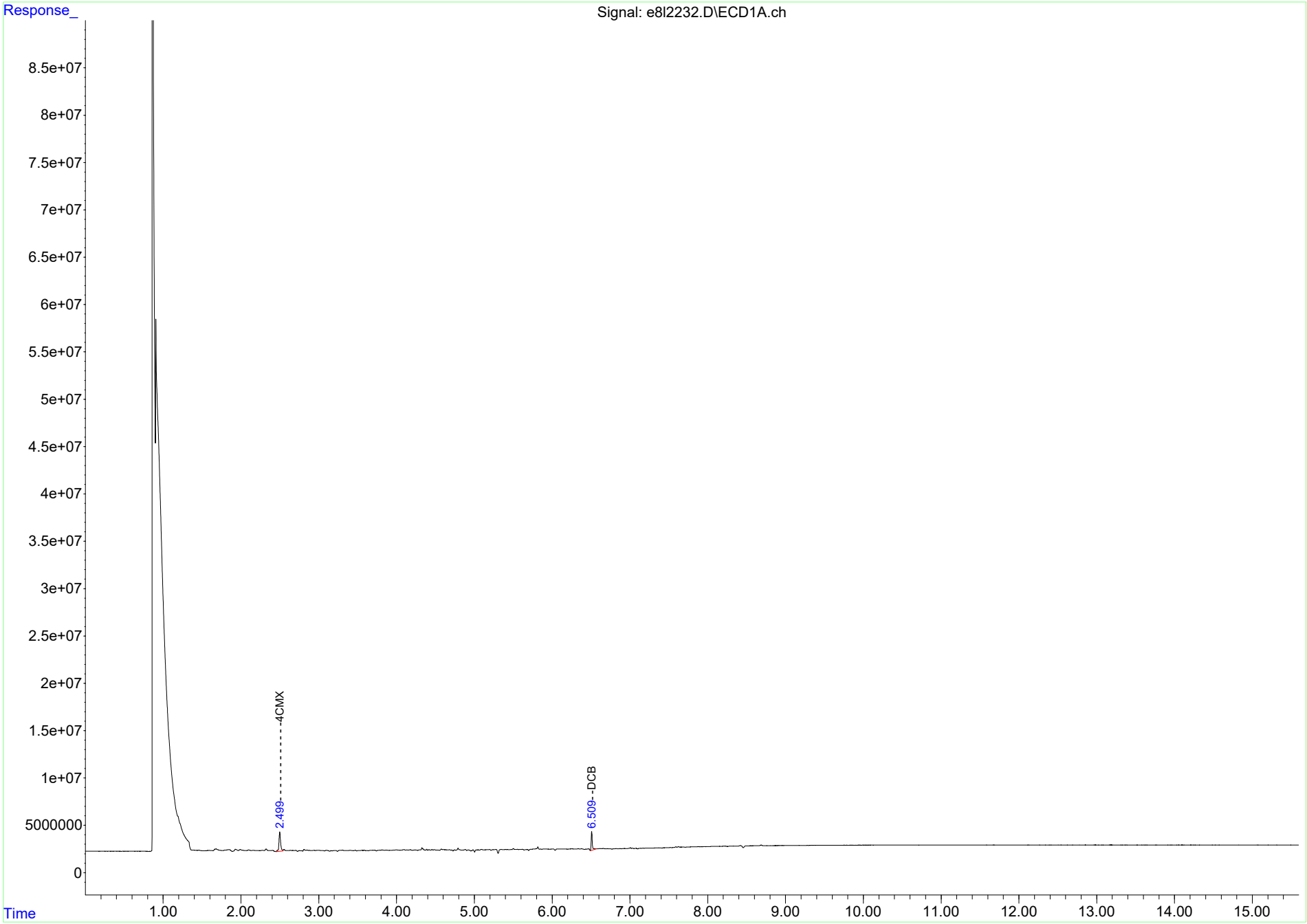
Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	24%	20%
DCB	200.000	No Limits	20%	19%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2

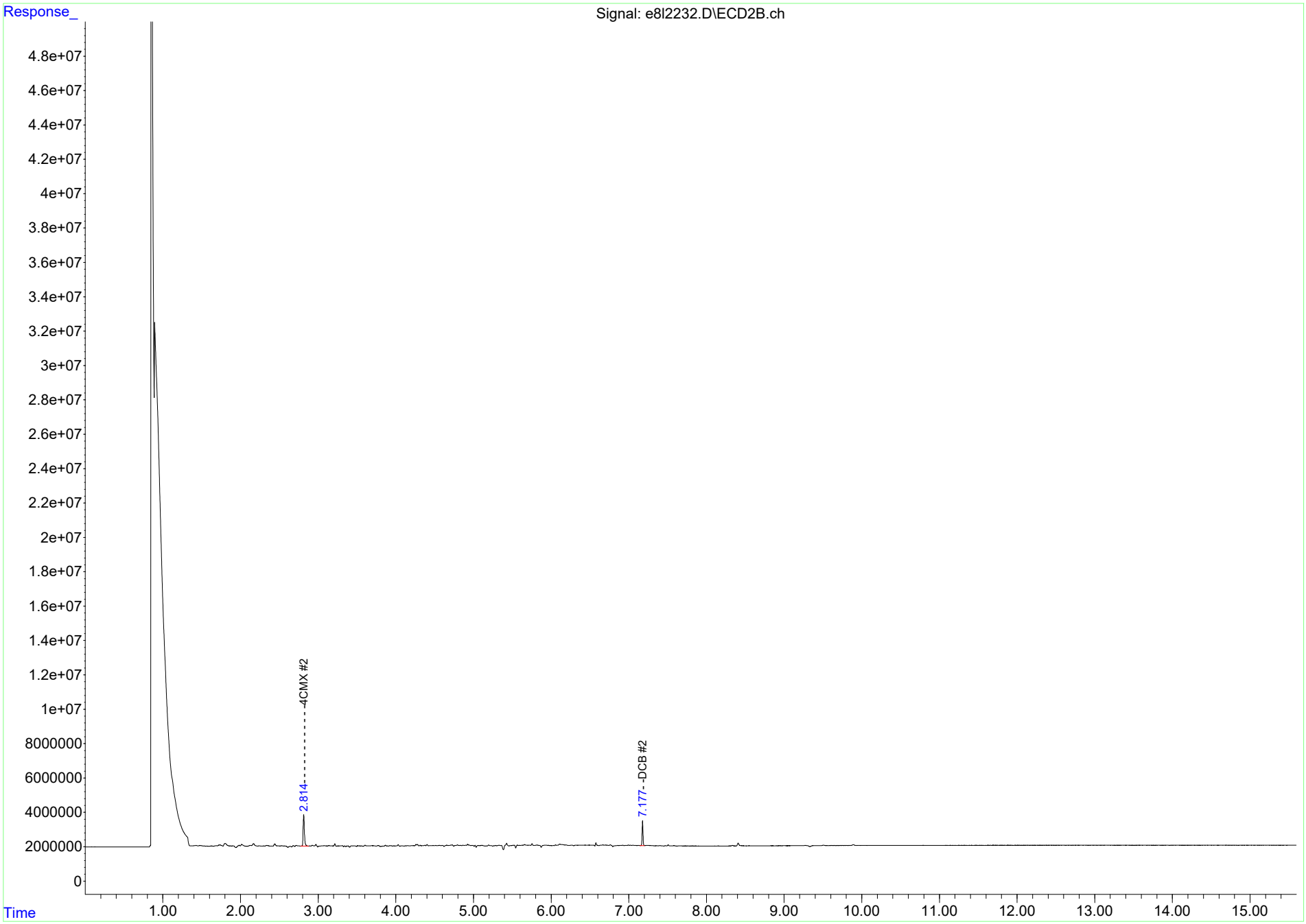
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2232.D



ECD8_8082_122022.m Fri Dec 23 05:05:44 2022 Page: 2

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2232.D



ECD8_8082_122022.m Fri Dec 23 05:05:44 2022 Page: 3

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.502	2.499	-0.003	30209882	47.889	2.815	2.814	-0.001	20215134	39.546
DCB	6.513	6.509	-0.004	19503200	40.389	7.181	7.178	-0.003	12050533	38.347

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	24%	20%
DCB	200.000	No Limits	20%	19%
4CMX	200.000	No Limits	24%	20%
DCB	200.000	No Limits	20%	19%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016 {2}	3.423	3.399	-0.024f	454073	1.631	3.899	0.000	-3.899	0	N.D.
Aroclor-1016 {3}	3.522	3.549	0.027f	881978	4.587	3.999	0.000	-3.999	0	N.D.
Aroclor-1016 {5}	3.824	3.811	-0.013	1004587	7.188	4.348	0.000	-4.348	0	N.D.
Sum Aroclor-1016				2340638	13.407				0	N.D.
Average Aroclor-1016					<MDL					N.D.
Aroclor-1221	2.642	0.000	-2.642	0	N.D.	3.055	3.052	-0.003	930911	21.539
Aroclor-1221 {2}	2.759	2.749	-0.010	1376773	40.886	3.170	0.000	-3.170	0	N.D.
Aroclor-1221 {3}	2.791	2.778	-0.013	792778	5.754	3.220	3.215	-0.005	1115247	11.091
Sum Aroclor-1221				2169550	46.640				2046158	32.629
Average Aroclor-1221					<MDL					<MDL
Aroclor-1232 {2}	3.421	3.399	-0.022f	454073	4.118	3.897	0.000	-3.897	0	N.D.
Aroclor-1232 {3}	3.520	3.549	0.029f	881978	11.830	3.998	0.000	-3.998	0	N.D.
Aroclor-1232 {5}	3.822	3.811	-0.011	1004587	20.110	4.346	0.000	-4.346	0	N.D.
Sum Aroclor-1232				2340638	36.058				0	N.D.
Average Aroclor-1232					<MDL					N.D.
Aroclor-1242 {2}	3.423	3.399	-0.024f	454073	2.090	3.898	0.000	-3.898	0	N.D.
Aroclor-1242 {3}	3.521	3.549	0.028f	881978	5.847	3.999	0.000	-3.999	0	N.D.
Aroclor-1242 {5}	3.823	3.811	-0.012	1004587	9.043	4.347	0.000	-4.347	0	N.D.
Sum Aroclor-1242				2340638	16.981				0	N.D.
Average Aroclor-1242					<MDL					N.D.
Aroclor-1248	3.423	3.399	-0.024f	454073	4.028	3.898	0.000	-3.898	0	N.D.
Aroclor-1248 {3}	3.822	3.811	-0.011	1004587	6.332	4.347	0.000	-4.347	0	N.D.
Aroclor-1248 {4}	4.129	4.100	-0.029f	326744	1.849	4.624	0.000	-4.624	0	N.D.
Aroclor-1248 {5}	4.290	4.288	-0.002	483660	3.353	4.823	4.793	-0.030f	549327	3.835
Sum Aroclor-1248				2269064	15.563				549327	3.835 #
Average Aroclor-1248					<MDL					<MDL
Aroclor-1254	4.099	4.100	0.001	326744	1.550	4.655	4.655	0.000	1469800	8.844
Aroclor-1254 {2}	4.286	4.288	0.002	483660	1.800	4.790	4.793	0.003	549327	3.038
Aroclor-1254 {3}	4.571	4.574	0.003	1230582	3.553	5.123	0.000	-5.123	0	N.D.

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1254 {4}	4.767	4.749	-0.018f	1508591	5.993	5.284	0.000	-5.284	0	N.D.
Aroclor-1254 {5}	4.896	4.886	-0.010	1931435	7.047	5.407	5.427	0.020f	9327042	76.795
Sum Aroclor-1254				5481013	19.943				11346169	88.677 #
Average Aroclor-1254					<MDL					<MDL
Aroclor-1260 {2}	4.896	4.886	-0.010	1931435	5.425	5.409	5.427	0.018f	9327042	45.690
Aroclor-1260 {3}	5.172	0.000	-5.172	0	N.D.	5.726	5.754	0.028f	843136	5.268
Aroclor-1260 {4}	5.560	0.000	-5.560	0	N.D.	6.108	6.111	0.003	1561600	4.204
Aroclor-1260 {5}	5.758	5.757	-0.001	2153223	8.875	6.368	0.000	-6.368	0	N.D.
Sum Aroclor-1260				4084658	14.300				11731777	55.163 #
Average Aroclor-1260					<MDL					<MDL
Aroclor-1262 {2}	4.894	4.886	-0.008	1931435	8.975	5.407	5.427	0.020f	9327042	70.134
Aroclor-1262 {3}	5.171	0.000	-5.171	0	N.D.	5.726	5.754	0.028f	843136	4.624
Aroclor-1262 {4}	5.559	0.000	-5.559	0	N.D.	6.107	6.111	0.004	1561600	4.763
Aroclor-1262 {5}	5.779	5.797	0.018f	2103931	9.860	6.362	0.000	-6.362	0	N.D.
Sum Aroclor-1262				4035366	18.835				11731777	79.521 #
Average Aroclor-1262					<MDL					<MDL
Aroclor-1268	5.778	5.797	0.019f	2103931	2.913	6.359	0.000	-6.359	0	N.D.
Aroclor-1268 {2}	5.805	5.797	-0.008	2103931	2.707	6.393	0.000	-6.393	0	N.D.
Aroclor-1268 {3}	5.939	0.000	-5.939	0	N.D.	6.572	6.577	0.005	993064	2.647
Aroclor-1268 {5}	6.380	0.000	-6.380	0	N.D.	6.997	6.995	-0.002	311162	0.287
Sum Aroclor-1268				4207862	5.620				1304225	2.934 #
Average Aroclor-1268					<MDL					<MDL
4,4' DDT	5.114	5.090	-0.024f	821706	<MDL	5.659	5.660	0.001	4123864	4.800 #
4,4' DDD	4.919	4.920	0.001	1567946	0.557	5.437	5.427	-0.010	9327042	6.089 #
4,4' DDE	4.494	4.482	-0.012	772923	0.187	5.024	5.021	-0.003	985553	0.379 #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2232.D

Aroclor-1016	Multi	-	Deletion ==	DMP
Aroclor-1221	Multi	-	Deletion ==	DMP
Aroclor-1232	Multi	-	Deletion ==	DMP
Aroclor-1242	Multi	-	Deletion ==	DMP
Aroclor-1248	Multi	-	Deletion ==	DMP
Aroclor-1254	Multi	-	Deletion ==	DMP
Aroclor-1260	Multi	-	Deletion ==	DMP
Aroclor-1262	Multi	-	Deletion ==	DMP
Aroclor-1268	Multi	-	Deletion ==	DMP
4,4' DDT	Both	-	Deletion ==	DMP
4,4' DDD	Both	-	Deletion ==	DMP
4,4' DDE	Both	-	Deletion ==	DMP

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:35**	**Matrix:**	**W**
Lab Sample ID:	**604449012**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB03-23-265383**	**Method:**	**SW846 3535A/8082A**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**2359880**	**Inst:**	**ECD8A.I**	**Dilution:**	**10**
Run Date:	**12/22/2022 18:31**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/22/2022 05:48**	**Aliquot:**	**1106.39 mL**	**Final Volume:**	**1 mL**
Data File:	**122222\e8l2233.D**	**Column:**	**1 Description: RTX-CLP**		
	122222\e8l2233.D		**2 PEST2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	0.301	ug/L	0.301	0.904	1
11104-28-2	Aroclor-1221	U	0.301	ug/L	0.301	0.904	1
11141-16-5	Aroclor-1232	U	0.301	ug/L	0.301	0.904	1
53469-21-9	Aroclor-1242	U	0.301	ug/L	0.301	0.904	1
12672-29-6	Aroclor-1248	U	0.301	ug/L	0.301	0.904	1
11097-69-1	Aroclor-1254	U	0.301	ug/L	0.301	0.904	1
11096-82-5	Aroclor-1260	U	0.301	ug/L	0.301	0.904	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%		Acceptable Limits
4cmx	0.0456	0.181	ug/L	25	*	(26%-108%)
Decachlorobiphenyl	0.0345	0.181	ug/L	19	*	(32%-135%)

Quantitation Report
GEL Laboratories, LLC

Jxm 12/23/2022

JC 12/23/2022

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2233.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On   : 22 Dec 2022 18:31 (#1); 22 Dec 2022 18:31 (#2)
Operator : JXM   InstName : ECD8
Sample   : |604449012|2359880|10|SVA|1|TNSL|||
Misc   : |ECD5A2A_1L|WATER|SMEB03-23-265383|||
ALS Vial : 33   Sample Multiplier: 10

Quant Time: Dec 23 04:59:42 2022
Quant Method : D:\MSDCHEM\1\DATA\122222\ECD8_8082_122022.m
Quant Title : ECD8   SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1   Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um   Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.502	2.499	-0.003	31813271	50.431	2.815	2.814	-0.001	23415679	45.808
DCB	6.513	6.509	-0.004	18413050	38.131	7.181	7.178	-0.003	12768904	40.633

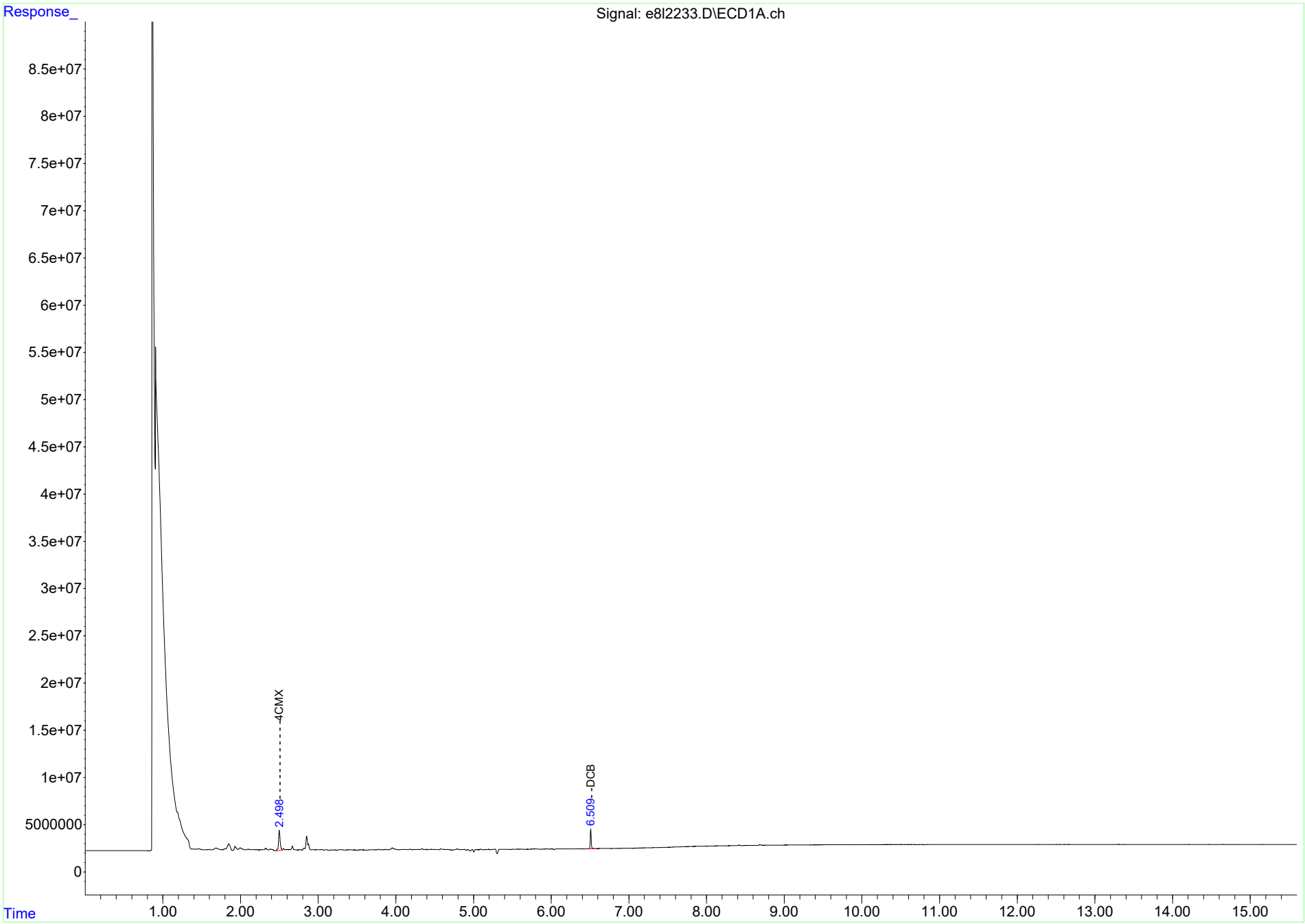
Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	25%	23%
DCB	200.000	No Limits	19%	20%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2

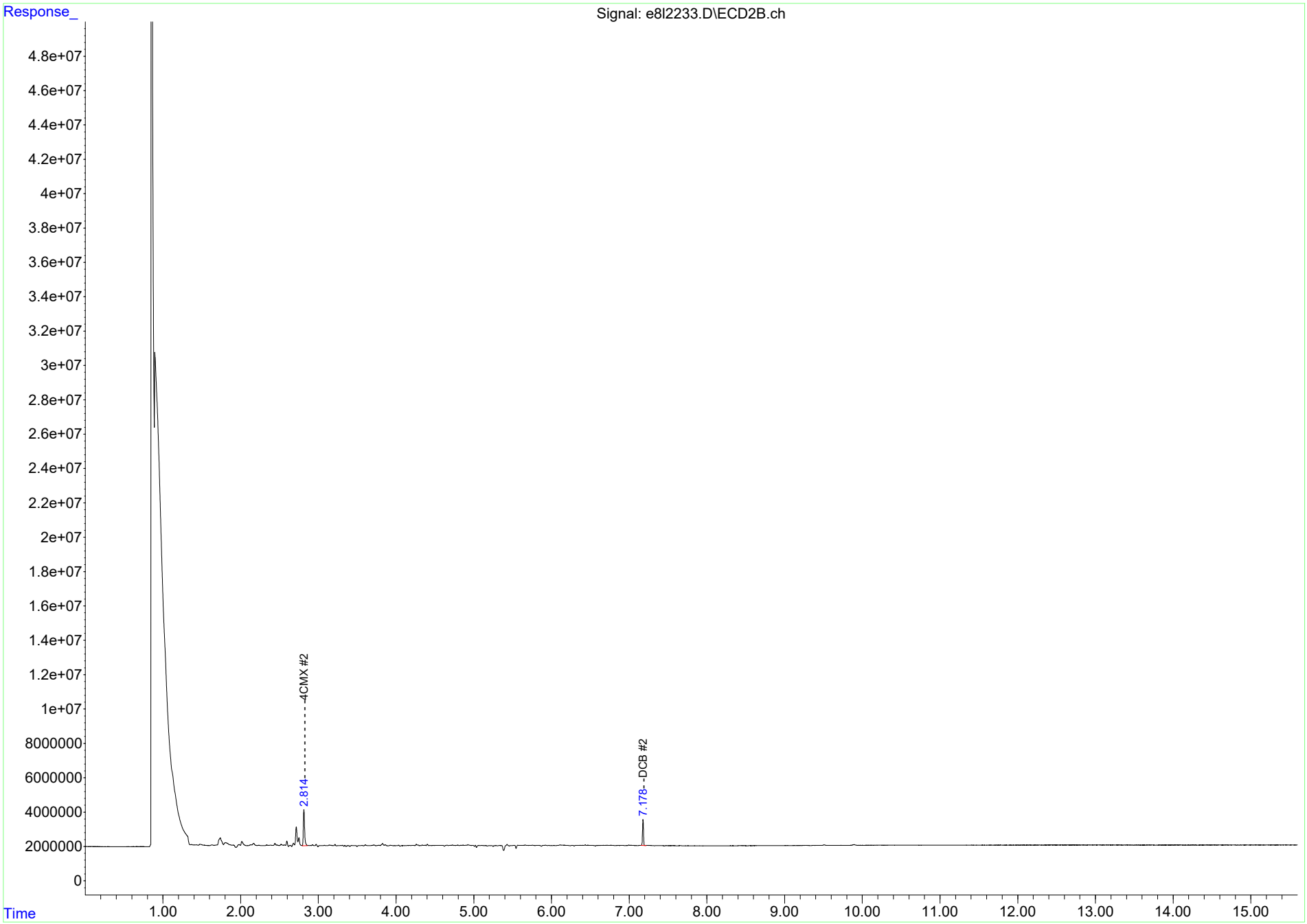
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2233.D



ECD8_8082_122022.m Fri Dec 23 05:06:10 2022 Page: 2

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2233.D



ECD8_8082_122022.m Fri Dec 23 05:06:11 2022 Page: 3

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
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Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.502	2.499	-0.003	31813271	50.431	2.815	2.814	-0.001	23415679	45.808
DCB	6.513	6.509	-0.004	18413050	38.131	7.181	7.178	-0.003	12768904	40.633

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	25%	23%
DCB	200.000	No Limits	19%	20%
4CMX	200.000	No Limits	25%	23%
DCB	200.000	No Limits	19%	20%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016 {3}	3.522	3.549	0.027f	1134332	5.899	3.999	0.000	-3.999	0	N.D.
Aroclor-1016 {4}	3.659	3.658	-0.001	654687	6.246	4.076	0.000	-4.076	0	N.D.
Sum Aroclor-1016				1789020	12.146				0	N.D.
Average Aroclor-1016					<MDL					N.D.
Aroclor-1221	2.642	2.667	0.025f	4604658	76.409	3.055	3.078	0.023f	688224	15.924
Aroclor-1221 {2}	2.759	2.777	0.018f	1603291	47.613	3.170	0.000	-3.170	0	N.D.
Aroclor-1221 {3}	2.791	2.777	-0.014	1603291	11.637	3.220	3.214	-0.006	904031	8.990
Sum Aroclor-1221				7811240	135.659				1592256	24.914 #
Average Aroclor-1221					45.220					<MDL
Aroclor-1232 {3}	3.520	3.549	0.029f	1134332	15.215	3.998	0.000	-3.998	0	N.D.
Aroclor-1232 {4}	3.658	3.658	0.000	654687	19.348	4.075	0.000	-4.075	0	N.D.
Sum Aroclor-1232				1789020	34.563				0	N.D.
Average Aroclor-1232					<MDL					N.D.
Aroclor-1242 {3}	3.521	3.549	0.028f	1134332	7.520	3.999	0.000	-3.999	0	N.D.
Aroclor-1242 {4}	3.659	3.658	-0.001	654687	8.512	4.076	0.000	-4.076	0	N.D.
Sum Aroclor-1242				1789020	16.032				0	N.D.
Average Aroclor-1242					<MDL					N.D.
Aroclor-1248 {2}	3.659	3.658	-0.001	654687	5.271	4.147	0.000	-4.147	0	N.D.
Sum Aroclor-1248				654687	5.271				0	N.D.
Average Aroclor-1248					<MDL					N.D.
Aroclor-1254	4.099	0.000	-4.099	0	N.D.	4.655	4.654	-0.001	240038	1.444
Aroclor-1254 {3}	4.571	4.575	0.004	821046	2.371	5.123	5.119	-0.004	1992163	7.412
Aroclor-1254 {4}	4.767	4.762	-0.005	1919353	7.625	5.284	0.000	-5.284	0	N.D.
Aroclor-1254 {5}	4.896	4.920	0.024f	1737384	6.339	5.407	5.429	0.022f	9790923	80.614
Sum Aroclor-1254				4477782	16.334				12023124	89.470 #
Average Aroclor-1254					<MDL					<MDL
Aroclor-1260	4.701	4.710	0.009	872413	3.484	5.263	0.000	-5.263	0	N.D.
Aroclor-1260 {2}	4.896	4.920	0.024f	1737384	4.880	5.409	5.429	0.020f	9790923	47.963

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
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Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1260 {3}	5.172	5.198	0.026f	3711400	15.729	5.726	0.000	-5.726	0	N.D.
Aroclor-1260 {5}	5.758	5.760	0.002	528629	2.179	6.368	0.000	-6.368	0	N.D.
Sum Aroclor-1260				6849826	26.272				9790923	47.963 #
Average Aroclor-1260					<MDL					47.963
Aroclor-1262	4.700	4.710	0.010	872413	5.024	5.261	0.000	-5.261	0	N.D.
Aroclor-1262 {2}	4.894	4.920	0.026f	1737384	8.074	5.407	5.429	0.022f	9790923	73.622
Aroclor-1262 {3}	5.171	5.198	0.027f	3711400	13.215	5.726	0.000	-5.726	0	N.D.
Aroclor-1262 {5}	5.779	5.760	-0.019f	528629	2.477	6.362	0.000	-6.362	0	N.D.
Sum Aroclor-1262				6849826	28.790				9790923	73.622 #
Average Aroclor-1262					<MDL					73.622
Aroclor-1268	5.778	5.760	-0.018f	528629	0.732	6.359	0.000	-6.359	0	N.D.
Sum Aroclor-1268				528629	0.732				0	N.D.
Average Aroclor-1268					<MDL					N.D.
4,4' DDT	5.114	5.120	0.006	449357	<MDL	5.659	0.000	-5.659	0	N.D. #
4,4' DDD	4.919	4.920	0.001	1737384	0.617	5.437	5.429	-0.008	9790923	6.392 #
4,4' DDE	4.494	4.490	-0.004	548916	0.133	5.024	5.021	-0.003	874055	0.336 #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2233.D

Aroclor-1016	Multi -	Deletion ==	DMP
Aroclor-1221	Multi -	Deletion ==	DMP
Aroclor-1232	Multi -	Deletion ==	DMP
Aroclor-1242	Multi -	Deletion ==	DMP
Aroclor-1248	Multi -	Deletion ==	DMP
Aroclor-1254	Multi -	Deletion ==	DMP
Aroclor-1260	Multi -	Deletion ==	DMP
Aroclor-1262	Multi -	Deletion ==	DMP
Aroclor-1268	Multi -	Deletion ==	DMP
4,4' DDT	-	Deletion ==	DMP
4,4' DDD	Both -	Deletion ==	DMP
4,4' DDE	Both -	Deletion ==	DMP

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:01**	**Matrix:**	**W**
Lab Sample ID:	**604449014**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB04-23-265374**	**Method:**	**SW846 3535A/8082A**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**2359880**	**Inst:**	**ECD8A.I**	**Dilution:**	**10**
Run Date:	**12/22/2022 19:15**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/22/2022 05:48**	**Aliquot:**	**1056.4 mL**	**Final Volume:**	**1 mL**
Data File:	**122222\e8l2236.D**	**Column:**	**1 Description: RTX-CLP**		
	122222\e8l2236.D		**2 PEST2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	0.315	ug/L	0.315	0.947	1
11104-28-2	Aroclor-1221	U	0.315	ug/L	0.315	0.947	1
11141-16-5	Aroclor-1232	U	0.315	ug/L	0.315	0.947	1
53469-21-9	Aroclor-1242	U	0.315	ug/L	0.315	0.947	1
12672-29-6	Aroclor-1248	U	0.315	ug/L	0.315	0.947	1
11097-69-1	Aroclor-1254	U	0.315	ug/L	0.315	0.947	1
11096-82-5	Aroclor-1260	U	0.315	ug/L	0.315	0.947	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
4cmx	0.0707	0.189	ug/L	37	(26%-108%)
Decachlorobiphenyl	0.0725	0.189	ug/L	38	(32%-135%)

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2236.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On   : 22 Dec 2022 19:15 (#1); 22 Dec 2022 19:15 (#2)
Operator : JXM   InstName : ECD8
Sample   : |604449014|2359880|10|SVA|1|TNSL|||
Misc   : |ECD5A2A_1L|WATER|SMEB04-23-265374|||
ALS Vial : 36   Sample Multiplier: 10

Jm 12/23/2022

JC 12/23/2022

Quant Time: Dec 23 04:59:48 2022
Quant Method : D:\MSDCHEM\1\DATA\122222\ECD8_8082_122022.m
Quant Title : ECD8   SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1   Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um   Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.502	2.501	-0.001	47101166	74.665	2.815	2.814	-0.001	32086760	62.771
DCB	6.513	6.511	-0.002	36966221	76.552	7.181	7.179	-0.002	26495942	84.314

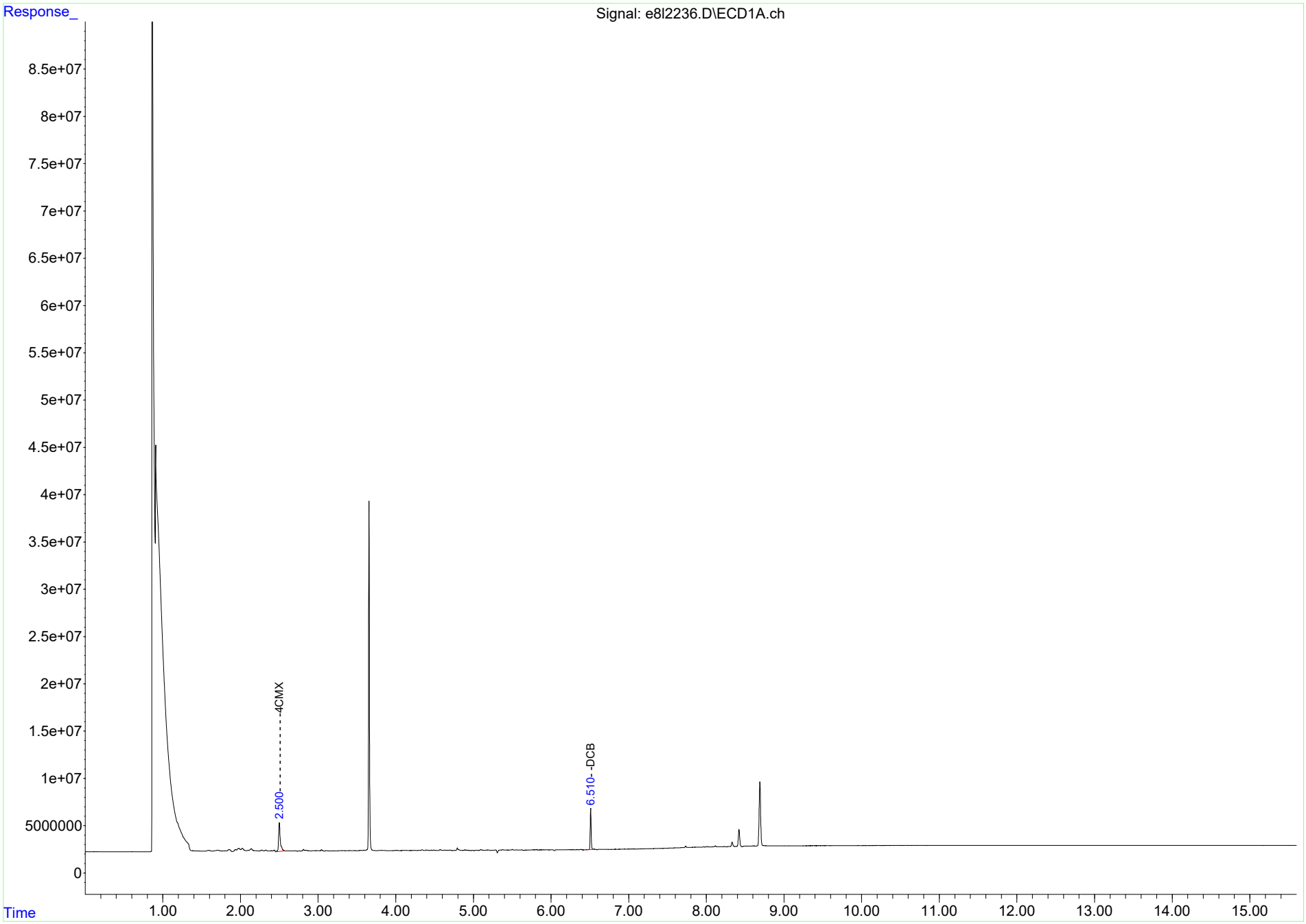
Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	37%	31%
DCB	200.000	No Limits	38%	42%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2

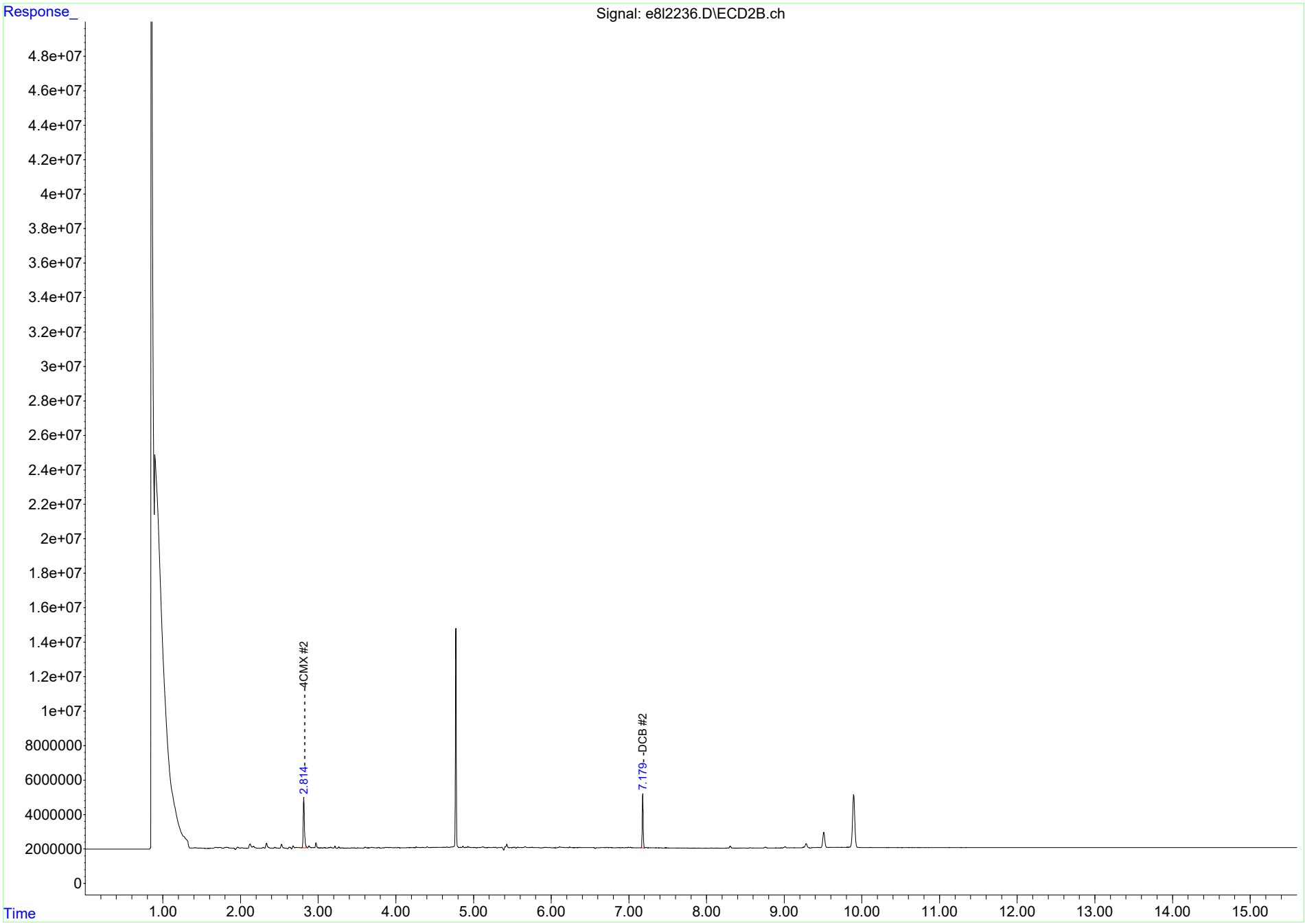
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2236.D



ECD8_8082_122022.m Fri Dec 23 05:08:36 2022 Page: 2

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2236.D



ECD8_8082_122022.m Fri Dec 23 05:08:37 2022 Page: 3

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.502	2.501	-0.001	47101166	74.665	2.815	2.814	-0.001	32086760	62.771
DCB	6.513	6.511	-0.002	36966221	76.552	7.181	7.179	-0.002	26495942	84.314

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	37%	31%
DCB	200.000	No Limits	38%	42%
4CMX	200.000	No Limits	37%	31%
DCB	200.000	No Limits	38%	42%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016	3.068	3.044	-0.024f	1474248	6.421	3.542	0.000	-3.542	0	N.D.
Aroclor-1016 {4}	3.659	3.655	-0.004	291450938	2780.658	4.076	0.000	-4.076	0	N.D.
Sum Aroclor-1016				292925186	2787.079				0	N.D.
Average Aroclor-1016					1393.539					N.D.
Aroclor-1221 {2}	2.759	0.000	-2.759	0	N.D.	3.170	3.160	-0.010	302557	10.469
Aroclor-1221 {3}	2.791	2.811	0.020f	2048424	14.868	3.220	3.216	-0.004	1036061	10.303
Sum Aroclor-1221				2048424	14.868				1338618	20.772
Average Aroclor-1221					<MDL					<MDL
Aroclor-1232	3.066	3.044	-0.022f	1474248	15.826	3.540	0.000	-3.540	0	N.D.
Aroclor-1232 {4}	3.658	3.655	-0.003	291450938	8613.282 A	4.075	0.000	-4.075	0	N.D.
Sum Aroclor-1232				292925186	8629.108				0	N.D.
Average Aroclor-1232					4314.554					N.D.
Aroclor-1242	3.067	3.044	-0.023f	1474248	8.100	3.542	0.000	-3.542	0	N.D.
Aroclor-1242 {4}	3.659	3.655	-0.004	291450938	3789.199	4.076	0.000	-4.076	0	N.D.
Sum Aroclor-1242				292925186	3797.298				0	N.D.
Average Aroclor-1242					1898.649					N.D.
Aroclor-1248 {2}	3.659	3.655	-0.004	291450938	2346.382	4.147	0.000	-4.147	0	N.D.
Sum Aroclor-1248				291450938	2346.382				0	N.D.
Average Aroclor-1248					2346.382					N.D.
Aroclor-1254 {2}	4.286	0.000	-4.286	0	N.D.	4.790	4.772	-0.018f	94135856	520.646
Aroclor-1254 {3}	4.571	4.573	0.002	726081	2.096	5.123	0.000	-5.123	0	N.D.
Aroclor-1254 {4}	4.767	4.792	0.025f	2352291	9.345	5.284	0.000	-5.284	0	N.D.
Aroclor-1254 {5}	4.896	0.000	-4.896	0	N.D.	5.407	5.407	0.000	1591785	13.106
Sum Aroclor-1254				3078371	11.441				95727642	533.752 #
Average Aroclor-1254					<MDL					266.876
Aroclor-1260 {2}	4.896	0.000	-4.896	0	N.D.	5.409	5.407	-0.002	1591785	7.798
Aroclor-1260 {4}	5.560	0.000	-5.560	0	N.D.	6.108	6.110	0.002	686140	1.847
Sum Aroclor-1260				0	N.D.				2277925	9.645

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
Average Aroclor-1260					N.D.					<MDL	
Aroclor-1262 {2}	4.894	0.000	-4.894	0	N.D.	5.407	5.407	0.000	1591785	11.969	
Aroclor-1262 {4}	5.559	0.000	-5.559	0	N.D.	6.107	6.110	0.003	686140	2.093	
Sum Aroclor-1262				0	N.D.				2277925	14.062	
Average Aroclor-1262					N.D.					<MDL	
4,4' DDT	5.114	5.094	-0.020f	908696	<MDL	5.659	0.000	-5.659	0	N.D.	#
4,4' DDD	4.919	0.000	-4.919	0	N.D.	5.437	5.429	-0.008	4277944	2.793	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Reasons for Analyst Intervention

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2236.D

Aroclor-1016	Multi -	Deletion ==	DMP
Aroclor-1221	Multi -	Deletion ==	DMP
Aroclor-1232	Multi -	Deletion ==	DMP
Aroclor-1242	Multi -	Deletion ==	DMP
Aroclor-1248	Multi -	Deletion ==	DMP
Aroclor-1254	Multi -	Deletion ==	DMP
Aroclor-1260	Multi -	Deletion ==	DMP
Aroclor-1262	Multi -	Deletion ==	DMP
4,4' DDT	-	Deletion ==	DMP
4,4' DDD #2	-	Deletion ==	DMP

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:01**	**Matrix:**	**W**
Lab Sample ID:	**604449016**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB04-23-265384**	**Method:**	**SW846 3535A/8082A**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**2359880**	**Inst:**	**ECD8A.I**	**Dilution:**	**10**
Run Date:	**12/22/2022 19:34**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/22/2022 05:48**	**Aliquot:**	**1037.82 mL**	**Final Volume:**	**1 mL**
Data File:	**122222\e8l2237.D**	**Column:**	**1 Description: RTX-CLP**		
	122222\e8l2237.D		**2 PEST2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	0.321	ug/L	0.321	0.964	1
11104-28-2	Aroclor-1221	U	0.321	ug/L	0.321	0.964	1
11141-16-5	Aroclor-1232	U	0.321	ug/L	0.321	0.964	1
53469-21-9	Aroclor-1242	U	0.321	ug/L	0.321	0.964	1
12672-29-6	Aroclor-1248	U	0.321	ug/L	0.321	0.964	1
11097-69-1	Aroclor-1254	U	0.321	ug/L	0.321	0.964	1
11096-82-5	Aroclor-1260	U	0.321	ug/L	0.321	0.964	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
4cmx	0.0680	0.193	ug/L	35	(26%-108%)
Decachlorobiphenyl	0.0698	0.193	ug/L	36	(32%-135%)

Quantitation Report
GEL Laboratories, LLC

Jxm 12/23/2022

JC 12/23/2022

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2237.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On   : 22 Dec 2022 19:34 (#1); 22 Dec 2022 19:34 (#2)
Operator : JXM   InstName : ECD8
Sample   : |604449016|2359880|10|SVA|1|TNSL|||
Misc   : |ECD5A2A_1L|WATER|SMEB04-23-265384|||
ALS Vial : 37   Sample Multiplier: 10

Quant Time: Dec 23 04:59:50 2022
Quant Method : D:\MSDCHEM\1\DATA\122222\ECD8_8082_122022.m
Quant Title : ECD8   SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1   Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um   Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.502	2.500	-0.002	44525806	70.583	2.815	2.815	0.000	29888368	58.470
DCB	6.513	6.510	-0.003	34980437	72.440	7.181	7.178	-0.003	24128705	76.781

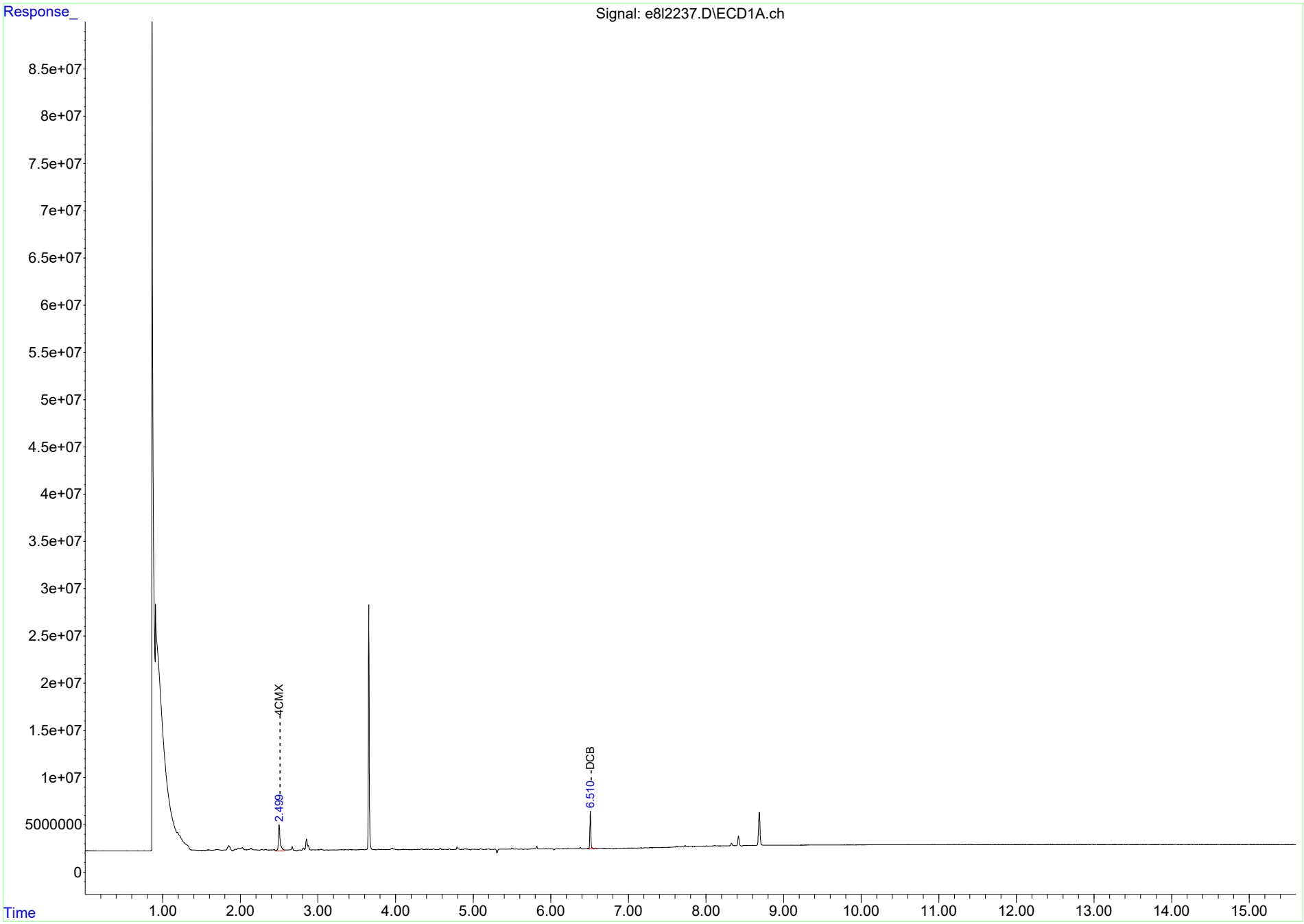
Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	35%	29%
DCB	200.000	No Limits	36%	38%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2

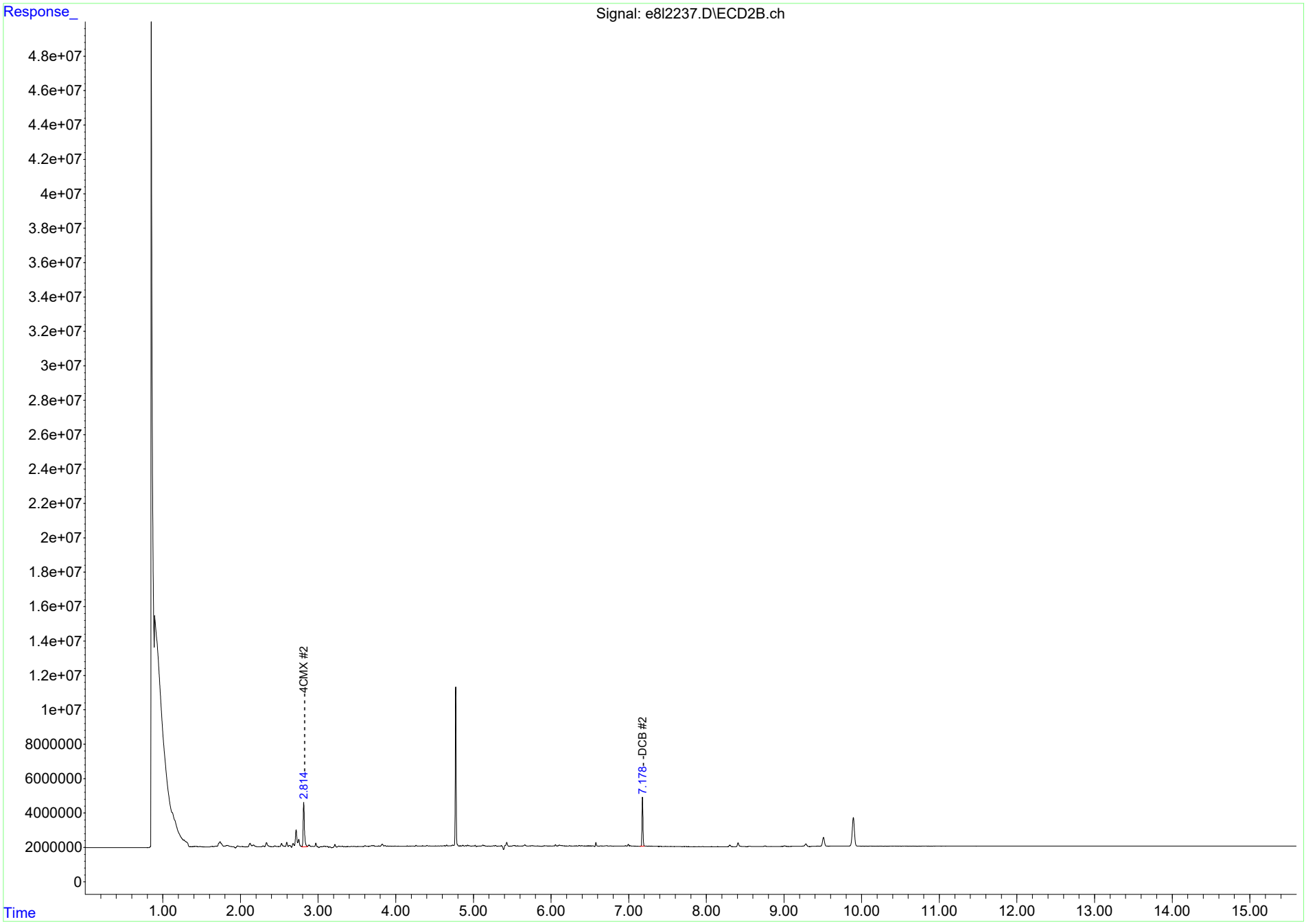
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2237.D



ECD8_8082_122022.m Fri Dec 23 05:09:20 2022 Page: 2

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2237.D



ECD8_8082_122022.m Fri Dec 23 05:09:20 2022 Page: 3

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.502	2.500	-0.002	44525806	70.583	2.815	2.815	0.000	29888368	58.470
DCB	6.513	6.510	-0.003	34980437	72.440	7.181	7.178	-0.003	24128705	76.781

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	35%	29%
DCB	200.000	No Limits	36%	38%
4CMX	200.000	No Limits	35%	29%
DCB	200.000	No Limits	36%	38%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016	3.068	3.042	-0.026f	1390335	6.055	3.542	0.000	-3.542	0	N.D.
Aroclor-1016 {4}	3.659	3.654	-0.005	208380567	1988.105	4.076	0.000	-4.076	0	N.D.
Sum Aroclor-1016				209770901	1994.160				0	N.D.
Average Aroclor-1016					997.080					N.D.
Aroclor-1221	2.642	2.638	-0.004	2419764	40.153	3.055	3.077	0.022f	2645764	61.216
Aroclor-1221 {2}	2.759	2.769	0.010	1444898	42.909	3.170	0.000	-3.170	0	N.D.
Aroclor-1221 {3}	2.791	2.811	0.020f	3673151	26.660	3.220	3.216	-0.004	2095152	20.835
Sum Aroclor-1221				7537813	109.723				4740916	82.051
Average Aroclor-1221					36.574					41.025
Aroclor-1232	3.066	3.042	-0.024f	1390335	14.925	3.540	0.000	-3.540	0	N.D.
Aroclor-1232 {4}	3.658	3.654	-0.004	208380567	6158.294 A	4.075	0.000	-4.075	0	N.D.
Sum Aroclor-1232				209770901	6173.219				0	N.D.
Average Aroclor-1232					3086.609					N.D.
Aroclor-1242	3.067	3.042	-0.025f	1390335	7.639	3.542	0.000	-3.542	0	N.D.
Aroclor-1242 {4}	3.659	3.654	-0.005	208380567	2709.188	4.076	0.000	-4.076	0	N.D.
Sum Aroclor-1242				209770901	2716.827				0	N.D.
Average Aroclor-1242					1358.413					N.D.
Aroclor-1248 {2}	3.659	3.654	-0.005	208380567	1677.608	4.147	0.000	-4.147	0	N.D.
Aroclor-1248 {5}	4.290	4.287	-0.003	529846	3.674	4.823	0.000	-4.823	0	N.D.
Sum Aroclor-1248				208910412	1681.281				0	N.D.
Average Aroclor-1248					840.641					N.D.
Aroclor-1254	4.099	0.000	-4.099	0	N.D.	4.655	4.655	0.000	724477	4.359
Aroclor-1254 {2}	4.286	4.287	0.001	529846	1.972	4.790	4.772	-0.018f	68968127	381.449
Aroclor-1254 {3}	4.571	4.574	0.003	1713060	4.946	5.123	5.123	0.000	998239	3.714
Aroclor-1254 {4}	4.767	4.793	0.026f	1853916	7.365	5.284	0.000	-5.284	0	N.D.
Aroclor-1254 {5}	4.896	4.893	-0.003	860932	3.141	5.407	5.429	0.022f	8190791	67.439
Sum Aroclor-1254				4957755	17.424				78881634	456.961 #
Average Aroclor-1254					<MDL					114.240

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1260	4.701	4.696	-0.005	749042	2.991	5.263	0.000	-5.263	0	N.D.
Aroclor-1260 {2}	4.896	4.893	-0.003	860932	2.418	5.409	5.429	0.020f	8190791	40.124
Aroclor-1260 {4}	5.560	0.000	-5.560	0	N.D.	6.108	6.107	-0.001	498992	1.343
Sum Aroclor-1260				1609974	5.410				8689783	41.468 #
Average Aroclor-1260					<MDL					<MDL
Aroclor-1262	4.700	4.696	-0.004	749042	4.314	5.261	0.000	-5.261	0	N.D.
Aroclor-1262 {2}	4.894	4.893	-0.001	860932	4.001	5.407	5.429	0.022f	8190791	61.590
Aroclor-1262 {4}	5.559	0.000	-5.559	0	N.D.	6.107	6.107	0.000	498992	1.522
Sum Aroclor-1262				1609974	8.315				8689783	63.112 #
Average Aroclor-1262					<MDL					<MDL
Aroclor-1268 {2}	5.805	5.819	0.014	3258946	4.193	6.393	0.000	-6.393	0	N.D.
Aroclor-1268 {3}	5.939	0.000	-5.939	0	N.D.	6.572	6.578	0.006	2061216	5.495
Aroclor-1268 {5}	6.380	6.380	0.000	1774748	0.948	6.997	6.996	-0.001	854715	0.788
Sum Aroclor-1268				5033693	5.141				2915931	6.283
Average Aroclor-1268					<MDL					<MDL
4,4' DDT	5.114	5.093	-0.021f	1660215	<MDL	5.659	5.663	0.004	949707	1.105
4,4' DDD	4.919	4.918	-0.001	539426	0.192	5.437	5.429	-0.008	8190791	5.347 #
4,4' DDE	4.494	4.490	-0.004	1035789	0.251	5.024	5.023	-0.001	783382	0.301

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Reasons for Analyst Intervention

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2237.D

Aroclor-1016	Multi	-	Deletion ==	DMP
Aroclor-1221	Multi	-	Deletion ==	DMP
Aroclor-1232	Multi	-	Deletion ==	DMP
Aroclor-1242	Multi	-	Deletion ==	DMP
Aroclor-1248	Multi	-	Deletion ==	DMP
Aroclor-1254	Multi	-	Deletion ==	DMP
Aroclor-1260	Multi	-	Deletion ==	DMP
Aroclor-1262	Multi	-	Deletion ==	DMP
Aroclor-1268	Multi	-	Deletion ==	DMP
4,4' DDT	Both	-	Deletion ==	DMP
4,4' DDD	Both	-	Deletion ==	DMP
4,4' DDE	Both	-	Deletion ==	DMP

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**604449002**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265371**	**Method:**	**SW846 3535A/8082A**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**2359880**	**Inst:**	**ECD8A.I**	**Dilution:**	**10**
Run Date:	**12/23/2022 07:38**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/22/2022 05:48**	**Aliquot:**	**1042.7 mL**	**Final Volume:**	**1 mL**
Data File:	**122322\e8l2312.D**	**Column:**	**1 Description: RTX-CLP**		
	122322\e8l2312.D		**2 PEST2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	0.319	ug/L	0.319	0.959	1
11104-28-2	Aroclor-1221	U	0.319	ug/L	0.319	0.959	1
11141-16-5	Aroclor-1232	U	0.319	ug/L	0.319	0.959	1
53469-21-9	Aroclor-1242	U	0.319	ug/L	0.319	0.959	1
12672-29-6	Aroclor-1248	U	0.319	ug/L	0.319	0.959	1
11097-69-1	Aroclor-1254	U	0.319	ug/L	0.319	0.959	1
11096-82-5	Aroclor-1260	U	0.319	ug/L	0.319	0.959	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
4cmx	0.0529	0.192	ug/L	28	(26%-108%)
Decachlorobiphenyl	0.0621	0.192	ug/L	32	(32%-135%)

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2312.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On   : 23 Dec 2022 07:38 (#1); 23 Dec 2022 07:38 (#2)
Operator : JXM   InstName : ECD8
Sample   : |604449002|2359880|10|SVA|1|TNSL|||
Misc   : |ECD5A2A_1L|WATER|SMEB01-23-265371|||
ALS Vial : 12   Sample Multiplier: 10

Jm 12/23/2022

JC 12/23/2022

Quant Time: Dec 23 07:58:43 2022
Quant Method : D:\MSDCHEM\1\DATA\122322\ECD8_8082_122022.m
Quant Title : ECD8   SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1   Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um   Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.500	2.501	0.001	34829547	55.212	2.814	2.814	0.000	30979924	60.605
DCB	6.512	6.513	0.001	31256088	64.727	7.180	7.179	-0.001	22497215	71.590

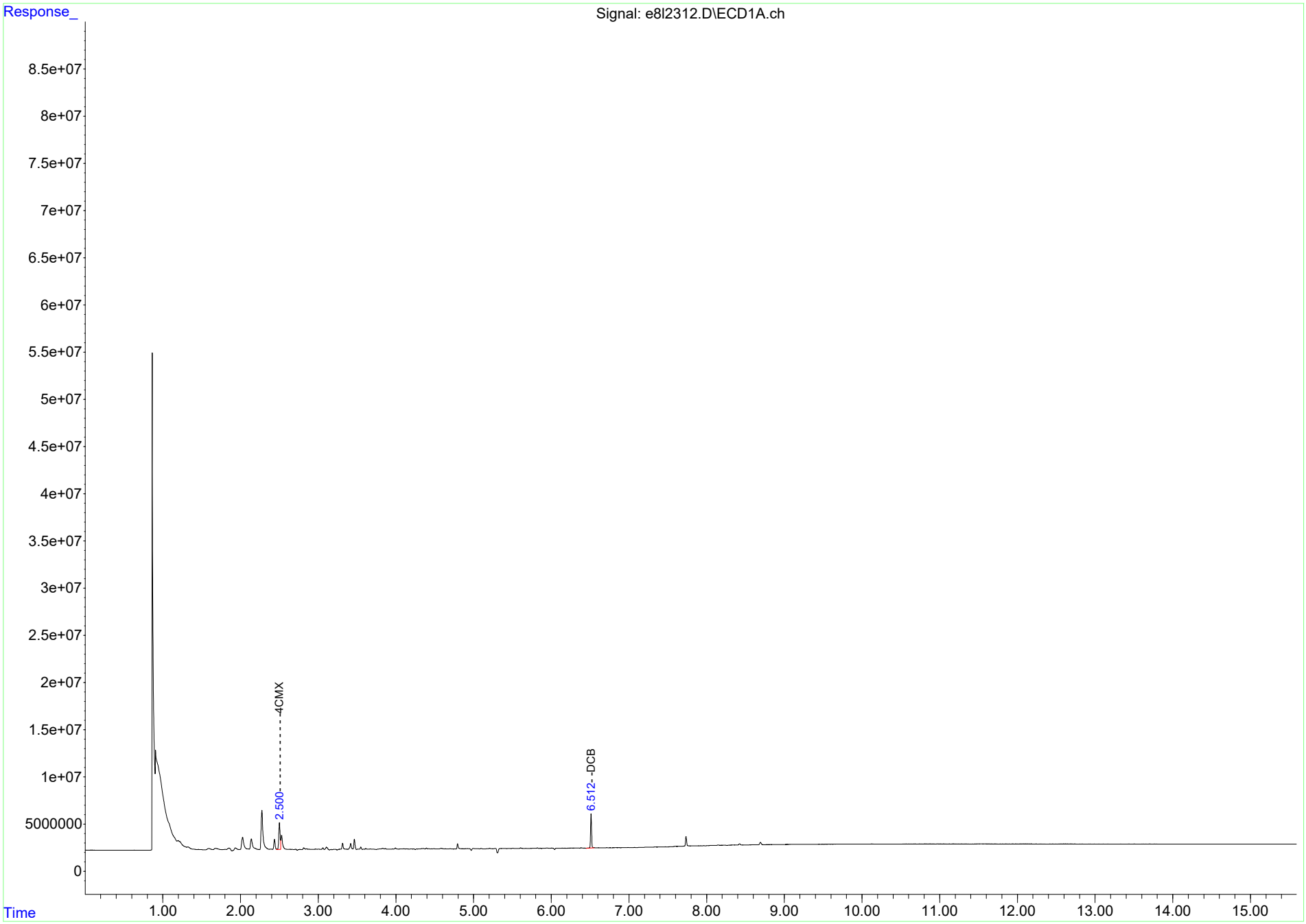
Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	28%	30%
DCB	200.000	No Limits	32%	36%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2

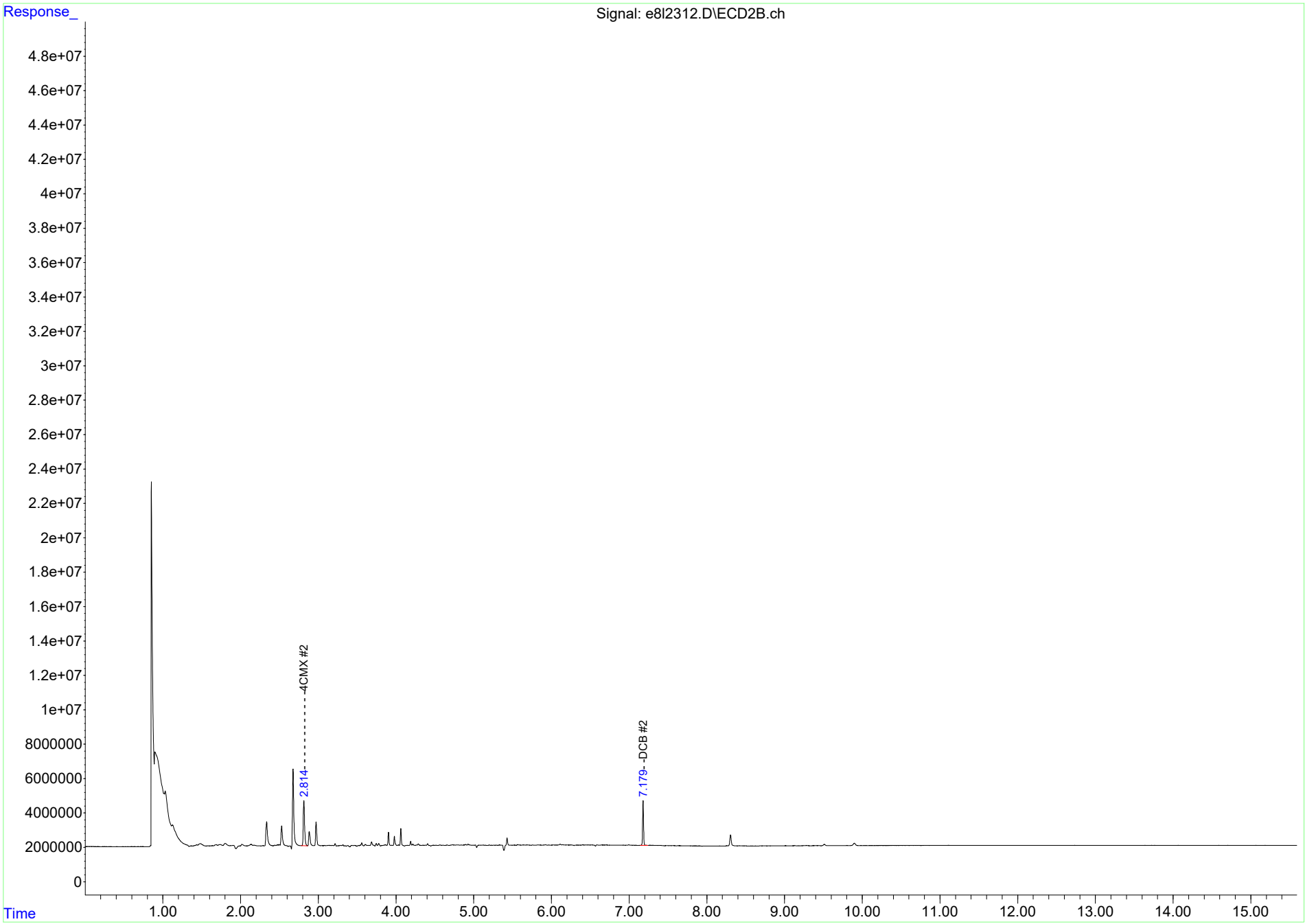
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2312.D



ECD8_8082_122022.m Fri Dec 23 07:59:20 2022 Page: 2

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2312.D



ECD8_8082_122022.m Fri Dec 23 07:59:20 2022 Page: 3

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.500	2.501	0.001	34829547	55.212	2.814	2.814	0.000	30979924	60.605
DCB	6.512	6.513	0.001	31256088	64.727	7.180	7.179	-0.001	22497215	71.590

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	28%	30%
DCB	200.000	No Limits	32%	36%
4CMX	200.000	No Limits	28%	30%
DCB	200.000	No Limits	32%	36%

Target Compounds Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016	3.067	3.060	-0.007	1967976	8.571	3.541	3.541	0.000	260783	2.370
Aroclor-1016 {2}	3.422	3.418	-0.004	8176996	29.376	3.898	3.902	0.004	6337195	32.415
Aroclor-1016 {3}	3.521	3.506	-0.015f	576701	2.999	3.998	3.978	-0.020f	4844037	35.436
Aroclor-1016 {4}	3.659	0.000	-3.659	0	N.D.	4.076	4.061	-0.015	8821079	100.783
Aroclor-1016 {5}	3.823	3.830	0.007	2830751	20.255	4.347	0.000	-4.347	0	N.D.
Sum Aroclor-1016				13552424	61.202				20263095	171.003 #
Average Aroclor-1016					<MDL					42.751
Aroclor-1221 {2}	2.760	2.766	0.006	1839746	54.635	3.171	0.000	-3.171	0	N.D.
Aroclor-1221 {3}	2.792	2.785	-0.007	329105	2.389	3.220	3.216	-0.004	1075771	10.698
Sum Aroclor-1221				2168851	57.024				1075771	10.698 #
Average Aroclor-1221					<MDL					<MDL
Aroclor-1232	3.066	3.060	-0.006	1967976	21.126	3.540	3.541	0.001	260783	5.437
Aroclor-1232 {2}	3.422	3.418	-0.004	8176996	74.154	3.897	3.902	0.005	6337195	86.701
Aroclor-1232 {3}	3.521	3.506	-0.015f	576701	7.735	3.998	3.978	-0.020f	4844037	88.887
Aroclor-1232 {4}	3.658	0.000	-3.658	0	N.D.	4.075	4.061	-0.014	8821079	248.806
Aroclor-1232 {5}	3.823	3.830	0.007	2830751	56.666	4.346	0.000	-4.346	0	N.D.
Sum Aroclor-1232				13552424	159.681				20263095	429.830 #
Average Aroclor-1232					39.920					107.458 #
Aroclor-1242	3.067	3.060	-0.007	1967976	10.812	3.542	3.541	-0.001	260783	2.976
Aroclor-1242 {2}	3.423	3.418	-0.005	8176996	37.642	3.898	3.902	0.004	6337195	42.029
Aroclor-1242 {3}	3.522	3.506	-0.016f	576701	3.823	3.999	3.978	-0.021f	4844037	44.670
Aroclor-1242 {4}	3.659	0.000	-3.659	0	N.D.	4.076	4.061	-0.015	8821079	127.972
Aroclor-1242 {5}	3.823	3.830	0.007	2830751	25.483	4.347	0.000	-4.347	0	N.D.
Sum Aroclor-1242				13552424	77.761				20263095	217.648 #
Average Aroclor-1242					<MDL					54.412
Aroclor-1248	3.423	3.418	-0.005	8176996	72.535	3.898	3.902	0.004	6337195	84.098
Aroclor-1248 {3}	3.824	3.830	0.006	2830751	17.843	4.347	0.000	-4.347	0	N.D.
Aroclor-1248 {5}	4.291	4.294	0.003	310288	2.151	4.824	0.000	-4.824	0	N.D.
Sum Aroclor-1248				11318036	92.529				6337195	84.098
Average Aroclor-1248					<MDL					84.098

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1254 {2}	4.287	4.294	0.007	310288	1.155	4.791	0.000	-4.791	0	N.D.
Aroclor-1254 {3}	4.571	4.581	0.010	718554	2.075	5.124	5.123	-0.001	2322423	8.641
Aroclor-1254 {4}	4.767	4.793	0.026f	5639880	22.405	5.284	0.000	-5.284	0	N.D.
Aroclor-1254 {5}	4.897	0.000	-4.897	0	N.D.	5.408	5.429	0.021f	13979796	115.103
Sum Aroclor-1254				6668722	25.635				16302219	123.744 #
Average Aroclor-1254					<MDL					61.872
Aroclor-1260 {2}	4.895	0.000	-4.895	0	N.D.	5.407	5.429	0.022f	13979796	68.483
Aroclor-1260 {4}	5.559	0.000	-5.559	0	N.D.	6.108	6.112	0.004	509136	1.371
Sum Aroclor-1260				0	N.D.				14488932	69.854
Average Aroclor-1260					N.D.					34.927
Aroclor-1262 {2}	4.894	0.000	-4.894	0	N.D.	5.407	5.429	0.022f	13979796	105.119
Aroclor-1262 {4}	5.559	0.000	-5.559	0	N.D.	6.107	6.112	0.005	509136	1.553
Sum Aroclor-1262				0	N.D.				14488932	106.672
Average Aroclor-1262					N.D.					53.336
Aroclor-1268 {3}	5.940	0.000	-5.940	0	N.D.	6.572	6.581	0.009	870628	2.321
Aroclor-1268 {4}	6.185	6.162	-0.023f	62633	0.245	6.766	0.000	-6.766	0	N.D.
Aroclor-1268 {5}	6.381	6.384	0.003	486612	0.260	6.997	0.000	-6.997	0	N.D.
Sum Aroclor-1268				549245	0.505				870628	2.321 #
Average Aroclor-1268					<MDL					<MDL
4,4' DDT	5.113	5.097	-0.016f	698107	<MDL	5.657	0.000	-5.657	0	N.D. #
4,4' DDD	4.918	0.000	-4.918	0	N.D.	5.435	5.429	-0.006	13979796	9.126 #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Reasons for Analyst Intervention

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2312.D

Aroclor-1016	Multi -	Deletion ==	DMP
Aroclor-1221	Multi -	Deletion ==	DMP
Aroclor-1232	Multi -	Deletion ==	DMP
Aroclor-1242	Multi -	Deletion ==	DMP
Aroclor-1248	Multi -	Deletion ==	DMP
Aroclor-1254	Multi -	Deletion ==	DMP
Aroclor-1260	Multi -	Deletion ==	DMP
Aroclor-1262	Multi -	Deletion ==	DMP
Aroclor-1268	Multi -	Deletion ==	DMP
4,4' DDT	-	Deletion ==	DMP
4,4' DDD #2	-	Deletion ==	DMP

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**604449004**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265381**	**Method:**	**SW846 3535A/8082A**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**2359880**	**Inst:**	**ECD8A.I**	**Dilution:**	**10**
Run Date:	**12/23/2022 07:58**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/22/2022 05:48**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**122322\e8l2313.D**	**Column:**	**1 Description: RTX-CLP**		
	122322\e8l2313.D		**2 PEST2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	0.333	ug/L	0.333	1.00	1
11104-28-2	Aroclor-1221	U	0.333	ug/L	0.333	1.00	1
11141-16-5	Aroclor-1232	U	0.333	ug/L	0.333	1.00	1
53469-21-9	Aroclor-1242	U	0.333	ug/L	0.333	1.00	1
12672-29-6	Aroclor-1248	U	0.333	ug/L	0.333	1.00	1
11097-69-1	Aroclor-1254	U	0.333	ug/L	0.333	1.00	1
11096-82-5	Aroclor-1260	U	0.333	ug/L	0.333	1.00	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%		Acceptable Limits
4cmx	0.0480	0.200	ug/L	24	*	(26%-108%)
Decachlorobiphenyl	0.0625	0.200	ug/L	31	*	(32%-135%)

Quantitation Report
GEL Laboratories, LLC

Jxm 12/23/2022

JC 12/23/2022

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2313.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On   : 23 Dec 2022 07:58 (#1); 23 Dec 2022 07:58 (#2)
Operator : JXM   InstName : ECD8
Sample   : |604449004|2359880|10|SVA|1|TNSL|||
Misc   : |ECD5A2A_1L|WATER|SMEB01-23-265381|||
ALS Vial : 13   Sample Multiplier: 10

Quant Time: Dec 23 08:24:57 2022
Quant Method : D:\MSDCHEM\1\DATA\122322\ECD8_8082_122022.m
Quant Title : ECD8   SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1   Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um   Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.500	2.498	-0.002	30271668	47.987	2.814	2.812	-0.002	29401605	57.518m
DCB	6.512	6.509	-0.003	30168629	62.475	7.180	7.178	-0.002	21006669	66.846

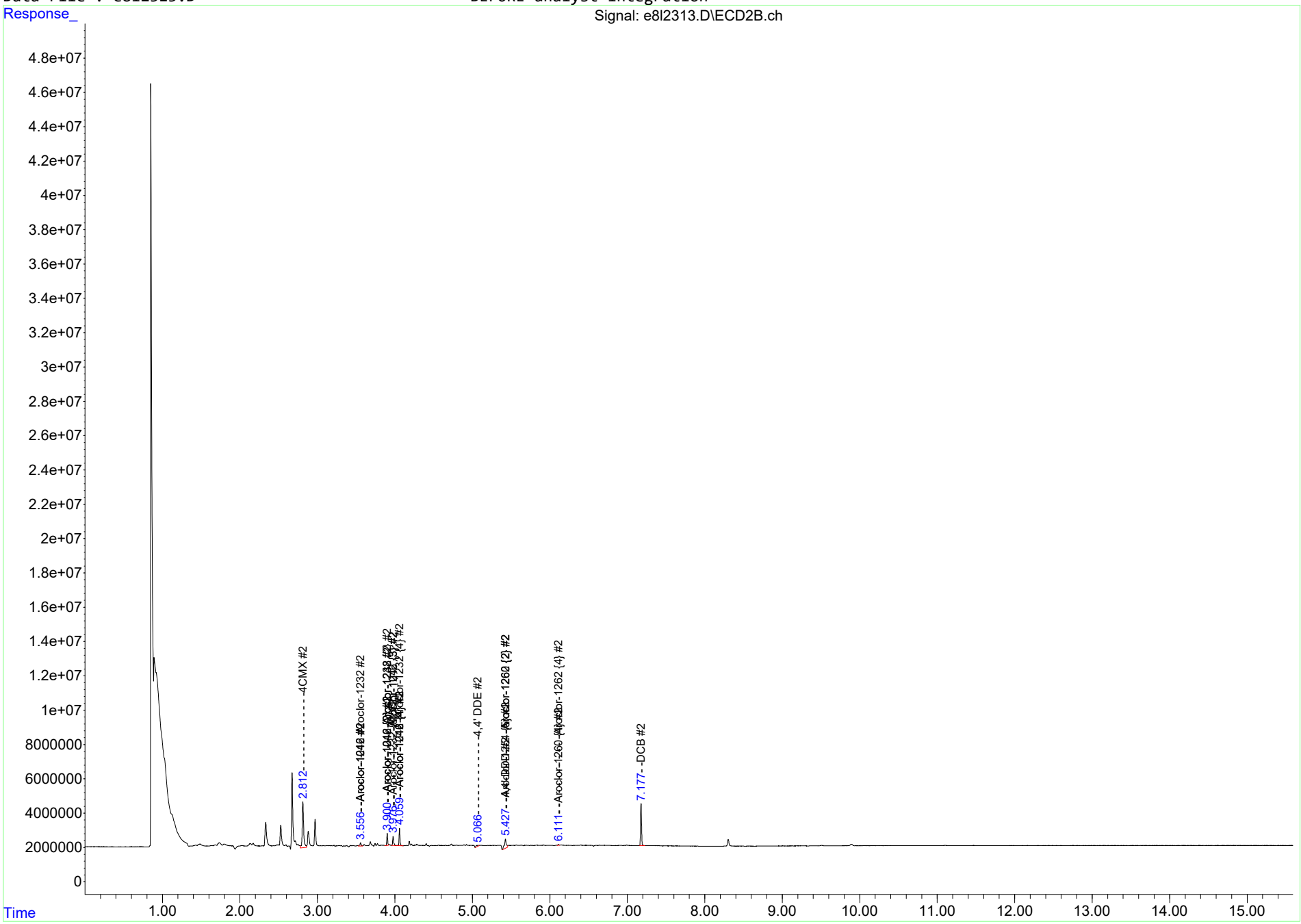
Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	24%	29%
DCB	200.000	No Limits	31%	33%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2

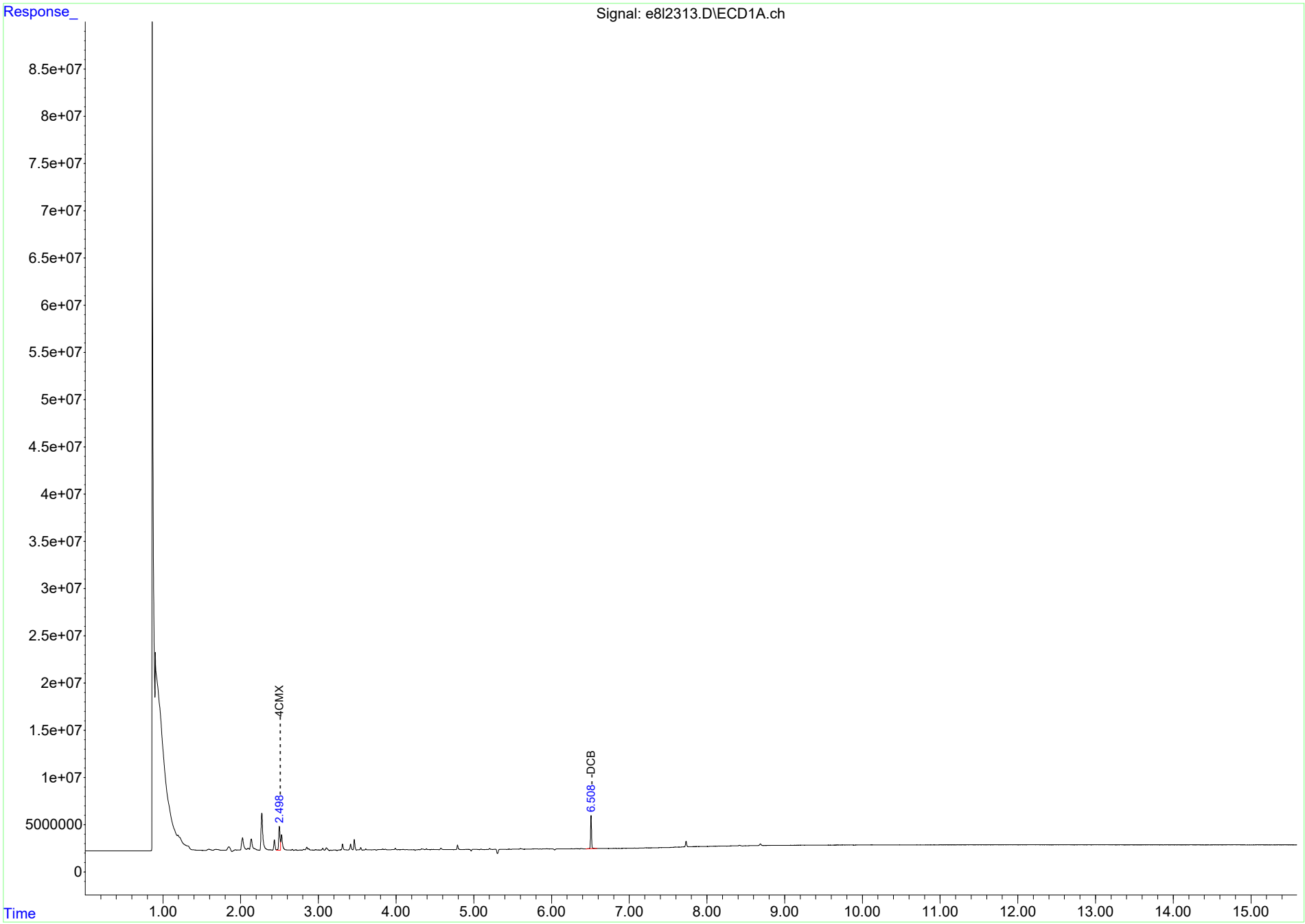
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2313.D BEFORE analyst integration



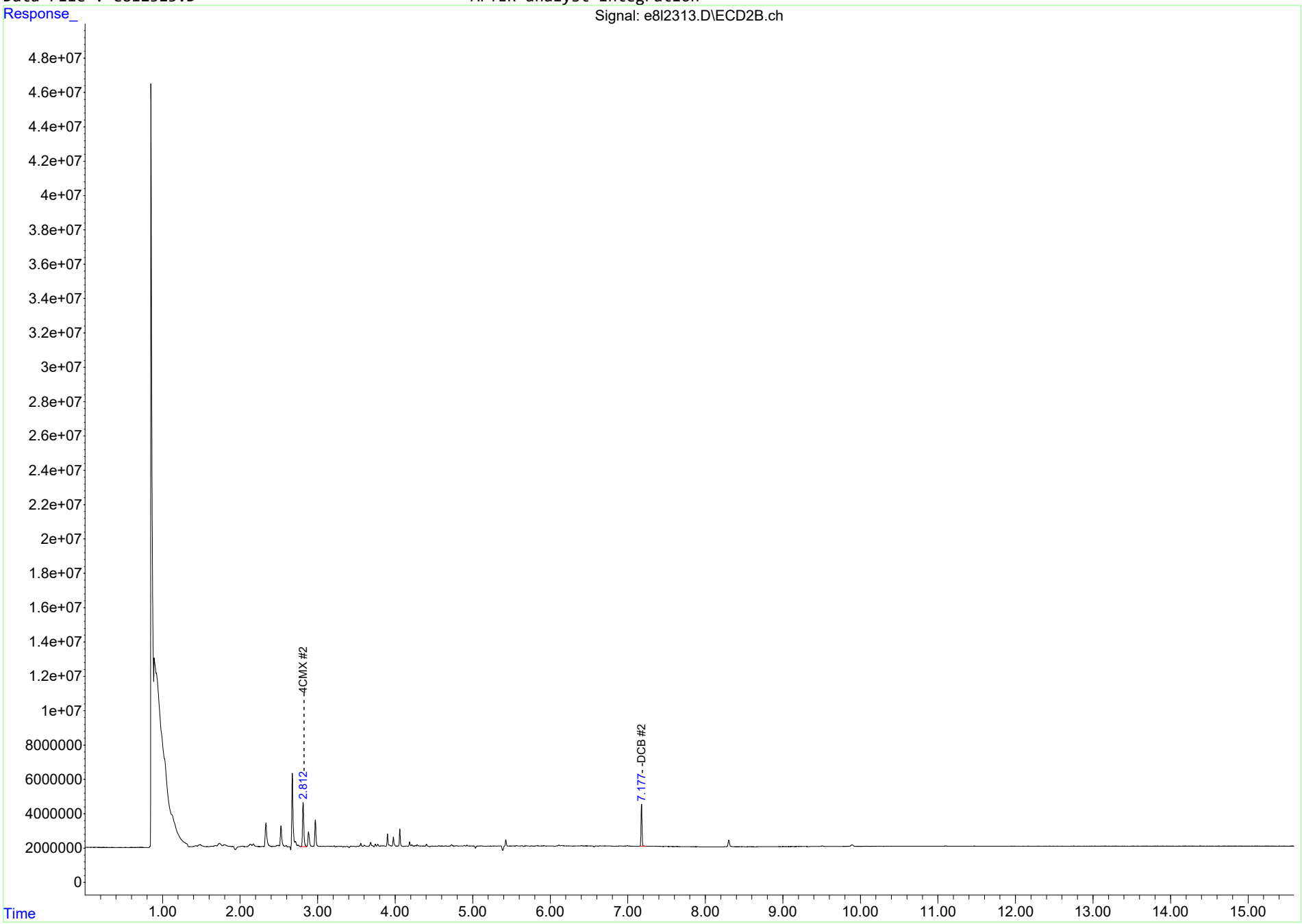
ECD8_8082_122022.m Fri Dec 23 08:25:31 2022 Page: 2

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2313.D



ECD8_8082_122022.m Fri Dec 23 08:25:32 2022 Page: 3

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2313.D AFTER analyst integration



ECD8_8082_122022.m Fri Dec 23 08:25:32 2022 Page: 4

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.500	2.498	-0.002	30271668	47.987	2.814	2.813	-0.001	34156018	66.819
DCB	6.512	6.509	-0.003	30168629	62.475	7.180	7.178	-0.002	21006669	66.846

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	24%	29%
DCB	200.000	No Limits	31%	33%
4CMX	200.000	No Limits	24%	33%
DCB	200.000	No Limits	31%	33%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016	3.067	3.056	-0.011	2181794	9.502	3.541	3.557	0.016f	2347490	21.331
Aroclor-1016 {2}	3.422	3.415	-0.007	7215642	25.923	3.898	3.901	0.003	5584867	28.566
Aroclor-1016 {3}	3.521	3.545	0.024f	3098922	16.117	3.998	3.977	-0.021f	4665760	34.132
Aroclor-1016 {4}	3.659	0.000	-3.659	0	N.D.	4.076	4.059	-0.017f	8551784	97.706
Aroclor-1016 {5}	3.823	3.828	0.005	1793184	12.831	4.347	0.000	-4.347	0	N.D.
Sum Aroclor-1016				14289543	64.372				21149901	181.735 #
Average Aroclor-1016					<MDL					45.434
Aroclor-1221	2.643	2.666	0.023f	958127	15.899	3.055	0.000	-3.055	0	N.D.
Aroclor-1221 {3}	2.792	2.812	0.020f	1078115	7.825	3.220	0.000	-3.220	0	N.D.
Sum Aroclor-1221				2036242	23.724				0	N.D.
Average Aroclor-1221					<MDL					N.D.
Aroclor-1232	3.066	3.056	-0.010	2181794	23.421	3.540	3.557	0.017f	2347490	48.940
Aroclor-1232 {2}	3.422	3.415	-0.007	7215642	65.436	3.897	3.901	0.004	5584867	76.408
Aroclor-1232 {3}	3.521	3.545	0.024f	3098922	41.567	3.998	3.977	-0.021f	4665760	85.615
Aroclor-1232 {4}	3.658	0.000	-3.658	0	N.D.	4.075	4.059	-0.016f	8551784	241.211
Aroclor-1232 {5}	3.823	3.828	0.005	1793184	35.896	4.346	0.000	-4.346	0	N.D.
Sum Aroclor-1232				14289543	166.319				21149901	452.174 #
Average Aroclor-1232					41.580					113.043 #
Aroclor-1242	3.067	3.056	-0.011	2181794	11.987	3.542	3.557	0.015f	2347490	26.793
Aroclor-1242 {2}	3.423	3.415	-0.008	7215642	33.217	3.898	3.901	0.003	5584867	37.040
Aroclor-1242 {3}	3.522	3.545	0.023f	3098922	20.545	3.999	3.977	-0.022f	4665760	43.026
Aroclor-1242 {4}	3.659	0.000	-3.659	0	N.D.	4.076	4.059	-0.017f	8551784	124.065
Aroclor-1242 {5}	3.823	3.828	0.005	1793184	16.142	4.347	0.000	-4.347	0	N.D.
Sum Aroclor-1242				14289543	81.891				21149901	230.924 #
Average Aroclor-1242					<MDL					57.731
Aroclor-1248	3.423	3.415	-0.008	7215642	64.007	3.898	3.901	0.003	5584867	74.114
Aroclor-1248 {3}	3.824	3.828	0.004	1793184	11.303	4.347	0.000	-4.347	0	N.D.
Aroclor-1248 {5}	4.291	4.290	-0.001	345351	2.394	4.824	0.000	-4.824	0	N.D.
Sum Aroclor-1248				9354178	77.704				5584867	74.114
Average Aroclor-1248					<MDL					74.114

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1254 {2}	4.287	4.290	0.003	345351	1.286	4.791	0.000	-4.791	0	N.D.
Aroclor-1254 {3}	4.571	4.577	0.006	1707972	4.931	5.124	0.000	-5.124	0	N.D.
Aroclor-1254 {4}	4.767	4.790	0.023f	4597664	18.265	5.284	0.000	-5.284	0	N.D.
Aroclor-1254 {5}	4.897	0.000	-4.897	0	N.D.	5.408	5.427	0.019f	8851951	72.883
Sum Aroclor-1254				6650987	24.482				8851951	72.883 #
Average Aroclor-1254					<MDL					72.883
Aroclor-1260 {2}	4.895	0.000	-4.895	0	N.D.	5.407	5.427	0.020f	8851951	43.363
Aroclor-1260 {4}	5.559	0.000	-5.559	0	N.D.	6.108	6.112	0.004	472845	1.273
Sum Aroclor-1260				0	N.D.				9324795	44.636
Average Aroclor-1260					N.D.					<MDL
Aroclor-1262 {2}	4.894	0.000	-4.894	0	N.D.	5.407	5.427	0.020f	8851951	66.561
Aroclor-1262 {4}	5.559	0.000	-5.559	0	N.D.	6.107	6.112	0.005	472845	1.442
Sum Aroclor-1262				0	N.D.				9324795	68.003
Average Aroclor-1262					N.D.					34.002
Aroclor-1268 {5}	6.381	6.380	-0.001	425431	0.227	6.997	0.000	-6.997	0	N.D.
Sum Aroclor-1268				425431	0.227				0	N.D.
Average Aroclor-1268					<MDL					N.D.
4,4' DDT	5.113	5.094	-0.019f	712679	<MDL	5.657	0.000	-5.657	0	N.D. #
4,4' DDD	4.918	0.000	-4.918	0	N.D.	5.435	5.427	-0.008	8851951	5.779 #
4,4' DDE	4.493	0.000	-4.493	0	N.D.	5.023	5.067	0.044	1424322	0.547 #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2313.D

4CMX #2 - Manual Integration == AB/AP

Aroclor-1016 Multi - Deletion == DMP
Aroclor-1221 Multi - Deletion == DMP
Aroclor-1232 Multi - Deletion == DMP
Aroclor-1242 Multi - Deletion == DMP
Aroclor-1248 Multi - Deletion == DMP
Aroclor-1254 Multi - Deletion == DMP
Aroclor-1260 Multi - Deletion == DMP
Aroclor-1262 Multi - Deletion == DMP
Aroclor-1268 Multi - Deletion == DMP
4,4' DDT - Deletion == DMP
4,4' DDD #2 - Deletion == DMP
4,4' DDE #2 - Deletion == DMP

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:12**	**Matrix:**	**W**
Lab Sample ID:	**604449018**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB05-23-265375**	**Method:**	**SW846 3535A/8082A**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**2359880**	**Inst:**	**ECD8A.I**	**Dilution:**	**10**
Run Date:	**12/23/2022 08:56**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/22/2022 05:48**	**Aliquot:**	**1016.06 mL**	**Final Volume:**	**1 mL**
Data File:	**122322\e8l2316.D**	**Column:**	**1 Description: RTX-CLP**		
	122322\e8l2316.D		**2 PEST2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	0.328	ug/L	0.328	0.984	1
11104-28-2	Aroclor-1221	U	0.328	ug/L	0.328	0.984	1
11141-16-5	Aroclor-1232	U	0.328	ug/L	0.328	0.984	1
53469-21-9	Aroclor-1242	U	0.328	ug/L	0.328	0.984	1
12672-29-6	Aroclor-1248	U	0.328	ug/L	0.328	0.984	1
11097-69-1	Aroclor-1254	U	0.328	ug/L	0.328	0.984	1
11096-82-5	Aroclor-1260	U	0.328	ug/L	0.328	0.984	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%		Acceptable Limits
4cmx	0.0223	0.197	ug/L	11	*	(26%-108%)
Decachlorobiphenyl	0.0186	0.197	ug/L	9	*	(32%-135%)

Quantitation Report
GEL Laboratories, LLC

Jxm 12/23/2022

JC 12/23/2022

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2316.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 23 Dec 2022 08:56 (#1); 23 Dec 2022 08:56 (#2)
Operator : JXM InstName : ECD8
Sample : |604449018|2359880|10|SVA|1|TNSL|||
Misc : |ECD5A2A_1L|WATER|SMEB05-23-265375|||
ALS Vial : 16 Sample Multiplier: 10

Quant Time: Dec 23 09:23:34 2022
Quant Method : D:\MSDCHEM\1\DATA\122322\ECD8_8082_122022.m
Quant Title : ECD8 SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1 Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.500	2.500	0.000	14266554	22.615	2.814	2.815	0.001	8147953	15.940
DCB	6.512	6.510	-0.002	9115152	18.876	7.180	7.179	-0.001	6742976	21.457

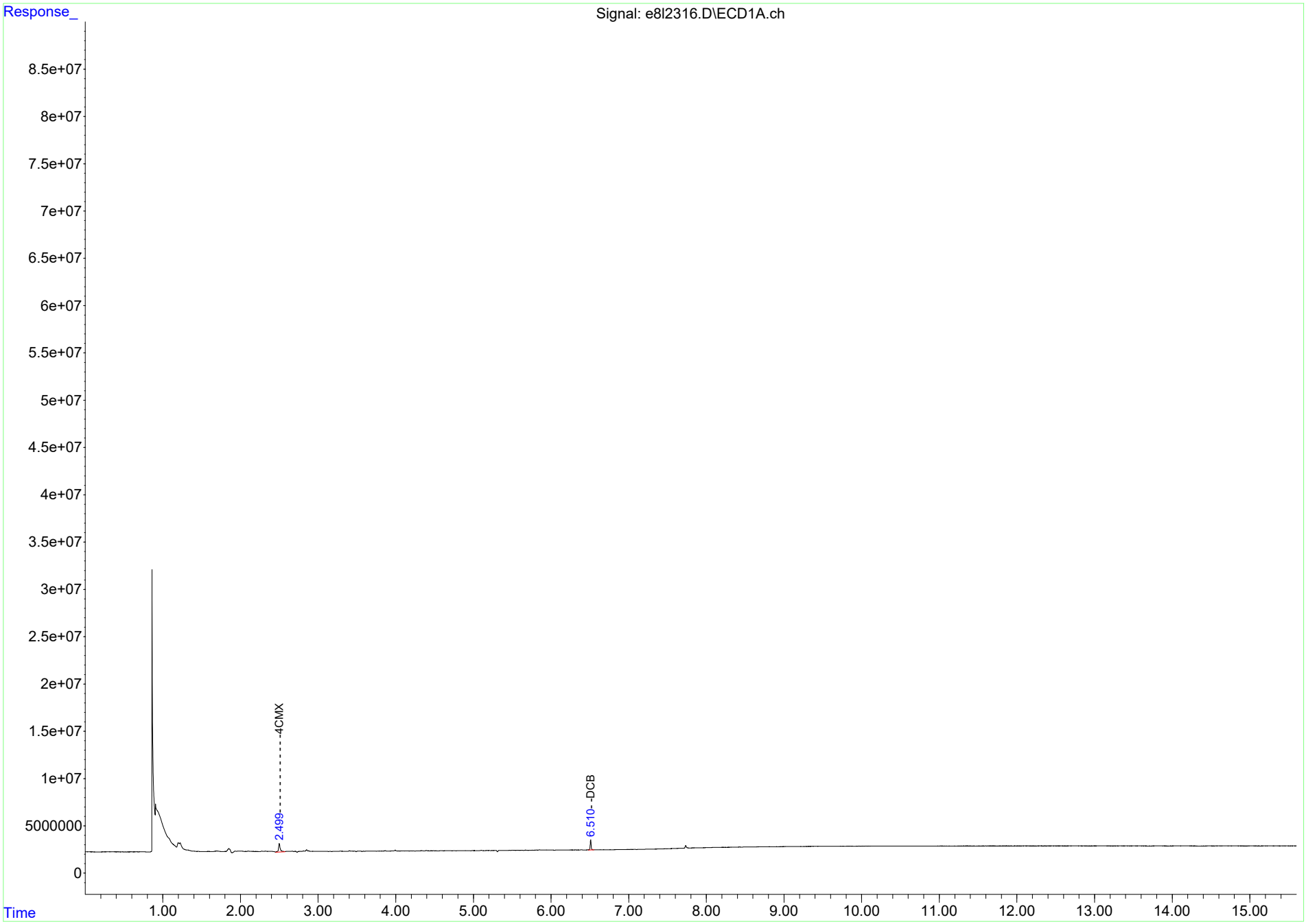
Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	11%	8%
DCB	200.000	No Limits	9%	11%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2

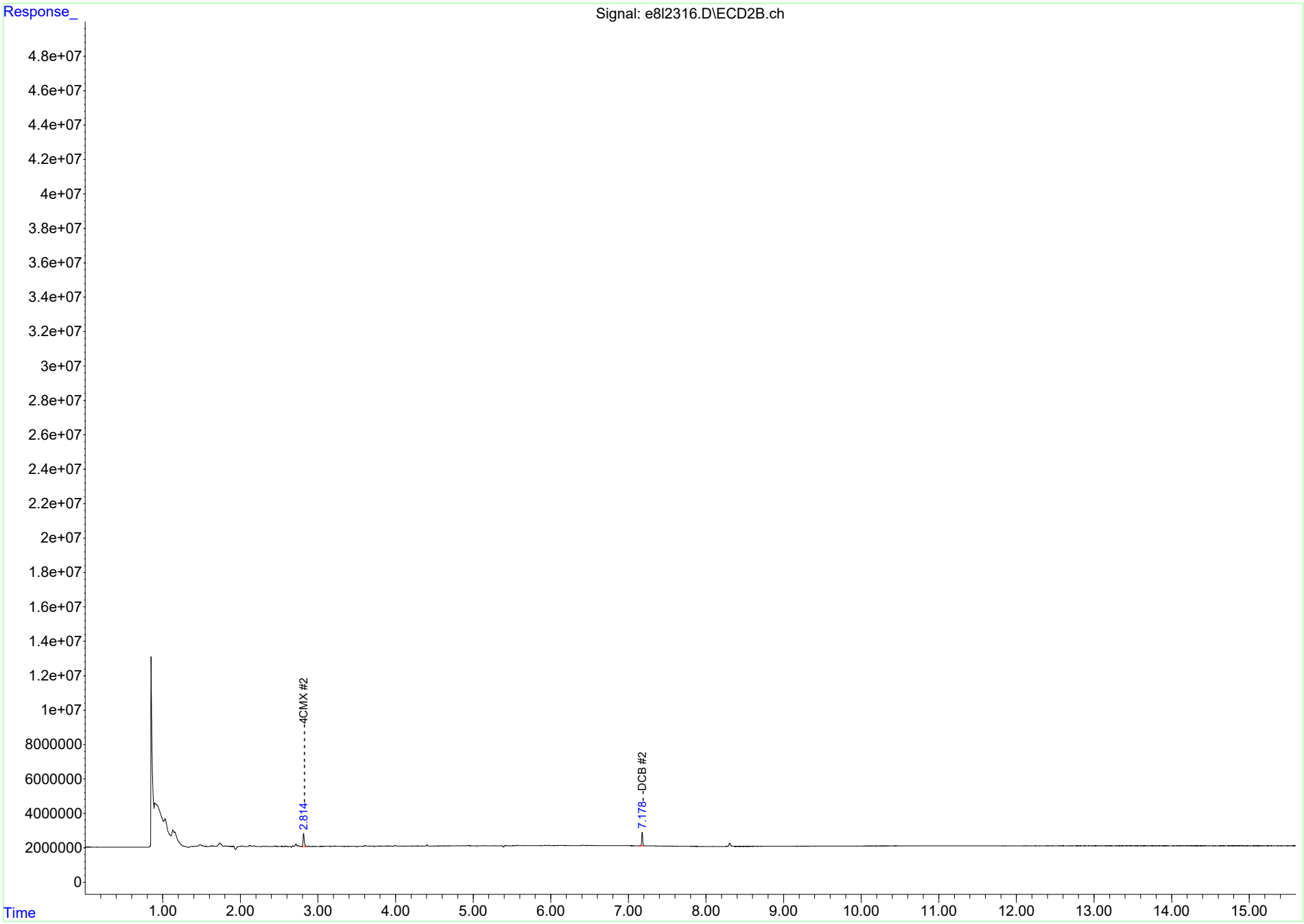
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2316.D



ECD8_8082_122022.m Fri Dec 23 09:23:55 2022 Page: 2

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2316.D



ECD8_8082_122022.m Fri Dec 23 09:23:56 2022 Page: 3

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.500	2.500	0.000	14266554	22.615	2.814	2.815	0.001	8147953	15.940
DCB	6.512	6.510	-0.002	9115152	18.876	7.180	7.179	-0.001	6742976	21.457

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	11%	8%
DCB	200.000	No Limits	9%	11%
4CMX	200.000	No Limits	11%	8%
DCB	200.000	No Limits	9%	11%

Target Compounds Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016 {2}	3.422	3.401	-0.021f	538864	1.936	3.898	0.000	-3.898	0	N.D.
Aroclor-1016 {3}	3.521	3.551	0.030f	904942	4.706	3.998	0.000	-3.998	0	N.D.
Sum Aroclor-1016				1443807	6.642				0	N.D.
Average Aroclor-1016					<MDL					N.D.
Aroclor-1221	2.643	2.638	-0.005	278306	4.618	3.055	0.000	-3.055	0	N.D.
Aroclor-1221 {2}	2.760	2.764	0.004	1110936	32.991	3.171	0.000	-3.171	0	N.D.
Aroclor-1221 {3}	2.792	2.789	-0.003	338158	2.454	3.220	0.000	-3.220	0	N.D.
Sum Aroclor-1221				1727400	40.064				0	N.D.
Average Aroclor-1221					<MDL					N.D.
Aroclor-1232 {2}	3.422	3.401	-0.021f	538864	4.887	3.897	0.000	-3.897	0	N.D.
Sum Aroclor-1232				538864	4.887				0	N.D.
Average Aroclor-1232					<MDL					N.D.
Aroclor-1242 {2}	3.423	3.401	-0.022f	538864	2.481	3.898	0.000	-3.898	0	N.D.
Aroclor-1242 {3}	3.522	3.551	0.029f	904942	5.999	3.999	0.000	-3.999	0	N.D.
Sum Aroclor-1242				1443807	8.480				0	N.D.
Average Aroclor-1242					<MDL					N.D.
Aroclor-1248	3.423	3.401	-0.022f	538864	4.780	3.898	0.000	-3.898	0	N.D.
Sum Aroclor-1248				538864	4.780				0	N.D.
Average Aroclor-1248					<MDL					N.D.
Aroclor-1254 {5}	4.897	0.000	-4.897	0	N.D.	5.408	5.431	0.023f	2659822	21.900
Sum Aroclor-1254				0	N.D.				2659822	21.900
Average Aroclor-1254					N.D.					<MDL
Aroclor-1260 {2}	4.895	0.000	-4.895	0	N.D.	5.407	5.431	0.024f	2659822	13.030
Sum Aroclor-1260				0	N.D.				2659822	13.030
Average Aroclor-1260					N.D.					<MDL
Aroclor-1262 {2}	4.894	0.000	-4.894	0	N.D.	5.407	5.431	0.024f	2659822	20.000
Sum Aroclor-1262				0	N.D.				2659822	20.000

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Average Aroclor-1262					N.D.					<MDL
4,4' DDD	4.918	0.000	-4.918	0	N.D.	5.435	5.431	-0.004	2659822	1.736 #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Reasons for Analyst Intervention

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2316.D

Aroclor-1016	Multi -	Deletion ==	DMP	
Aroclor-1221	Multi -	Deletion ==	DMP	
Aroclor-1232	Multi -	Deletion ==	DMP	
Aroclor-1242	Multi -	Deletion ==	DMP	
Aroclor-1248	Multi -	Deletion ==	DMP	
Aroclor-1254	Multi -	Deletion ==	DMP	
Aroclor-1260	Multi -	Deletion ==	DMP	
Aroclor-1262	Multi -	Deletion ==	DMP	
		4,4' DDD #2 -	Deletion ==	DMP

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 13:12**	**Matrix:**	**W**
Lab Sample ID:	**604449020**	**Date Received:**	**12/16/2022 09:15**		
		Client:	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB05-23-265385**	**Method:**	**SW846 3535A/8082A**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**2359880**	**Inst:**	**ECD8A.I**	**Dilution:**	**10**
Run Date:	**12/23/2022 09:15**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/22/2022 05:48**	**Aliquot:**	**988.88 mL**	**Final Volume:**	**1 mL**
Data File:	**122322\e8l2317.D**	**Column:**	**1 Description: RTX-CLP**		
	122322\e8l2317.D		**2 PEST2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	0.337	ug/L	0.337	1.01	1
11104-28-2	Aroclor-1221	U	0.337	ug/L	0.337	1.01	1
11141-16-5	Aroclor-1232	U	0.337	ug/L	0.337	1.01	1
53469-21-9	Aroclor-1242	U	0.337	ug/L	0.337	1.01	1
12672-29-6	Aroclor-1248	U	0.337	ug/L	0.337	1.01	1
11097-69-1	Aroclor-1254	U	0.337	ug/L	0.337	1.01	1
11096-82-5	Aroclor-1260	U	0.337	ug/L	0.337	1.01	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%		Acceptable Limits
4cmx	0.0523	0.202	ug/L	26		(26%-108%)
Decachlorobiphenyl	0.0528	0.202	ug/L	26	*	(32%-135%)

Quantitation Report
GEL Laboratories, LLC

Jxm 12/23/2022

JC 12/23/2022

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2317.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On   : 23 Dec 2022 09:15 (#1); 23 Dec 2022 09:15 (#2)
Operator : JXM   InstName : ECD8
Sample   : |604449020|2359880|10|SVA|1|TNSL|||
Misc   : |ECD5A2A_1L|WATER|SMEB05-23-265385|||
ALS Vial : 17   Sample Multiplier: 10

Quant Time: Dec 23 10:31:10 2022
Quant Method : D:\MSDCHEM\1\DATA\122322\ECD8_8082_122022.m
Quant Title : ECD8   SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1   Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um   Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.500	2.499	-0.001	32596036	51.672	2.814	2.813	-0.001	21921847	42.885
DCB	6.512	6.509	-0.003	25233396	52.255	7.180	7.178	-0.002	18548709	59.025

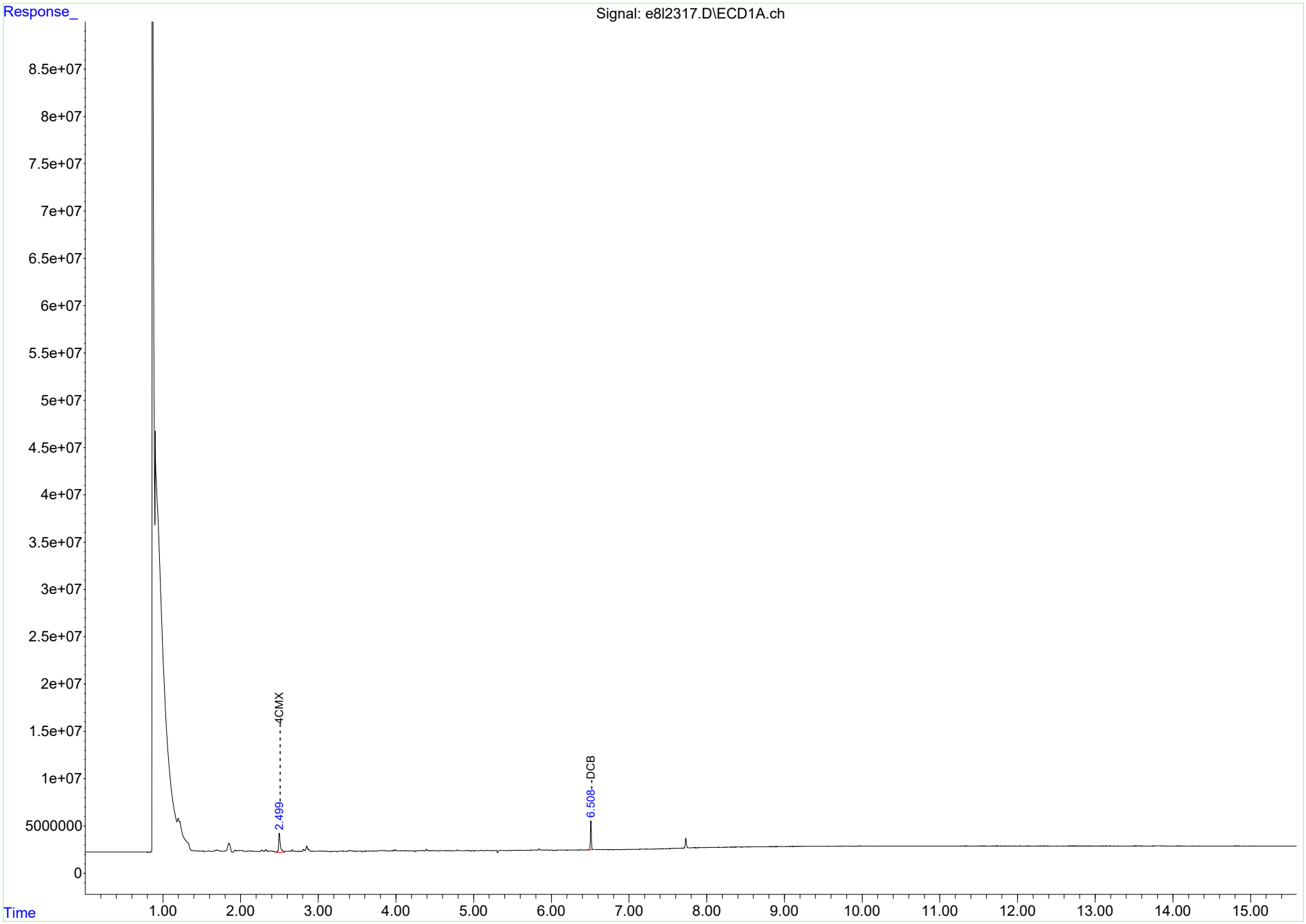
Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	26%	21%
DCB	200.000	No Limits	26%	30%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2

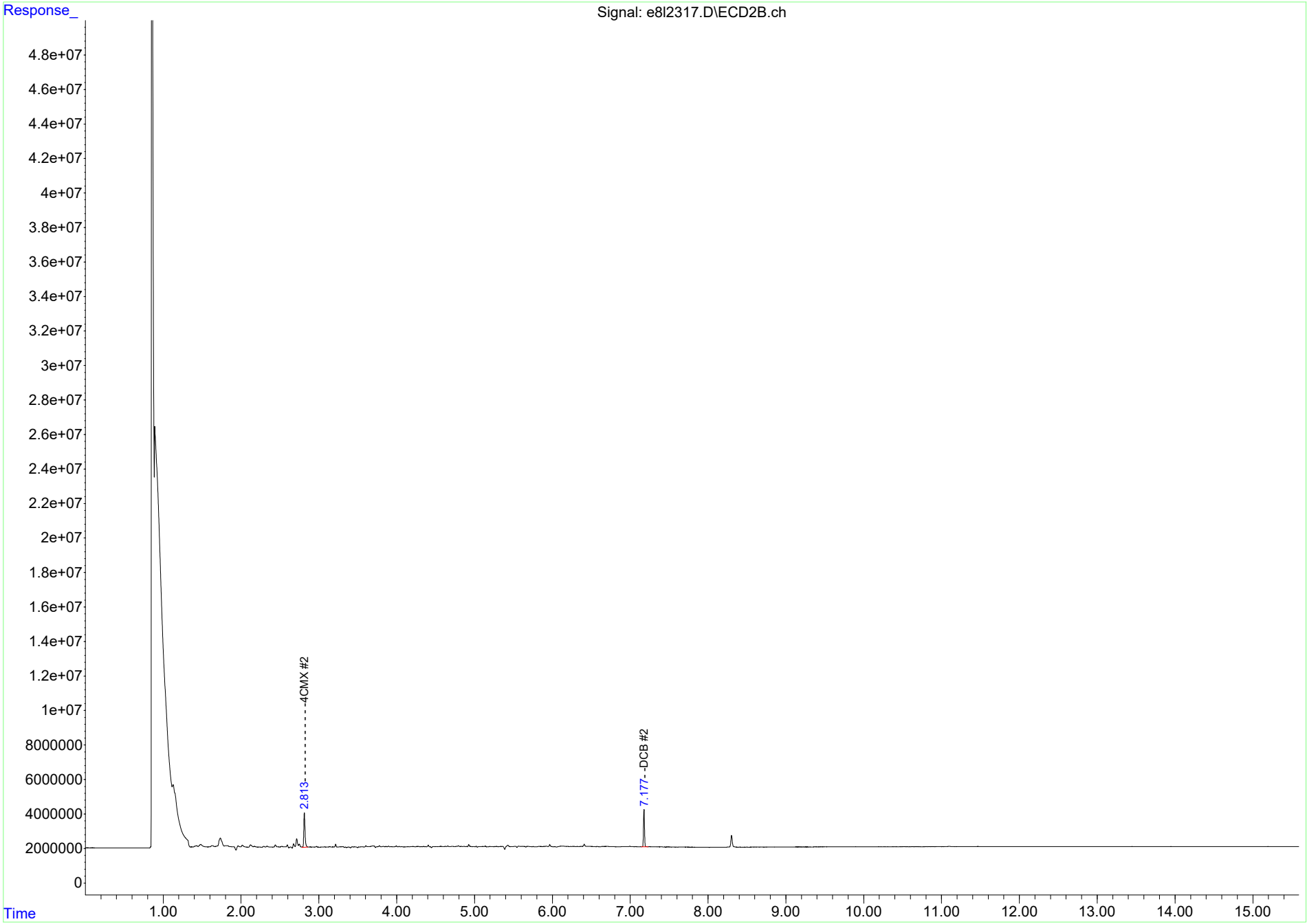
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2317.D



ECD8_8082_122022.m Fri Dec 23 10:31:38 2022 Page: 2

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2317.D



ECD8_8082_122022.m Fri Dec 23 10:31:39 2022 Page: 3

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.500	2.499	-0.001	32596036	51.672	2.814	2.813	-0.001	21921847	42.885
DCB	6.512	6.509	-0.003	25233396	52.255	7.180	7.178	-0.002	18548709	59.025

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	26%	21%
DCB	200.000	No Limits	26%	30%
4CMX	200.000	No Limits	26%	21%
DCB	200.000	No Limits	26%	30%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016 {2}	3.422	3.404	-0.018f	2572164	9.241	3.898	3.894	-0.004	577676	2.955
Aroclor-1016 {3}	3.521	3.517	-0.004	520723	2.708	3.998	3.994	-0.004	583957	4.272
Aroclor-1016 {4}	3.659	3.657	-0.002	240938	2.299	4.076	0.000	-4.076	0	N.D.
Aroclor-1016 {5}	3.823	3.818	-0.005	2523374	18.056	4.347	0.000	-4.347	0	N.D.
Sum Aroclor-1016				5857201	32.303				1161633	7.227 #
Average Aroclor-1016					<MDL					<MDL
Aroclor-1221	2.643	2.638	-0.005	1814176	30.104	3.055	0.000	-3.055	0	N.D.
Aroclor-1221 {3}	2.792	2.809	0.017f	3540773	25.699	3.220	3.215	-0.005	1700975	16.915
Sum Aroclor-1221				5354949	55.804				1700975	16.915 #
Average Aroclor-1221					<MDL					<MDL
Aroclor-1232 {2}	3.422	3.404	-0.018f	2572164	23.326	3.897	3.894	-0.003	577676	7.903
Aroclor-1232 {3}	3.521	3.517	-0.004	520723	6.985	3.998	3.994	-0.004	583957	10.715
Aroclor-1232 {4}	3.658	3.657	-0.001	240938	7.120	4.075	0.000	-4.075	0	N.D.
Aroclor-1232 {5}	3.823	3.818	-0.005	2523374	50.513	4.346	0.000	-4.346	0	N.D.
Sum Aroclor-1232				5857201	87.944				1161633	18.619 #
Average Aroclor-1232					<MDL					<MDL
Aroclor-1242 {2}	3.423	3.404	-0.019f	2572164	11.841	3.898	3.894	-0.004	577676	3.831
Aroclor-1242 {3}	3.522	3.517	-0.005	520723	3.452	3.999	3.994	-0.005	583957	5.385
Aroclor-1242 {4}	3.659	3.657	-0.002	240938	3.132	4.076	0.000	-4.076	0	N.D.
Aroclor-1242 {5}	3.823	3.818	-0.005	2523374	22.716	4.347	0.000	-4.347	0	N.D.
Sum Aroclor-1242				5857201	41.141				1161633	9.216 #
Average Aroclor-1242					<MDL					<MDL
Aroclor-1248	3.423	3.404	-0.019f	2572164	22.817	3.898	3.894	-0.004	577676	7.666
Aroclor-1248 {2}	3.659	3.657	-0.002	240938	1.940	4.147	0.000	-4.147	0	N.D.
Aroclor-1248 {3}	3.824	3.818	-0.006	2523374	15.905	4.347	0.000	-4.347	0	N.D.
Aroclor-1248 {5}	4.291	4.288	-0.003	1740395	12.067	4.824	0.000	-4.824	0	N.D.
Sum Aroclor-1248				7076872	52.729				577676	7.666 #
Average Aroclor-1248					<MDL					<MDL
Aroclor-1254 {2}	4.287	4.288	0.001	1740395	6.479	4.791	0.000	-4.791	0	N.D.

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1254 {3}	4.571	4.572	0.001	269528	0.778	5.124	0.000	-5.124	0	N.D.
Aroclor-1254 {4}	4.767	4.791	0.024f	701311	2.786	5.284	0.000	-5.284	0	N.D.
Aroclor-1254 {5}	4.897	0.000	-4.897	0	N.D.	5.408	5.428	0.020f	5842745	48.106
Sum Aroclor-1254				2711234	10.043				5842745	48.106 #
Average Aroclor-1254					<MDL					48.106
Aroclor-1260 {2}	4.895	0.000	-4.895	0	N.D.	5.407	5.428	0.021f	5842745	28.622
Aroclor-1260 {4}	5.559	0.000	-5.559	0	N.D.	6.108	6.108	0.000	372544	1.003
Sum Aroclor-1260				0	N.D.				6215289	29.625
Average Aroclor-1260					N.D.					<MDL
Aroclor-1262 {2}	4.894	0.000	-4.894	0	N.D.	5.407	5.428	0.021f	5842745	43.934
Aroclor-1262 {4}	5.559	0.000	-5.559	0	N.D.	6.107	6.108	0.001	372544	1.136
Sum Aroclor-1262				0	N.D.				6215289	45.070
Average Aroclor-1262					N.D.					<MDL
Aroclor-1268 {2}	5.806	0.000	-5.806	0	N.D.	6.393	6.410	0.017f	1366321	3.075
Aroclor-1268 {5}	6.381	6.380	-0.001	413589	0.221	6.997	0.000	-6.997	0	N.D.
Sum Aroclor-1268				413589	0.221				1366321	3.075 #
Average Aroclor-1268					<MDL					<MDL
4,4' DDT	5.113	0.000	-5.113	0	N.D.	5.657	5.675	0.018f	243470	0.283 #
4,4' DDD	4.918	0.000	-4.918	0	N.D.	5.435	5.428	-0.007	5842745	3.814 #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Reasons for Analyst Intervention

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2317.D

Aroclor-1016	Multi -	Deletion ==	DMP	
Aroclor-1221	Multi -	Deletion ==	DMP	
Aroclor-1232	Multi -	Deletion ==	DMP	
Aroclor-1242	Multi -	Deletion ==	DMP	
Aroclor-1248	Multi -	Deletion ==	DMP	
Aroclor-1254	Multi -	Deletion ==	DMP	
Aroclor-1260	Multi -	Deletion ==	DMP	
Aroclor-1262	Multi -	Deletion ==	DMP	
Aroclor-1268	Multi -	Deletion ==	DMP	
4,4' DDT #2	-	Deletion ==	DMP	
4,4' DDD #2	-	Deletion ==	DMP	

Standards

Calibration History Report ECD8
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\DATA\122222\ECD8_8082_122022.m
Last Update : Wed Dec 21 04:50:48 2022
Integrator : (ChemStation Integrator) Response via : Initial Calibration

JM 12/23/2022

JC 12/23/2022

Cal Lvl:1 Amt:10.00 Last Updated with: D:\MSDCHEM\1\DATA\122022\e8l2024.D

Injection Date	Mix	Calibration File
20 Dec 2022 10:40	A	D:\MSDCHEM\1\DATA\122022\e8l2012.D
20 Dec 2022 11:54	B	D:\MSDCHEM\1\DATA\122022\e8l2018.D
20 Dec 2022 13:08	D	D:\MSDCHEM\1\DATA\122022\e8l2024.D
18 Dec 2022 12:24	E	D:\MSDCHEM\1\DATA\121822\e8l1822.D
18 Dec 2022 13:38	O	D:\MSDCHEM\1\DATA\121822\e8l1828.D
18 Dec 2022 16:05	F	D:\MSDCHEM\1\DATA\121822\e8l1840.D
18 Dec 2022 14:51	K	D:\MSDCHEM\1\DATA\121822\e8l1834.D

Cal Lvl:2 Amt:25.00 Last Updated with: D:\MSDCHEM\1\DATA\122022\e8l2025.D

Injection Date	Mix	Calibration File
20 Dec 2022 10:53	A	D:\MSDCHEM\1\DATA\122022\e8l2013.D
20 Dec 2022 12:06	B	D:\MSDCHEM\1\DATA\122022\e8l2019.D
20 Dec 2022 13:20	D	D:\MSDCHEM\1\DATA\122022\e8l2025.D
18 Dec 2022 12:36	E	D:\MSDCHEM\1\DATA\121822\e8l1823.D
18 Dec 2022 13:50	O	D:\MSDCHEM\1\DATA\121822\e8l1829.D
18 Dec 2022 16:17	F	D:\MSDCHEM\1\DATA\121822\e8l1841.D
18 Dec 2022 15:04	K	D:\MSDCHEM\1\DATA\121822\e8l1835.D

Cal Lvl:3 Amt:50.00 Last Updated with: D:\MSDCHEM\1\DATA\122022\e8l2026.D

Injection Date	Mix	Calibration File
20 Dec 2022 11:05	A	D:\MSDCHEM\1\DATA\122022\e8l2014.D
20 Dec 2022 12:19	B	D:\MSDCHEM\1\DATA\122022\e8l2020.D
20 Dec 2022 13:32	D	D:\MSDCHEM\1\DATA\122022\e8l2026.D
18 Dec 2022 12:49	E	D:\MSDCHEM\1\DATA\121822\e8l1824.D
18 Dec 2022 14:02	O	D:\MSDCHEM\1\DATA\121822\e8l1830.D
18 Dec 2022 16:29	F	D:\MSDCHEM\1\DATA\121822\e8l1842.D
18 Dec 2022 15:16	K	D:\MSDCHEM\1\DATA\121822\e8l1836.D

Cal Lvl:4 Amt:100.00 Last Updated with: D:\MSDCHEM\1\DATA\122022\e8l2027.D

Injection Date	Mix	Calibration File
20 Dec 2022 11:17	A	D:\MSDCHEM\1\DATA\122022\e8l2015.D
20 Dec 2022 12:31	B	D:\MSDCHEM\1\DATA\122022\e8l2021.D
20 Dec 2022 13:44	D	D:\MSDCHEM\1\DATA\122022\e8l2027.D
18 Dec 2022 13:01	E	D:\MSDCHEM\1\DATA\121822\e8l1825.D
18 Dec 2022 08:30	J	D:\MSDCHEM\1\DATA\121822\e8l1803.D
18 Dec 2022 14:14	O	D:\MSDCHEM\1\DATA\121822\e8l1831.D
18 Dec 2022 08:18	X	D:\MSDCHEM\1\DATA\121822\e8l1802.D
18 Dec 2022 16:42	F	D:\MSDCHEM\1\DATA\121822\e8l1843.D
18 Dec 2022 15:28	K	D:\MSDCHEM\1\DATA\121822\e8l1837.D

Cal Lvl:5 Amt:400.00 Last Updated with: D:\MSDCHEM\1\DATA\122022\e8l2028.D

Injection Date	Mix	Calibration File
20 Dec 2022 11:30	A	D:\MSDCHEM\1\DATA\122022\e8l2016.D
20 Dec 2022 12:43	B	D:\MSDCHEM\1\DATA\122022\e8l2022.D
20 Dec 2022 13:57	D	D:\MSDCHEM\1\DATA\122022\e8l2028.D
18 Dec 2022 13:13	E	D:\MSDCHEM\1\DATA\121822\e8l1826.D

Calibration History Report ECD8
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\DATA\122222\ECD8_8082_122022.m
Last Update : Wed Dec 21 04:50:48 2022
Integrator : (ChemStation Integrator) Response via : Initial Calibration

18 Dec 2022 14:27	O	D:\MSDCHEM\1\DATA\121822\e8l1832.D
18 Dec 2022 16:54	F	D:\MSDCHEM\1\DATA\121822\e8l1844.D
18 Dec 2022 15:40	K	D:\MSDCHEM\1\DATA\121822\e8l1838.D

ECD8_8082_122022.m Thu Dec 22 11:04:41 2022

JM 12/23/2022

JC 12/23/2022

Calibration History Report ECD8
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\DATA\122322\ECD8_8082_122022.m
Last Update : Wed Dec 21 04:50:48 2022
Integrator : (ChemStation Integrator) Response via : Initial Calibration

Cal Lvl:1 Amt:10.00 Last Updated with: D:\MSDCHEM\1\DATA\122022\e8l2024.D

Injection Date	Mix	Calibration File
20 Dec 2022 10:40	A	D:\MSDCHEM\1\DATA\122022\e8l2012.D
20 Dec 2022 11:54	B	D:\MSDCHEM\1\DATA\122022\e8l2018.D
20 Dec 2022 13:08	D	D:\MSDCHEM\1\DATA\122022\e8l2024.D
18 Dec 2022 12:24	E	D:\MSDCHEM\1\DATA\121822\e8l1822.D
18 Dec 2022 13:38	O	D:\MSDCHEM\1\DATA\121822\e8l1828.D
18 Dec 2022 16:05	F	D:\MSDCHEM\1\DATA\121822\e8l1840.D
18 Dec 2022 14:51	K	D:\MSDCHEM\1\DATA\121822\e8l1834.D

Cal Lvl:2 Amt:25.00 Last Updated with: D:\MSDCHEM\1\DATA\122022\e8l2025.D

Injection Date	Mix	Calibration File
20 Dec 2022 10:53	A	D:\MSDCHEM\1\DATA\122022\e8l2013.D
20 Dec 2022 12:06	B	D:\MSDCHEM\1\DATA\122022\e8l2019.D
20 Dec 2022 13:20	D	D:\MSDCHEM\1\DATA\122022\e8l2025.D
18 Dec 2022 12:36	E	D:\MSDCHEM\1\DATA\121822\e8l1823.D
18 Dec 2022 13:50	O	D:\MSDCHEM\1\DATA\121822\e8l1829.D
18 Dec 2022 16:17	F	D:\MSDCHEM\1\DATA\121822\e8l1841.D
18 Dec 2022 15:04	K	D:\MSDCHEM\1\DATA\121822\e8l1835.D

Cal Lvl:3 Amt:50.00 Last Updated with: D:\MSDCHEM\1\DATA\122022\e8l2026.D

Injection Date	Mix	Calibration File
20 Dec 2022 11:05	A	D:\MSDCHEM\1\DATA\122022\e8l2014.D
20 Dec 2022 12:19	B	D:\MSDCHEM\1\DATA\122022\e8l2020.D
20 Dec 2022 13:32	D	D:\MSDCHEM\1\DATA\122022\e8l2026.D
18 Dec 2022 12:49	E	D:\MSDCHEM\1\DATA\121822\e8l1824.D
18 Dec 2022 14:02	O	D:\MSDCHEM\1\DATA\121822\e8l1830.D
18 Dec 2022 16:29	F	D:\MSDCHEM\1\DATA\121822\e8l1842.D
18 Dec 2022 15:16	K	D:\MSDCHEM\1\DATA\121822\e8l1836.D

Cal Lvl:4 Amt:100.00 Last Updated with: D:\MSDCHEM\1\DATA\122022\e8l2027.D

Injection Date	Mix	Calibration File
20 Dec 2022 11:17	A	D:\MSDCHEM\1\DATA\122022\e8l2015.D
20 Dec 2022 12:31	B	D:\MSDCHEM\1\DATA\122022\e8l2021.D
20 Dec 2022 13:44	D	D:\MSDCHEM\1\DATA\122022\e8l2027.D
18 Dec 2022 13:01	E	D:\MSDCHEM\1\DATA\121822\e8l1825.D
18 Dec 2022 08:30	J	D:\MSDCHEM\1\DATA\121822\e8l1803.D
18 Dec 2022 14:14	O	D:\MSDCHEM\1\DATA\121822\e8l1831.D
18 Dec 2022 08:18	X	D:\MSDCHEM\1\DATA\121822\e8l1802.D
18 Dec 2022 16:42	F	D:\MSDCHEM\1\DATA\121822\e8l1843.D
18 Dec 2022 15:28	K	D:\MSDCHEM\1\DATA\121822\e8l1837.D

Cal Lvl:5 Amt:400.00 Last Updated with: D:\MSDCHEM\1\DATA\122022\e8l2028.D

Injection Date	Mix	Calibration File
20 Dec 2022 11:30	A	D:\MSDCHEM\1\DATA\122022\e8l2016.D
20 Dec 2022 12:43	B	D:\MSDCHEM\1\DATA\122022\e8l2022.D
20 Dec 2022 13:57	D	D:\MSDCHEM\1\DATA\122022\e8l2028.D
18 Dec 2022 13:13	E	D:\MSDCHEM\1\DATA\121822\e8l1826.D

Calibration History Report ECD8
GEL Laboratories, LLC

Method File : D:\MSDCHEM\1\DATA\122322\ECD8_8082_122022.m
Last Update : Wed Dec 21 04:50:48 2022
Integrator : (ChemStation Integrator) Response via : Initial Calibration

18 Dec 2022 14:27	O	D:\MSDCHEM\1\DATA\121822\e8l1832.D
18 Dec 2022 16:54	F	D:\MSDCHEM\1\DATA\121822\e8l1844.D
18 Dec 2022 15:40	K	D:\MSDCHEM\1\DATA\121822\e8l1838.D

ECD8_8082_122022.m Fri Dec 23 07:58:11 2022

Response Factor Report ECD8
GEL Laboratories, LLC

Method File : D:\MSDCHEM\1\DATA\122222\ECD8_8082_122022.m
Last Update : Wed Dec 21 04:50:48 2022
Integrator : (ChemStation Integrator) Response via : Initial Calibration

JM 12/23/2022

JC 12/23/2022

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
1)SA 4CMX	6.9592810	6.3295345	6.3696970	6.1758064	5.7072434					
							6.3083	AVRG	E6	7.1194
2)MAL1 Aroclor-1016	2.7477750	2.3922233	2.2951486	2.1723935	1.8730726					
							2.2961	AVRG	E5	13.9009
3)MAL1 Aroclor-1016 {2}	3.1672371	2.8384371	2.7877002	2.6932522	2.4310494					
							2.7835	AVRG	E5	9.5500
4)MAL1 Aroclor-1016 {3}	2.2649698	1.9785379	1.9000178	1.8296517	1.6408550					
							1.9228	AVRG	E5	11.8844
5)MAL1 Aroclor-1016 {4}	1.2426739	1.0789997	1.0228741	0.9908340	0.9053009					
							1.0481	AVRG	E5	11.9850
6)MAL1 Aroclor-1016 {5}	1.6422315	1.4261079	1.3676716	1.3321114	1.2195277					
							1.3975	AVRG	E5	11.1744
7)JL2 Aroclor-1221				6.0262948						
0 60262.9 0.00								LINR	E7	1.0000
8)JL2 Aroclor-1221 {2}				3.3673431						
0 33673.4 0.00								LINR	E7	1.0000
9)JL2 Aroclor-1221 {3}				1.3777684						
0 137777 0.00								LINR	E8	1.0000
10)FL3 Aroclor-1232	1.0986962	0.9738757	0.9316005	0.8658349	0.7877732					
							0.9316	AVRG	E5	12.5555
11)FL3 Aroclor-1232 {2}	1.2635215	1.1277972	1.0975227	1.0397454	0.9849604					
							1.1027	AVRG	E5	9.5485
12)FL3 Aroclor-1232 {3}	8.4955505	7.7398298	7.5332112	6.9796799	6.5281998					
							7.4553	AVRG	E4	10.0709
13)FL3 Aroclor-1232 {4}	3.8261058	3.5495627	3.4473769	3.1402721	2.9553749					
							3.3837	AVRG	E4	10.1304
14)FL3 Aroclor-1232 {5}	5.7097866	5.1840796	5.0318124	4.6637975	4.3881614					

Response Factor Report ECD8
GEL Laboratories, LLC

Method File : D:\MSDCHEM\1\DATA\122222\ECD8_8082_122022.m
Last Update : Wed Dec 21 04:50:48 2022
Integrator : (ChemStation Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
							4.9955	AVRG	E4	10.1381
15)DL4 Aroclor-1242	2.2182181	1.9197265	1.7818389	1.7232982	1.4575790					
							1.8201	AVRG	E5	15.3117
16)DL4 Aroclor-1242 {2}	2.5282089	2.2390569	2.1273531	2.1096980	1.8571048					
							2.1723	AVRG	E5	11.1916
17)DL4 Aroclor-1242 {3}	1.7969470	1.5812285	1.4697781	1.4312788	1.2626933					
							1.5084	AVRG	E5	13.1081
18)DL4 Aroclor-1242 {4}	9.1549683	8.0603311	7.4985253	7.2464584	6.4978392					
							7.6916	AVRG	E4	12.8998
19)DL4 Aroclor-1242 {5}	1.3131809	1.1548801	1.0814587	1.0594013	0.9453528					
							1.1109	AVRG	E5	12.2257
20)EL5 Aroclor-1248	1.2649466	1.1667967	1.1160702	1.0597383	1.0290322					
							1.1273	AVRG	E5	8.2804
21)EL5 Aroclor-1248 {2}	1.4257545	1.2779933	1.2180525	1.1664281	1.1224182					
							1.2421	AVRG	E5	9.4955
22)EL5 Aroclor-1248 {3}	1.7905403	1.6382189	1.5645435	1.4910279	1.4481564					
							1.5865	AVRG	E5	8.5177
23)EL5 Aroclor-1248 {4}	1.9630043	1.8030051	1.7332792	1.6746092	1.6596533					
							1.7667	AVRG	E5	6.9847
24)EL5 Aroclor-1248 {5}	1.6043031	1.4875960	1.4247718	1.3662038	1.3286044					
							1.4423	AVRG	E5	7.5413
25)BL6 Aroclor-1254	2.4040257	2.1641291	2.0724680	2.0111557	1.8893515					
							2.1082	AVRG	E5	9.1618
26)BL6 Aroclor-1254 {2}	3.1018353	2.6960020	2.6200825	2.6675801	2.3460599					
							2.6863	AVRG	E5	10.0796
27)BL6 Aroclor-1254 {3}	3.8282951	3.4722118	3.4035020	3.3766738	3.2370731					
							3.4636	AVRG	E5	6.3839

Response Factor Report ECD8
GEL Laboratories, LLC
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Last Update : Wed Dec 21 04:50:48 2022
Integrator : (ChemStation Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
28)BL6 Aroclor-1254 {4}	2.8168319	2.4852456	2.4617363	2.5282015	2.2939737					
							2.5172	AVRG	E5	7.5331
29)BL6 Aroclor-1254 {5}	3.1919206	2.7155585	2.6849492	2.6738030	2.4380698					
							2.7409	AVRG	E5	10.0483
30)MAL7 Aroclor-1260	2.8499805	2.5278311	2.4756762	2.4199945	2.2460740					
							2.5039	AVRG	E5	8.8102
31)MAL7 Aroclor-1260 {2}	3.9132155	3.5563748	3.5346739	3.5143809	3.2813009					
							3.5600	AVRG	E5	6.3618
32)MAL7 Aroclor-1260 {3}	2.6256848	2.3522344	2.3385837	2.3138764	2.1679463					
							2.3597	AVRG	E5	7.0315
33)MAL7 Aroclor-1260 {4}	5.3746904	5.0078903	5.1139846	5.1314524	4.8715186					
							5.0999	AVRG	E5	3.6332
34)MAL7 Aroclor-1260 {5}	2.5394225	2.3453911	2.4016243	2.4608332	2.3837847					
							2.4262	AVRG	E5	3.1221
35)KL8 Aroclor-1262	1.9478142	1.7641140	1.7131265	1.6777355	1.5788361					
							1.7363	AVRG	E5	7.8479
36)KL8 Aroclor-1262 {2}	2.3748940	2.1654176	2.1214534	2.0998075	1.9981487					
							2.1519	AVRG	E5	6.4553
37)KL8 Aroclor-1262 {3}	3.0542072	2.8324599	2.7748529	2.7656573	2.6153156					
							2.8085	AVRG	E5	5.6645
38)KL8 Aroclor-1262 {4}	5.1398610	4.8702236	4.8347919	4.8554528	4.6644445					
							4.8730	AVRG	E5	3.5020
39)KL8 Aroclor-1262 {5}	2.3271145	2.1595463	2.0880095	2.0917581	2.0025386					
							2.1338	AVRG	E5	5.6979
40)OL9 Aroclor-1268	7.5469556	7.1954255	7.0632961	7.1624103	7.1410557					
							7.2218	AVRG	E5	2.6052

Response Factor Report ECD8
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\DATA\122222\ECD8_8082_122022.m
Last Update : Wed Dec 21 04:50:48 2022
Integrator : (ChemStation Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
41)OL9 Aroclor-1268 {2}	8.1765077	7.7345063	7.5377702	7.7187666	7.6982343					
							7.7732	AVRG	E5	3.0725
42)OL9 Aroclor-1268 {3}	6.5273181	6.2628826	6.1537312	6.3388046	6.4219372					
							6.3409	AVRG	E5	2.2641
43)OL9 Aroclor-1268 {4}	2.6113771	2.3801661	2.3870584	2.6326591	2.7952778					
							2.5613	AVRG	E5	6.9160
44)OL9 Aroclor-1268 {5}	1.9043214	1.8360111	1.8240141	1.8674486	1.9241397					
							1.8712	AVRG	E6	2.2953
45)X 4,4' DDT				1.6438562						
							1.6439	AVRG	E6	0.0000
46)X 4,4' DDD				2.8159593						
							2.8160	AVRG	E6	0.0000
47)X 4,4' DDE				4.1286449						
							4.1286	AVRG	E6	0.0000
48)SA DCB	5.0818044	4.7038685	4.7866628	4.8200680	4.7519901					
							4.8289	AVRG	E6	3.0606

----------COLUMN #2----------

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
1)SA 4CMX	5.4951141	5.0514671	5.1133042	5.0837663	4.8150411					
							5.1117	AVRG	E6	4.7861
2)MAL1 Aroclor-1016	1.3423994	1.1408709	1.0858982	1.0363440	0.8971205					
							1.1005	AVRG	E5	14.7805
3)MAL1 Aroclor-1016 {2}	2.2131629	1.9606467	1.9378906	1.9070752	1.7564372					
							1.9550	AVRG	E5	8.4318

Response Factor Report ECD8
GEL Laboratories, LLC
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For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
4)MAL1 Aroclor-1016 {3}	1.6090797	1.4097112	1.3486821	1.2934913	1.1739689					
							1.3670	AVRG	E5	11.7631
5)MAL1 Aroclor-1016 {4}	1.0135609	0.8937601	0.8624914	0.8327633	0.7736916					
							0.8753	AVRG	E5	10.1798
6)MAL1 Aroclor-1016 {5}	1.2399042	1.1004834	1.0494138	1.0071825	0.9217543					
							1.0637	AVRG	E5	11.1179
7)JL2 Aroclor-1221				4.3220464						
							4.3220	AVRG	E4	0.0000
8)JL2 Aroclor-1221 {2}				2.8900685						
							2.8901	AVRG	E4	0.0000
9)JL2 Aroclor-1221 {3}				1.0055772						
							1.0056	AVRG	E5	0.0000
10)FL3 Aroclor-1232	5.9287811	5.1069426	4.8036306	4.3417480	3.8023443					
							4.7967	AVRG	E4	16.7225
11)FL3 Aroclor-1232 {2}	8.4836286	7.5074599	7.2023358	6.8405127	6.5124600					
							7.3093	AVRG	E4	10.3392
12)FL3 Aroclor-1232 {3}	6.4471384	5.7998931	5.4371573	5.0418845	4.5223248					
							5.4497	AVRG	E4	13.4342
13)FL3 Aroclor-1232 {4}	4.2332142	3.7102493	3.5411860	3.2621357	2.9800136					
							3.5454	AVRG	E4	13.3806
14)FL3 Aroclor-1232 {5}	4.6972543	4.0892284	3.9024438	3.5180260	3.1872581					
							3.8788	AVRG	E4	14.8273
15)DL4 Aroclor-1242	1.0708596	0.9377477	0.8503161	0.8193537	0.7024697					
							0.8761	AVRG	E5	15.7081
16)DL4 Aroclor-1242 {2}	1.6599976	1.5499164	1.5176470	1.4780247	1.3334365					
							1.5078	AVRG	E5	7.8699
17)DL4 Aroclor-1242 {3}	1.2904292	1.1438017	1.0582617	1.0231840	0.9063406					

Response Factor Report ECD8
GEL Laboratories, LLC

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Last Update : Wed Dec 21 04:50:48 2022
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Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
							1.0844	AVRG	E5	13.2124
18)DL4 Aroclor-1242 {4}	7.9941129	7.2010645	6.7312291	6.5826698	5.9558492					
							6.8930	AVRG	E4	11.0202
19)DL4 Aroclor-1242 {5}	1.0328518	0.8776510	0.8295203	0.8082298	0.7182205					
							0.8533	AVRG	E5	13.5755
20)EL5 Aroclor-1248	8.7175816	7.9752999	7.3910141	6.9495917	6.6438265					
							7.5355	AVRG	E4	11.0034
21)EL5 Aroclor-1248 {2}	1.0715268	0.9408403	0.8668477	0.8016377	0.7480030					
							0.8858	AVRG	E5	14.2752
22)EL5 Aroclor-1248 {3}	1.4127209	1.2417279	1.1574790	1.0861034	1.0269757					
							1.1850	AVRG	E5	12.6992
23)EL5 Aroclor-1248 {4}	1.4879216	1.3202858	1.2375524	1.1711181	1.1266086					
							1.2687	AVRG	E5	11.2442
24)EL5 Aroclor-1248 {5}	1.6469394	1.4704519	1.3795972	1.3487511	1.3162976					
							1.4324	AVRG	E5	9.2840
25)BL6 Aroclor-1254	1.9056279	1.6883011	1.6145703	1.6023526	1.4983684					
							1.6618	AVRG	E5	9.1570
26)BL6 Aroclor-1254 {2}	2.0385372	1.8492514	1.7597306	1.7352322	1.6575368					
							1.8081	AVRG	E5	8.0678
27)BL6 Aroclor-1254 {3}	2.9487089	2.7001988	2.6195988	2.6266156	2.5435993					
							2.6877	AVRG	E5	5.8063
28)BL6 Aroclor-1254 {4}	2.1273964	1.7996663	1.7313903	1.7460051	1.7034225					
							1.8216	AVRG	E5	9.5800
29)BL6 Aroclor-1254 {5}	1.4115325	1.2345440	1.1435423	1.1787272	1.1043781					
							1.2145	AVRG	E5	9.8858
30)MAL7 Aroclor-1260	1.9680524	1.7639817	1.7018452	1.6754101	1.5606063					
							1.7340	AVRG	E5	8.6608

Response Factor Report ECD8
GEL Laboratories, LLC
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Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
31)MAL7 Aroclor-1260 {2}	2.3334741	2.0745829	1.9914960	1.9655643	1.8416537					
							2.0414	AVRG	E5	8.9844
32)MAL7 Aroclor-1260 {3}	1.8510566	1.6313476	1.5591927	1.5276538	1.4329280					
							1.6004	AVRG	E5	9.8211
33)MAL7 Aroclor-1260 {4}	4.0700818	3.7046310	3.6555469	3.6519354	3.4903694					
							3.7145	AVRG	E5	5.7765
34)MAL7 Aroclor-1260 {5}	2.9424345	2.6400507	2.5871556	2.5834875	2.4825536					
							2.6471	AVRG	E5	6.5971
35)KL8 Aroclor-1262	1.4005066	1.2127631	1.1462612	1.1140635	1.0251505					
							1.1797	AVRG	E5	11.9244
36)KL8 Aroclor-1262 {2}	1.6020744	1.3653786	1.2753164	1.2513544	1.1553592					
							1.3299	AVRG	E5	12.7470
37)KL8 Aroclor-1262 {3}	2.1194709	1.8647871	1.7814953	1.7389181	1.6114877					
							1.8232	AVRG	E5	10.3766
38)KL8 Aroclor-1262 {4}	3.7104864	3.3106965	3.2046428	3.1740839	2.9939245					
							3.2788	AVRG	E5	8.1409
39)KL8 Aroclor-1262 {5}	2.7105628	2.4147540	2.3089007	2.2634324	2.1576227					
							2.3711	AVRG	E5	8.9012
40)OL9 Aroclor-1268	5.0862447	4.6707296	4.4867595	4.5103666	4.4134549					
							4.6335	AVRG	E5	5.8259
41)OL9 Aroclor-1268 {2}	4.9476754	4.4884433	4.3234937	4.2819377	4.1768599					
							4.4437	AVRG	E5	6.8240
42)OL9 Aroclor-1268 {3}	4.1224098	3.7605591	3.6463203	3.6689650	3.5574042					
							3.7511	AVRG	E5	5.8589
43)OL9 Aroclor-1268 {4}	1.8486564	1.6236818	1.5275379	1.5335079	1.4784901					
							1.6024	AVRG	E5	9.1931

Response Factor Report ECD8
GEL Laboratories, LLC
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For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5	Avg	Curve	Exp	%RSD/r2
b m1 m2									
44)OL9 Aroclor-1268 {5}	1.1477770	1.0861005	1.0523818	1.0713464	1.0679900	1.0851	AVRG	E6	3.4116
45)X 4,4' DDT				8.5918374		8.5918	AVRG	E5	0.0000
46)X 4,4' DDD				1.5318455		1.5318	AVRG	E6	0.0000
47)X 4,4' DDE				2.6033565		2.6034	AVRG	E6	0.0000
48)SA DCB	3.4993303	3.1331066	3.1040029	3.0540765	2.9221191	3.1425	AVRG	E6	6.8487

(#) = Out of Range ($) = Individual RF Out of Range ### Number of calibration levels exceeded format ###
AVRG = Average, LINR = Linear Regression, 1/x = the inverse of concentration, 1/x^2 = the inverse square of concentration

Response Factor Report ECD8
GEL Laboratories, LLC

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Last Update : Wed Dec 21 04:50:48 2022
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Jm 12/23/2022

JC 12/23/2022

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
1)SA 4CMX	6.9592810	6.3295345	6.3696970	6.1758064	5.7072434					
							6.3083	AVRG	E6	7.1194
2)MAL1 Aroclor-1016	2.7477750	2.3922233	2.2951486	2.1723935	1.8730726					
							2.2961	AVRG	E5	13.9009
3)MAL1 Aroclor-1016 {2}	3.1672371	2.8384371	2.7877002	2.6932522	2.4310494					
							2.7835	AVRG	E5	9.5500
4)MAL1 Aroclor-1016 {3}	2.2649698	1.9785379	1.9000178	1.8296517	1.6408550					
							1.9228	AVRG	E5	11.8844
5)MAL1 Aroclor-1016 {4}	1.2426739	1.0789997	1.0228741	0.9908340	0.9053009					
							1.0481	AVRG	E5	11.9850
6)MAL1 Aroclor-1016 {5}	1.6422315	1.4261079	1.3676716	1.3321114	1.2195277					
							1.3975	AVRG	E5	11.1744
7)JL2 Aroclor-1221				6.0262948						
0 60262.9 0.00								LINR	E7	1.0000
8)JL2 Aroclor-1221 {2}				3.3673431						
0 33673.4 0.00								LINR	E7	1.0000
9)JL2 Aroclor-1221 {3}				1.3777684						
0 137777 0.00								LINR	E8	1.0000
10)FL3 Aroclor-1232	1.0986962	0.9738757	0.9316005	0.8658349	0.7877732					
							0.9316	AVRG	E5	12.5555
11)FL3 Aroclor-1232 {2}	1.2635215	1.1277972	1.0975227	1.0397454	0.9849604					
							1.1027	AVRG	E5	9.5485
12)FL3 Aroclor-1232 {3}	8.4955505	7.7398298	7.5332112	6.9796799	6.5281998					
							7.4553	AVRG	E4	10.0709
13)FL3 Aroclor-1232 {4}	3.8261058	3.5495627	3.4473769	3.1402721	2.9553749					
							3.3837	AVRG	E4	10.1304
14)FL3 Aroclor-1232 {5}	5.7097866	5.1840796	5.0318124	4.6637975	4.3881614					

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GEL Laboratories, LLC

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Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
							4.9955	AVRG	E4	10.1381
15)DL4 Aroclor-1242	2.2182181	1.9197265	1.7818389	1.7232982	1.4575790					
							1.8201	AVRG	E5	15.3117
16)DL4 Aroclor-1242 {2}	2.5282089	2.2390569	2.1273531	2.1096980	1.8571048					
							2.1723	AVRG	E5	11.1916
17)DL4 Aroclor-1242 {3}	1.7969470	1.5812285	1.4697781	1.4312788	1.2626933					
							1.5084	AVRG	E5	13.1081
18)DL4 Aroclor-1242 {4}	9.1549683	8.0603311	7.4985253	7.2464584	6.4978392					
							7.6916	AVRG	E4	12.8998
19)DL4 Aroclor-1242 {5}	1.3131809	1.1548801	1.0814587	1.0594013	0.9453528					
							1.1109	AVRG	E5	12.2257
20)EL5 Aroclor-1248	1.2649466	1.1667967	1.1160702	1.0597383	1.0290322					
							1.1273	AVRG	E5	8.2804
21)EL5 Aroclor-1248 {2}	1.4257545	1.2779933	1.2180525	1.1664281	1.1224182					
							1.2421	AVRG	E5	9.4955
22)EL5 Aroclor-1248 {3}	1.7905403	1.6382189	1.5645435	1.4910279	1.4481564					
							1.5865	AVRG	E5	8.5177
23)EL5 Aroclor-1248 {4}	1.9630043	1.8030051	1.7332792	1.6746092	1.6596533					
							1.7667	AVRG	E5	6.9847
24)EL5 Aroclor-1248 {5}	1.6043031	1.4875960	1.4247718	1.3662038	1.3286044					
							1.4423	AVRG	E5	7.5413
25)BL6 Aroclor-1254	2.4040257	2.1641291	2.0724680	2.0111557	1.8893515					
							2.1082	AVRG	E5	9.1618
26)BL6 Aroclor-1254 {2}	3.1018353	2.6960020	2.6200825	2.6675801	2.3460599					
							2.6863	AVRG	E5	10.0796
27)BL6 Aroclor-1254 {3}	3.8282951	3.4722118	3.4035020	3.3766738	3.2370731					
							3.4636	AVRG	E5	6.3839

Response Factor Report ECD8
GEL Laboratories, LLC
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Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
28)BL6 Aroclor-1254 {4}	2.8168319	2.4852456	2.4617363	2.5282015	2.2939737					
							2.5172	AVRG	E5	7.5331
29)BL6 Aroclor-1254 {5}	3.1919206	2.7155585	2.6849492	2.6738030	2.4380698					
							2.7409	AVRG	E5	10.0483
30)MAL7 Aroclor-1260	2.8499805	2.5278311	2.4756762	2.4199945	2.2460740					
							2.5039	AVRG	E5	8.8102
31)MAL7 Aroclor-1260 {2}	3.9132155	3.5563748	3.5346739	3.5143809	3.2813009					
							3.5600	AVRG	E5	6.3618
32)MAL7 Aroclor-1260 {3}	2.6256848	2.3522344	2.3385837	2.3138764	2.1679463					
							2.3597	AVRG	E5	7.0315
33)MAL7 Aroclor-1260 {4}	5.3746904	5.0078903	5.1139846	5.1314524	4.8715186					
							5.0999	AVRG	E5	3.6332
34)MAL7 Aroclor-1260 {5}	2.5394225	2.3453911	2.4016243	2.4608332	2.3837847					
							2.4262	AVRG	E5	3.1221
35)KL8 Aroclor-1262	1.9478142	1.7641140	1.7131265	1.6777355	1.5788361					
							1.7363	AVRG	E5	7.8479
36)KL8 Aroclor-1262 {2}	2.3748940	2.1654176	2.1214534	2.0998075	1.9981487					
							2.1519	AVRG	E5	6.4553
37)KL8 Aroclor-1262 {3}	3.0542072	2.8324599	2.7748529	2.7656573	2.6153156					
							2.8085	AVRG	E5	5.6645
38)KL8 Aroclor-1262 {4}	5.1398610	4.8702236	4.8347919	4.8554528	4.6644445					
							4.8730	AVRG	E5	3.5020
39)KL8 Aroclor-1262 {5}	2.3271145	2.1595463	2.0880095	2.0917581	2.0025386					
							2.1338	AVRG	E5	5.6979
40)OL9 Aroclor-1268	7.5469556	7.1954255	7.0632961	7.1624103	7.1410557					
							7.2218	AVRG	E5	2.6052

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Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
41)OL9 Aroclor-1268 {2}	8.1765077	7.7345063	7.5377702	7.7187666	7.6982343					
							7.7732	AVRG	E5	3.0725
42)OL9 Aroclor-1268 {3}	6.5273181	6.2628826	6.1537312	6.3388046	6.4219372					
							6.3409	AVRG	E5	2.2641
43)OL9 Aroclor-1268 {4}	2.6113771	2.3801661	2.3870584	2.6326591	2.7952778					
							2.5613	AVRG	E5	6.9160
44)OL9 Aroclor-1268 {5}	1.9043214	1.8360111	1.8240141	1.8674486	1.9241397					
							1.8712	AVRG	E6	2.2953
45)X 4,4' DDT				1.6438562						
							1.6439	AVRG	E6	0.0000
46)X 4,4' DDD				2.8159593						
							2.8160	AVRG	E6	0.0000
47)X 4,4' DDE				4.1286449						
							4.1286	AVRG	E6	0.0000
48)SA DCB	5.0818044	4.7038685	4.7866628	4.8200680	4.7519901					
							4.8289	AVRG	E6	3.0606

----------COLUMN #2----------

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
1)SA 4CMX	5.4951141	5.0514671	5.1133042	5.0837663	4.8150411					
							5.1117	AVRG	E6	4.7861
2)MAL1 Aroclor-1016	1.3423994	1.1408709	1.0858982	1.0363440	0.8971205					
							1.1005	AVRG	E5	14.7805
3)MAL1 Aroclor-1016 {2}	2.2131629	1.9606467	1.9378906	1.9070752	1.7564372					
							1.9550	AVRG	E5	8.4318

Response Factor Report ECD8
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\DATA\122322\ECD8_8082_122022.m
Last Update : Wed Dec 21 04:50:48 2022
Integrator : (ChemStation Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
4)MAL1 Aroclor-1016 {3}	1.6090797	1.4097112	1.3486821	1.2934913	1.1739689					
							1.3670	AVRG	E5	11.7631
5)MAL1 Aroclor-1016 {4}	1.0135609	0.8937601	0.8624914	0.8327633	0.7736916					
							0.8753	AVRG	E5	10.1798
6)MAL1 Aroclor-1016 {5}	1.2399042	1.1004834	1.0494138	1.0071825	0.9217543					
							1.0637	AVRG	E5	11.1179
7)JL2 Aroclor-1221				4.3220464						
							4.3220	AVRG	E4	0.0000
8)JL2 Aroclor-1221 {2}				2.8900685						
							2.8901	AVRG	E4	0.0000
9)JL2 Aroclor-1221 {3}				1.0055772						
							1.0056	AVRG	E5	0.0000
10)FL3 Aroclor-1232	5.9287811	5.1069426	4.8036306	4.3417480	3.8023443					
							4.7967	AVRG	E4	16.7225
11)FL3 Aroclor-1232 {2}	8.4836286	7.5074599	7.2023358	6.8405127	6.5124600					
							7.3093	AVRG	E4	10.3392
12)FL3 Aroclor-1232 {3}	6.4471384	5.7998931	5.4371573	5.0418845	4.5223248					
							5.4497	AVRG	E4	13.4342
13)FL3 Aroclor-1232 {4}	4.2332142	3.7102493	3.5411860	3.2621357	2.9800136					
							3.5454	AVRG	E4	13.3806
14)FL3 Aroclor-1232 {5}	4.6972543	4.0892284	3.9024438	3.5180260	3.1872581					
							3.8788	AVRG	E4	14.8273
15)DL4 Aroclor-1242	1.0708596	0.9377477	0.8503161	0.8193537	0.7024697					
							0.8761	AVRG	E5	15.7081
16)DL4 Aroclor-1242 {2}	1.6599976	1.5499164	1.5176470	1.4780247	1.3334365					
							1.5078	AVRG	E5	7.8699
17)DL4 Aroclor-1242 {3}	1.2904292	1.1438017	1.0582617	1.0231840	0.9063406					

Response Factor Report ECD8
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\DATA\122322\ECD8_8082_122022.m
Last Update : Wed Dec 21 04:50:48 2022
Integrator : (ChemStation Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
							1.0844	AVRG	E5	13.2124
18)DL4 Aroclor-1242 {4}	7.9941129	7.2010645	6.7312291	6.5826698	5.9558492					
							6.8930	AVRG	E4	11.0202
19)DL4 Aroclor-1242 {5}	1.0328518	0.8776510	0.8295203	0.8082298	0.7182205					
							0.8533	AVRG	E5	13.5755
20)EL5 Aroclor-1248	8.7175816	7.9752999	7.3910141	6.9495917	6.6438265					
							7.5355	AVRG	E4	11.0034
21)EL5 Aroclor-1248 {2}	1.0715268	0.9408403	0.8668477	0.8016377	0.7480030					
							0.8858	AVRG	E5	14.2752
22)EL5 Aroclor-1248 {3}	1.4127209	1.2417279	1.1574790	1.0861034	1.0269757					
							1.1850	AVRG	E5	12.6992
23)EL5 Aroclor-1248 {4}	1.4879216	1.3202858	1.2375524	1.1711181	1.1266086					
							1.2687	AVRG	E5	11.2442
24)EL5 Aroclor-1248 {5}	1.6469394	1.4704519	1.3795972	1.3487511	1.3162976					
							1.4324	AVRG	E5	9.2840
25)BL6 Aroclor-1254	1.9056279	1.6883011	1.6145703	1.6023526	1.4983684					
							1.6618	AVRG	E5	9.1570
26)BL6 Aroclor-1254 {2}	2.0385372	1.8492514	1.7597306	1.7352322	1.6575368					
							1.8081	AVRG	E5	8.0678
27)BL6 Aroclor-1254 {3}	2.9487089	2.7001988	2.6195988	2.6266156	2.5435993					
							2.6877	AVRG	E5	5.8063
28)BL6 Aroclor-1254 {4}	2.1273964	1.7996663	1.7313903	1.7460051	1.7034225					
							1.8216	AVRG	E5	9.5800
29)BL6 Aroclor-1254 {5}	1.4115325	1.2345440	1.1435423	1.1787272	1.1043781					
							1.2145	AVRG	E5	9.8858
30)MAL7 Aroclor-1260	1.9680524	1.7639817	1.7018452	1.6754101	1.5606063					
							1.7340	AVRG	E5	8.6608

Response Factor Report ECD8
GEL Laboratories, LLC
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Last Update : Wed Dec 21 04:50:48 2022
Integrator : (ChemStation Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5		Avg	Curve	Exp	%RSD/r2
b m1 m2										
31)MAL7 Aroclor-1260 {2}	2.3334741	2.0745829	1.9914960	1.9655643	1.8416537					
							2.0414	AVRG	E5	8.9844
32)MAL7 Aroclor-1260 {3}	1.8510566	1.6313476	1.5591927	1.5276538	1.4329280					
							1.6004	AVRG	E5	9.8211
33)MAL7 Aroclor-1260 {4}	4.0700818	3.7046310	3.6555469	3.6519354	3.4903694					
							3.7145	AVRG	E5	5.7765
34)MAL7 Aroclor-1260 {5}	2.9424345	2.6400507	2.5871556	2.5834875	2.4825536					
							2.6471	AVRG	E5	6.5971
35)KL8 Aroclor-1262	1.4005066	1.2127631	1.1462612	1.1140635	1.0251505					
							1.1797	AVRG	E5	11.9244
36)KL8 Aroclor-1262 {2}	1.6020744	1.3653786	1.2753164	1.2513544	1.1553592					
							1.3299	AVRG	E5	12.7470
37)KL8 Aroclor-1262 {3}	2.1194709	1.8647871	1.7814953	1.7389181	1.6114877					
							1.8232	AVRG	E5	10.3766
38)KL8 Aroclor-1262 {4}	3.7104864	3.3106965	3.2046428	3.1740839	2.9939245					
							3.2788	AVRG	E5	8.1409
39)KL8 Aroclor-1262 {5}	2.7105628	2.4147540	2.3089007	2.2634324	2.1576227					
							2.3711	AVRG	E5	8.9012
40)OL9 Aroclor-1268	5.0862447	4.6707296	4.4867595	4.5103666	4.4134549					
							4.6335	AVRG	E5	5.8259
41)OL9 Aroclor-1268 {2}	4.9476754	4.4884433	4.3234937	4.2819377	4.1768599					
							4.4437	AVRG	E5	6.8240
42)OL9 Aroclor-1268 {3}	4.1224098	3.7605591	3.6463203	3.6689650	3.5574042					
							3.7511	AVRG	E5	5.8589
43)OL9 Aroclor-1268 {4}	1.8486564	1.6236818	1.5275379	1.5335079	1.4784901					
							1.6024	AVRG	E5	9.1931

Response Factor Report ECD8
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\DATA\122322\ECD8_8082_122022.m
Last Update : Wed Dec 21 04:50:48 2022
Integrator : (ChemStation Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5	Avg	Curve	Exp	%RSD/r2
b m1 m2									
44)OL9 Aroclor-1268 {5}	1.1477770	1.0861005	1.0523818	1.0713464	1.0679900	1.0851	AVRG	E6	3.4116
45)X 4,4' DDT				8.5918374		8.5918	AVRG	E5	0.0000
46)X 4,4' DDD				1.5318455		1.5318	AVRG	E6	0.0000
47)X 4,4' DDE				2.6033565		2.6034	AVRG	E6	0.0000
48)SA DCB	3.4993303	3.1331066	3.1040029	3.0540765	2.9221191	3.1425	AVRG	E6	6.8487

(#) = Out of Range ($) = Individual RF Out of Range ### Number of calibration levels exceeded format ###
AVRG = Average, LINR = Linear Regression, 1/x = the inverse of concentration, 1/x^2 = the inverse square of concentration

COMPOUND LISTING
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\DATA\122222\ECD8_8082_122022.m
Last Update : Wed Dec 21 04:50:48 2022
Integrator : (ChemStation Integrator) Response via : Initial Calibration

JM 12/23/2022

JC 12/23/2022

Integration Parameter File: autoint1.e

*** Integrator Events ***
Initial Threshold 17.0
Initial Peak Width 0.003
Initial Area Reject 0.0
Shoulders OFF
2.600 Peak Width 0.010

Integration Parameter File: autoint2.e

*** Integrator Events ***
Initial Threshold 17.0
Initial Peak Width 0.005
Initial Area Reject 0.0
Shoulders OFF

Compound	RT	RT Window
1)SA 4CMX	2.502	2.472- 2.532
2)MAL1Aroclor-1016	3.068	3.038- 3.098
3)MAL1Aroclor-1016 {2}	3.423	3.393- 3.453
4)MAL1Aroclor-1016 {3}	3.522	3.492- 3.552
5)MAL1Aroclor-1016 {4}	3.659	3.629- 3.689
6)MAL1Aroclor-1016 {5}	3.824	3.794- 3.854
7)JL2 Aroclor-1221	2.642	2.612- 2.672
8)JL2 Aroclor-1221 {2}	2.759	2.729- 2.789
9)JL2 Aroclor-1221 {3}	2.791	2.761- 2.821
10)FL3 Aroclor-1232	3.066	3.036- 3.096
11)FL3 Aroclor-1232 {2}	3.421	3.391- 3.451
12)FL3 Aroclor-1232 {3}	3.520	3.490- 3.550
13)FL3 Aroclor-1232 {4}	3.658	3.628- 3.688
14)FL3 Aroclor-1232 {5}	3.822	3.792- 3.852
15)DL4 Aroclor-1242	3.067	3.037- 3.097
16)DL4 Aroclor-1242 {2}	3.423	3.393- 3.453
17)DL4 Aroclor-1242 {3}	3.521	3.491- 3.551
18)DL4 Aroclor-1242 {4}	3.659	3.629- 3.689
19)DL4 Aroclor-1242 {5}	3.823	3.793- 3.853
20)EL5 Aroclor-1248	3.423	3.393- 3.453
21)EL5 Aroclor-1248 {2}	3.659	3.629- 3.689
22)EL5 Aroclor-1248 {3}	3.822	3.792- 3.852
23)EL5 Aroclor-1248 {4}	4.129	4.099- 4.159
24)EL5 Aroclor-1248 {5}	4.290	4.260- 4.320
25)BL6 Aroclor-1254	4.099	4.069- 4.129
26)BL6 Aroclor-1254 {2}	4.286	4.256- 4.316
27)BL6 Aroclor-1254 {3}	4.571	4.541- 4.601
28)BL6 Aroclor-1254 {4}	4.767	4.737- 4.797
29)BL6 Aroclor-1254 {5}	4.896	4.866- 4.926
30)MAL7Aroclor-1260	4.701	4.671- 4.731
31)MAL7Aroclor-1260 {2}	4.896	4.866- 4.926
32)MAL7Aroclor-1260 {3}	5.172	5.142- 5.202
33)MAL7Aroclor-1260 {4}	5.560	5.530- 5.590
34)MAL7Aroclor-1260 {5}	5.758	5.728- 5.788
35)KL8 Aroclor-1262	4.700	4.675- 4.730
36)KL8 Aroclor-1262 {2}	4.894	4.869- 4.924
37)KL8 Aroclor-1262 {3}	5.171	5.146- 5.201

38)KL8 Aroclor-1262 {4}	5.559	5.534- 5.589
39)KL8 Aroclor-1262 {5}	5.779	5.754- 5.809
40)OL9 Aroclor-1268	5.778	5.753- 5.808
41)OL9 Aroclor-1268 {2}	5.805	5.780- 5.835
42)OL9 Aroclor-1268 {3}	5.939	5.914- 5.969
43)OL9 Aroclor-1268 {4}	6.184	6.159- 6.214
44)OL9 Aroclor-1268 {5}	6.380	6.355- 6.410
45)X 4,4' DDT	5.114	5.089- 5.144
46)X 4,4' DDD	4.919	4.894- 4.949
47)X 4,4' DDE	4.494	4.464- 4.524
48)SA DCB	6.513	6.483- 6.543
49) Column #2	4.816	4.786- 4.846
50)SA 4CMX #2	2.815	2.785- 2.845
51)MAL1Aroclor-1016 #2	3.542	3.512- 3.572
52)MAL1Aroclor-1016 {2} #2	3.899	3.869- 3.929
53)MAL1Aroclor-1016 {3} #2	3.999	3.969- 4.029
54)MAL1Aroclor-1016 {4} #2	4.076	4.046- 4.106
55)MAL1Aroclor-1016 {5} #2	4.348	4.318- 4.378
56)JL2 Aroclor-1221 #2	3.055	3.025- 3.085
57)JL2 Aroclor-1221 {2} #2	3.170	3.140- 3.200
58)JL2 Aroclor-1221 {3} #2	3.220	3.190- 3.250
59)FL3 Aroclor-1232 #2	3.540	3.510- 3.570
60)FL3 Aroclor-1232 {2} #2	3.897	3.867- 3.927
61)FL3 Aroclor-1232 {3} #2	3.998	3.968- 4.028
62)FL3 Aroclor-1232 {4} #2	4.075	4.045- 4.105
63)FL3 Aroclor-1232 {5} #2	4.346	4.316- 4.376
64)DL4 Aroclor-1242 #2	3.542	3.512- 3.572
65)DL4 Aroclor-1242 {2} #2	3.898	3.868- 3.928
66)DL4 Aroclor-1242 {3} #2	3.999	3.969- 4.029
67)DL4 Aroclor-1242 {4} #2	4.076	4.046- 4.106
68)DL4 Aroclor-1242 {5} #2	4.347	4.317- 4.377
69)EL5 Aroclor-1248 #2	3.898	3.868- 3.928
70)EL5 Aroclor-1248 {2} #2	4.147	4.117- 4.177
71)EL5 Aroclor-1248 {3} #2	4.347	4.317- 4.377
72)EL5 Aroclor-1248 {4} #2	4.624	4.594- 4.654
73)EL5 Aroclor-1248 {5} #2	4.823	4.793- 4.853
74)BL6 Aroclor-1254 #2	4.655	4.625- 4.685
75)BL6 Aroclor-1254 {2} #2	4.790	4.760- 4.820
76)BL6 Aroclor-1254 {3} #2	5.123	5.093- 5.153
77)BL6 Aroclor-1254 {4} #2	5.284	5.254- 5.314
78)BL6 Aroclor-1254 {5} #2	5.407	5.377- 5.442
79)MAL7Aroclor-1260 #2	5.263	5.233- 5.293
80)MAL7Aroclor-1260 {2} #2	5.409	5.379- 5.439
81)MAL7Aroclor-1260 {3} #2	5.726	5.696- 5.756
82)MAL7Aroclor-1260 {4} #2	6.108	6.078- 6.138
83)MAL7Aroclor-1260 {5} #2	6.368	6.338- 6.398
84)KL8 Aroclor-1262 #2	5.261	5.231- 5.291
85)KL8 Aroclor-1262 {2} #2	5.407	5.377- 5.437
86)KL8 Aroclor-1262 {3} #2	5.726	5.696- 5.756
87)KL8 Aroclor-1262 {4} #2	6.107	6.077- 6.137
88)KL8 Aroclor-1262 {5} #2	6.362	6.332- 6.391
89)OL9 Aroclor-1268 #2	6.359	6.329- 6.389
90)OL9 Aroclor-1268 {2} #2	6.393	6.363- 6.423
91)OL9 Aroclor-1268 {3} #2	6.572	6.542- 6.602
92)OL9 Aroclor-1268 {4} #2	6.767	6.737- 6.797
93)OL9 Aroclor-1268 {5} #2	6.997	6.966- 7.027
94)X 4,4' DDT #2	5.659	5.629- 5.689
95)X 4,4' DDD #2	5.437	5.407- 5.467
96)X 4,4' DDE #2	5.024	4.724- 5.324
97)SA DCB #2	7.181	7.151- 7.211

ECD8_8082_122022.m Thu Dec 22 11:04:32 2022

COMPOUND LISTING
GEL Laboratories, LLC
Method File : D:\MSDCHEM\1\DATA\122322\ECD8_8082_122022.m
Last Update : Wed Dec 21 04:50:48 2022
Integrator : (ChemStation Integrator) Response via : Initial Calibration

12/23/2022

JC
12/23/2022

Integration Parameter File: autoint1.e

*** Integrator Events ***
Initial Threshold 17.0
Initial Peak Width 0.003
Initial Area Reject 0.0
Shoulders OFF
2.600 Peak Width 0.010

Integration Parameter File: autoint2.e

*** Integrator Events ***
Initial Threshold 17.0
Initial Peak Width 0.005
Initial Area Reject 0.0
Shoulders OFF

Compound	RT	RT Window
1)SA 4CMX	2.500	2.470- 2.530
2)MAL1Aroclor-1016	3.067	3.037- 3.097
3)MAL1Aroclor-1016 {2}	3.422	3.392- 3.452
4)MAL1Aroclor-1016 {3}	3.521	3.491- 3.551
5)MAL1Aroclor-1016 {4}	3.659	3.629- 3.689
6)MAL1Aroclor-1016 {5}	3.823	3.793- 3.853
7)JL2 Aroclor-1221	2.643	2.613- 2.673
8)JL2 Aroclor-1221 {2}	2.760	2.730- 2.790
9)JL2 Aroclor-1221 {3}	2.792	2.762- 2.822
10)FL3 Aroclor-1232	3.066	3.036- 3.096
11)FL3 Aroclor-1232 {2}	3.422	3.392- 3.452
12)FL3 Aroclor-1232 {3}	3.521	3.491- 3.551
13)FL3 Aroclor-1232 {4}	3.658	3.628- 3.688
14)FL3 Aroclor-1232 {5}	3.823	3.793- 3.853
15)DL4 Aroclor-1242	3.067	3.037- 3.097
16)DL4 Aroclor-1242 {2}	3.423	3.393- 3.453
17)DL4 Aroclor-1242 {3}	3.522	3.492- 3.552
18)DL4 Aroclor-1242 {4}	3.659	3.629- 3.689
19)DL4 Aroclor-1242 {5}	3.823	3.793- 3.853
20)EL5 Aroclor-1248	3.423	3.393- 3.453
21)EL5 Aroclor-1248 {2}	3.659	3.629- 3.689
22)EL5 Aroclor-1248 {3}	3.824	3.794- 3.854
23)EL5 Aroclor-1248 {4}	4.130	4.100- 4.160
24)EL5 Aroclor-1248 {5}	4.291	4.261- 4.321
25)BL6 Aroclor-1254	4.100	4.070- 4.130
26)BL6 Aroclor-1254 {2}	4.287	4.257- 4.317
27)BL6 Aroclor-1254 {3}	4.571	4.541- 4.601
28)BL6 Aroclor-1254 {4}	4.767	4.737- 4.797
29)BL6 Aroclor-1254 {5}	4.897	4.867- 4.927
30)MAL7Aroclor-1260	4.699	4.669- 4.729
31)MAL7Aroclor-1260 {2}	4.895	4.865- 4.925
32)MAL7Aroclor-1260 {3}	5.171	5.141- 5.201
33)MAL7Aroclor-1260 {4}	5.559	5.529- 5.589
34)MAL7Aroclor-1260 {5}	5.757	5.727- 5.787
35)KL8 Aroclor-1262	4.700	4.675- 4.730
36)KL8 Aroclor-1262 {2}	4.894	4.869- 4.924
37)KL8 Aroclor-1262 {3}	5.171	5.146- 5.201

38)KL8 Aroclor-1262 {4}	5.559	5.534- 5.589
39)KL8 Aroclor-1262 {5}	5.779	5.754- 5.809
40)OL9 Aroclor-1268	5.779	5.754- 5.809
41)OL9 Aroclor-1268 {2}	5.806	5.781- 5.836
42)OL9 Aroclor-1268 {3}	5.940	5.915- 5.970
43)OL9 Aroclor-1268 {4}	6.185	6.160- 6.215
44)OL9 Aroclor-1268 {5}	6.381	6.356- 6.411
45)X 4,4' DDT	5.113	5.088- 5.143
46)X 4,4' DDD	4.918	4.893- 4.948
47)X 4,4' DDE	4.493	4.463- 4.523
48)SA DCB	6.512	6.482- 6.542
49) Column #2	4.816	4.786- 4.846
50)SA 4CMX #2	2.814	2.784- 2.844
51)MAL1Aroclor-1016 #2	3.541	3.511- 3.571
52)MAL1Aroclor-1016 {2} #2	3.898	3.868- 3.928
53)MAL1Aroclor-1016 {3} #2	3.998	3.968- 4.028
54)MAL1Aroclor-1016 {4} #2	4.076	4.046- 4.106
55)MAL1Aroclor-1016 {5} #2	4.347	4.317- 4.377
56)JL2 Aroclor-1221 #2	3.055	3.025- 3.085
57)JL2 Aroclor-1221 {2} #2	3.171	3.141- 3.201
58)JL2 Aroclor-1221 {3} #2	3.220	3.190- 3.250
59)FL3 Aroclor-1232 #2	3.540	3.510- 3.570
60)FL3 Aroclor-1232 {2} #2	3.897	3.867- 3.927
61)FL3 Aroclor-1232 {3} #2	3.998	3.968- 4.028
62)FL3 Aroclor-1232 {4} #2	4.075	4.045- 4.105
63)FL3 Aroclor-1232 {5} #2	4.346	4.316- 4.376
64)DL4 Aroclor-1242 #2	3.542	3.512- 3.572
65)DL4 Aroclor-1242 {2} #2	3.898	3.868- 3.928
66)DL4 Aroclor-1242 {3} #2	3.999	3.969- 4.029
67)DL4 Aroclor-1242 {4} #2	4.076	4.046- 4.106
68)DL4 Aroclor-1242 {5} #2	4.347	4.317- 4.377
69)EL5 Aroclor-1248 #2	3.898	3.868- 3.928
70)EL5 Aroclor-1248 {2} #2	4.147	4.117- 4.177
71)EL5 Aroclor-1248 {3} #2	4.347	4.317- 4.377
72)EL5 Aroclor-1248 {4} #2	4.624	4.594- 4.654
73)EL5 Aroclor-1248 {5} #2	4.824	4.794- 4.854
74)BL6 Aroclor-1254 #2	4.655	4.625- 4.685
75)BL6 Aroclor-1254 {2} #2	4.791	4.761- 4.821
76)BL6 Aroclor-1254 {3} #2	5.124	5.094- 5.154
77)BL6 Aroclor-1254 {4} #2	5.284	5.254- 5.314
78)BL6 Aroclor-1254 {5} #2	5.408	5.378- 5.443
79)MAL7Aroclor-1260 #2	5.261	5.231- 5.291
80)MAL7Aroclor-1260 {2} #2	5.407	5.377- 5.437
81)MAL7Aroclor-1260 {3} #2	5.726	5.696- 5.756
82)MAL7Aroclor-1260 {4} #2	6.108	6.078- 6.138
83)MAL7Aroclor-1260 {5} #2	6.367	6.337- 6.397
84)KL8 Aroclor-1262 #2	5.261	5.231- 5.291
85)KL8 Aroclor-1262 {2} #2	5.407	5.377- 5.437
86)KL8 Aroclor-1262 {3} #2	5.726	5.696- 5.756
87)KL8 Aroclor-1262 {4} #2	6.107	6.077- 6.137
88)KL8 Aroclor-1262 {5} #2	6.362	6.332- 6.392
89)OL9 Aroclor-1268 #2	6.359	6.329- 6.389
90)OL9 Aroclor-1268 {2} #2	6.393	6.363- 6.423
91)OL9 Aroclor-1268 {3} #2	6.572	6.542- 6.602
92)OL9 Aroclor-1268 {4} #2	6.766	6.736- 6.796
93)OL9 Aroclor-1268 {5} #2	6.997	6.967- 7.027
94)X 4,4' DDT #2	5.657	5.627- 5.687
95)X 4,4' DDD #2	5.435	5.405- 5.465
96)X 4,4' DDE #2	5.023	4.723- 5.323
97)SA DCB #2	7.180	7.150- 7.210

ECD8_8082_122022.m Fri Dec 23 07:58:00 2022

Quantitation Report
GEL Laboratories, LLC

12/21/2022

Data Path : D:\MSDCHEM\1\DATA\122022\
Data File : e8l2012.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Dec 2022 10:40 (#1); 20 Dec 2022 10:40 (#2)
Operator : JXM InstName : ECD8
Sample : |WAR221218-01|ICAL|1|SVA|1|1660-1
Misc : |MIX[A]
ALS Vial : 12 Sample Multiplier: 1

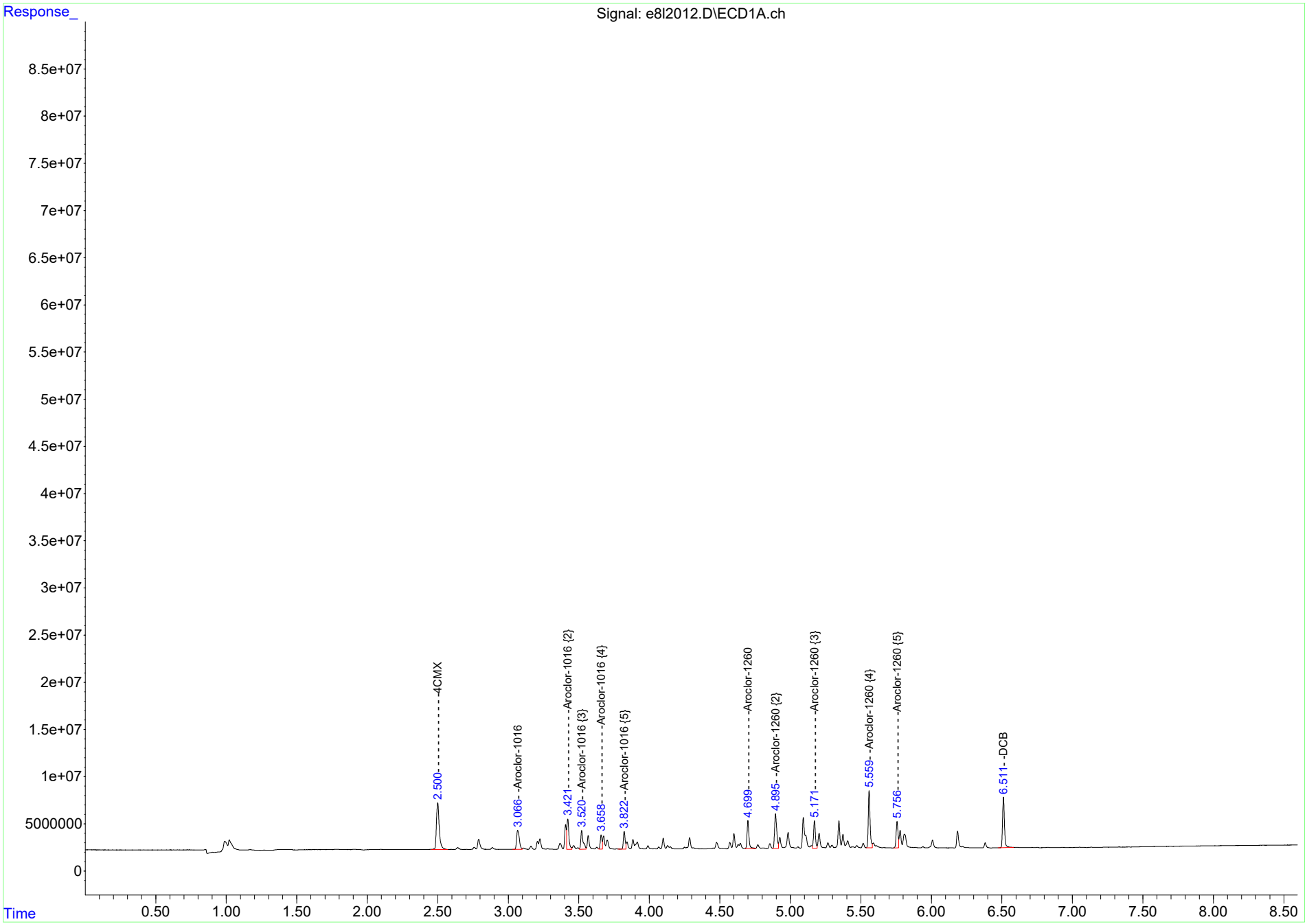
Quant Time: Dec 21 04:53:25 2022
Quant Method : D:\MSDCHEM\1\DATA\122022\ECD8_8082_122022.m
Quant Title : ECD8 SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1 Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.500	2.500	0.000	69592810	11.032	2.814	2.814	0.000	54951141	10.750
DCB	6.509	6.511	0.002	50818044	10.524	7.177	7.179	0.002	34993303	11.135
Target Compounds										
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016	3.066	3.067	0.001	27477750	119.670	3.541	3.541	0.000	13423994	121.978
Aroclor-1016 {2}	3.421	3.422	0.001	31672371	113.785	3.897	3.898	0.001	22131629	113.203
Aroclor-1016 {3}	3.520	3.521	0.001	22649698	117.795	3.998	3.998	0.000	16090797	117.710
Aroclor-1016 {4}	3.658	3.658	0.000	12426739	118.560	4.075	4.075	0.000	10135609	115.802
Aroclor-1016 {5}	3.821	3.822	0.001	16422315	117.510	4.346	4.347	0.001	12399042	116.560
Sum Aroclor-1016				110648873	587.320				74181071	585.253
Average Aroclor-1016					117.464					117.051
Aroclor-1260	4.698	4.699	0.001	28499805	113.821	5.259	5.262	0.003	19680524	113.499
Aroclor-1260 {2}	4.893	4.895	0.002	39132155	109.922	5.406	5.408	0.002	23334741	114.310
Aroclor-1260 {3}	5.169	5.171	0.002	26256848	111.274	5.724	5.726	0.002	18510566	115.660
Aroclor-1260 {4}	5.556	5.559	0.003	53746904	105.388	6.106	6.108	0.002	40700818	109.572
Aroclor-1260 {5}	5.754	5.757	0.003	25394225	104.666	6.365	6.366	0.001	29424345	111.155
Sum Aroclor-1260				173029937	545.071				131650994	564.197
Average Aroclor-1260					109.014					112.839

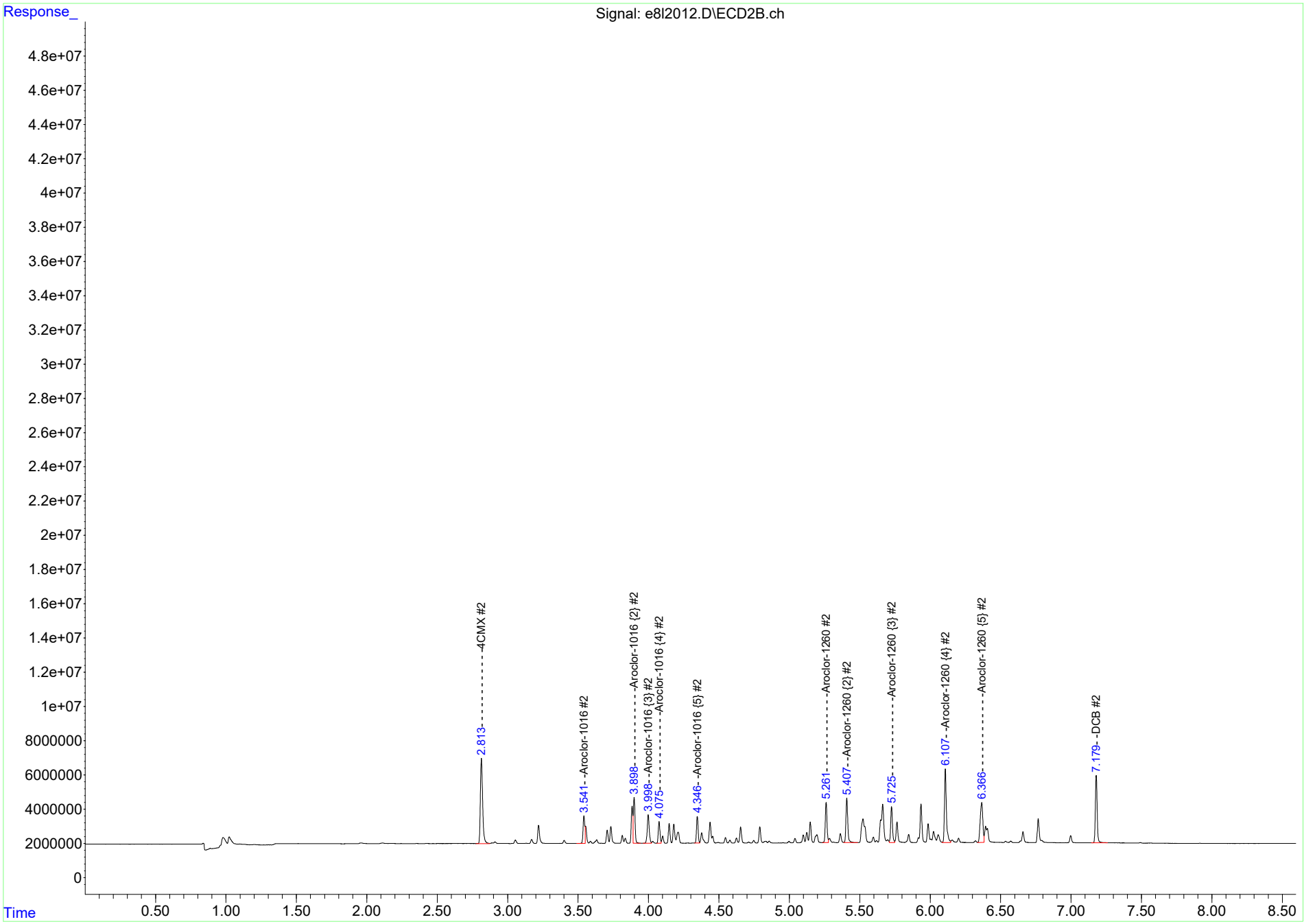
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122022\
Data File : e8l2012.D



ECD8_8082_122022.m Wed Dec 21 05:06:13 2022 Page: 2

Data Path : D:\MSDCHEM\1\DATA\122022\
Data File : e8l2012.D



ECD8_8082_122022.m Wed Dec 21 05:06:14 2022 Page: 3

Quantitation Report
GEL Laboratories, LLC

12/21/2022

Data Path : D:\MSDCHEM\1\DATA\122022\
Data File : e8l2013.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Dec 2022 10:53 (#1); 20 Dec 2022 10:53 (#2)
Operator : JXM InstName : ECD8
Sample : |WAR221218-02|ICAL|1|SVA|1|1660-2
Misc : |MIX[A]
ALS Vial : 13 Sample Multiplier: 1

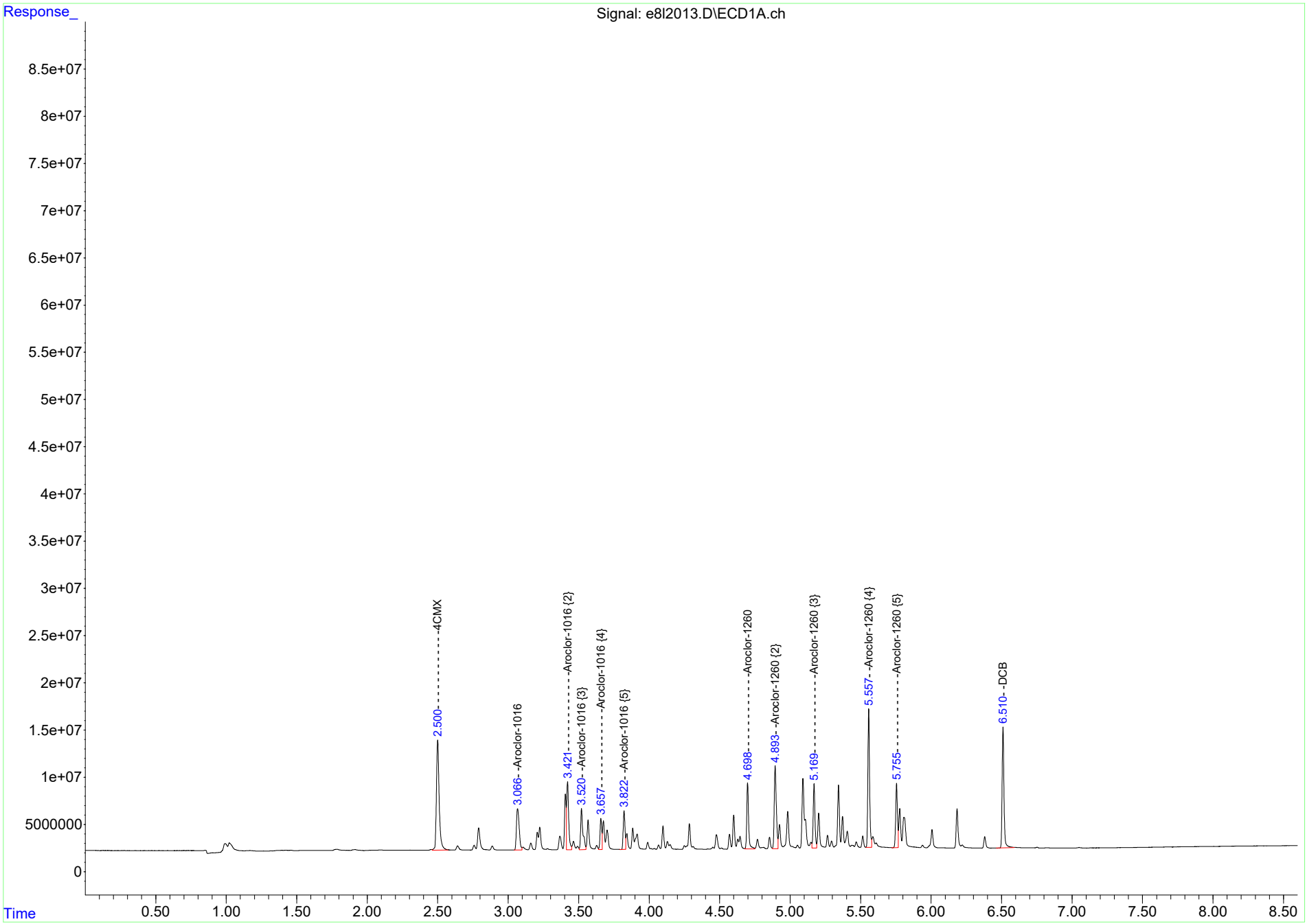
Quant Time: Dec 21 04:53:27 2022
Quant Method : D:\MSDCHEM\1\DATA\122022\ECD8_8082_122022.m
Quant Title : ECD8 SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1 Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.500	2.500	0.000	158238363	25.084	2.814	2.814	0.000	126286677	24.705
DCB	6.509	6.510	0.001	117596713	24.353	7.177	7.178	0.001	78327664	24.925
Target Compounds										
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016	3.066	3.067	0.001	59805582	260.463	3.541	3.541	0.000	28521773	259.165
Aroclor-1016 {2}	3.421	3.421	0.000	70960928	254.931	3.897	3.898	0.001	49016167	250.717
Aroclor-1016 {3}	3.520	3.520	0.000	49463447	257.246	3.998	3.998	0.000	35242780	257.814
Aroclor-1016 {4}	3.658	3.658	0.000	26974992	257.361	4.075	4.075	0.000	22344002	255.286
Aroclor-1016 {5}	3.821	3.822	0.001	35652697	255.112	4.346	4.346	0.000	27512086	258.634
Sum Aroclor-1016				242857646	1285.114				162636808	1281.615
Average Aroclor-1016					257.023					256.323
Aroclor-1260	4.698	4.699	0.001	63195777	252.388	5.259	5.260	0.001	44099544	254.326
Aroclor-1260 {2}	4.893	4.894	0.001	88909371	249.746	5.406	5.406	0.000	51864573	254.069
Aroclor-1260 {3}	5.169	5.170	0.001	58805859	249.213	5.724	5.724	0.000	40783690	254.829
Aroclor-1260 {4}	5.556	5.557	0.001	125197257	245.489	6.106	6.107	0.001	92615774	249.335
Aroclor-1260 {5}	5.754	5.755	0.001	58634776	241.672	6.365	6.365	0.000	66001269	249.331
Sum Aroclor-1260				394743040	1238.509				295364850	1261.890
Average Aroclor-1260					247.702					252.378

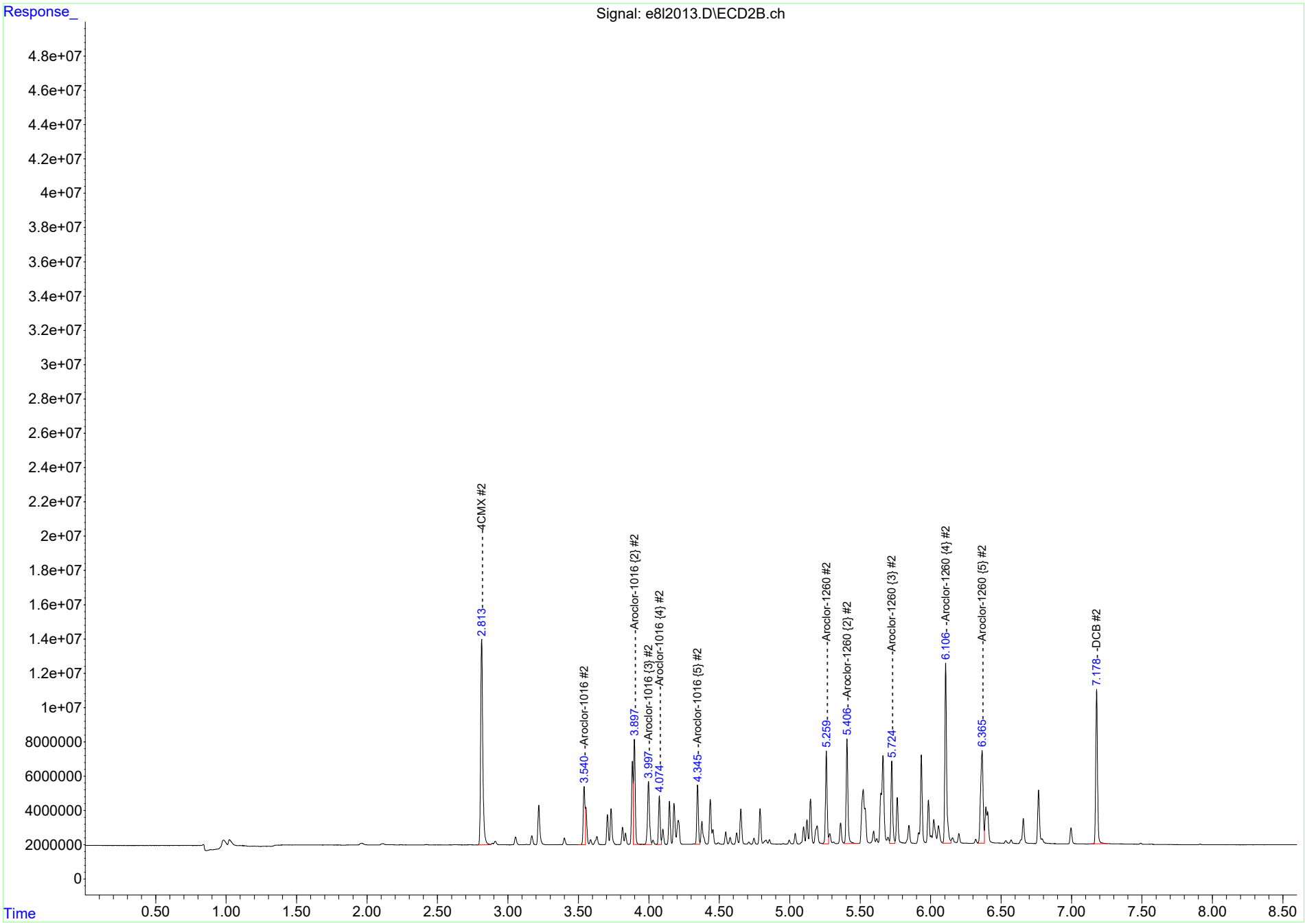
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122022\
Data File : e8l2013.D



ECD8_8082_122022.m Wed Dec 21 05:06:18 2022 Page: 2

Data Path : D:\MSDCHEM\1\DATA\122022\
Data File : e8l2013.D



ECD8_8082_122022.m Wed Dec 21 05:06:18 2022 Page: 3

Quantitation Report
GEL Laboratories, LLC

12/21/2022

Data Path : D:\MSDCHEM\1\DATA\122022\
Data File : e8l2014.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Dec 2022 11:05 (#1); 20 Dec 2022 11:05 (#2)
Operator : JXM InstName : ECD8
Sample : |WAR221218-03|ICAL|1|SVA|1|1660-3
Misc : |MIX[A]
ALS Vial : 14 Sample Multiplier: 1

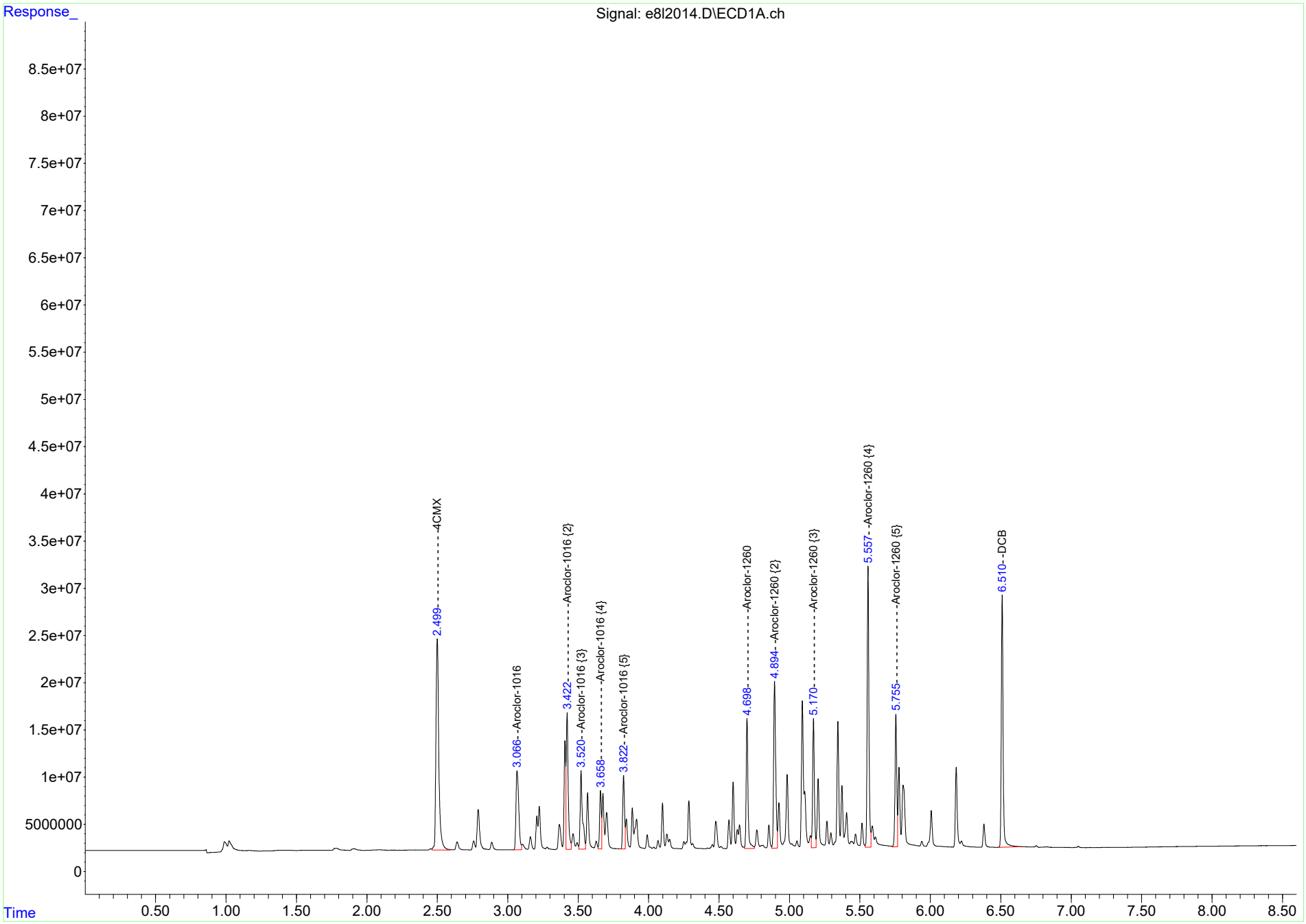
Quant Time: Dec 21 04:53:29 2022
Quant Method : D:\MSDCHEM\1\DATA\122022\ECD8_8082_122022.m
Quant Title : ECD8 SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1 Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.500	2.500	0.000	318484848	50.487	2.814	2.813	-0.001	255665210	50.015
DCB	6.509	6.510	0.001	239333138	49.563	7.177	7.179	0.002	155200145	49.387
Target Compounds										
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016	3.066	3.066	0.000	114757432	499.788	3.541	3.541	0.000	54294912	493.354
Aroclor-1016 {2}	3.421	3.422	0.001	139385011	500.748	3.897	3.898	0.001	96894528	495.613
Aroclor-1016 {3}	3.520	3.521	0.001	95000892	494.074	3.998	3.998	0.000	67434105	493.305
Aroclor-1016 {4}	3.658	3.659	0.001	51143703	487.949	4.075	4.076	0.001	43124571	492.710
Aroclor-1016 {5}	3.821	3.822	0.001	68383580	489.317	4.346	4.347	0.001	52470691	493.263
Sum Aroclor-1016				468670619	2471.877				314218807	2468.244
Average Aroclor-1016					494.375					493.649
Aroclor-1260	4.698	4.699	0.001	123783811	494.362	5.259	5.261	0.002	85092259	490.734
Aroclor-1260 {2}	4.893	4.894	0.001	176733694	496.444	5.406	5.407	0.001	99574802	487.788
Aroclor-1260 {3}	5.169	5.171	0.002	116929187	495.533	5.724	5.725	0.001	77959636	487.115
Aroclor-1260 {4}	5.556	5.558	0.002	255699232	501.380	6.106	6.107	0.001	182777344	492.063
Aroclor-1260 {5}	5.754	5.756	0.002	120081215	494.933	6.365	6.366	0.001	129357782	488.671
Sum Aroclor-1260				793227139	2482.652				574761822	2446.370
Average Aroclor-1260					496.530					489.274

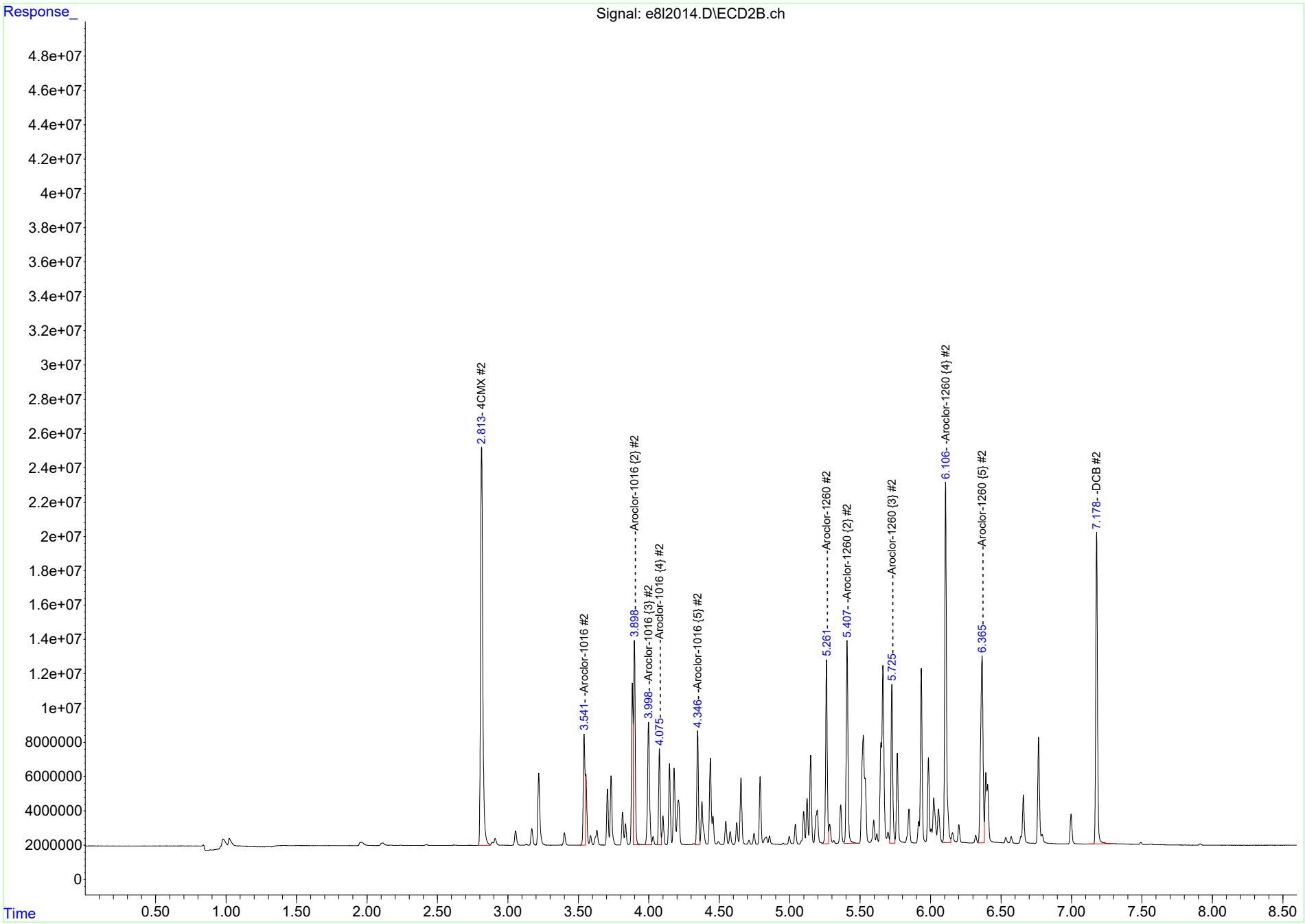
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122022\
Data File : e8l2014.D



ECD8_8082_122022.m Wed Dec 21 05:06:23 2022 Page: 2

Data Path : D:\MSDCHEM\1\DATA\122022\
Data File : e8l2014.D



Quantitation Report
GEL Laboratories, LLC

12/21/2022

Data Path : D:\MSDCHEM\1\DATA\122022\
Data File : e8l2015.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Dec 2022 11:17 (#1); 20 Dec 2022 11:17 (#2)
Operator : JXM InstName : ECD8
Sample : |WAR221218-04|ICAL|1|SVA|1|1660-4
Misc : |MIX[A]
ALS Vial : 15 Sample Multiplier: 1

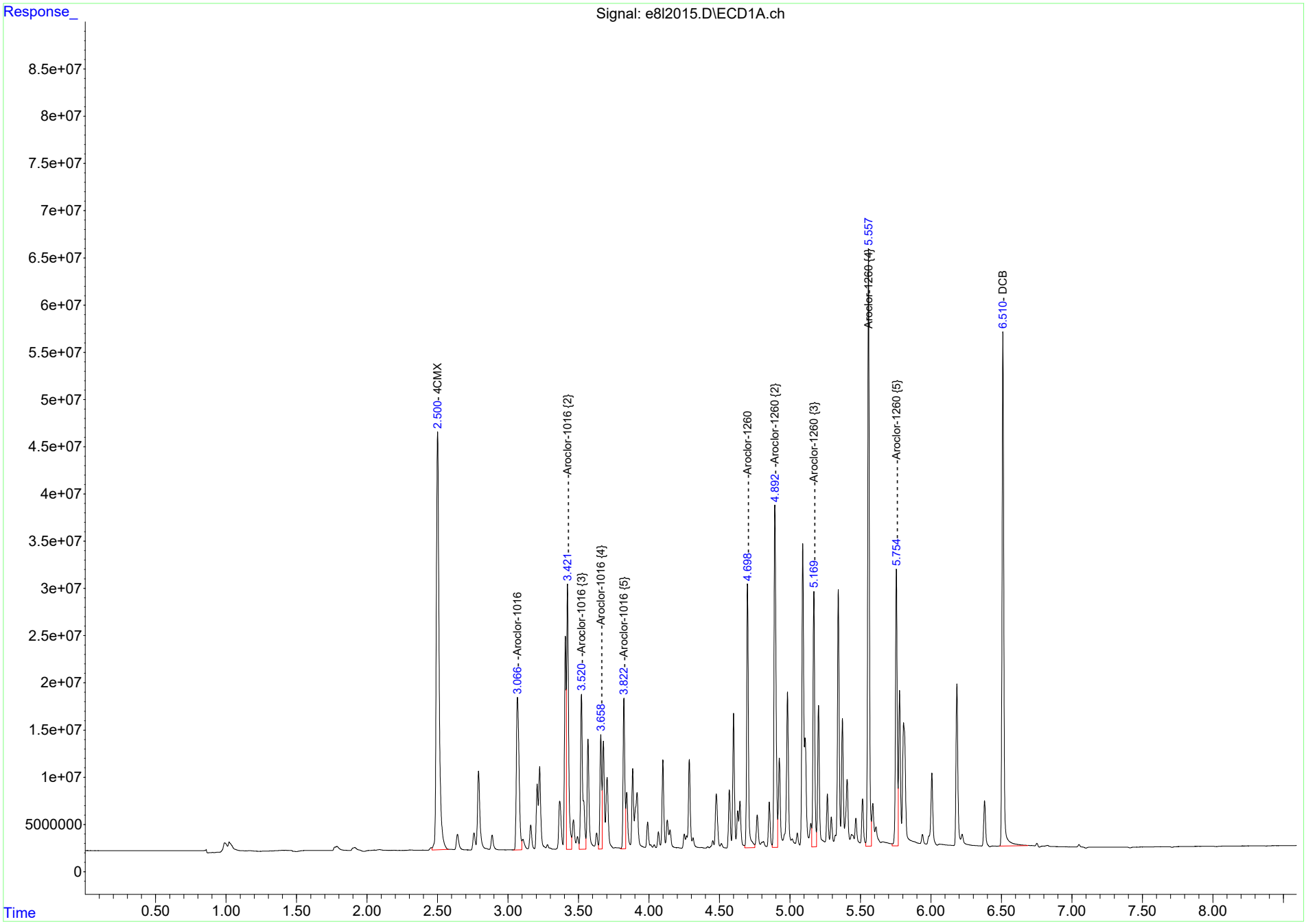
Quant Time: Dec 21 04:53:31 2022
Quant Method : D:\MSDCHEM\1\DATA\122022\ECD8_8082_122022.m
Quant Title : ECD8 SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1 Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.500	2.500	0.000	617580643	97.900	2.814	2.814	0.000	508376627	99.453
DCB	6.509	6.510	0.001	482006799	99.818	7.177	7.179	0.002	305407652	97.185
Target Compounds										
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016	3.066	3.067	0.001	217239353	946.114	3.541	3.542	0.001	103634400	941.680
Aroclor-1016 {2}	3.421	3.422	0.001	269325218	967.565	3.897	3.898	0.001	190707516	975.465
Aroclor-1016 {3}	3.520	3.521	0.001	182965174	951.553	3.998	3.998	0.000	129349134	946.236
Aroclor-1016 {4}	3.658	3.658	0.000	99083400	945.329	4.075	4.075	0.000	83276331	951.454
Aroclor-1016 {5}	3.821	3.822	0.001	133211142	953.190	4.346	4.347	0.001	100718249	946.825
Sum Aroclor-1016				901824289	4763.751				607685630	4761.659
Average Aroclor-1016					952.750					952.332
Aroclor-1260	4.698	4.698	0.000	241999446	966.486	5.259	5.260	0.001	167541006	966.223
Aroclor-1260 {2}	4.893	4.893	0.000	351438085	987.189	5.406	5.407	0.001	196556434	962.873
Aroclor-1260 {3}	5.169	5.170	0.001	231387639	980.595	5.724	5.724	0.000	152765375	954.524
Aroclor-1260 {4}	5.556	5.557	0.001	513145241	1006.185	6.106	6.106	0.000	365193538	983.153
Aroclor-1260 {5}	5.754	5.755	0.001	246083317	1014.270	6.365	6.365	0.000	258348749	975.956
Sum Aroclor-1260				1584053728	4954.725				1140405102	4842.728
Average Aroclor-1260					990.945					968.546

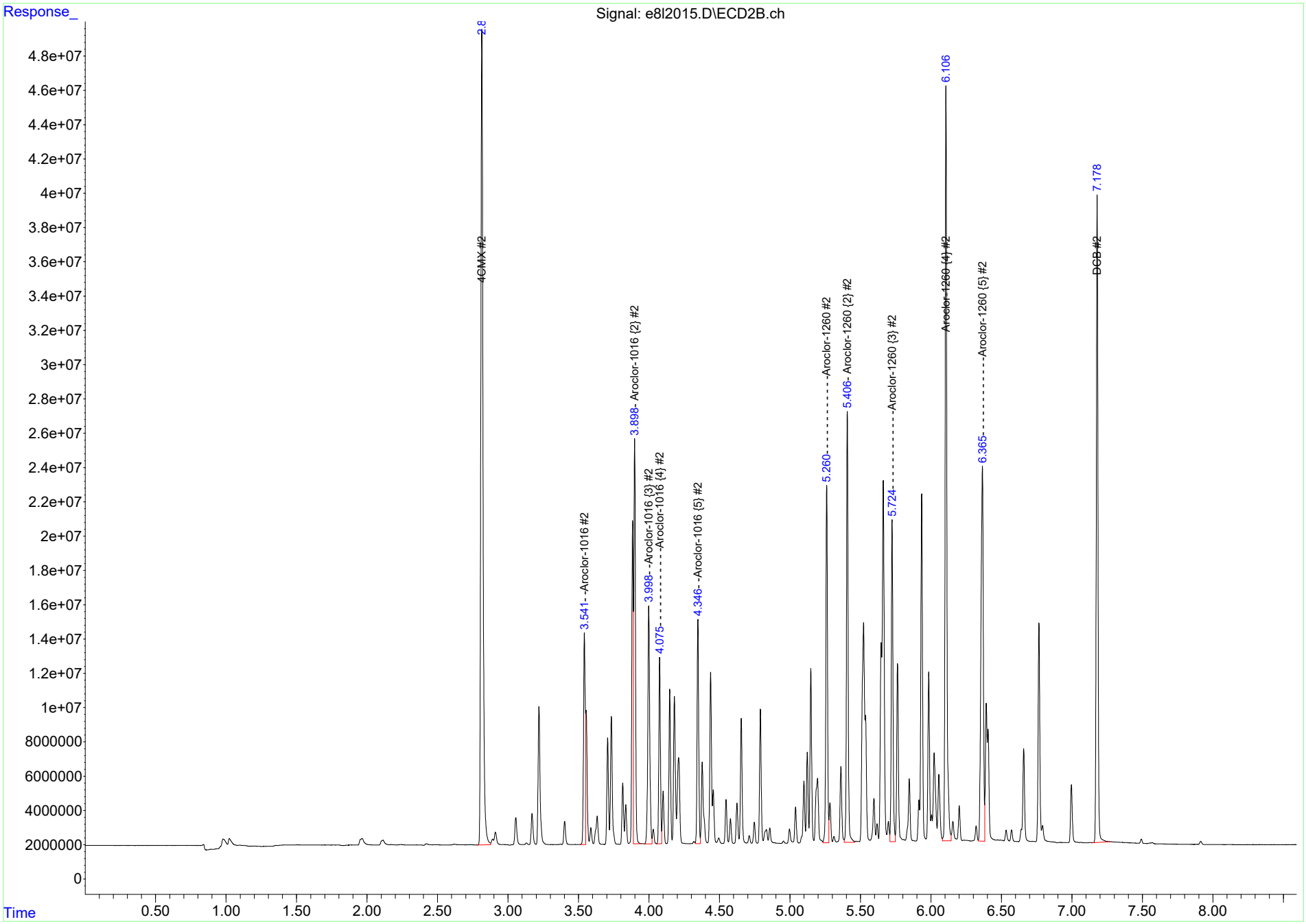
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122022\
Data File : e8l2015.D



ECD8_8082_122022.m Wed Dec 21 05:06:28 2022 Page: 2

Data Path : D:\MSDCHEM\1\DATA\122022\
Data File : e8l2015.D



Quantitation Report
GEL Laboratories, LLC

12/21/2022

Data Path : D:\MSDCHEM\1\DATA\122022\
Data File : e8l2016.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Dec 2022 11:30 (#1); 20 Dec 2022 11:30 (#2)
Operator : JXM InstName : ECD8
Sample : |IAR220908-01|ICAL|1|SVA|1|1660-5
Misc : |MIX[A]
ALS Vial : 16 Sample Multiplier: 1

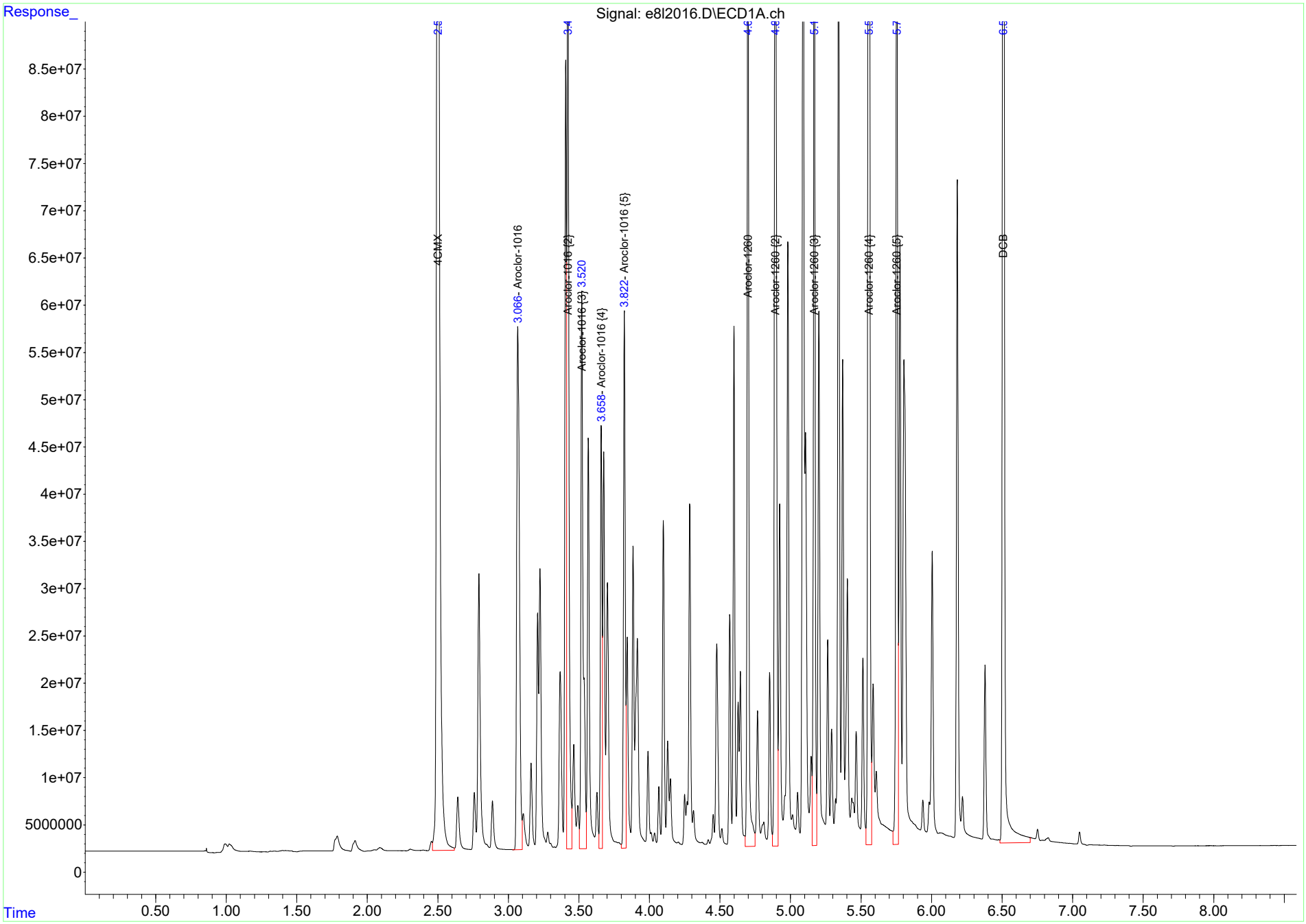
Quant Time: Dec 21 04:53:33 2022
Quant Method : D:\MSDCHEM\1\DATA\122022\ECD8_8082_122022.m
Quant Title : ECD8 SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1 Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um Signal #2 Info : 250 um

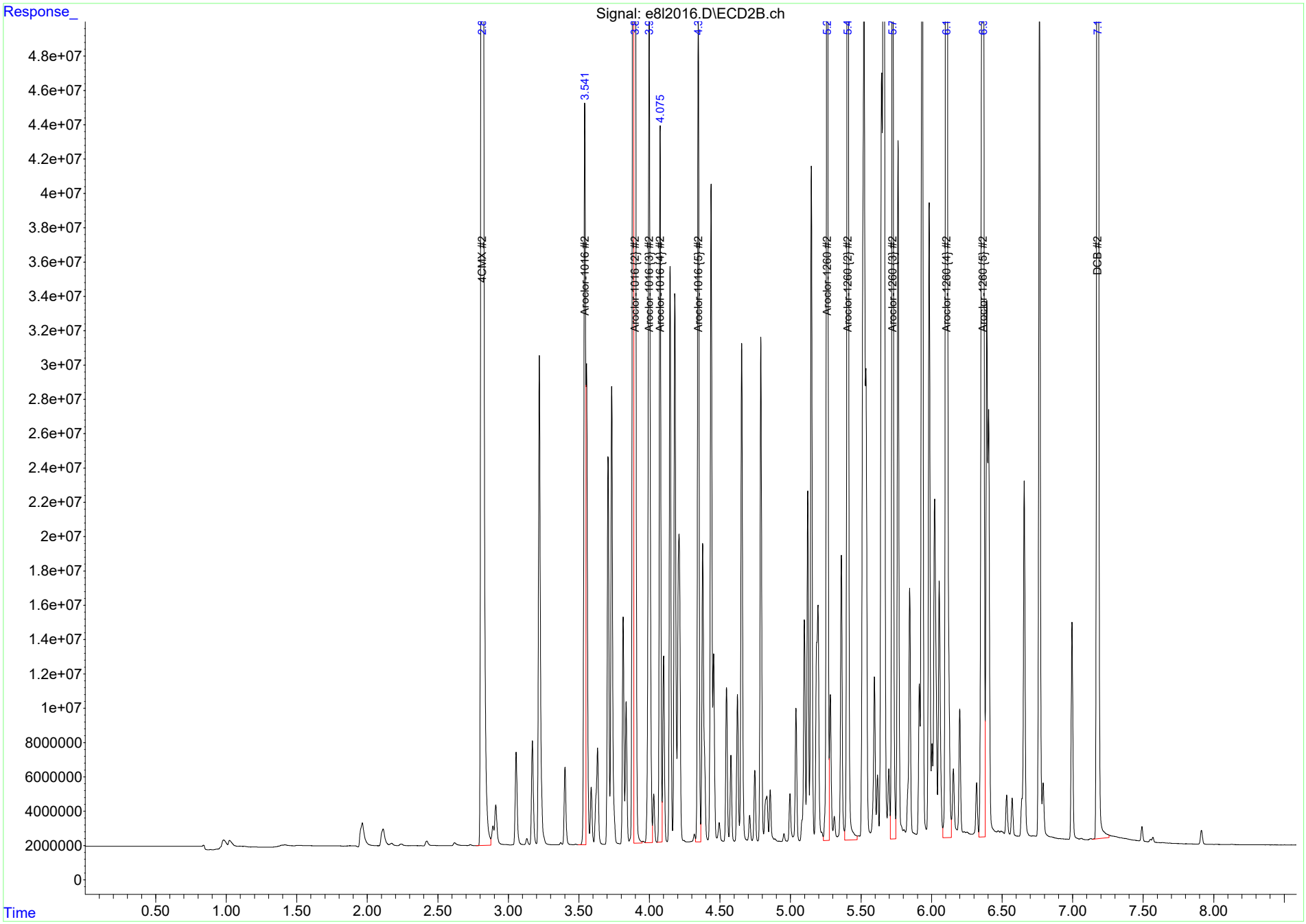
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.500	2.501	0.001	2282897341	361.887	2.814	2.815	0.001	1926016458	376.783
DCB	6.509	6.509	0.000	1900796043	393.631	7.177	7.178	0.001	1168847624	371.945
Target Compounds										
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016	3.066	3.067	0.001	749229034	3263.018	3.541	3.542	0.001	358848207	3260.695
Aroclor-1016 {2}	3.421	3.423	0.002	972419747	3493.470	3.897	3.898	0.001	702574888	3593.655
Aroclor-1016 {3}	3.520	3.521	0.001	656342008	3413.459	3.998	3.998	0.000	469587555	3435.202
Aroclor-1016 {4}	3.658	3.658	0.000	362120352	3454.897	4.075	4.076	0.001	309476632	3535.852
Aroclor-1016 {5}	3.821	3.822	0.001	487811100	3490.523	4.346	4.347	0.001	368701731	3466.064
Sum Aroclor-1016				3227922240	17115.367				2209189013	17291.468
Average Aroclor-1016					3423.073					3458.294
Aroclor-1260	4.698	4.698	0.000	898429593	3588.105	5.259	5.260	0.001	624242514	3600.058
Aroclor-1260 {2}	4.893	4.893	0.000	1312520374	3686.866	5.406	5.406	0.000	736661469	3608.690
Aroclor-1260 {3}	5.169	5.169	0.000	867178525	3675.007	5.724	5.724	0.000	573171209	3581.345
Aroclor-1260 {4}	5.556	5.556	0.000	1948607427	3820.868	6.106	6.106	0.000	1396147773	3758.630
Aroclor-1260 {5}	5.754	5.754	0.000	953513895	3930.053	6.365	6.365	0.000	993021451	3751.304
Sum Aroclor-1260				5980249814	18700.899				4323244417	18300.027
Average Aroclor-1260					3740.180					3660.005

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122022\
Data File : e8l2016.D



Data Path : D:\MSDCHEM\1\DATA\122022\
Data File : e8l2016.D



Continuing Calibration Summary

Instrument ID: ECD8A.I_1

Client SDG: 2023-289

Injection Date: 20-DEC-22 11:42

Data File: 122022\e8l2017.D

Init. Cal. Date(s): NA

Lab Sample ID WAR221130-60

Method: 122022\ECD8_8082_122022.m

Column ID: Description: RTX-CLP

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Aroclor-1016	229612.26	224441.12	1000	-2.25	20		Averaged
Aroclor-1016(2)	278353.52	281114.36	1000	0.99	20		Averaged
Aroclor-1016(3)	192280.65	189735.75	1000	-1.32	20		Averaged
Aroclor-1016(4)	104813.65	100306.82	1000	-4.3	20		Averaged
Aroclor-1016(5)	139753	136693.8	1000	-2.19	20		Averaged
Aroclor-1260	250391.12	257880.34	1000	2.99	20		Averaged
Aroclor-1260(2)	355998.92	380596.92	1000	6.91	20		Averaged
Aroclor-1260(3)	235966.51	202372.13	1000	-14.24	20		Averaged
Aroclor-1260(4)	509990.73	461761.97	1000	-9.46	20		Averaged
Aroclor-1260(5)	242621.11	238515.67	1000	-1.69	20		Averaged
4cmx(Surr)	6308312.46	6083536	100	-3.56	20		Averaged
Decachlorobiphenyl(Surr)	4828878.75	4724688.59	100	-2.16	20		Averaged

Continuing Calibration Summary

Client SDG: 2023-289

Instrument ID: ECD8A.I_2

Injection Date: 20-DEC-22 11:42

Data File: 122022\e8l2017.D

Init. Cal. Date(s): NA

Lab Sample ID WAR221130-60

Method: 122022\ECD8_8082_122022.m

Column ID: PEST2

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Aroclor-1016	110052.66	106417.11	1000	-3.3	20		Averaged
Aroclor-1016(2)	195504.25	199319.66	1000	1.95	20		Averaged
Aroclor-1016(3)	136698.66	134592.97	1000	-1.54	20		Averaged
Aroclor-1016(4)	87525.35	86478.46	1000	-1.2	20		Averaged
Aroclor-1016(5)	106374.77	103429.53	1000	-2.77	20		Averaged
Aroclor-1260	173397.91	177506.89	1000	2.37	20		Averaged
Aroclor-1260(2)	204135.42	209734.81	1000	2.74	20		Averaged
Aroclor-1260(3)	160043.58	134493.88	1000	-15.96	20		Averaged
Aroclor-1260(4)	371451.29	331116.7	1000	-10.86	20		Averaged
Aroclor-1260(5)	264713.64	236729.46	1000	-10.57	20		Averaged
4cmx(Surr)	5111738.57	4903188.51	100	-4.08	20		Averaged
Decachlorobiphenyl(Surr)	3142527.08	3013914.74	100	-4.09	20		Averaged

Quantitation Report
GEL Laboratories, LLC

12/21/2022

Data Path : D:\MSDCHEM\1\DATA\122022\
Data File : e8l2017.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Dec 2022 11:42 (#1); 20 Dec 2022 11:42 (#2)
Operator : JXM InstName : ECD8
Sample : |WAR221130-60|ICV|1|SVA|1|1660
Misc : |MIX[A]
ALS Vial : 17 Sample Multiplier: 1

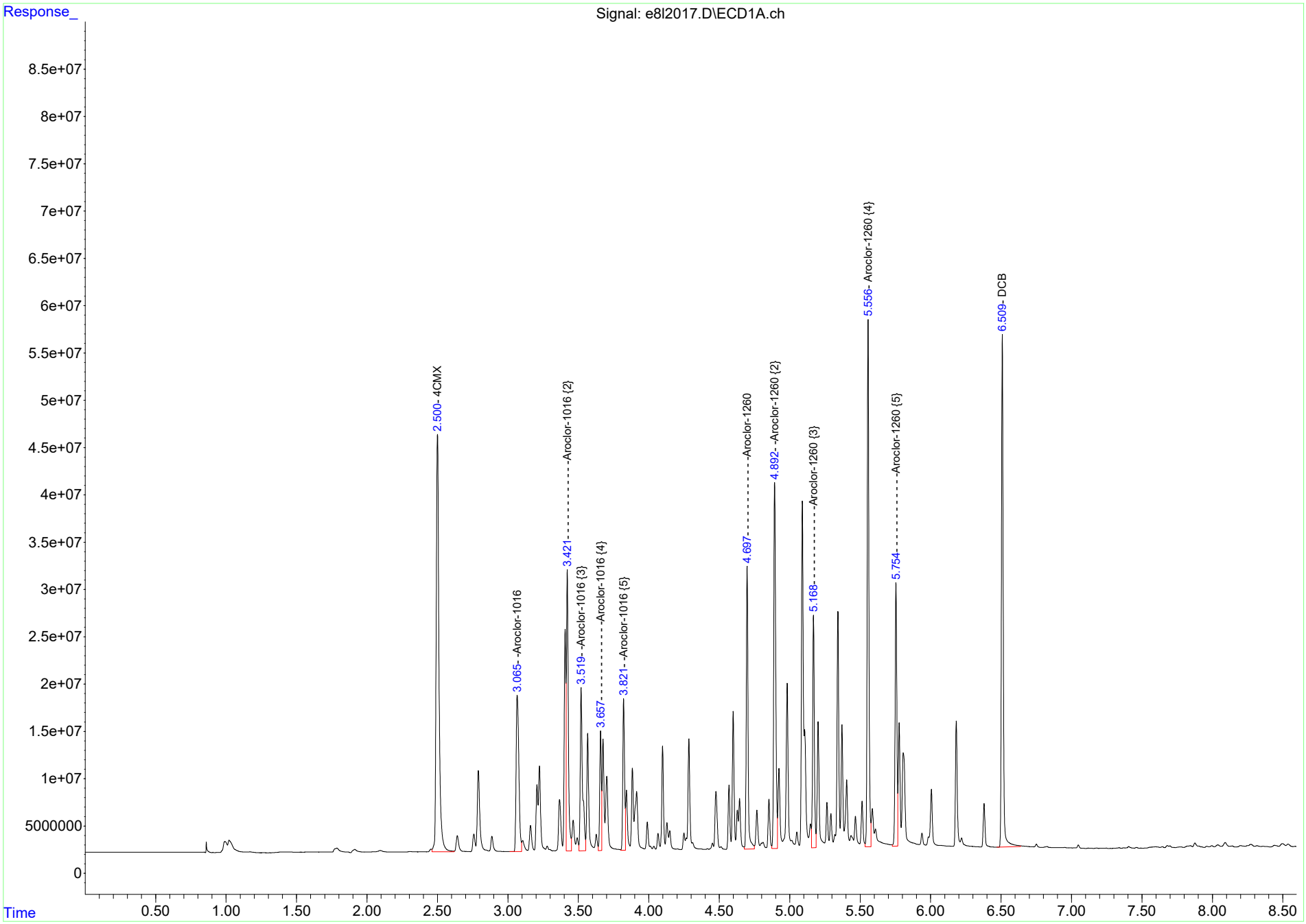
Quant Time: Dec 21 04:59:42 2022
Quant Method : D:\MSDCHEM\1\DATA\122022\ECD8_8082_122022.m
Quant Title : ECD8 SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1 Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um Signal #2 Info : 250 um

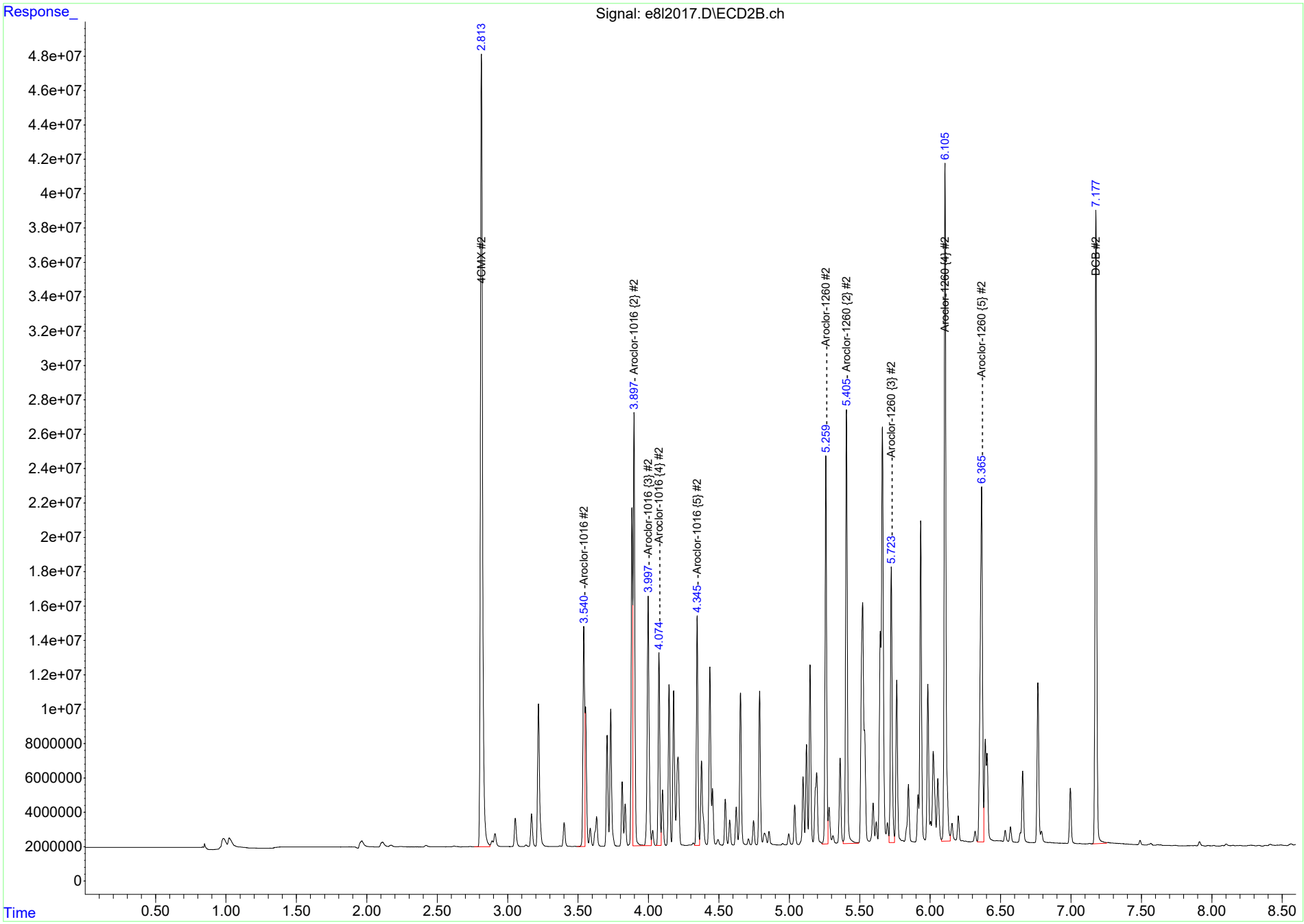
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.500	2.500	0.000	608353600	96.437	2.814	2.814	0.000	490318851	95.920
DCB	6.509	6.509	0.000	472468859	97.842	7.177	7.177	0.000	301391474	95.907
Target Compounds										
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016	3.066	3.066	0.000	224441121	977.479	3.541	3.541	0.000	106417113	966.965
Aroclor-1016 {2}	3.421	3.421	0.000	281114357	1009.918	3.897	3.897	0.000	199319662	1019.516
Aroclor-1016 {3}	3.520	3.520	0.000	189735745	986.765	3.998	3.998	0.000	134592971	984.596
Aroclor-1016 {4}	3.658	3.658	0.000	100306819	957.001	4.075	4.075	0.000	86478463	988.039
Aroclor-1016 {5}	3.821	3.821	0.000	136693800	978.110	4.346	4.346	0.000	103429534	972.313
Sum Aroclor-1016				932291842	4909.273				630237743	4931.429
Average Aroclor-1016					981.855					986.286
Aroclor-1260	4.698	4.698	0.000	257880336	1029.910	5.259	5.259	0.000	177506887	1023.697
Aroclor-1260 {2}	4.893	4.893	0.000	380596924	1069.096	5.406	5.406	0.000	209734806	1027.430
Aroclor-1260 {3}	5.169	5.169	0.000	202372132	857.631	5.724	5.724	0.000	134493883	840.358
Aroclor-1260 {4}	5.556	5.556	0.000	461761972	905.432	6.106	6.106	0.000	331116700	891.414
Aroclor-1260 {5}	5.754	5.754	0.000	238515670	983.079	6.365	6.365	0.000	236729462	894.285
Sum Aroclor-1260				1541127035	4845.147				1089581737	4677.183
Average Aroclor-1260					969.029					935.437

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122022\
Data File : e8l2017.D



Data Path : D:\MSDCHEM\1\DATA\122022\
Data File : e8l2017.D



ECD8_8082_122022.m Wed Dec 21 04:59:53 2022 Page: 3

Continuing Calibration Summary

Instrument ID: ECD8A.I_1

Client SDG: 2023-289

Injection Date: 22-DEC-22 09:12

Data File: 122222\e8l2203.D

Init. Cal. Date(s): NA

Lab Sample ID WAR221130-60

Method: 122222\ECD8_8082_122022.m

Column ID: Description: RTX-CLP

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Aroclor-1016	229612.26	219656.92	1000	-4.34	20		Averaged
Aroclor-1016(2)	278353.52	273326.06	1000	-1.81	20		Averaged
Aroclor-1016(3)	192280.65	186124.96	1000	-3.2	20		Averaged
Aroclor-1016(4)	104813.65	100499.59	1000	-4.12	20		Averaged
Aroclor-1016(5)	139753	135259.83	1000	-3.22	20		Averaged
Aroclor-1260	250391.12	245084.67	1000	-2.12	20		Averaged
Aroclor-1260(2)	355998.92	353066.64	1000	-0.82	20		Averaged
Aroclor-1260(3)	235966.51	235076.47	1000	-0.38	20		Averaged
Aroclor-1260(4)	509990.73	520061.9	1000	1.97	20		Averaged
Aroclor-1260(5)	242621.11	247406.13	1000	1.97	20		Averaged
4cmx(Surr)	6308312.46	5869812.1	100	-6.95	20		Averaged
Decachlorobiphenyl(Surr)	4828878.75	4543435.35	100	-5.91	20		Averaged

Continuing Calibration Summary

Client SDG: 2023-289

Instrument ID: ECD8A.I_2

Injection Date: 22-DEC-22 09:12

Data File: 122222\e8l2203.D

Init. Cal. Date(s): NA

Lab Sample ID WAR221130-60

Method: 122222\ECD8_8082_122022.m

Column ID: PEST2

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Aroclor-1016	110052.66	105806.69	1000	-3.86	20		Averaged
Aroclor-1016(2)	195504.25	195706.01	1000	0.1	20		Averaged
Aroclor-1016(3)	136698.66	132468.43	1000	-3.09	20		Averaged
Aroclor-1016(4)	87525.35	85282.03	1000	-2.56	20		Averaged
Aroclor-1016(5)	106374.77	102929.01	1000	-3.24	20		Averaged
Aroclor-1260	173397.91	171163.92	1000	-1.29	20		Averaged
Aroclor-1260(2)	204135.42	202508.23	1000	-0.8	20		Averaged
Aroclor-1260(3)	160043.58	156488.79	1000	-2.22	20		Averaged
Aroclor-1260(4)	371451.29	374520.28	1000	0.83	20		Averaged
Aroclor-1260(5)	264713.64	262773.25	1000	-0.73	20		Averaged
4cmx(Surr)	5111738.57	4730457.75	100	-7.46	20		Averaged
Decachlorobiphenyl(Surr)	3142527.08	2954591.26	100	-5.98	20		Averaged

Quantitation Report
GEL Laboratories, LLC

JXM 12/22/2022

JC 12/23/2022

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2203.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Dec 2022 09:12 (#1); 22 Dec 2022 09:12 (#2)
Operator : JXM InstName : ECD8
Sample : |WAR221130-60|CCV|1|SVA|1|1660
Misc : |MIX[A]
ALS Vial : 3 Sample Multiplier: 1

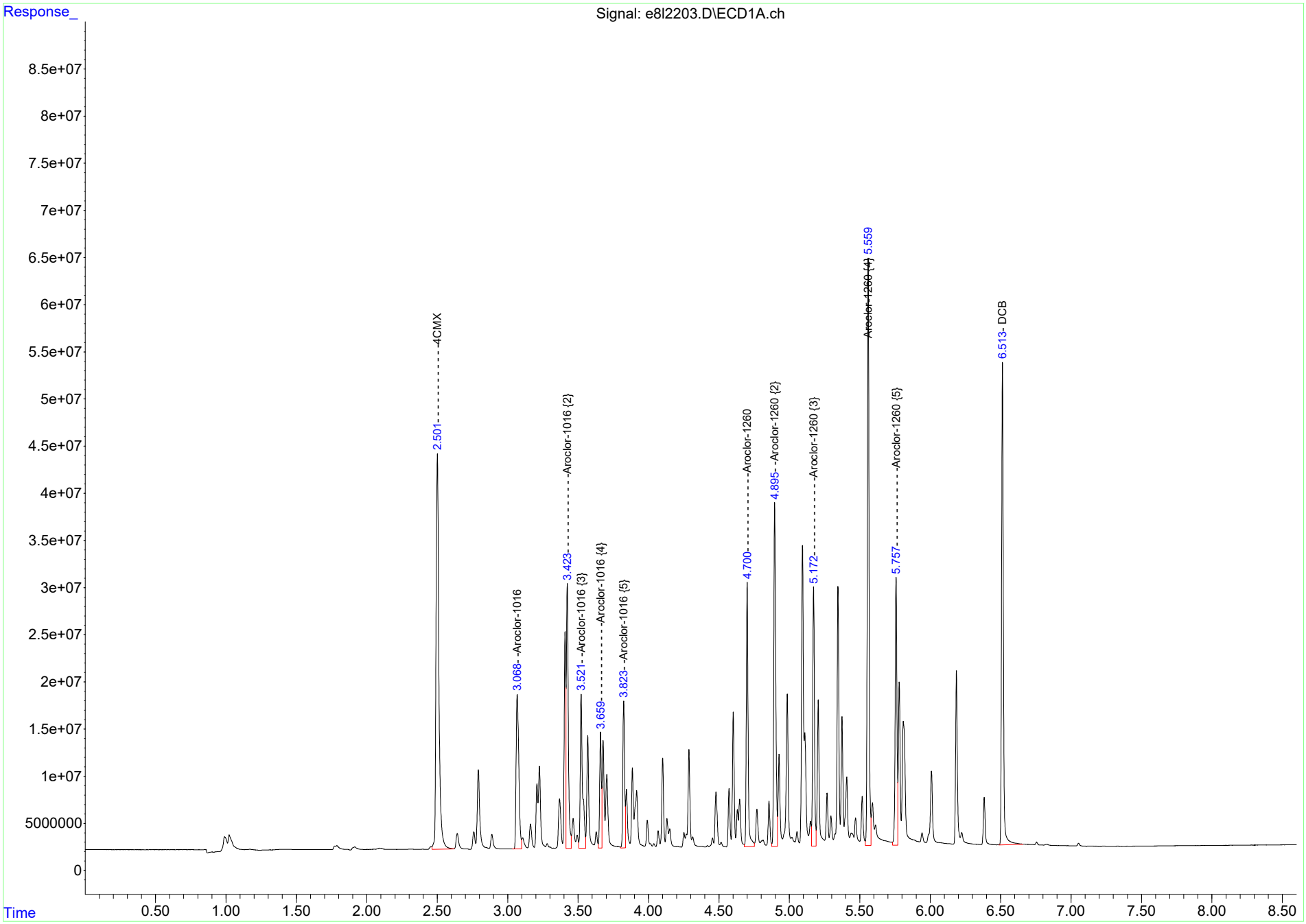
Quant Time: Dec 22 09:32:52 2022
Quant Method : D:\MSDCHEM\1\DATA\122222\ECD8_8082_122022.m
Quant Title : ECD8 SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1 Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.502	2.502	0.000	586981210	93.049	2.815	2.815	0.000	473045775	92.541
DCB	6.513	6.513	0.000	454343535	94.089	7.181	7.181	0.000	295459126	94.020
Target Compounds										
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016	3.068	3.068	0.000	219656918	956.643	3.542	3.542	0.000	105806692	961.419
Aroclor-1016 {2}	3.423	3.423	0.000	273326055	981.939	3.899	3.899	0.000	195706013	1001.032
Aroclor-1016 {3}	3.522	3.522	0.000	186124956	967.986	3.999	3.999	0.000	132468427	969.054
Aroclor-1016 {4}	3.659	3.659	0.000	100499588	958.841	4.076	4.076	0.000	85282028	974.369
Aroclor-1016 {5}	3.824	3.824	0.000	135259831	967.849	4.348	4.348	0.000	102929005	967.607
Sum Aroclor-1016				914867349	4833.257				622192165	4873.482
Average Aroclor-1016					966.651					974.696
Aroclor-1260	4.701	4.701	0.000	245084665	978.807	5.263	5.263	0.000	171163915	987.116
Aroclor-1260 {2}	4.896	4.896	0.000	353066637	991.763	5.409	5.409	0.000	202508226	992.029
Aroclor-1260 {3}	5.172	5.172	0.000	235076469	996.228	5.726	5.726	0.000	156488786	977.789
Aroclor-1260 {4}	5.560	5.560	0.000	520061904	1019.748	6.108	6.108	0.000	374520284	1008.262
Aroclor-1260 {5}	5.758	5.758	0.000	247406133	1019.722	6.368	6.368	0.000	262773252	992.670
Sum Aroclor-1260				1600695808	5006.269				1167454464	4957.866
Average Aroclor-1260					1001.254					991.573

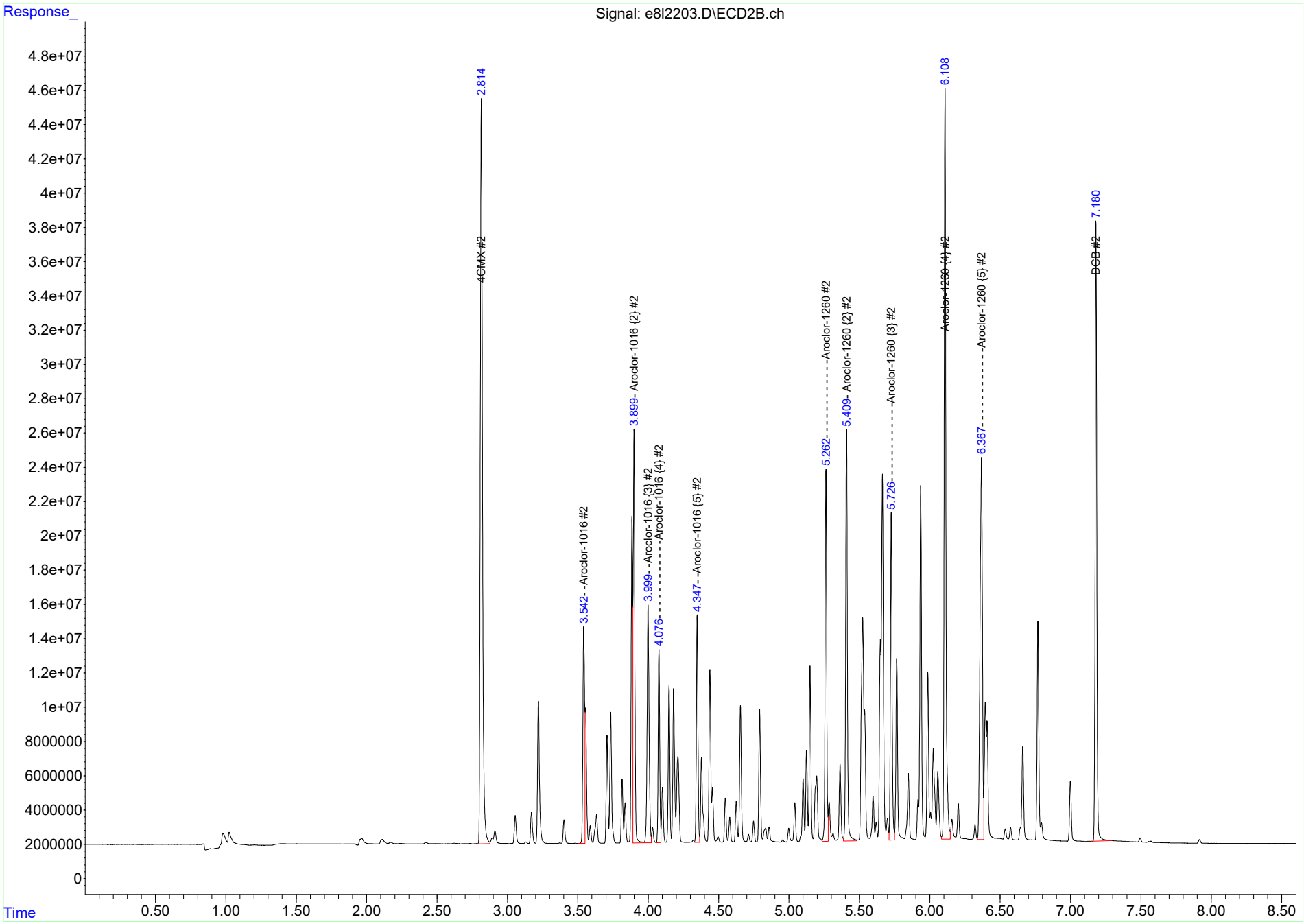
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2203.D



ECD8_8082_122022.m Thu Dec 22 10:03:31 2022 Page: 2

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2203.D



Quantitation Report
GEL Laboratories, LLC

Jxm 12/22/2022

JC 12/23/2022

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2204.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Dec 2022 09:24 (#1); 22 Dec 2022 09:24 (#2)
Operator : JXM InstName : ECD8
Sample : |WAR220811-54|CCV|1|SVA|1|1254
Misc : |MIX[B]
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 22 09:34:15 2022
Quant Method : D:\MSDCHEM\1\DATA\122222\ECD8_8082_122022.m
Quant Title : ECD8 SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1 Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um Signal #2 Info : 250 um

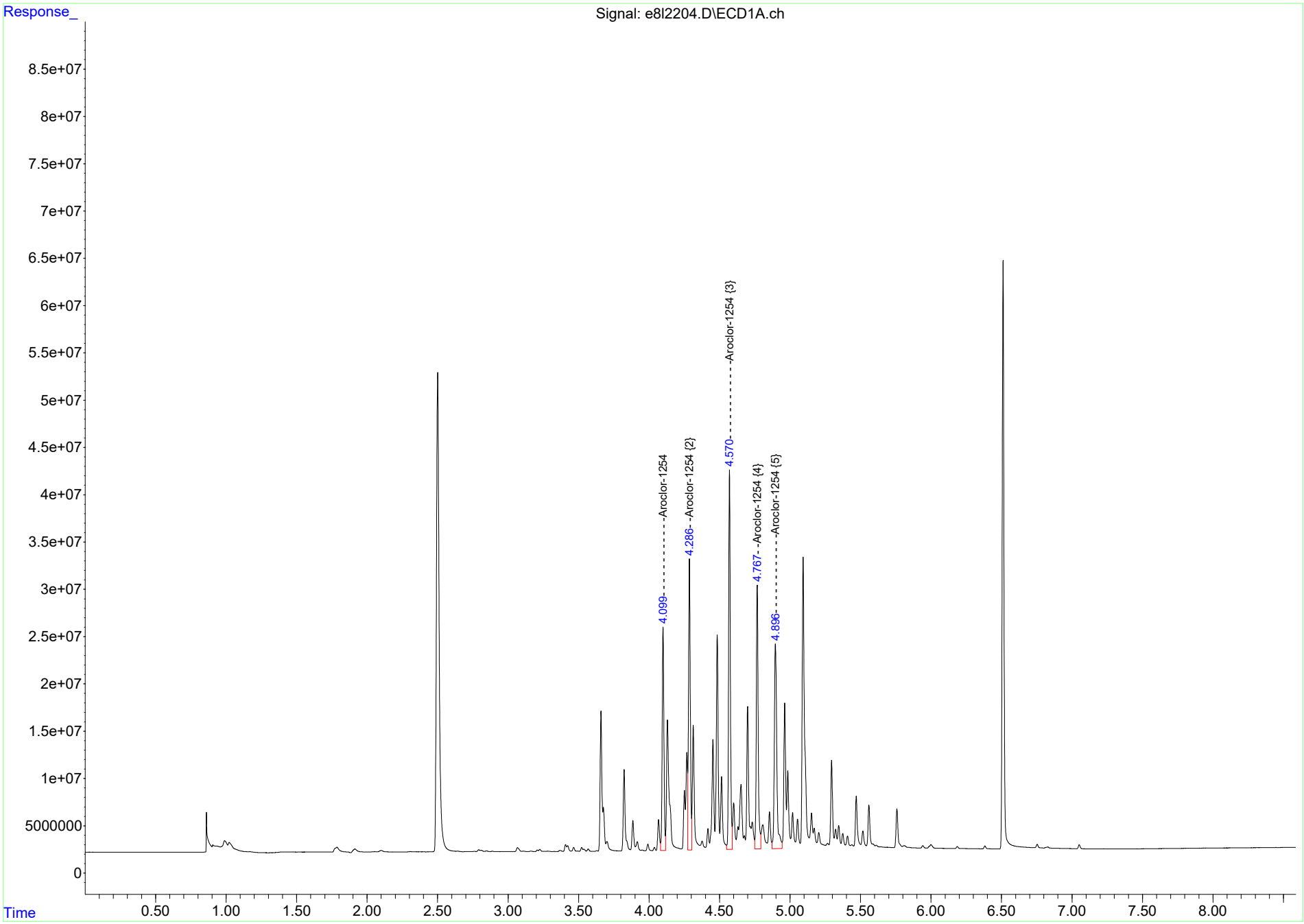
System Monitoring Compounds

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1254	4.099	4.099	0.000	202496734	960.508	4.655	4.655	0.000	165845515	997.961
Aroclor-1254 {2}	4.286	4.286	0.000	268760845	1000.483	4.790	4.790	0.000	177415618	981.250
Aroclor-1254 {3}	4.571	4.571	0.000	341194995	985.102	5.123	5.123	0.000	268946955	1000.642
Aroclor-1254 {4}	4.767	4.767	0.000	256989500	1020.935	5.284	5.284	0.000	188368418	1034.096
Aroclor-1254 {5}	4.896	4.896	0.000	266393287	971.933	5.407	5.407	0.000	119460412	983.582
Sum Aroclor-1254				1335835360	4938.960				920036918	4997.530
Average Aroclor-1254					987.792					999.506

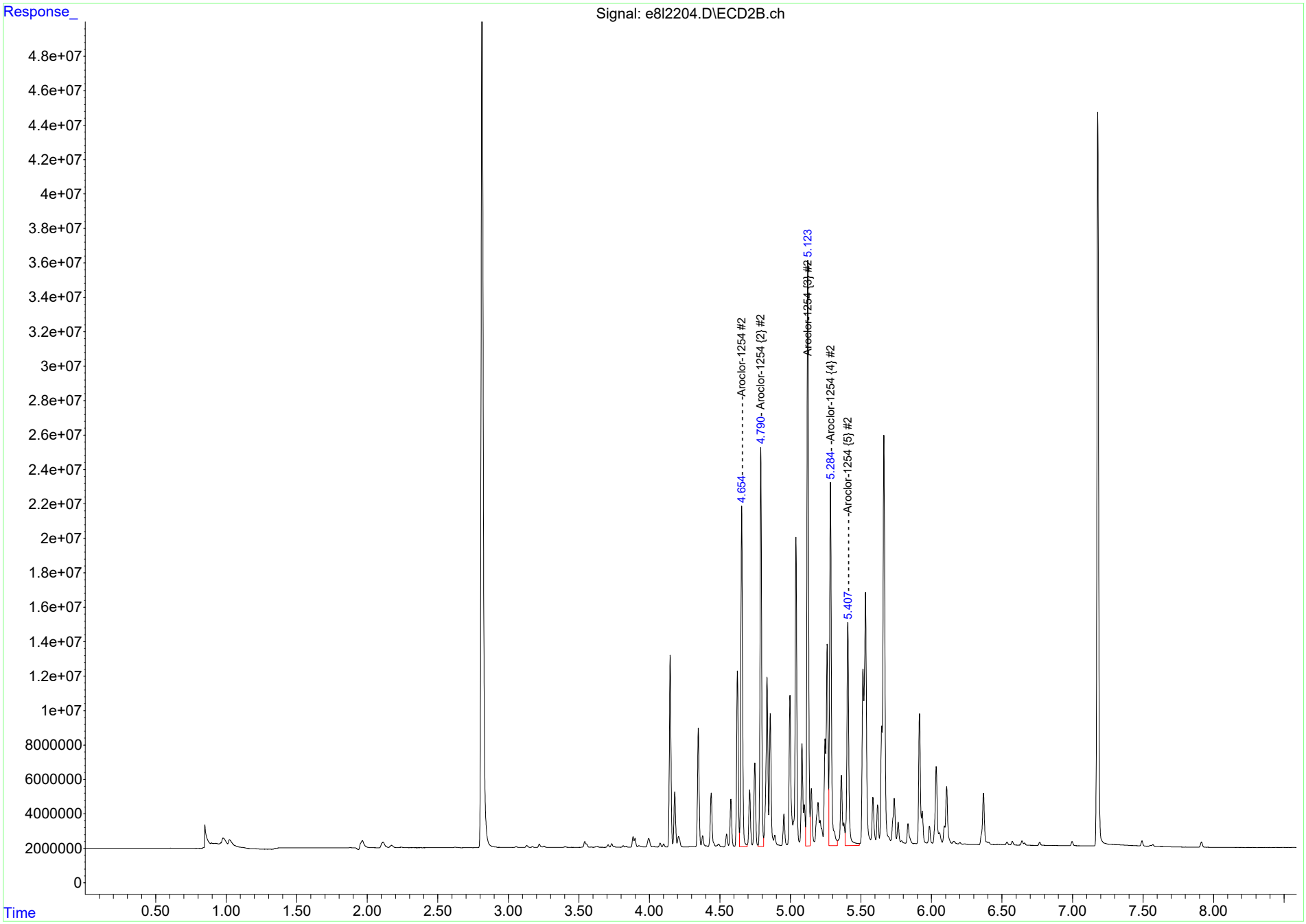
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2204.D



ECD8_8082_122022.m Thu Dec 22 10:03:36 2022 Page: 2

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2204.D



ECD8_8082_122022.m Thu Dec 22 10:03:36 2022 Page: 3

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2205.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On   : 22 Dec 2022 09:37 (#1); 22 Dec 2022 09:37 (#2)
Operator : JXM   InstName : ECD8
Sample   : |WAR221206-42|CCV|1|SVA|1|1242
Misc   : |MIX[D]
ALS Vial : 5   Sample Multiplier: 1

Jm 12/22/2022

JC 12/23/2022

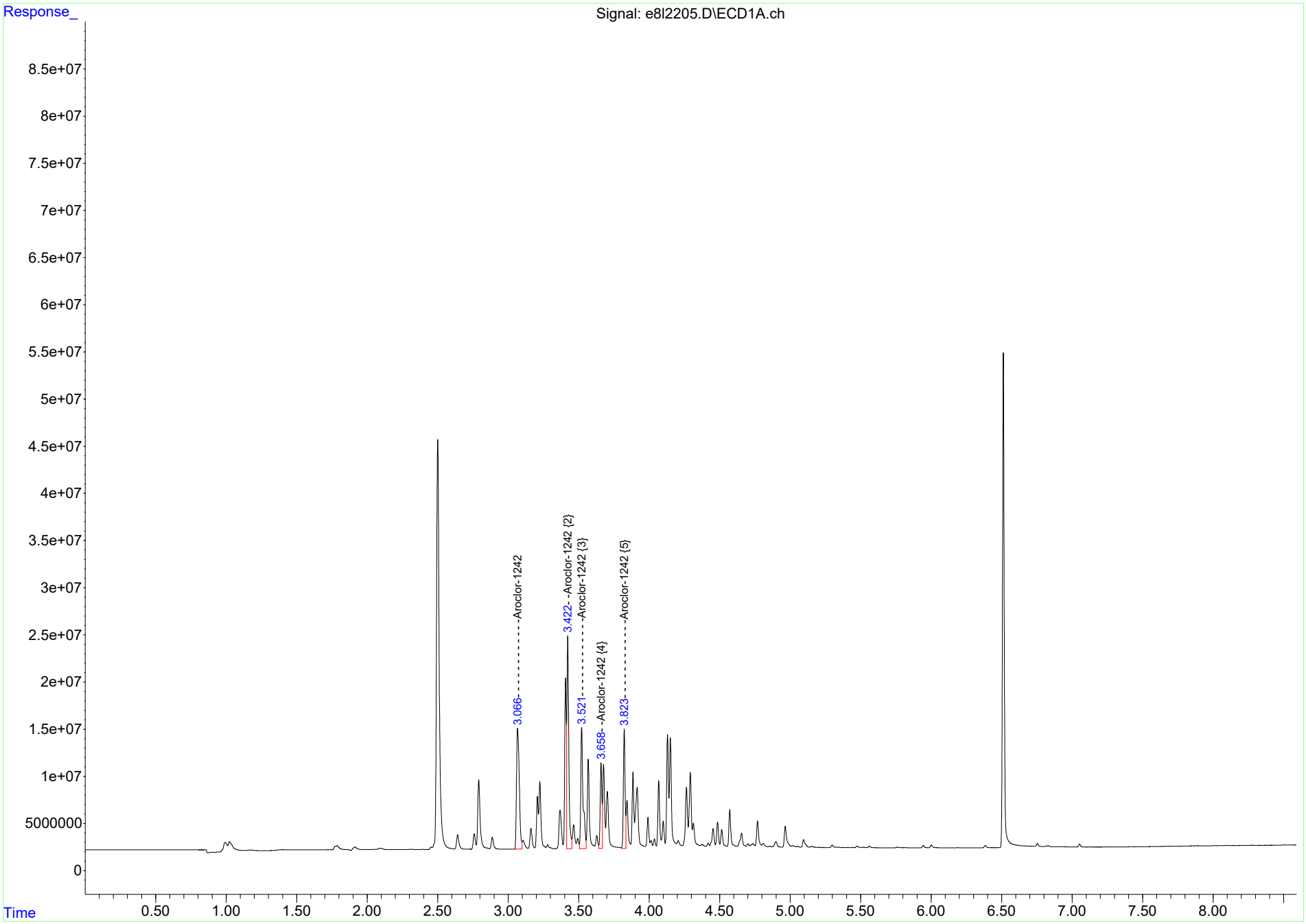
Quant Time: Dec 22 10:02:33 2022
Quant Method : D:\MSDCHEM\1\DATA\122222\ECD8_8082_122022.m
Quant Title : ECD8   SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1   Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um   Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
Target Compounds										
Aroclor-1242	3.067	3.067	0.000	172678367	948.713	3.542	3.542	0.000	85084578	971.120
Aroclor-1242 {2}	3.423	3.423	0.000	211880516	975.381	3.898	3.898	0.000	151620757	1005.573
Aroclor-1242 {3}	3.521	3.521	0.000	145275220	963.118	3.999	3.999	0.000	104042267	959.442
Aroclor-1242 {4}	3.659	3.659	0.000	73895740	960.730	4.076	4.076	0.000	66875095	970.191
Aroclor-1242 {5}	3.823	3.823	0.000	106784352	961.281	4.347	4.347	0.000	81864668	959.395
Sum Aroclor-1242				710514194	4809.223				489487364	4865.721
Average Aroclor-1242					961.845					973.144

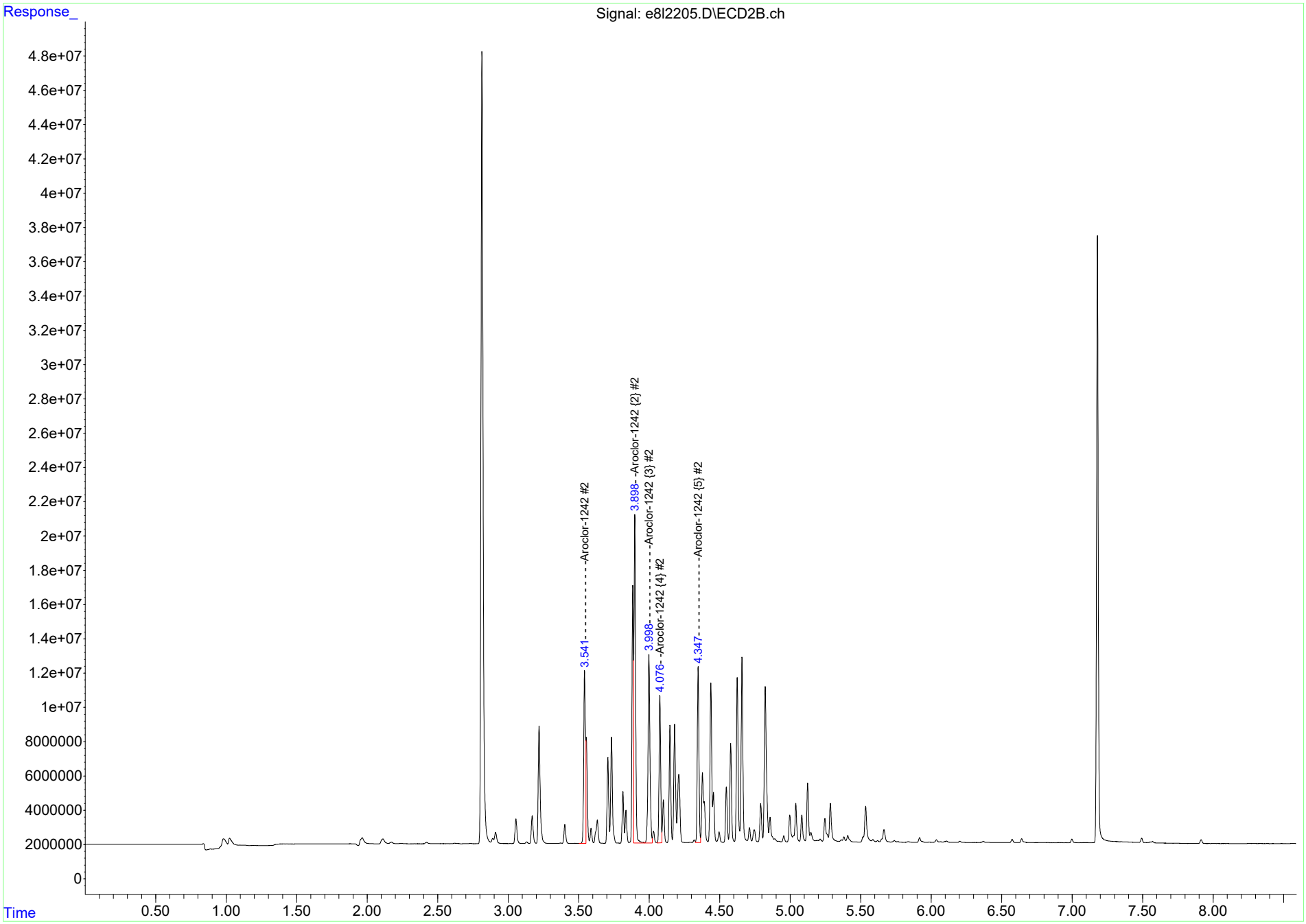
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2205.D



ECD8_8082_122022.m Thu Dec 22 10:03:41 2022 Page: 2

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2205.D



ECD8_8082_122022.m Thu Dec 22 10:03:41 2022 Page: 3

Quantitation Report
GEL Laboratories, LLC

Jm 12/22/2022

JC 12/23/2022

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2206.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Dec 2022 09:49 (#1); 22 Dec 2022 09:49 (#2)
Operator : JXM InstName : ECD8
Sample : |WAR221216-48|CCV|1|SVA|1|1248
Misc : |MIX[E]
ALS Vial : 6 Sample Multiplier: 1

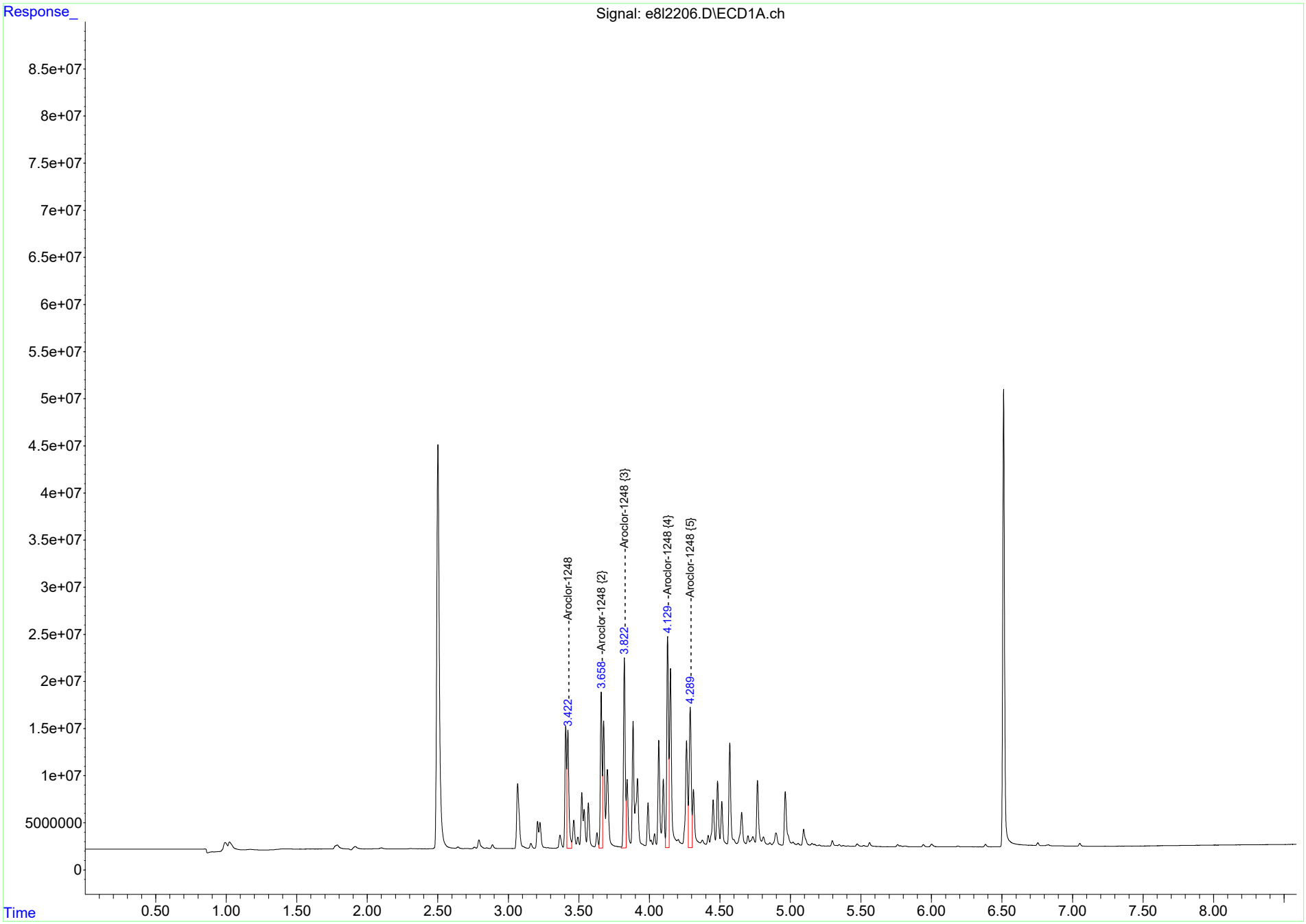
Quant Time: Dec 22 10:02:59 2022
Quant Method : D:\MSDCHEM\1\DATA\122222\ECD8_8082_122022.m
Quant Title : ECD8 SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1 Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
Target Compounds										
Aroclor-1248	3.423	3.423	0.000	115783358	1027.070	3.898	3.898	0.000	82554388	1095.545
Aroclor-1248 {2}	3.659	3.659	0.000	132562908	1067.223	4.147	4.147	0.000	95631333	1079.639
Aroclor-1248 {3}	3.822	3.822	0.000	170363342	1073.833	4.347	4.347	0.000	129640034	1094.007
Aroclor-1248 {4}	4.129	4.129	0.000	190859893	1080.312	4.624	4.624	0.000	140893873	1110.540
Aroclor-1248 {5}	4.290	4.290	0.000	154153512	1068.806	4.823	4.823	0.000	159938372	1116.570
Sum Aroclor-1248				763723013	5317.245				608658001	5496.302
Average Aroclor-1248					1063.449					1099.260

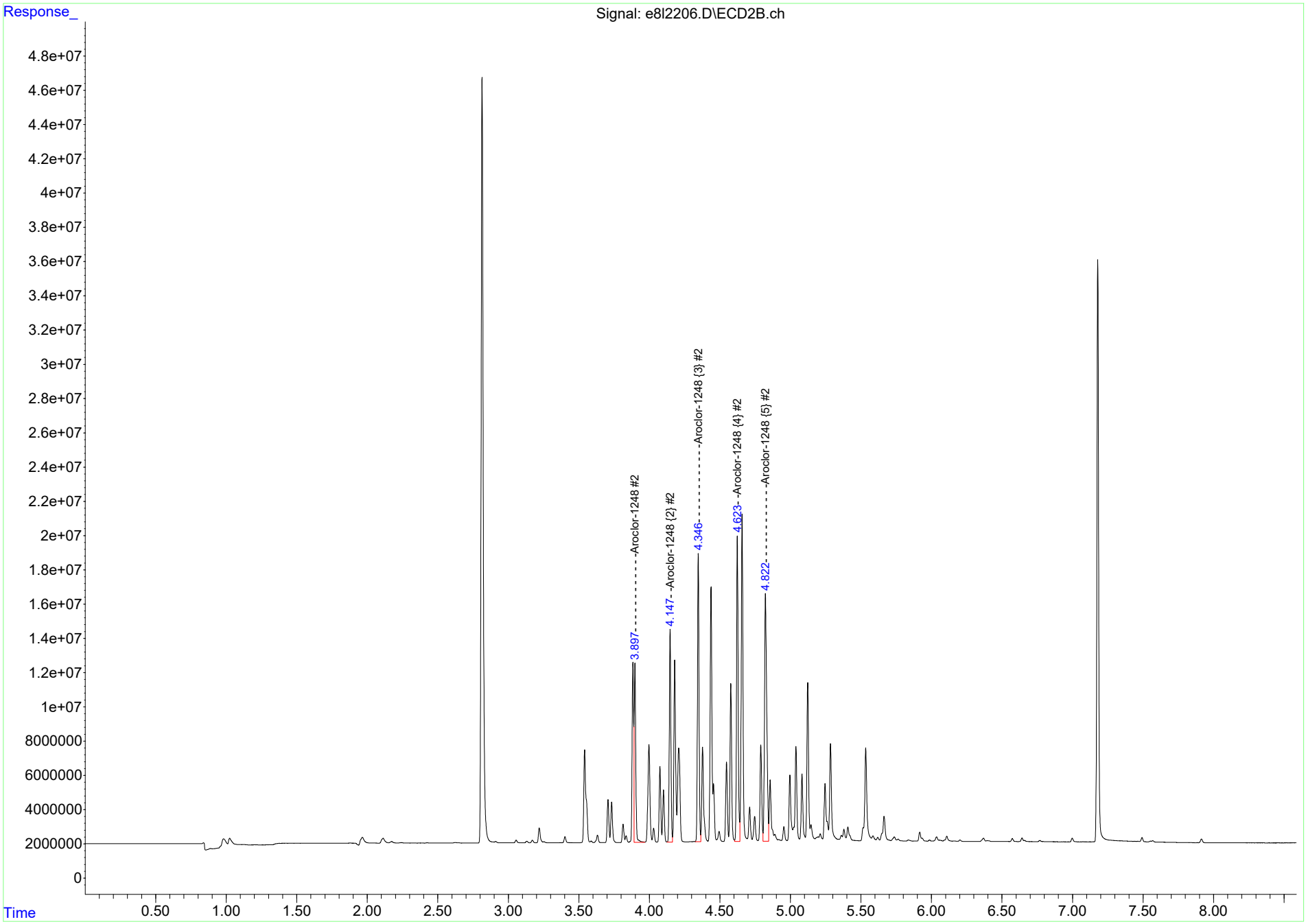
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2206.D



ECD8_8082_122022.m Thu Dec 22 10:03:46 2022 Page: 2

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2206.D



ECD8_8082_122022.m Thu Dec 22 10:03:46 2022 Page: 3

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2209.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Dec 2022 10:26 (#1); 22 Dec 2022 10:26 (#2)
Operator : JXM InstName : ECD8
Sample : |WAR221209-32|CCV|1|SVA|1|1232
Misc : |MIX[F]
ALS Vial : 9 Sample Multiplier: 1

Jm 12/23/2022

JC 12/23/2022

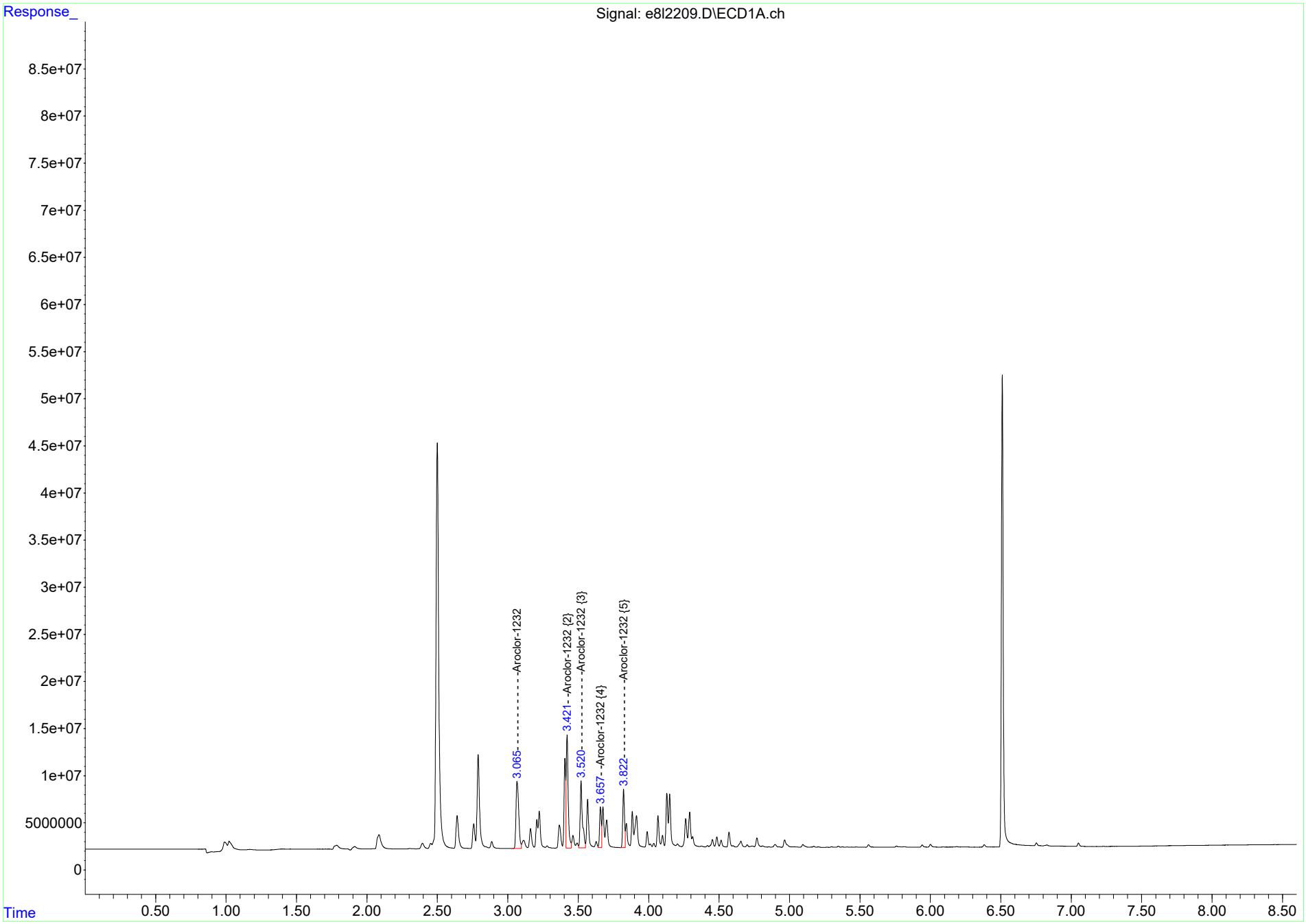
Quant Time: Dec 22 10:42:15 2022
Quant Method : D:\MSDCHEM\1\DATA\122222\ECD8_8082_122022.m
Quant Title : ECD8 SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1 Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
Target Compounds										
Aroclor-1232	3.066	3.066	0.000	96298455	1033.738	3.540	3.540	0.000	50210453	1046.773
Aroclor-1232 {2}	3.421	3.421	0.000	116055291	1052.456	3.897	3.897	0.000	83771291	1146.095
Aroclor-1232 {3}	3.520	3.520	0.000	79358067	1064.453	3.998	3.998	0.000	58318664	1070.130
Aroclor-1232 {4}	3.658	3.658	0.000	35654810	1053.711	4.075	4.075	0.000	37553654	1059.234
Aroclor-1232 {5}	3.822	3.822	0.000	52270782	1046.352	4.346	4.346	0.000	40698004	1049.231
Sum Aroclor-1232				379637404	5250.708				270552066	5371.463
Average Aroclor-1232					1050.142					1074.293

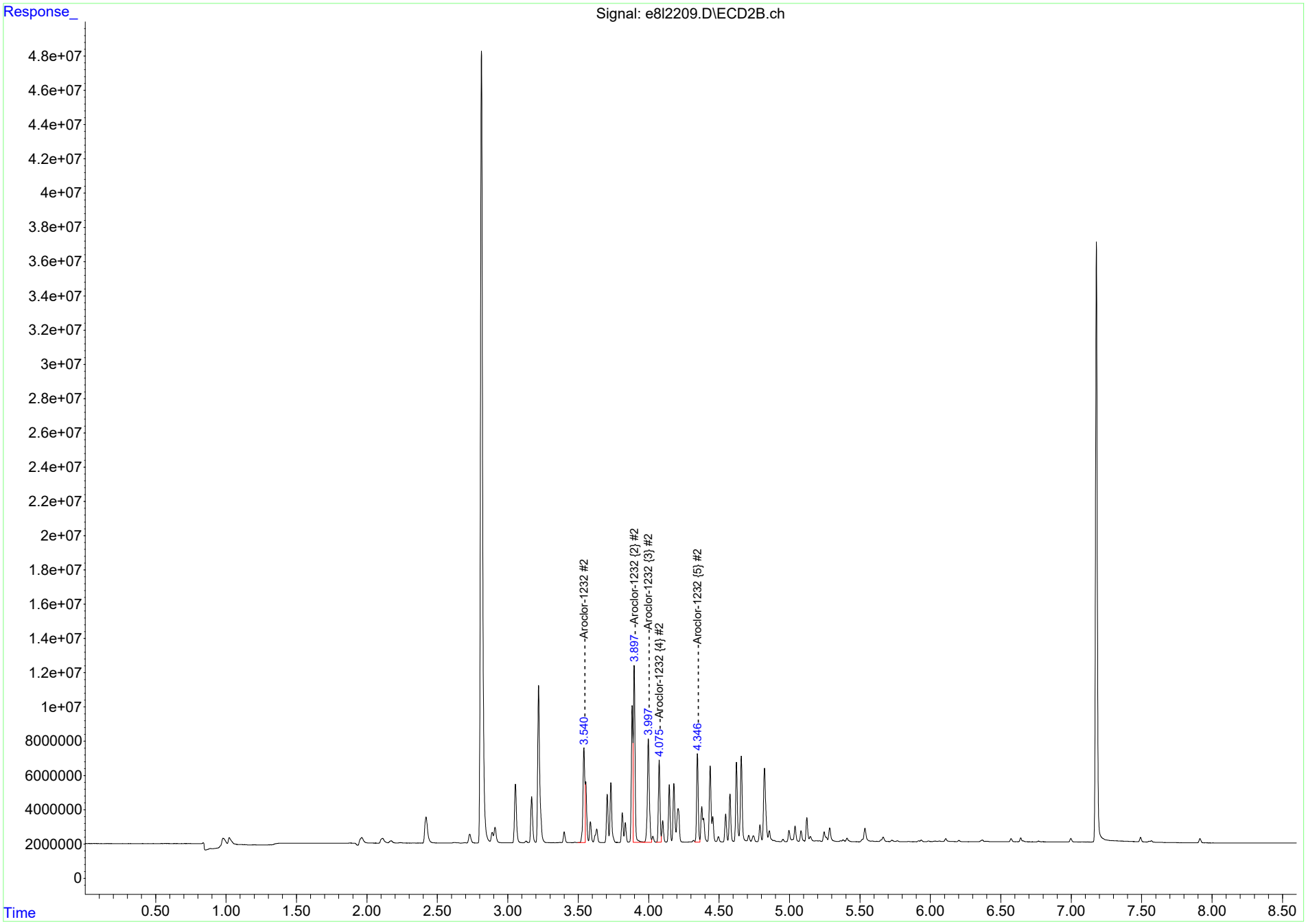
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2209.D



ECD8_8082_122022.m Thu Dec 22 10:42:24 2022 Page: 2

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2209.D



ECD8_8082_122022.m Thu Dec 22 10:42:24 2022 Page: 3

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2210.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Dec 2022 10:38 (#1); 22 Dec 2022 10:38 (#2)
Operator : JXM InstName : ECD8
Sample : |WAR221219-21|CCV|1|SVA|1|1221
Misc : |MIX[J]
ALS Vial : 10 Sample Multiplier: 1

Jm 12/23/2022

JC 12/23/2022

Quant Time: Dec 22 11:03:58 2022
Quant Method : D:\MSDCHEM\1\DATA\122222\ECD8_8082_122022.m
Quant Title : ECD8 SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1 Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um Signal #2 Info : 250 um

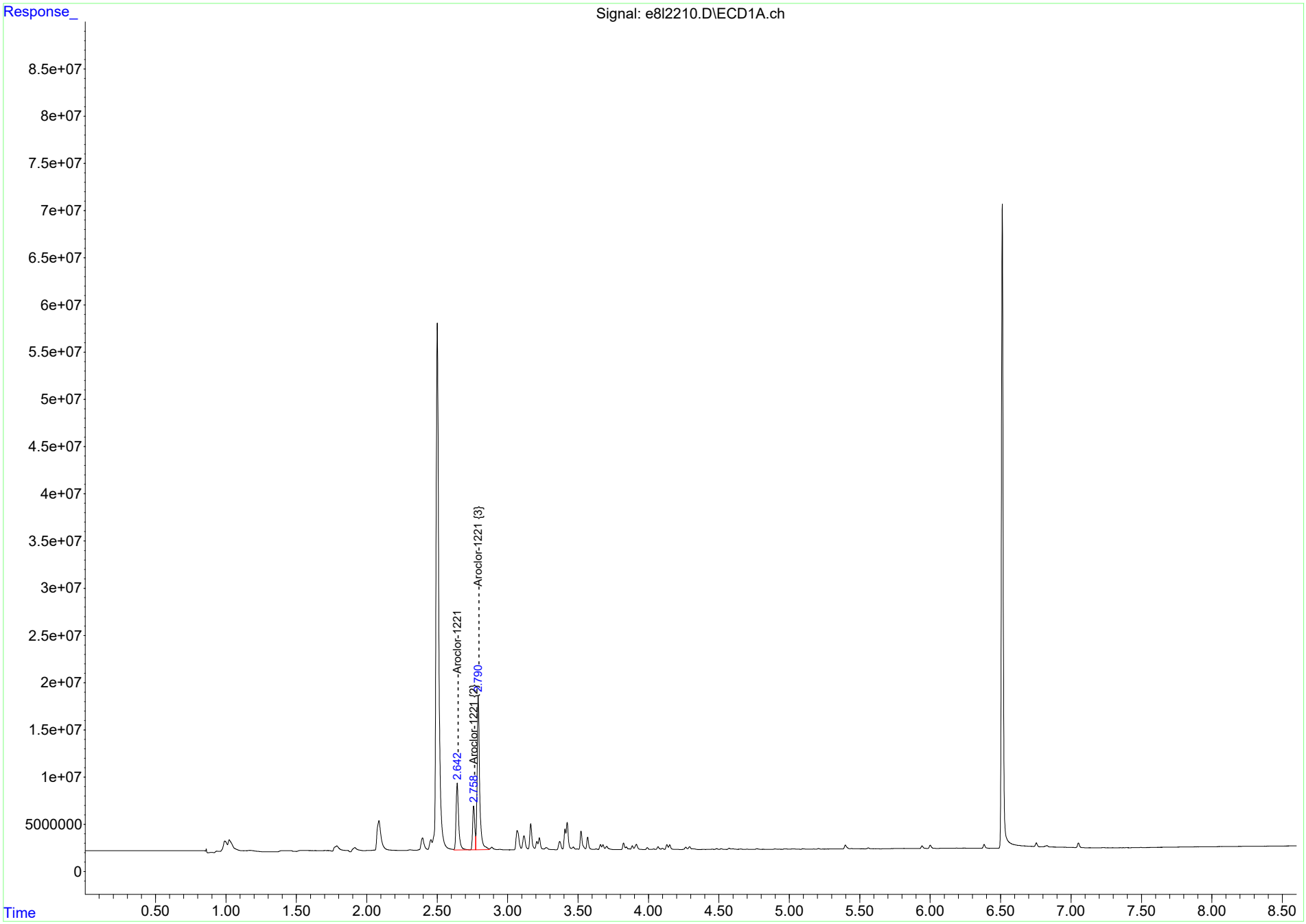
System Monitoring Compounds

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1221	2.642	2.642	0.000	89241279	1480.865 A	3.055	3.055	0.000	66490722	1538.408 A
Aroclor-1221 {2}	2.759	2.759	0.000	49199183	1461.068 A	3.170	3.170	0.000	43382822	1501.100 A
Aroclor-1221 {3}	2.791	2.791	0.000	201809983	1464.760 A	3.220	3.220	0.000	155157362	1542.968 A
Sum Aroclor-1221				340250446	4406.693				265030906	4582.477
Average Aroclor-1221					1468.898					1527.492

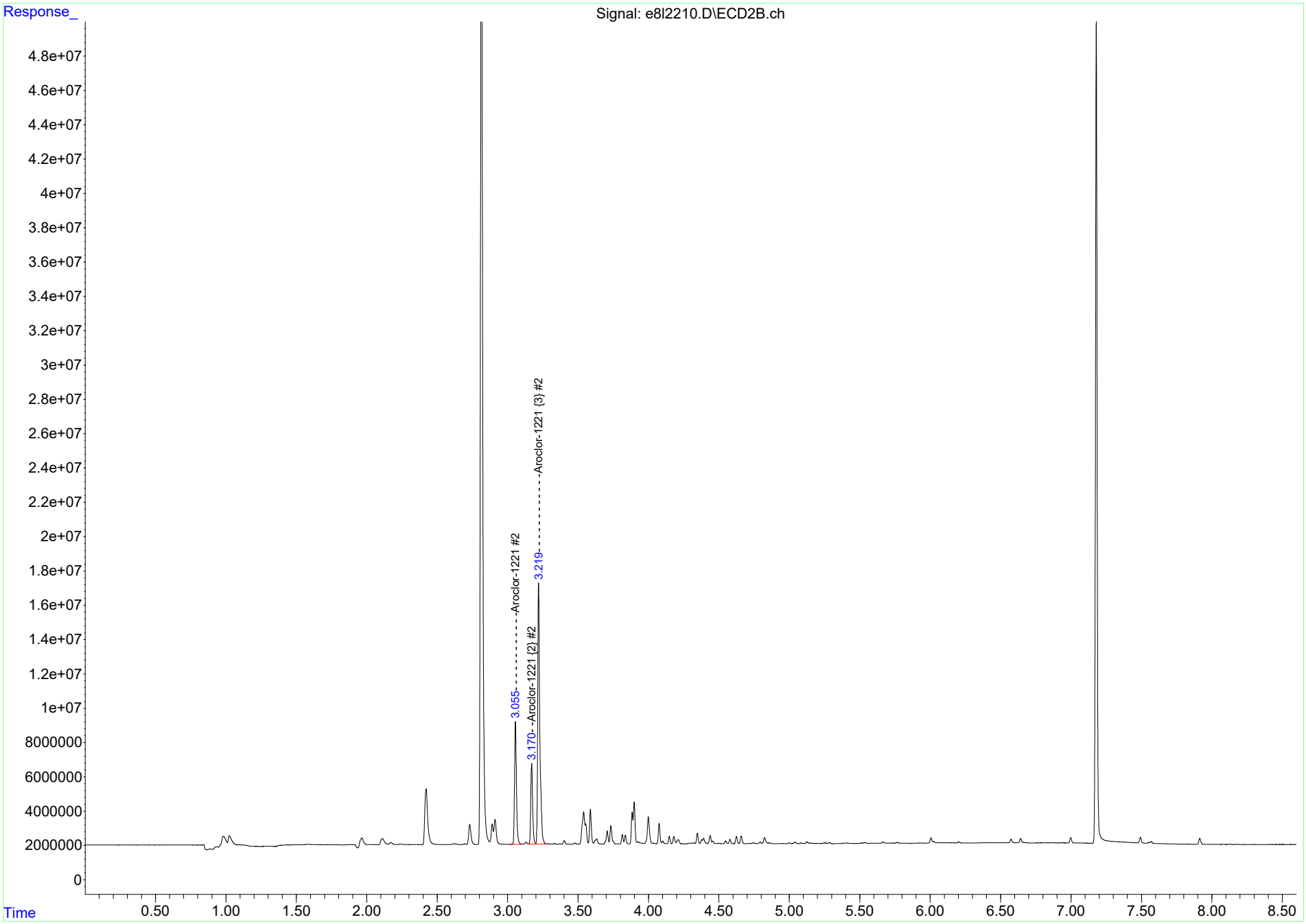
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2210.D



ECD8_8082_122022.m Thu Dec 22 11:04:06 2022 Page: 2

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2210.D



ECD8_8082_122022.m Thu Dec 22 11:04:07 2022 Page: 3

Continuing Calibration Summary

Instrument ID: ECD8A.I_1

Client SDG: 2023-289

Injection Date: 22-DEC-22 14:49

Data File: 122222\e8l2221.D

Init. Cal. Date(s): NA

Lab Sample ID WAR221130-60

Method: 122222\ECD8_8082_122022.m

Column ID: Description: RTX-CLP

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Aroclor-1016	229612.26	223099.42	1000	-2.84	20		Averaged
Aroclor-1016(2)	278353.52	278833.71	1000	0.17	20		Averaged
Aroclor-1016(3)	192280.65	155310.7	1000	-19.23	20		Averaged
Aroclor-1016(4)	104813.65	104727.93	1000	-0.08	20		Averaged
Aroclor-1016(5)	139753	141033.91	1000	0.92	20		Averaged
Aroclor-1260	250391.12	254322.4	1000	1.57	20		Averaged
Aroclor-1260(2)	355998.92	378491.31	1000	6.32	20		Averaged
Aroclor-1260(3)	235966.51	246766.88	1000	4.58	20		Averaged
Aroclor-1260(4)	509990.73	558571.56	1000	9.53	20		Averaged
Aroclor-1260(5)	242621.11	273542.35	1000	12.74	20		Averaged
4cmx(Surr)	6308312.46	5914143.57	100	-6.25	20		Averaged
Decachlorobiphenyl(Surr)	4828878.75	4725966.91	100	-2.13	20		Averaged

Continuing Calibration Summary

Client SDG: 2023-289

Instrument ID: ECD8A.I_2

Injection Date: 22-DEC-22 14:49

Data File: 122222\e8l2221.D

Init. Cal. Date(s): NA

Lab Sample ID WAR221130-60

Method: 122222\ECD8_8082_122022.m

Column ID: PEST2

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Aroclor-1016	110052.66	109134.78	1000	-0.83	20		Averaged
Aroclor-1016(2)	195504.25	206437.82	1000	5.59	20		Averaged
Aroclor-1016(3)	136698.66	139813.47	1000	2.28	20		Averaged
Aroclor-1016(4)	87525.35	90860.84	1000	3.81	20		Averaged
Aroclor-1016(5)	106374.77	108129.71	1000	1.65	20		Averaged
Aroclor-1260	173397.91	181020.73	1000	4.4	20		Averaged
Aroclor-1260(2)	204135.42	215126.77	1000	5.38	20		Averaged
Aroclor-1260(3)	160043.58	164892.52	1000	3.03	20		Averaged
Aroclor-1260(4)	371451.29	402097.27	1000	8.25	20		Averaged
Aroclor-1260(5)	264713.64	284965.55	1000	7.65	20		Averaged
4cmx(Surr)	5111738.57	4850017.58	100	-5.12	20		Averaged
Decachlorobiphenyl(Surr)	3142527.08	3047910.51	100	-3.01	20		Averaged

Quantitation Report
GEL Laboratories, LLC

JM 12/23/2022

JC 12/23/2022

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2221.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Dec 2022 14:49 (#1); 22 Dec 2022 14:49 (#2)
Operator : JXM InstName : ECD8
Sample : |WAR221130-60|CCV|1|SVA|1|1660
Misc : |MIX[A]
ALS Vial : 21 Sample Multiplier: 1

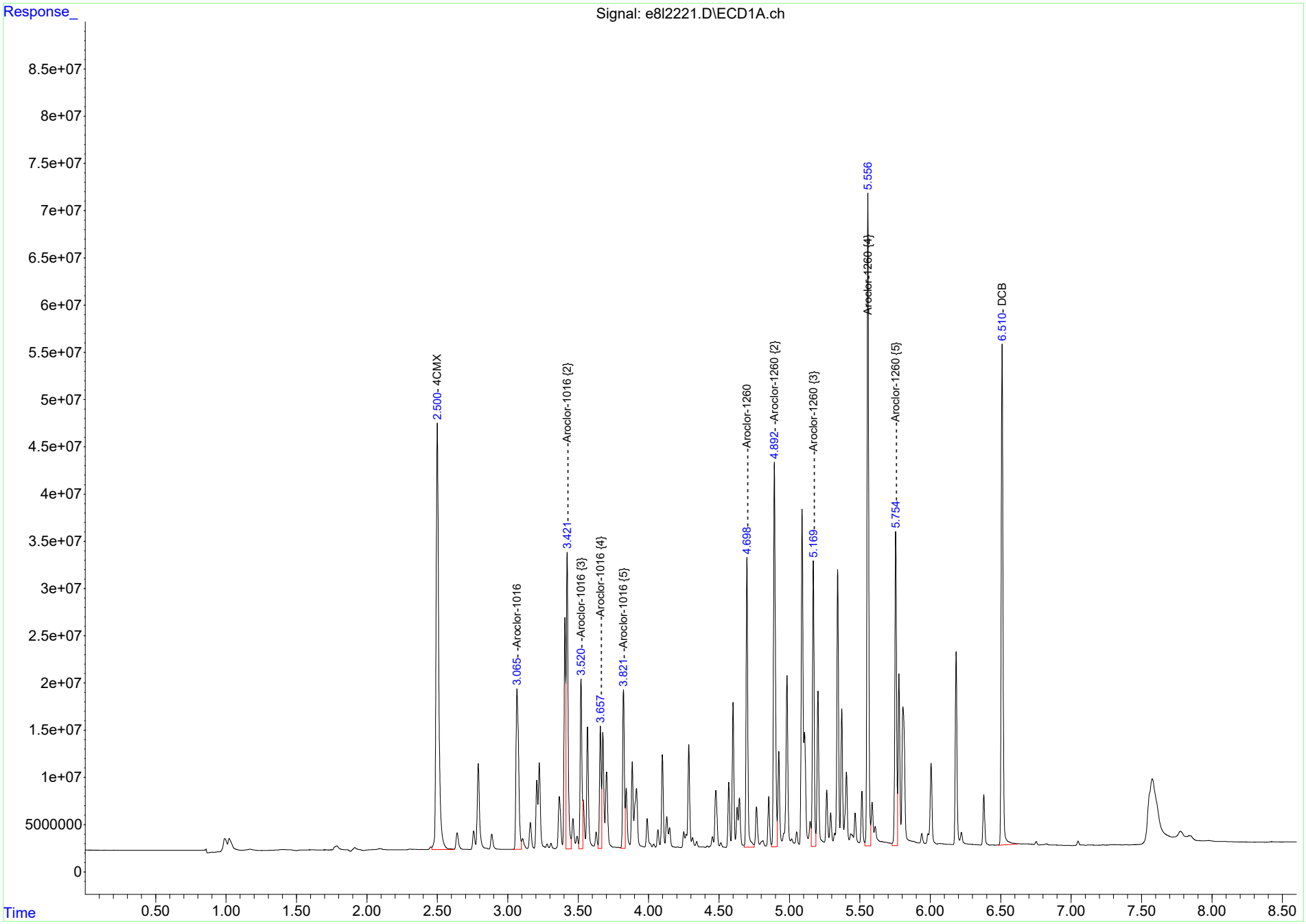
Quant Time: Dec 22 15:43:01 2022
Quant Method : D:\MSDCHEM\1\DATA\122222\ECD8_8082_122022.m
Quant Title : ECD8 SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1 Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.502	2.500	-0.002	591414357	93.752	2.815	2.814	-0.001	485001758	94.880
DCB	6.513	6.510	-0.003	472596691	97.869	7.181	7.178	-0.003	304791051	96.989
Target Compounds										
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016	3.068	3.066	-0.002	223099423	971.635	3.542	3.541	-0.001	109134784	991.660
Aroclor-1016 {2}	3.423	3.422	-0.001	278833708	1001.725	3.899	3.898	-0.001	206437818	1055.925
Aroclor-1016 {3}	3.522	3.520	-0.002	155310697	807.729	3.999	3.998	-0.001	139813469	1022.786
Aroclor-1016 {4}	3.659	3.658	-0.001	104727928	999.182	4.076	4.075	-0.001	90860840	1038.109
Aroclor-1016 {5}	3.824	3.821	-0.003	141033905	1009.165	4.348	4.346	-0.002	108129712	1016.498
Sum Aroclor-1016				903005660	4789.437				654376623	5124.977
Average Aroclor-1016					957.887					1024.995
Aroclor-1260	4.701	4.698	-0.003	254322402	1015.701	5.263	5.260	-0.003	181020733	1043.961
Aroclor-1260 {2}	4.896	4.893	-0.003	378491305	1063.181	5.409	5.406	-0.003	215126765	1053.843
Aroclor-1260 {3}	5.172	5.169	-0.003	246766880	1045.771	5.726	5.724	-0.002	164892523	1030.298
Aroclor-1260 {4}	5.560	5.557	-0.003	558571564	1095.258	6.108	6.106	-0.002	402097268	1082.503
Aroclor-1260 {5}	5.758	5.754	-0.004	273542352	1127.447	6.368	6.365	-0.003	284965551	1076.505
Sum Aroclor-1260				1711694503	5347.357				1248102839	5287.111
Average Aroclor-1260					1069.471					1057.422

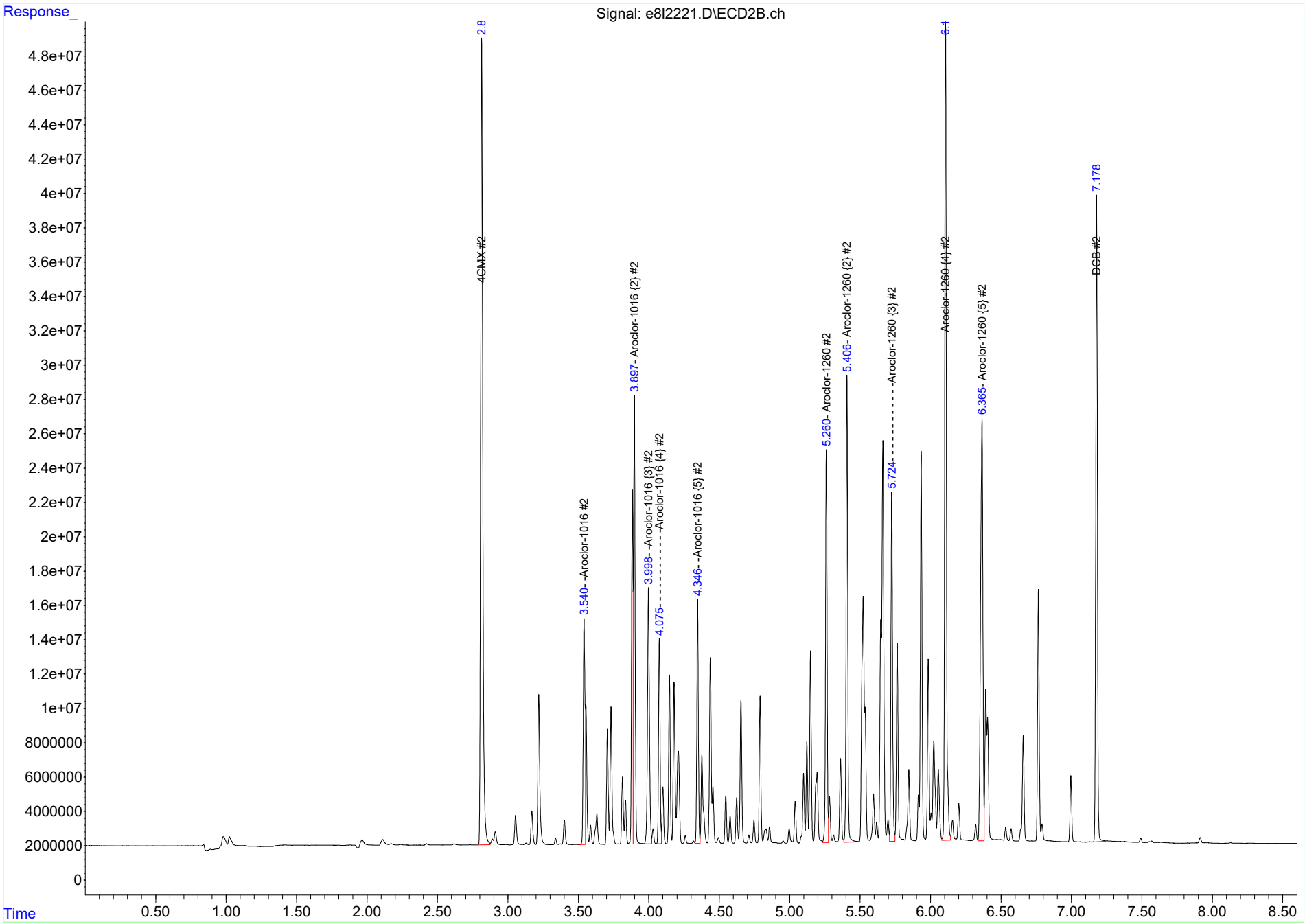
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2221.D



ECD8_8082_122022.m Thu Dec 22 15:43:15 2022 Page: 2

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2221.D



Continuing Calibration Summary

Instrument ID: ECD8A.I_1

Client SDG: 2023-289

Injection Date: 22-DEC-22 18:50

Data File: 122222\e8l2234.D

Init. Cal. Date(s): NA

Lab Sample ID WAR221130-60

Method: 122222\ECD8_8082_122022.m

Column ID: Description: RTX-CLP

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Aroclor-1016	229612.26	222962.24	1000	-2.9	20		Averaged
Aroclor-1016(2)	278353.52	279641.38	1000	0.46	20		Averaged
Aroclor-1016(3)	192280.65	190050.73	1000	-1.16	20		Averaged
Aroclor-1016(4)	104813.65	103592.92	1000	-1.16	20		Averaged
Aroclor-1016(5)	139753	139867.01	1000	0.08	20		Averaged
Aroclor-1260	250391.12	249803.26	1000	-0.23	20		Averaged
Aroclor-1260(2)	355998.92	368485.45	1000	3.51	20		Averaged
Aroclor-1260(3)	235966.51	240467.19	1000	1.91	20		Averaged
Aroclor-1260(4)	509990.73	539191.94	1000	5.73	20		Averaged
Aroclor-1260(5)	242621.11	256440.65	1000	5.7	20		Averaged
4cmx(Surr)	6308312.46	5919988.95	100	-6.16	20		Averaged
Decachlorobiphenyl(Surr)	4828878.75	4576970.39	100	-5.22	20		Averaged

Continuing Calibration Summary

Instrument ID: ECD8A.I_2

Client SDG: 2023-289

Injection Date: 22-DEC-22 18:50

Data File: 122222\e8l2234.D

Init. Cal. Date(s): NA

Lab Sample ID WAR221130-60

Method: 122222\ECD8_8082_122022.m

Column ID: PEST2

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Aroclor-1016	110052.66	109048.93	1000	-0.91	20		Averaged
Aroclor-1016(2)	195504.25	209674.44	1000	7.25	20		Averaged
Aroclor-1016(3)	136698.66	140617.52	1000	2.87	20		Averaged
Aroclor-1016(4)	87525.35	91320.4	1000	4.34	20		Averaged
Aroclor-1016(5)	106374.77	108698.11	1000	2.18	20		Averaged
Aroclor-1260	173397.91	180130.29	1000	3.88	20		Averaged
Aroclor-1260(2)	204135.42	214776.15	1000	5.21	20		Averaged
Aroclor-1260(3)	160043.58	164618.26	1000	2.86	20		Averaged
Aroclor-1260(4)	371451.29	398531.61	1000	7.29	20		Averaged
Aroclor-1260(5)	264713.64	279523.29	1000	5.59	20		Averaged
4cmx(Surr)	5111738.57	4815533.09	100	-5.79	20		Averaged
Decachlorobiphenyl(Surr)	3142527.08	3062057.52	100	-2.56	20		Averaged

Quantitation Report
GEL Laboratories, LLC

JXM 12/23/2022

JC 12/23/2022

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2234.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Dec 2022 18:50 (#1); 22 Dec 2022 18:50 (#2)
Operator : JXM InstName : ECD8
Sample : |WAR221130-60|CCV|1|SVA|1|1660
Misc : |MIX[A]
ALS Vial : 34 Sample Multiplier: 1

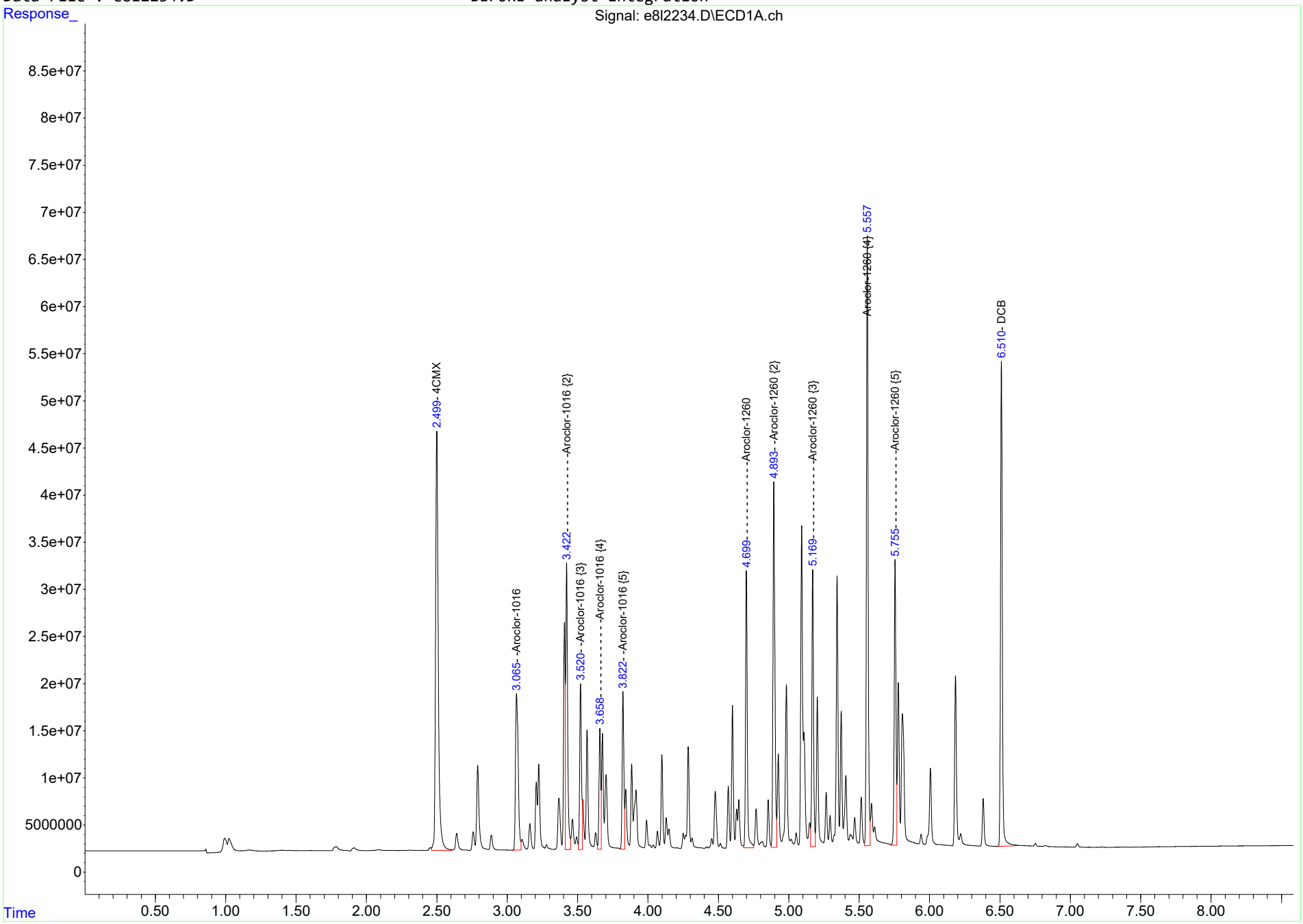
Quant Time: Dec 23 04:59:44 2022
Quant Method : D:\MSDCHEM\1\DATA\122222\ECD8_8082_122022.m
Quant Title : ECD8 SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1 Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.502	2.500	-0.002	591998895	93.844	2.815	2.815	0.000	481553309	94.205
DCB	6.513	6.511	-0.002	457697039	94.783	7.181	7.179	-0.002	306205752	97.439
Target Compounds										
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016	3.068	3.066	-0.002	222962244	971.038	3.542	3.542	0.000	109048931	990.880
Aroclor-1016 {2}	3.423	3.422	-0.001	279641375	1004.627	3.899	3.899	0.000	209674439	1072.480
Aroclor-1016 {3}	3.522	3.520	-0.002	190050732	988.403m	3.999	3.999	0.000	140617519	1028.668
Aroclor-1016 {4}	3.659	3.658	-0.001	103592922	988.353	4.076	4.077	0.001	91320402	1043.359
Aroclor-1016 {5}	3.824	3.822	-0.002	139867006	1000.816	4.348	4.348	0.000	108698114	1021.841
Sum Aroclor-1016				936114279	4953.237				659359406	5157.228
Average Aroclor-1016					990.647					1031.446
Aroclor-1260	4.701	4.699	-0.002	249803259	997.652	5.263	5.261	-0.002	180130285	1038.826
Aroclor-1260 {2}	4.896	4.894	-0.002	368485447	1035.075	5.409	5.408	-0.001	214776145	1052.126
Aroclor-1260 {3}	5.172	5.170	-0.002	240467189	1019.073	5.726	5.726	0.000	164618261	1028.584
Aroclor-1260 {4}	5.560	5.558	-0.002	539191944	1057.258	6.108	6.107	-0.001	398531611	1072.904
Aroclor-1260 {5}	5.758	5.755	-0.003	256440648	1056.959	6.368	6.366	-0.002	279523286	1055.946
Sum Aroclor-1260				1654388487	5166.018				1237579590	5248.386
Average Aroclor-1260					1033.204					1049.677

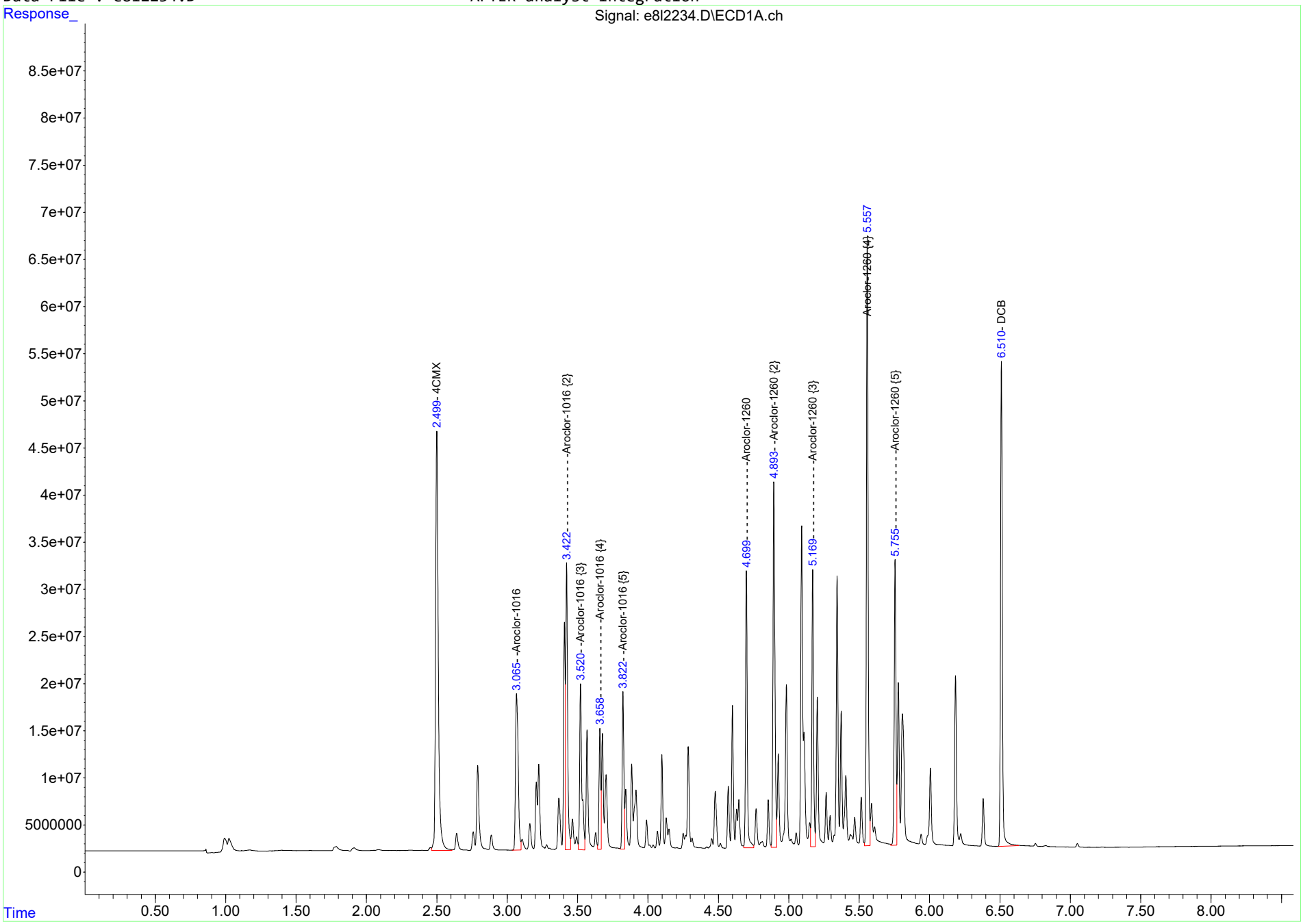
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2234.D BEFORE analyst integration



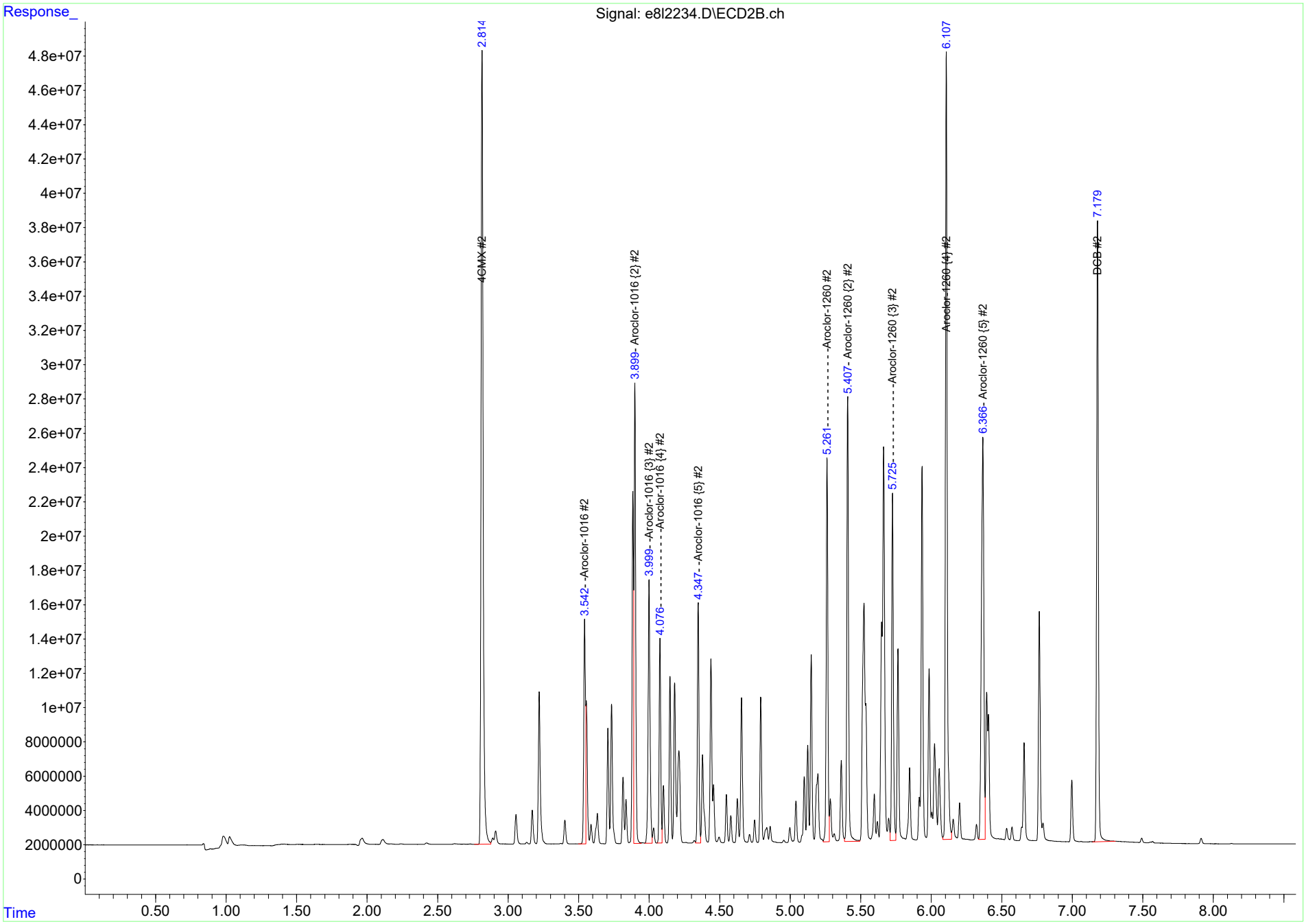
ECD8_8082_122022.m Fri Dec 23 05:06:40 2022 Page: 2

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2234.D AFTER analyst integration



ECD8_8082_122022.m Fri Dec 23 05:06:41 2022 Page: 3

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2234.D



ECD8_8082_122022.m Fri Dec 23 05:06:41 2022 Page: 4

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.502	2.500	-0.002	591998895	93.844	2.815	2.815	0.000	481553309	94.205
DCB	6.513	6.511	-0.002	457697039	94.783	7.181	7.179	-0.002	306205752	97.439
Target Compounds										
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016	3.068	3.066	-0.002	222962244	971.038	3.542	3.542	0.000	109048931	990.880
Aroclor-1016 {2}	3.423	3.422	-0.001	279641375	1004.627	3.899	3.899	0.000	209674439	1072.480
Aroclor-1016 {3}	3.522	3.521	-0.001	153991111	800.866	3.999	3.999	0.000	140617519	1028.668
Aroclor-1016 {4}	3.659	3.658	-0.001	103592922	988.353	4.076	4.077	0.001	91320402	1043.359
Aroclor-1016 {5}	3.824	3.822	-0.002	139867006	1000.816	4.348	4.348	0.000	108698114	1021.841
Sum Aroclor-1016				900054658	4765.700				659359406	5157.228
Average Aroclor-1016					953.140					1031.446
Aroclor-1260	4.701	4.699	-0.002	249803259	997.652	5.263	5.261	-0.002	180130285	1038.826
Aroclor-1260 {2}	4.896	4.894	-0.002	368485447	1035.075	5.409	5.408	-0.001	214776145	1052.126
Aroclor-1260 {3}	5.172	5.170	-0.002	240467189	1019.073	5.726	5.726	0.000	164618261	1028.584
Aroclor-1260 {4}	5.560	5.558	-0.002	539191944	1057.258	6.108	6.107	-0.001	398531611	1072.904
Aroclor-1260 {5}	5.758	5.755	-0.003	256440648	1056.959	6.368	6.366	-0.002	279523286	1055.946
Sum Aroclor-1260				1654388487	5166.018				1237579590	5248.386
Average Aroclor-1260					1033.204					1049.677

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2234.D
Aroclor-1016 {3} - Manual Integration == AB/AP

Continuing Calibration Summary

Instrument ID: ECD8A.I_1

Client SDG: 2023-289

Injection Date: 22-DEC-22 20:32

Data File: 122222\e8l2240.D

Init. Cal. Date(s): NA

Lab Sample ID WAR221130-60

Method: 122222\ECD8_8082_122022.m

Column ID: Description: RTX-CLP

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Aroclor-1016	229612.26	229049.15	1000	-0.25	20		Averaged
Aroclor-1016(2)	278353.52	288978.61	1000	3.82	20		Averaged
Aroclor-1016(3)	192280.65	196166.56	1000	2.02	20		Averaged
Aroclor-1016(4)	104813.65	106695.25	1000	1.8	20		Averaged
Aroclor-1016(5)	139753	143774.61	1000	2.88	20		Averaged
Aroclor-1260	250391.12	256687.35	1000	2.51	20		Averaged
Aroclor-1260(2)	355998.92	378603.55	1000	6.35	20		Averaged
Aroclor-1260(3)	235966.51	246286.28	1000	4.37	20		Averaged
Aroclor-1260(4)	509990.73	552100.92	1000	8.26	20		Averaged
Aroclor-1260(5)	242621.11	260773.32	1000	7.48	20		Averaged
4cmx(Surr)	6308312.46	6086046.43	100	-3.52	20		Averaged
Decachlorobiphenyl(Surr)	4828878.75	4725358.56	100	-2.14	20		Averaged

Continuing Calibration Summary

Instrument ID: ECD8A.I_2

Client SDG: 2023-289

Injection Date: 22-DEC-22 20:32

Data File: 122222\e8l2240.D

Init. Cal. Date(s): NA

Lab Sample ID WAR221130-60

Method: 122222\ECD8_8082_122022.m

Column ID: PEST2

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Aroclor-1016	110052.66	111917.51	1000	1.69	20		Averaged
Aroclor-1016(2)	195504.25	219423.92	1000	12.23	20		Averaged
Aroclor-1016(3)	136698.66	145607.57	1000	6.52	20		Averaged
Aroclor-1016(4)	87525.35	94674.44	1000	8.17	20		Averaged
Aroclor-1016(5)	106374.77	112289.27	1000	5.56	20		Averaged
Aroclor-1260	173397.91	186849.35	1000	7.76	20		Averaged
Aroclor-1260(2)	204135.42	225093.07	1000	10.27	20		Averaged
Aroclor-1260(3)	160043.58	171522.41	1000	7.17	20		Averaged
Aroclor-1260(4)	371451.29	414819.37	1000	11.68	20		Averaged
Aroclor-1260(5)	264713.64	290121.99	1000	9.6	20		Averaged
4cmx(Surr)	5111738.57	4920196.22	100	-3.75	20		Averaged
Decachlorobiphenyl(Surr)	3142527.08	3156826.55	100	0.46	20		Averaged

Quantitation Report
GEL Laboratories, LLC

JM 12/23/2022

JC 12/23/2022

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2240.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Dec 2022 20:32 (#1); 22 Dec 2022 20:32 (#2)
Operator : JXM InstName : ECD8
Sample : |WAR221130-60|CCV|1|SVA|1|1660
Misc : |MIX[A]
ALS Vial : 40 Sample Multiplier: 1

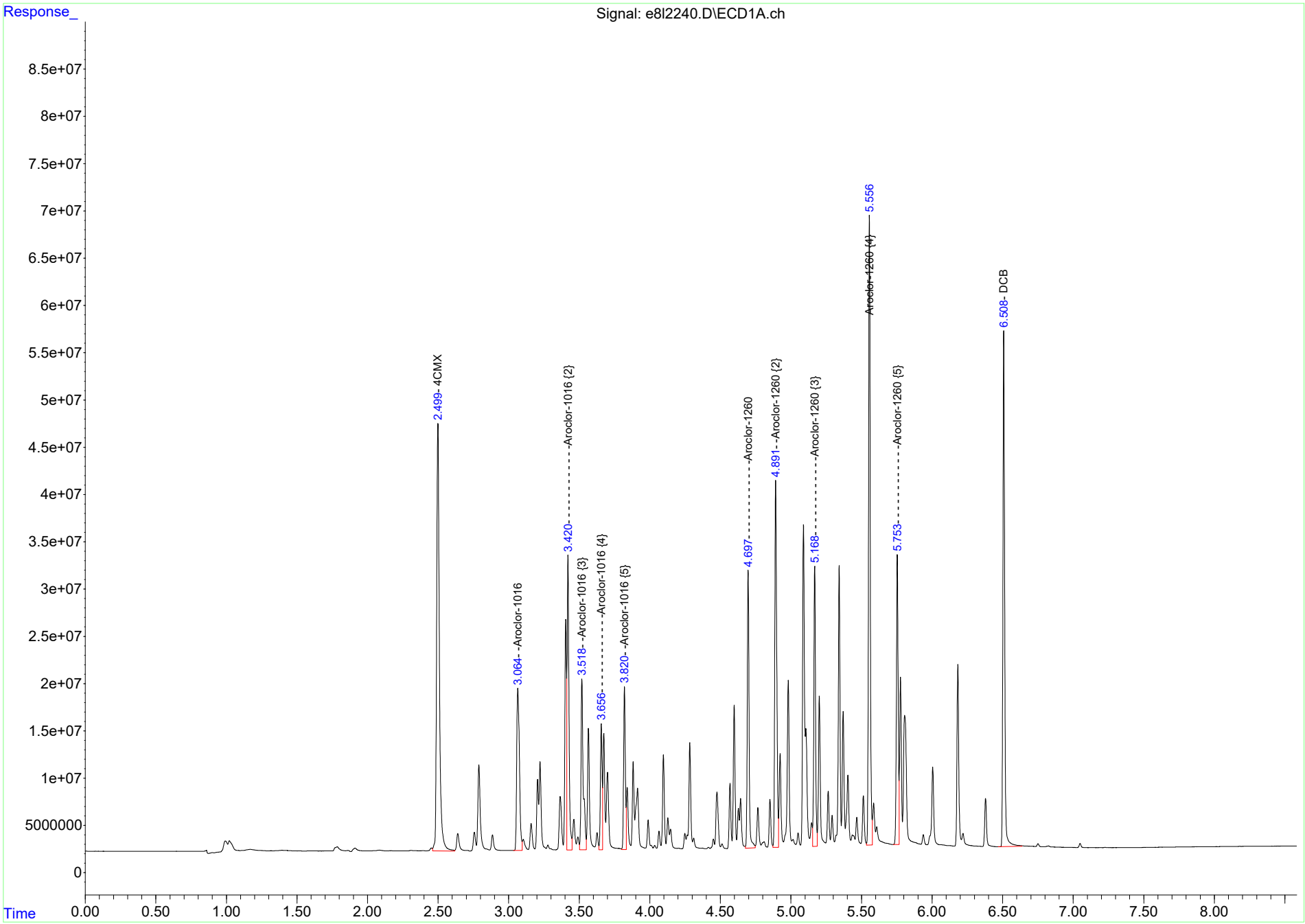
Quant Time: Dec 23 04:59:56 2022
Quant Method : D:\MSDCHEM\1\DATA\122222\ECD8_8082_122022.m
Quant Title : ECD8 SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1 Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um Signal #2 Info : 250 um

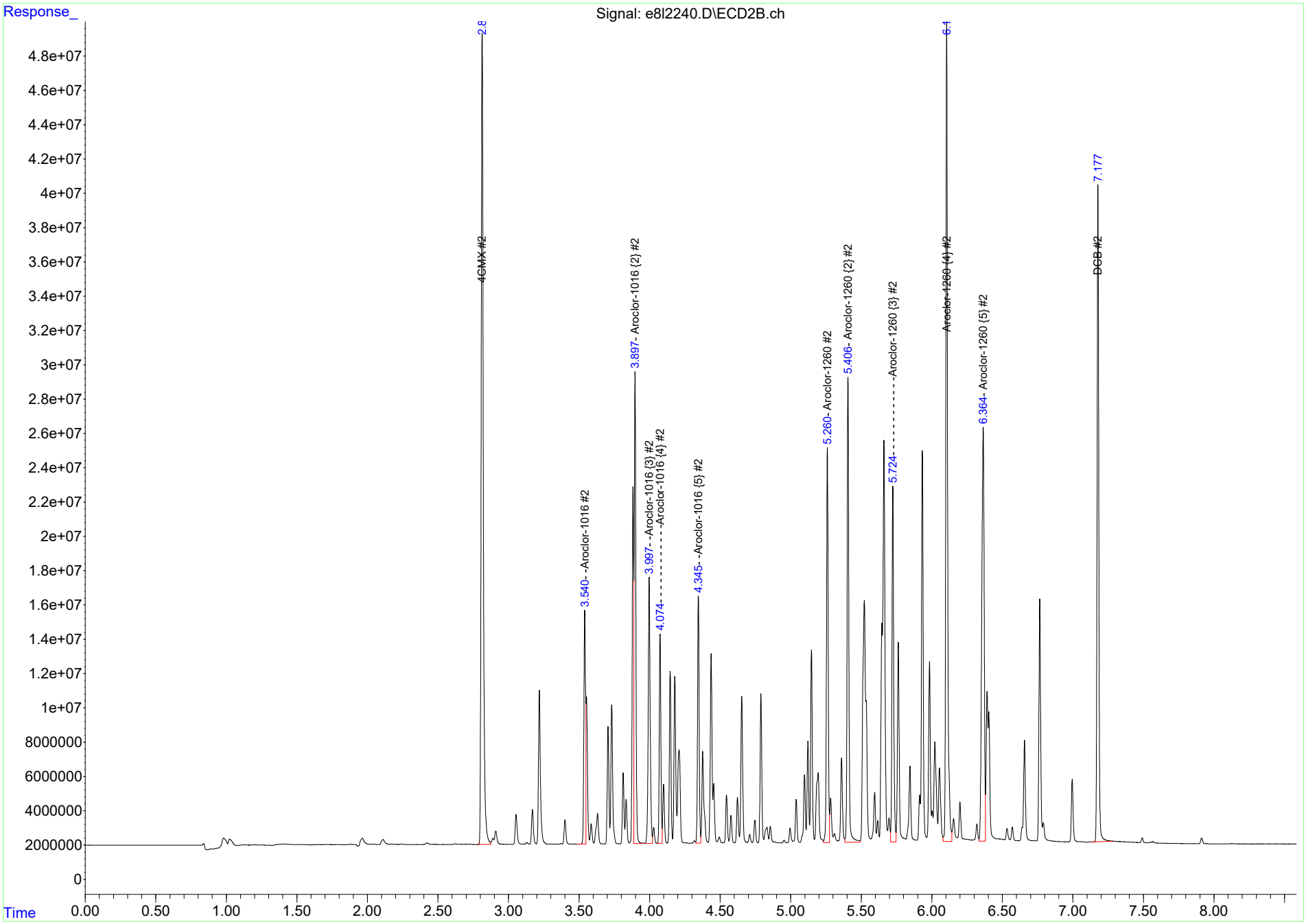
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.502	2.499	-0.003	608604643	96.477	2.815	2.813	-0.002	492019622	96.253
DCB	6.513	6.508	-0.005	472535856	97.856	7.181	7.178	-0.003	315682655	100.455
Target Compounds										
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016	3.068	3.065	-0.003	229049145	997.548	3.542	3.540	-0.002	111917510	1016.945
Aroclor-1016 {2}	3.423	3.420	-0.003	288978610	1038.171	3.899	3.897	-0.002	219423916	1122.349
Aroclor-1016 {3}	3.522	3.519	-0.003	196166559	1020.210	3.999	3.997	-0.002	145607568	1065.172
Aroclor-1016 {4}	3.659	3.656	-0.003	106695249	1017.952	4.076	4.074	-0.002	94674438	1081.680
Aroclor-1016 {5}	3.824	3.821	-0.003	143774614	1028.777	4.348	4.346	-0.002	112289273	1055.601
Sum Aroclor-1016				964664176	5102.657				683912704	5341.746
Average Aroclor-1016					1020.531					1068.349
Aroclor-1260	4.701	4.697	-0.004	256687350	1025.146	5.263	5.260	-0.003	186849353	1077.576
Aroclor-1260 {2}	4.896	4.892	-0.004	378603550	1063.496	5.409	5.406	-0.003	225093072	1102.665
Aroclor-1260 {3}	5.172	5.168	-0.004	246286283	1043.734	5.726	5.724	-0.002	171522405	1071.723
Aroclor-1260 {4}	5.560	5.556	-0.004	552100920	1082.571	6.108	6.106	-0.002	414819372	1116.753
Aroclor-1260 {5}	5.758	5.754	-0.004	260773316	1074.817	6.368	6.365	-0.003	290121986	1095.984
Sum Aroclor-1260				1694451419	5289.764				1288406189	5464.701
Average Aroclor-1260					1057.953					1092.940

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2240.D



Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2240.D



Continuing Calibration Summary

Instrument ID: ECD8A.I_1

Client SDG: 2023-289

Injection Date: 23-DEC-22 05:47

Data File: 122322\e8l2303.D

Init. Cal. Date(s): NA

Lab Sample ID WAR221130-60

Method: 122322\ECD8_8082_122022.m

Column ID: Description: RTX-CLP

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Aroclor-1016	229612.26	218875.41	1000	-4.68	20		Averaged
Aroclor-1016(2)	278353.52	274292.34	1000	-1.46	20		Averaged
Aroclor-1016(3)	192280.65	186852.86	1000	-2.82	20		Averaged
Aroclor-1016(4)	104813.65	101346.15	1000	-3.31	20		Averaged
Aroclor-1016(5)	139753	137478.08	1000	-1.63	20		Averaged
Aroclor-1260	250391.12	244644.6	1000	-2.3	20		Averaged
Aroclor-1260(2)	355998.92	360257.53	1000	1.2	20		Averaged
Aroclor-1260(3)	235966.51	234868.87	1000	-0.47	20		Averaged
Aroclor-1260(4)	509990.73	524388.25	1000	2.82	20		Averaged
Aroclor-1260(5)	242621.11	249996.02	1000	3.04	20		Averaged
4cmx(Surr)	6308312.46	5799597.12	100	-8.06	20		Averaged
Decachlorobiphenyl(Surr)	4828878.75	4532838.83	100	-6.13	20		Averaged

Continuing Calibration Summary

Client SDG: 2023-289

Instrument ID: ECD8A.I_2

Injection Date: 23-DEC-22 05:47

Data File: 122322\e8l2303.D

Init. Cal. Date(s): NA

Lab Sample ID WAR221130-60

Method: 122322\ECD8_8082_122022.m

Column ID: PEST2

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Aroclor-1016	110052.66	108484.77	1000	-1.42	20		Averaged
Aroclor-1016(2)	195504.25	209082.24	1000	6.95	20		Averaged
Aroclor-1016(3)	136698.66	139945.43	1000	2.38	20		Averaged
Aroclor-1016(4)	87525.35	90403.41	1000	3.29	20		Averaged
Aroclor-1016(5)	106374.77	108382.01	1000	1.89	20		Averaged
Aroclor-1260	173397.91	179774.28	1000	3.68	20		Averaged
Aroclor-1260(2)	204135.42	213863.3	1000	4.77	20		Averaged
Aroclor-1260(3)	160043.58	164288.88	1000	2.65	20		Averaged
Aroclor-1260(4)	371451.29	395648.03	1000	6.51	20		Averaged
Aroclor-1260(5)	264713.64	278533.78	1000	5.22	20		Averaged
4cmx(Surr)	5111738.57	4934294.66	100	-3.47	20		Averaged
Decachlorobiphenyl(Surr)	3142527.08	3064665.96	100	-2.48	20		Averaged

Quantitation Report
GEL Laboratories, LLC

JM 12/23/2022

JC 12/23/2022

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2303.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 23 Dec 2022 05:47 (#1); 23 Dec 2022 05:47 (#2)
Operator : JXM InstName : ECD8
Sample : |WAR221130-60|CCV|1|SVA|1|1660
Misc : |MIX[A]
ALS Vial : 3 Sample Multiplier: 1

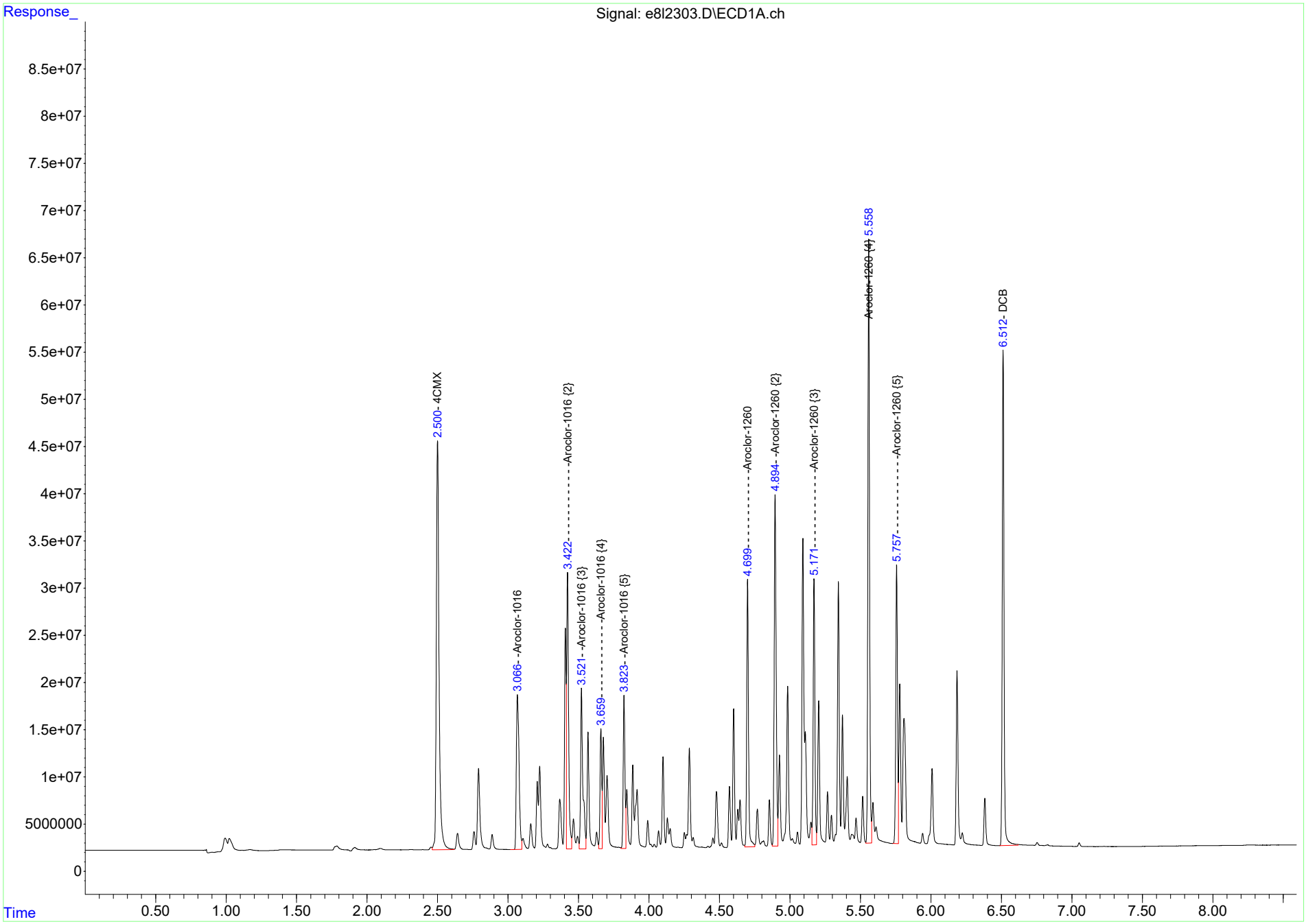
Quant Time: Dec 23 06:08:22 2022
Quant Method : D:\MSDCHEM\1\DATA\122322\ECD8_8082_122022.m
Quant Title : ECD8 SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1 Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.500	2.500	0.000	579959712	91.936	2.814	2.814	0.000	493429466	96.529
DCB	6.512	6.512	0.000	453283883	93.869	7.180	7.180	0.000	306466596	97.522
Target Compounds										
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016	3.067	3.067	0.000	218875406	953.239	3.541	3.541	0.000	108484769	985.753
Aroclor-1016 {2}	3.422	3.422	0.000	274292343	985.410	3.898	3.898	0.000	209082235	1069.451
Aroclor-1016 {3}	3.521	3.521	0.000	186852855	971.772	3.998	3.998	0.000	139945428	1023.751
Aroclor-1016 {4}	3.659	3.659	0.000	101346150	966.917	4.076	4.076	0.000	90403407	1032.883
Aroclor-1016 {5}	3.823	3.823	0.000	137478079	983.722	4.347	4.347	0.000	108382013	1018.870
Sum Aroclor-1016				918844834	4861.060				656297852	5130.708
Average Aroclor-1016					972.212					1026.142
Aroclor-1260	4.699	4.699	0.000	244644598	977.050	5.261	5.261	0.000	179774277	1036.773
Aroclor-1260 {2}	4.895	4.895	0.000	360257529	1011.962	5.407	5.407	0.000	213863295	1047.654
Aroclor-1260 {3}	5.171	5.171	0.000	234868865	995.348	5.726	5.726	0.000	164288875	1026.526
Aroclor-1260 {4}	5.559	5.559	0.000	524388253	1028.231	6.108	6.108	0.000	395648031	1065.141
Aroclor-1260 {5}	5.757	5.757	0.000	249996020	1030.397	6.367	6.367	0.000	278533784	1052.208
Sum Aroclor-1260				1614155265	5042.988				1232108262	5228.302
Average Aroclor-1260					1008.598					1045.660

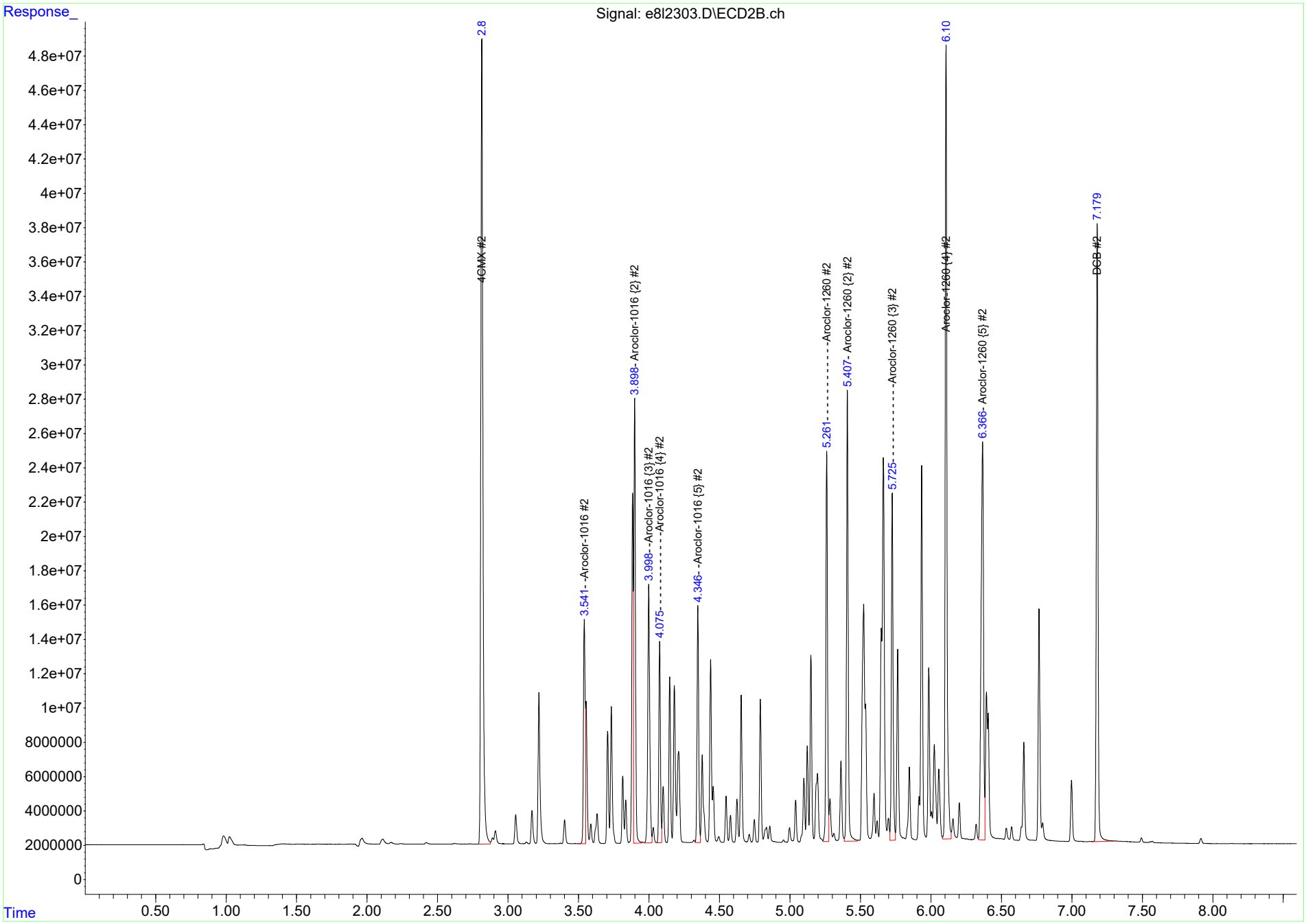
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2303.D



ECD8_8082_122022.m Fri Dec 23 07:55:33 2022 Page: 2

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2303.D



Quantitation Report
GEL Laboratories, LLC

Jxm 12/23/2022

JC 12/23/2022

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2304.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 23 Dec 2022 06:00 (#1); 23 Dec 2022 06:00 (#2)
Operator : JXM InstName : ECD8
Sample : |WAR220811-54|CCV|1|SVA|1|1254
Misc : |MIX[B]
ALS Vial : 4 Sample Multiplier: 1

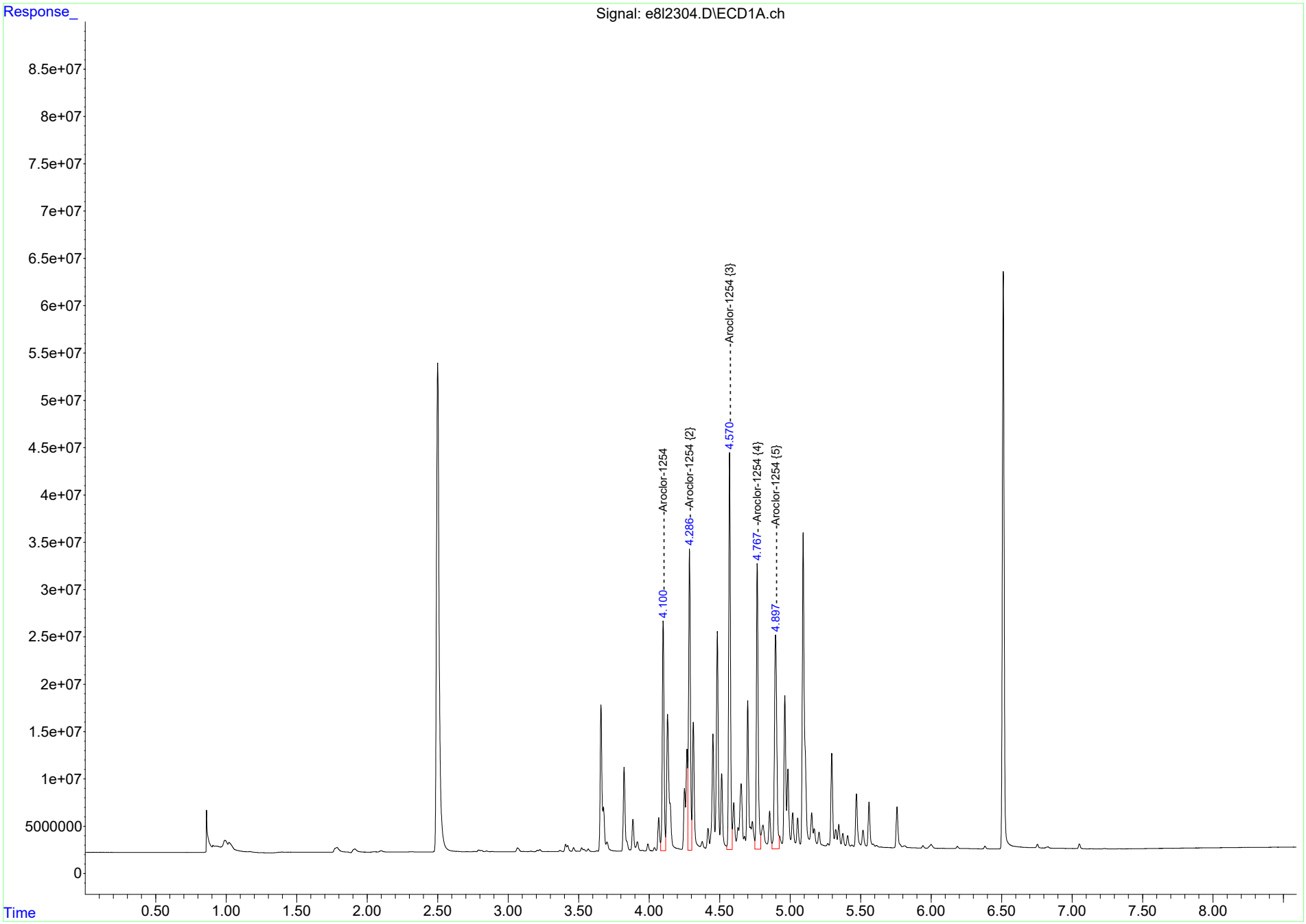
Quant Time: Dec 23 06:09:43 2022
Quant Method : D:\MSDCHEM\1\DATA\122322\ECD8_8082_122022.m
Quant Title : ECD8 SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1 Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
Target Compounds										
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1254	4.100	4.100	0.000	208961747	991.173	4.655	4.655	0.000	177207562	1066.331
Aroclor-1254 {2}	4.287	4.287	0.000	279400927	1040.091	4.791	4.791	0.000	189999270	1050.847
Aroclor-1254 {3}	4.571	4.571	0.000	355042598	1025.083	5.124	5.124	0.000	289852258	1078.422
Aroclor-1254 {4}	4.767	4.767	0.000	266777867	1059.821	5.284	5.284	0.000	202871864	1113.716
Aroclor-1254 {5}	4.897	4.897	0.000	261306105	953.373	5.408	5.408	0.000	125833345	1036.054
Sum Aroclor-1254				1371489243	5069.541				985764299	5345.370
Average Aroclor-1254					1013.908					1069.074

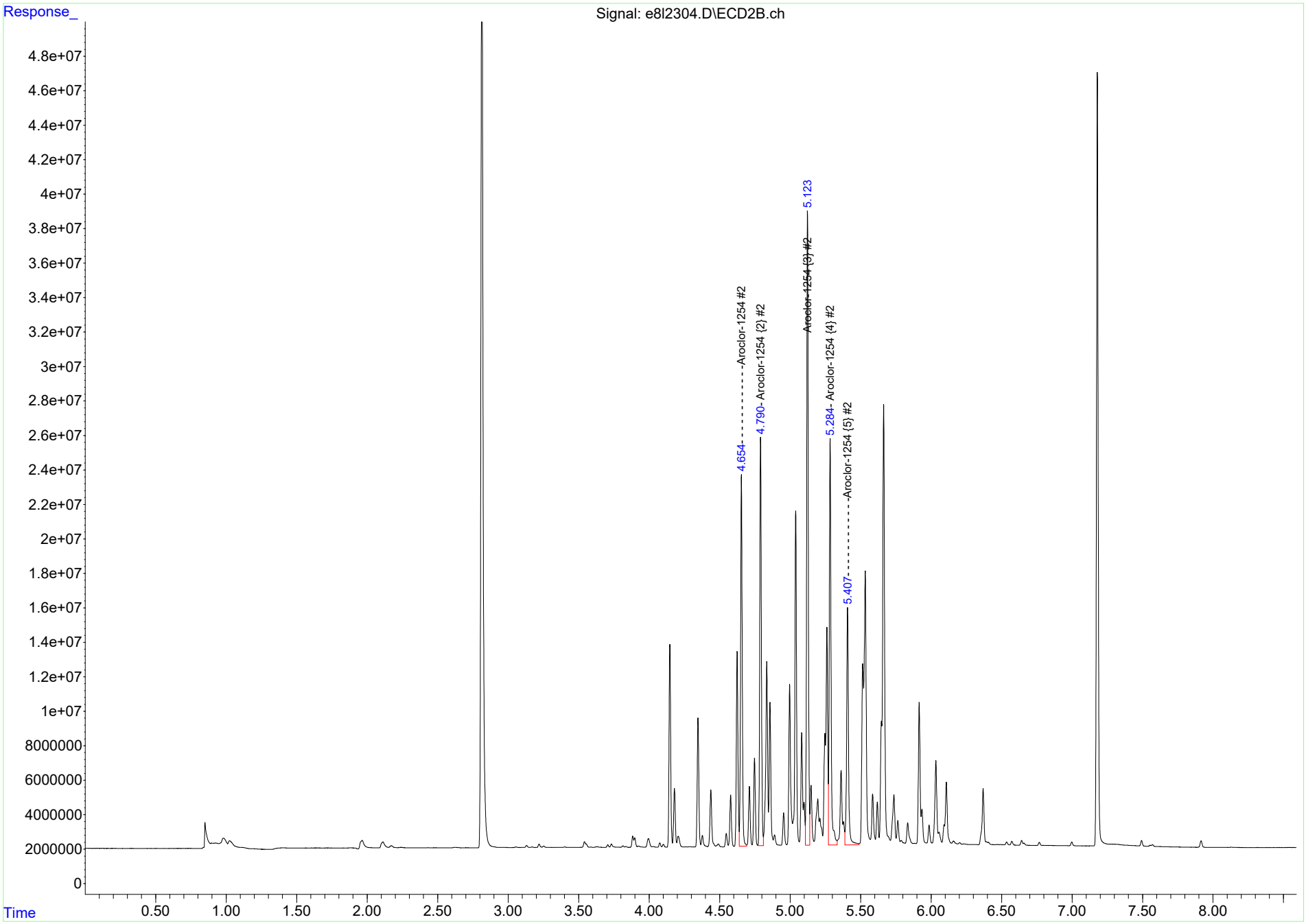
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2304.D



ECD8_8082_122022.m Fri Dec 23 07:55:38 2022 Page: 2

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2304.D



ECD8_8082_122022.m Fri Dec 23 07:55:38 2022 Page: 3

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2305.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 23 Dec 2022 06:12 (#1); 23 Dec 2022 06:12 (#2)
Operator : JXM InstName : ECD8
Sample : |WAR221206-42|CCV|1|SVA|1|1242
Misc : |MIX[D]
ALS Vial : 5 Sample Multiplier: 1

Jm 12/23/2022

JC 12/23/2022

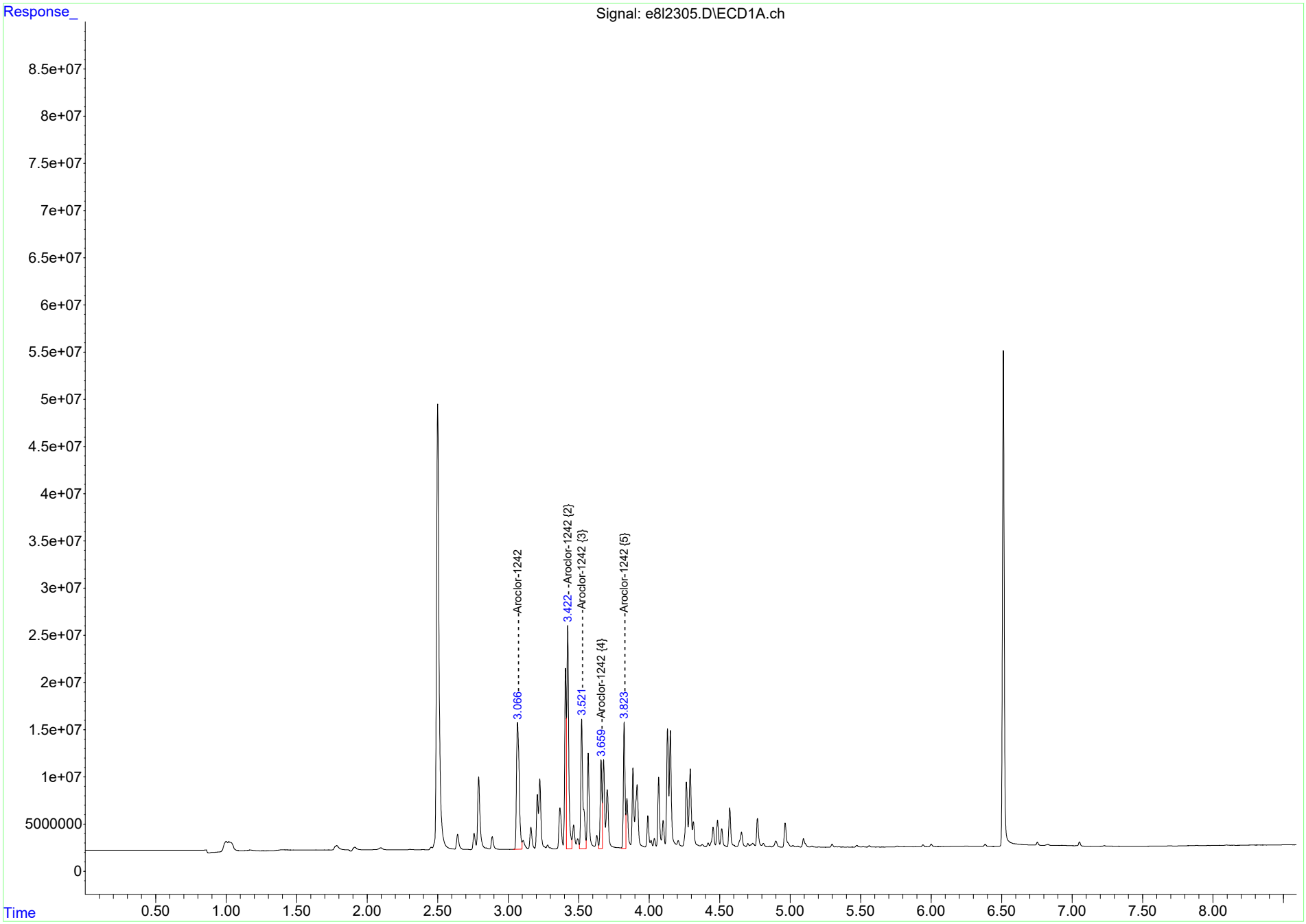
Quant Time: Dec 23 06:34:00 2022
Quant Method : D:\MSDCHEM\1\DATA\122322\ECD8_8082_122022.m
Quant Title : ECD8 SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1 Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
Target Compounds										
Aroclor-1242	3.067	3.067	0.000	178592079	981.204	3.542	3.542	0.000	89568363	1022.296
Aroclor-1242 {2}	3.423	3.423	0.000	220603808	1015.538	3.898	3.898	0.000	168810406	1119.578
Aroclor-1242 {3}	3.522	3.522	0.000	150663595	998.840	3.999	3.999	0.000	113880959	1050.172
Aroclor-1242 {4}	3.659	3.659	0.000	77223500	1003.995	4.076	4.076	0.000	73394029	1064.764
Aroclor-1242 {5}	3.823	3.823	0.000	111003584	999.263	4.347	4.347	0.000	88564806	1037.916
Sum Aroclor-1242				738086566	4998.840				534218563	5294.725
Average Aroclor-1242					999.768					1058.945

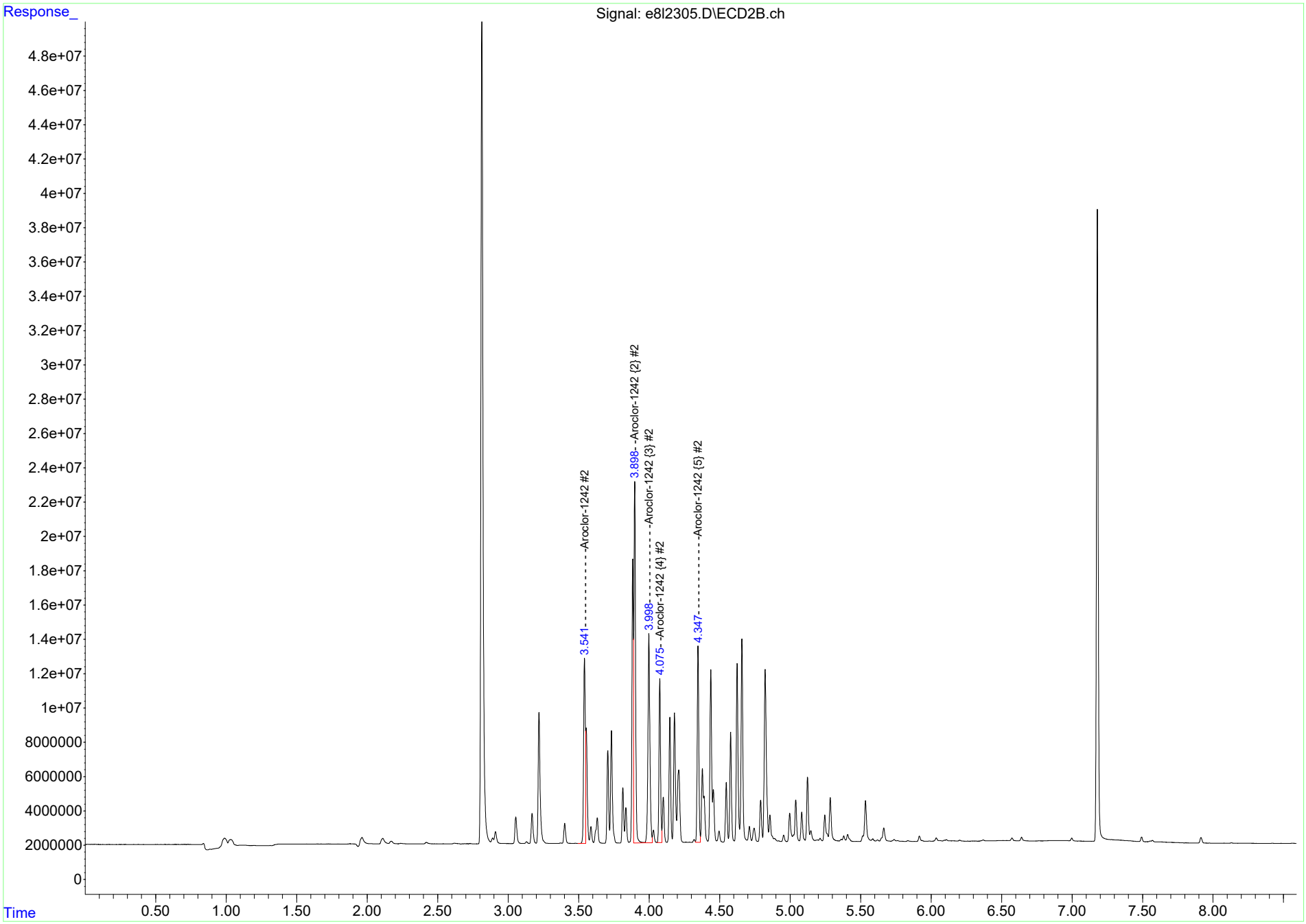
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2305.D



ECD8_8082_122022.m Fri Dec 23 07:55:43 2022 Page: 2

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2305.D



ECD8_8082_122022.m Fri Dec 23 07:55:43 2022 Page: 3

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2306.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 23 Dec 2022 06:24 (#1); 23 Dec 2022 06:24 (#2)
Operator : JXM InstName : ECD8
Sample : |WAR221216-48|CCV|1|SVA|1|1248
Misc : |MIX[E]
ALS Vial : 6 Sample Multiplier: 1

Jm 12/23/2022

JC 12/23/2022

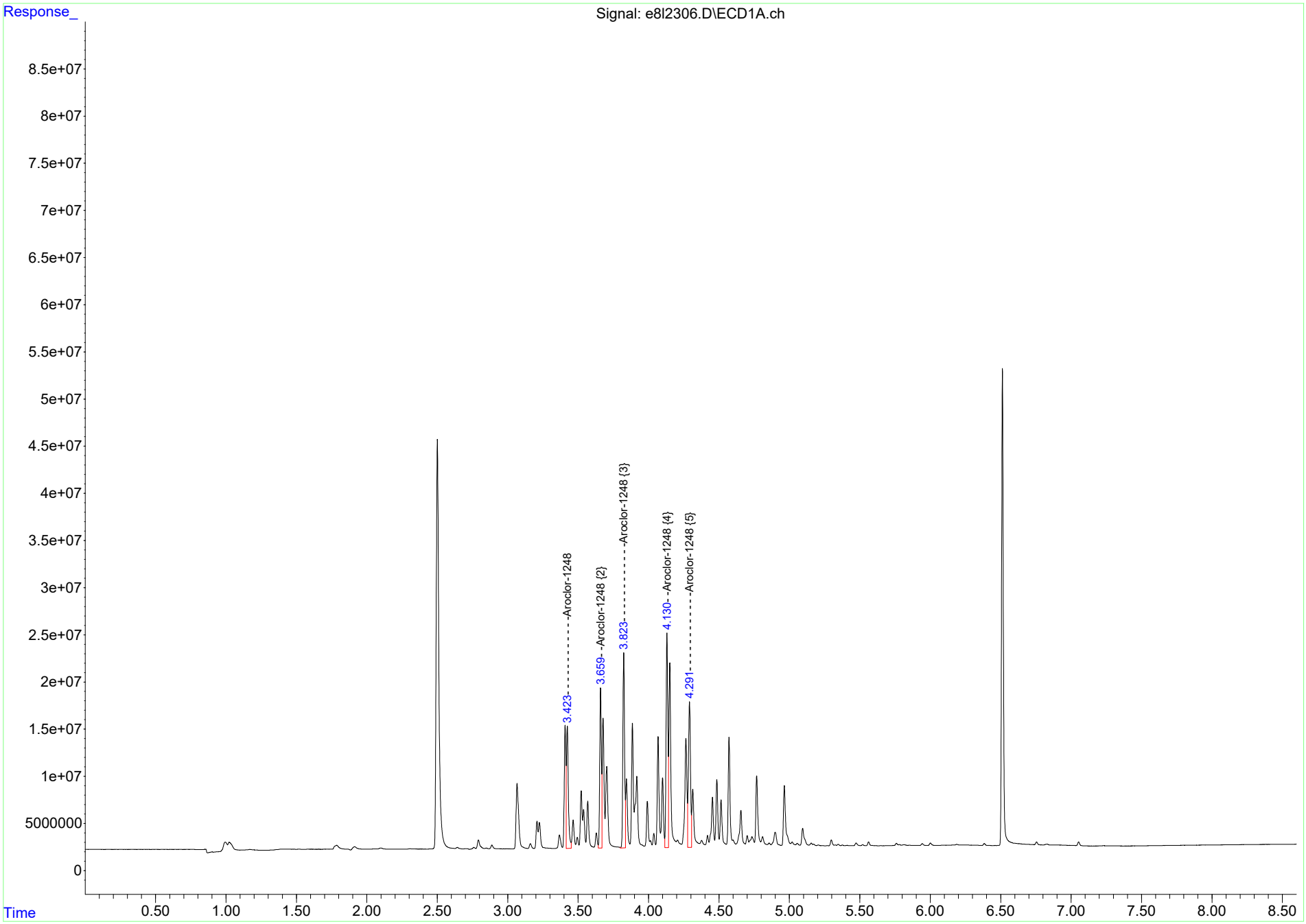
Quant Time: Dec 23 06:34:33 2022
Quant Method : D:\MSDCHEM\1\DATA\122322\ECD8_8082_122022.m
Quant Title : ECD8 SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1 Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
Target Compounds										
Aroclor-1248	3.423	3.423	0.000	119810746	1062.796	3.898	3.898	0.000	89989642	1194.215
Aroclor-1248 {2}	3.659	3.659	0.000	135304747	1089.297	4.147	4.147	0.000	101184949	1142.337
Aroclor-1248 {3}	3.824	3.824	0.000	174635221	1100.760	4.347	4.347	0.000	138284329	1166.955
Aroclor-1248 {4}	4.130	4.130	0.000	196456949	1111.993	4.624	4.624	0.000	151648511	1195.309
Aroclor-1248 {5}	4.291	4.291	0.000	158582887	1099.517	4.824	4.824	0.000	172958249	1207.465
Sum Aroclor-1248				784790549	5464.362				654065679	5906.282
Average Aroclor-1248					1092.872					1181.256

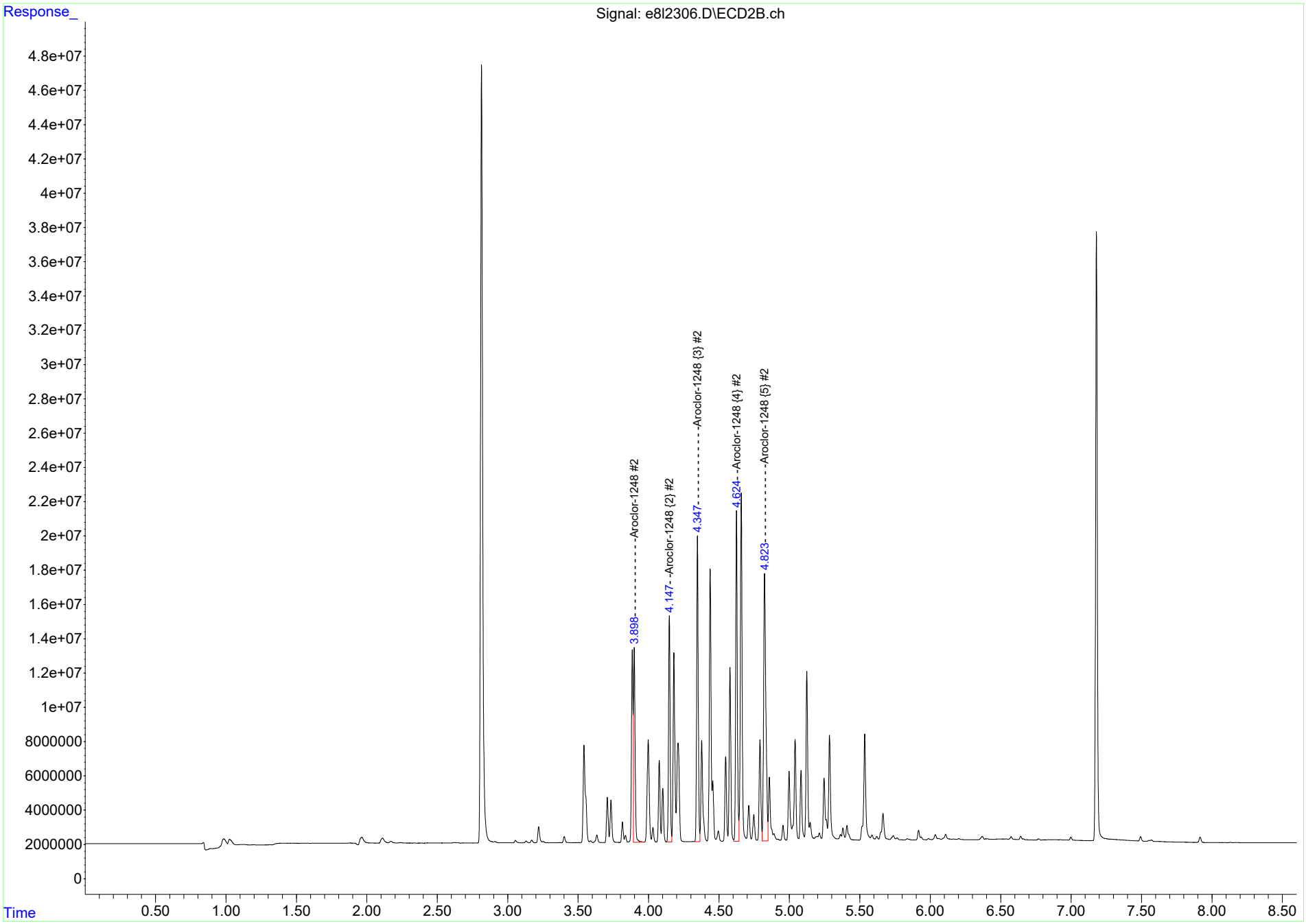
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2306.D



ECD8_8082_122022.m Fri Dec 23 07:55:48 2022 Page: 2

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2306.D



ECD8_8082_122022.m Fri Dec 23 07:55:48 2022 Page: 3

Quantitation Report
GEL Laboratories, LLC

Jxm 12/23/2022

JC 12/23/2022

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2309.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 23 Dec 2022 07:01 (#1); 23 Dec 2022 07:01 (#2)
Operator : JXM InstName : ECD8
Sample : |WAR221209-32|CCV|1|SVA|1|1232
Misc : |MIX[F]
ALS Vial : 9 Sample Multiplier: 1

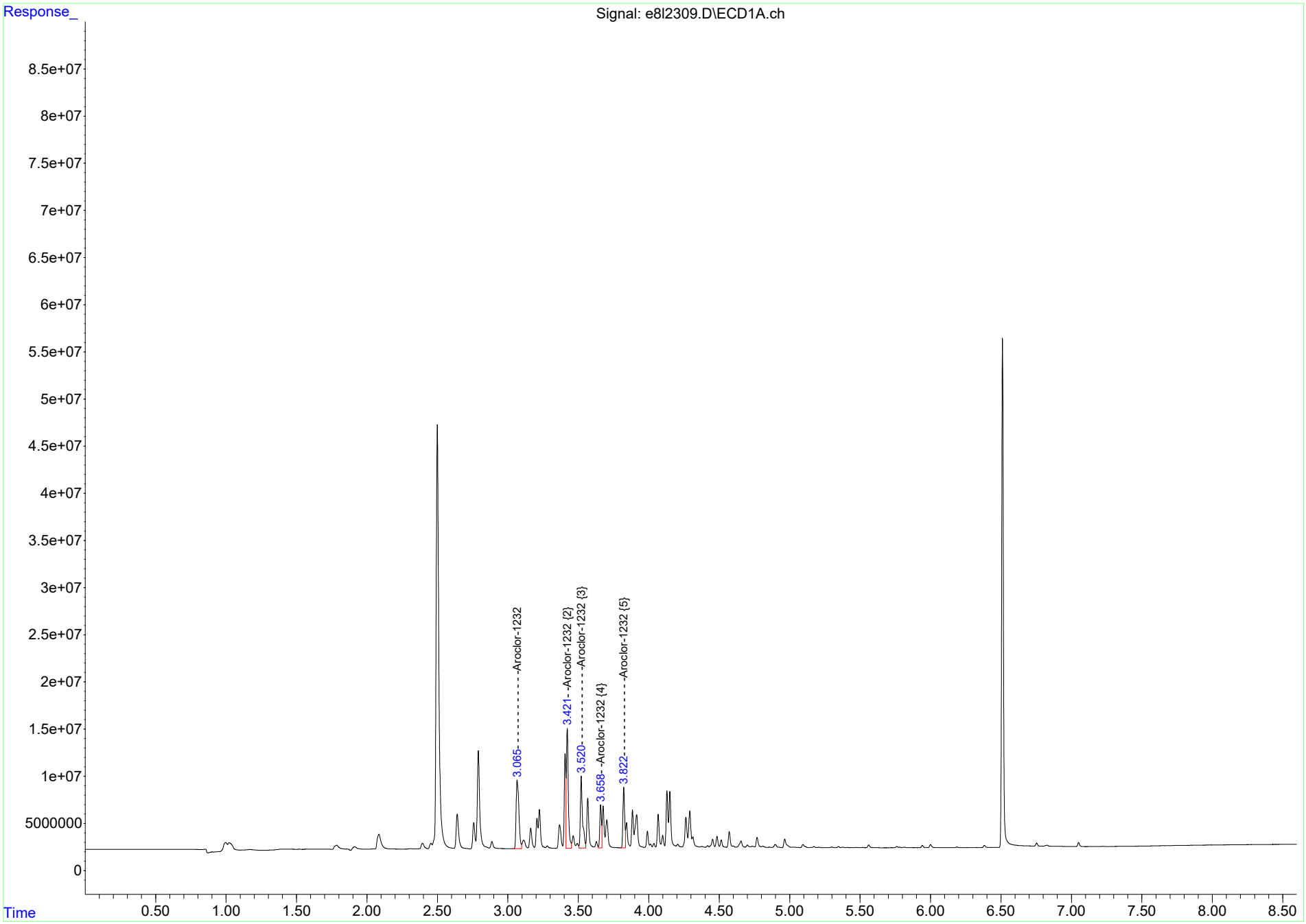
Quant Time: Dec 23 07:50:00 2022
Quant Method : D:\MSDCHEM\1\DATA\122322\ECD8_8082_122022.m
Quant Title : ECD8 SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1 Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
Target Compounds										
Aroclor-1232	3.066	3.066	0.000	98581004	1058.240	3.540	3.540	0.000	52675712	1098.168
Aroclor-1232 {2}	3.422	3.422	0.000	120484915	1092.626	3.897	3.897	0.000	91306413	1249.185
Aroclor-1232 {3}	3.521	3.521	0.000	81830080	1097.610	3.998	3.998	0.000	62700603	1150.537
Aroclor-1232 {4}	3.658	3.658	0.000	36616374	1082.128	4.075	4.075	0.000	40544850	1143.603
Aroclor-1232 {5}	3.823	3.823	0.000	54021586	1081.399	4.346	4.346	0.000	43629755	1124.814
Sum Aroclor-1232				391533959	5412.003				290857332	5766.308
Average Aroclor-1232					1082.401					1153.262

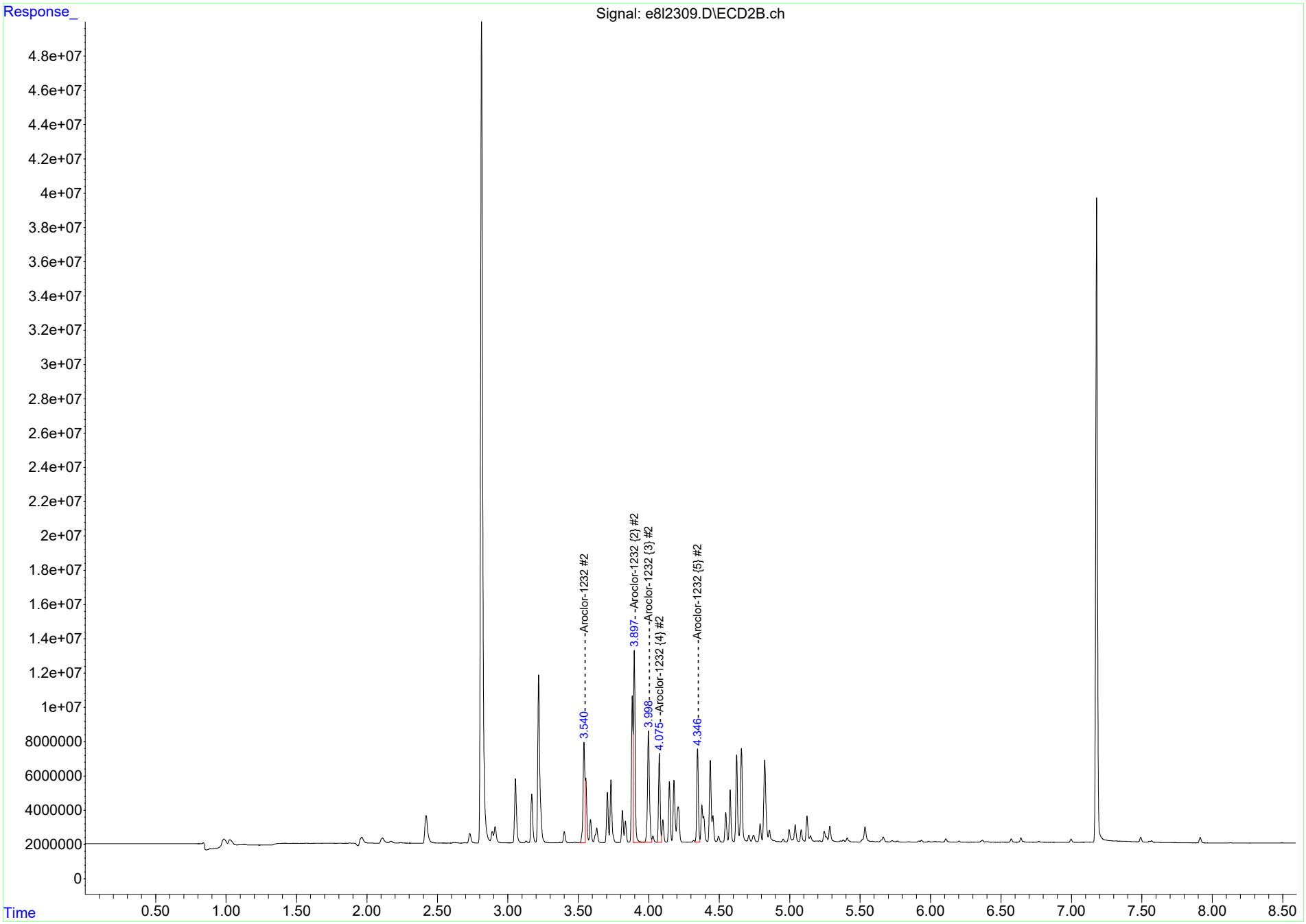
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2309.D



ECD8_8082_122022.m Fri Dec 23 07:56:03 2022 Page: 2

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2309.D



ECD8_8082_122022.m Fri Dec 23 07:56:03 2022 Page: 3

Quantitation Report
GEL Laboratories, LLC

JM 12/23/2022

JC 12/23/2022

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2310.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 23 Dec 2022 07:13 (#1); 23 Dec 2022 07:13 (#2)
Operator : JXM InstName : ECD8
Sample : |WAR221219-21|CCV|1|SVA|1|1221
Misc : |MIX[J]
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 23 07:54:53 2022
Quant Method : D:\MSDCHEM\1\DATA\122322\ECD8_8082_122022.m
Quant Title : ECD8 SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1 Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um Signal #2 Info : 250 um

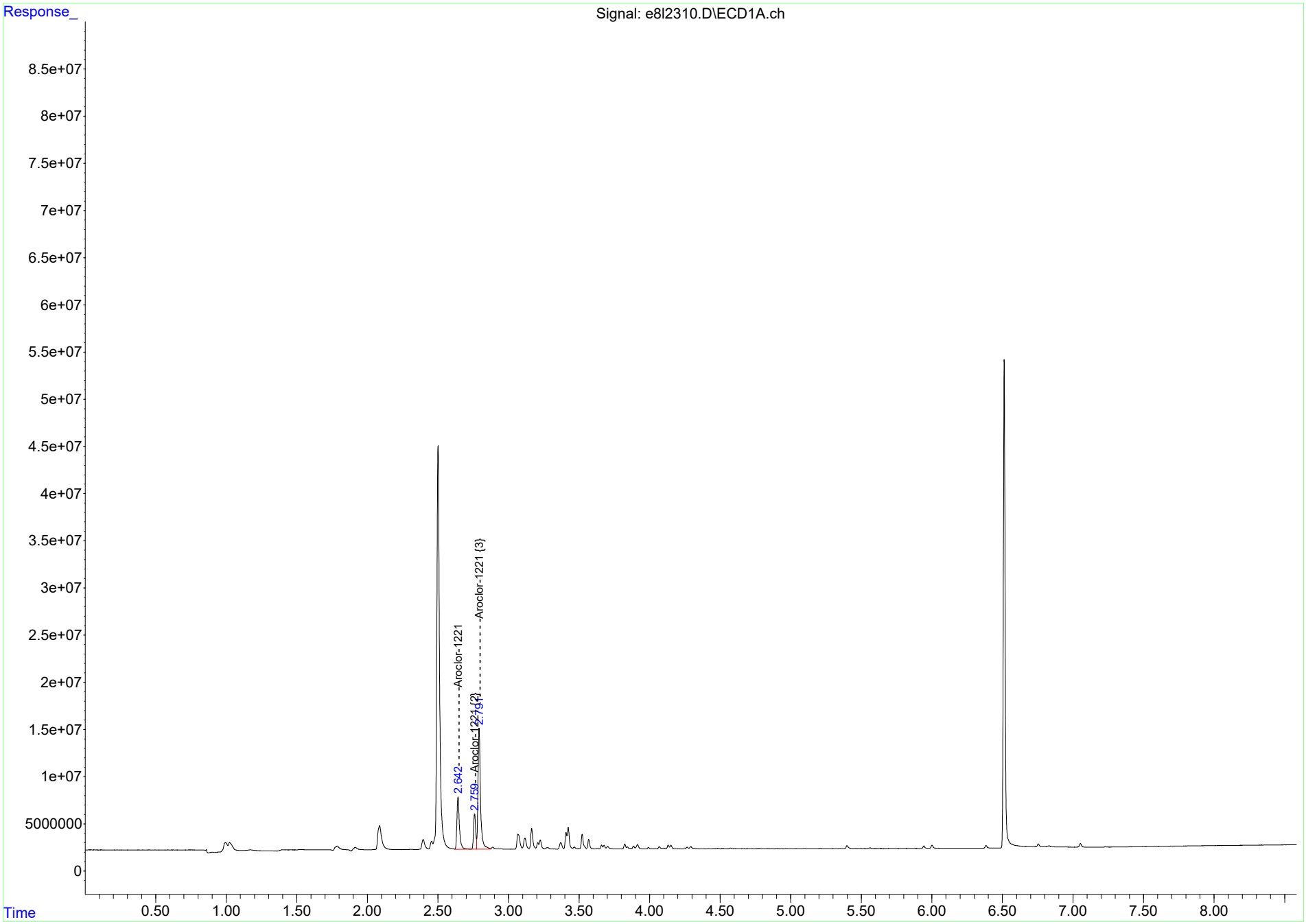
System Monitoring Compounds

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1221	2.643	2.643	0.000	69302425	1150.001 A	3.055	3.055	0.000	53642639	1241.140 A
Aroclor-1221 {2}	2.760	2.760	0.000	38607167	1146.517 A	3.171	3.171	0.000	35146792	1216.123 A
Aroclor-1221 {3}	2.792	2.792	0.000	156970630	1139.311 A	3.220	3.220	0.000	125421729	1247.261 A
Sum Aroclor-1221				264880222	3435.829				214211161	3704.524
Average Aroclor-1221					1145.276					1234.841

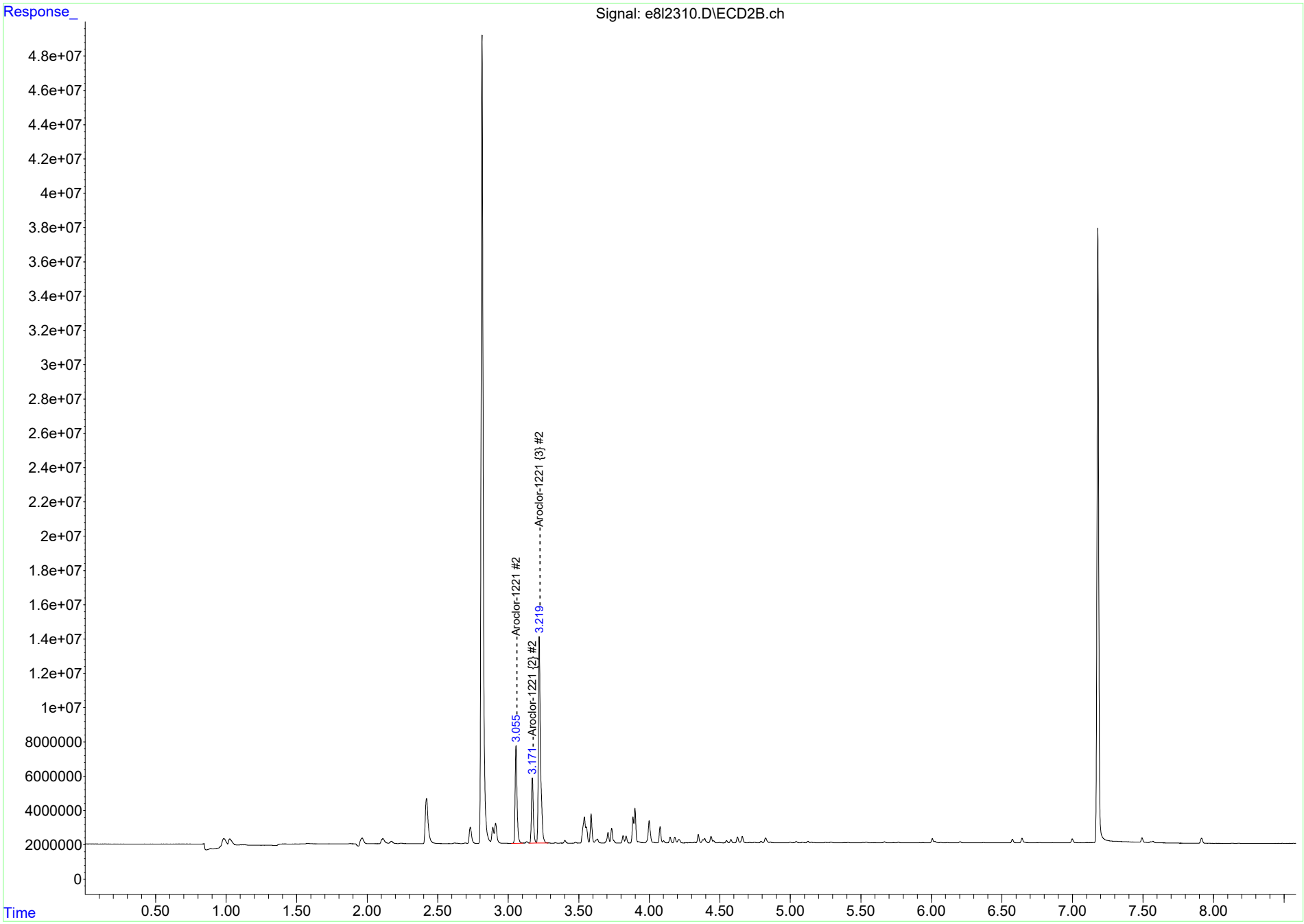
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2310.D



ECD8_8082_122022.m Fri Dec 23 07:56:08 2022 Page: 2

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2310.D



ECD8_8082_122022.m Fri Dec 23 07:56:08 2022 Page: 3

Continuing Calibration Summary

Instrument ID: ECD8A.I_1

Client SDG: 2023-289

Injection Date: 23-DEC-22 09:35

Data File: 122322\e8l2318.D

Init. Cal. Date(s): NA

Lab Sample ID WAR221130-60

Method: 122322\ECD8_8082_122022.m

Column ID: Description: RTX-CLP

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Aroclor-1016	229612.26	231377.15	1000	0.77	20		Averaged
Aroclor-1016(2)	278353.52	293451.93	1000	5.42	20		Averaged
Aroclor-1016(3)	192280.65	198042.29	1000	3	20		Averaged
Aroclor-1016(4)	104813.65	107418.07	1000	2.48	20		Averaged
Aroclor-1016(5)	139753	145543.08	1000	4.14	20		Averaged
Aroclor-1260	250391.12	259229.3	1000	3.53	20		Averaged
Aroclor-1260(2)	355998.92	380462.06	1000	6.87	20		Averaged
Aroclor-1260(3)	235966.51	249654.86	1000	5.8	20		Averaged
Aroclor-1260(4)	509990.73	554843.37	1000	8.79	20		Averaged
Aroclor-1260(5)	242621.11	263147.45	1000	8.46	20		Averaged
4cmx(Surr)	6308312.46	6144341.53	100	-2.6	20		Averaged
Decachlorobiphenyl(Surr)	4828878.75	4655578.84	100	-3.59	20		Averaged

Continuing Calibration Summary

Client SDG: 2023-289

Instrument ID: ECD8A.I_2

Injection Date: 23-DEC-22 09:35

Data File: 122322\e8l2318.D

Init. Cal. Date(s): NA

Lab Sample ID WAR221130-60

Method: 122322\ECD8_8082_122022.m

Column ID: PEST2

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Aroclor-1016	110052.66	113323.93	1000	2.97	20		Averaged
Aroclor-1016(2)	195504.25	225269.63	1000	15.22	20		Averaged
Aroclor-1016(3)	136698.66	148932.79	1000	8.95	20		Averaged
Aroclor-1016(4)	87525.35	96492.29	1000	10.24	20		Averaged
Aroclor-1016(5)	106374.77	114814.29	1000	7.93	20		Averaged
Aroclor-1260	173397.91	189563.34	1000	9.32	20		Averaged
Aroclor-1260(2)	204135.42	226623.2	1000	11.02	20		Averaged
Aroclor-1260(3)	160043.58	173219.69	1000	8.23	20		Averaged
Aroclor-1260(4)	371451.29	416363.95	1000	12.09	20		Averaged
Aroclor-1260(5)	264713.64	288801.23	1000	9.1	20		Averaged
4cmx(Surr)	5111738.57	5214364.95	100	2.01	20		Averaged
Decachlorobiphenyl(Surr)	3142527.08	3138072.84	100	-0.14	20		Averaged

Quantitation Report
GEL Laboratories, LLC

JM 12/23/2022

JC 12/23/2022

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2318.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 23 Dec 2022 09:35 (#1); 23 Dec 2022 09:35 (#2)
Operator : JXM InstName : ECD8
Sample : |WAR221130-60|CCV|1|SVA|1|1660
Misc : |MIX[A]
ALS Vial : 18 Sample Multiplier: 1

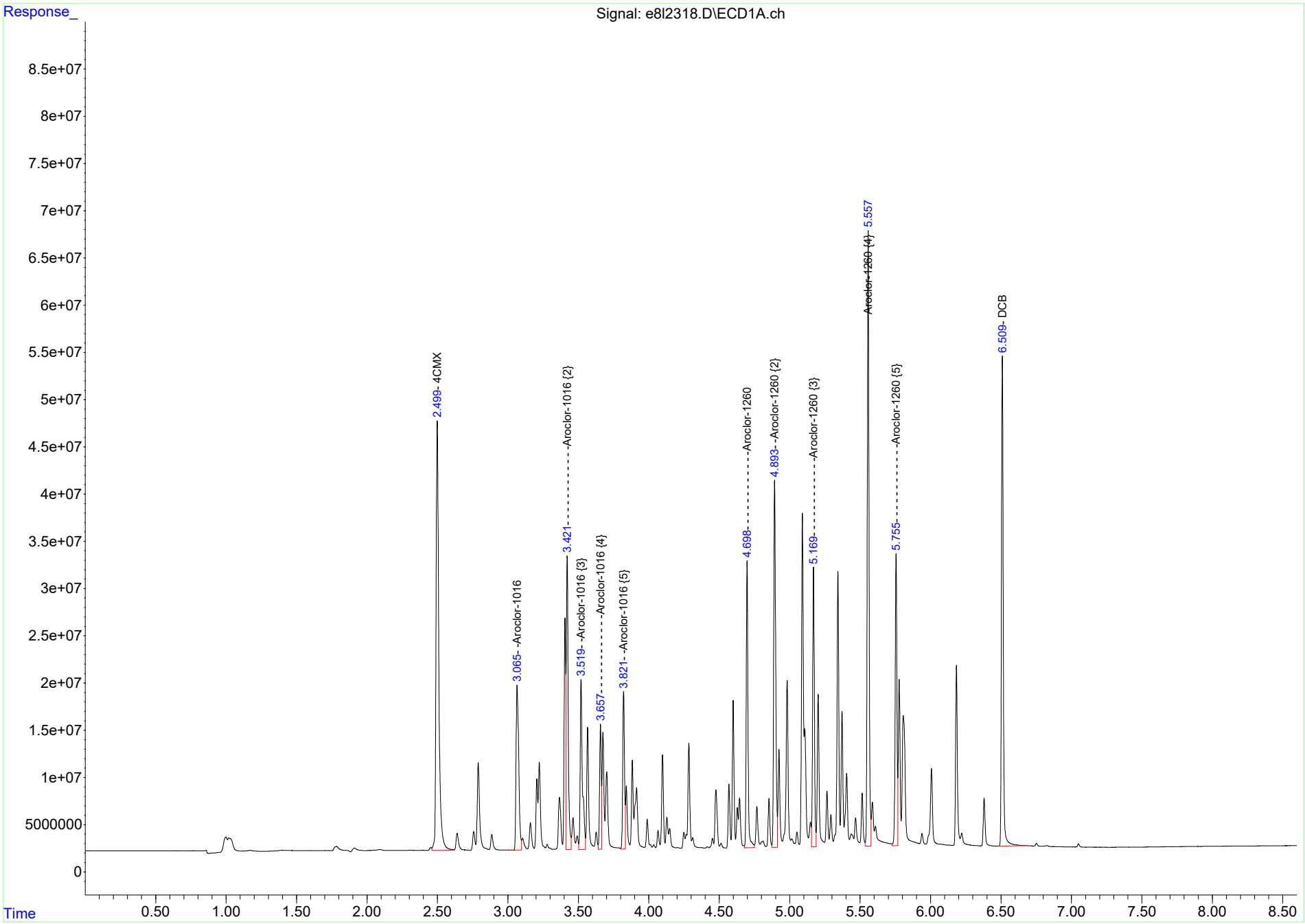
Quant Time: Dec 23 10:31:13 2022
Quant Method : D:\MSDCHEM\1\DATA\122322\ECD8_8082_122022.m
Quant Title : ECD8 SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1 Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.500	2.499	-0.001	614434153	97.401	2.814	2.814	0.000	521436495	102.008
DCB	6.512	6.510	-0.002	465557884	96.411	7.180	7.178	-0.002	313807284	99.858
Target Compounds										
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016	3.067	3.065	-0.002	231377150	1007.686	3.541	3.541	0.000	113323930	1029.725
Aroclor-1016 {2}	3.422	3.421	-0.001	293451930	1054.242	3.898	3.897	-0.001	225269626	1152.249
Aroclor-1016 {3}	3.521	3.519	-0.002	198042287	1029.965	3.998	3.998	0.000	148932793	1089.497
Aroclor-1016 {4}	3.659	3.657	-0.002	107418074	1024.848	4.076	4.075	-0.001	96492287	1102.450
Aroclor-1016 {5}	3.823	3.821	-0.002	145543075	1041.431	4.347	4.346	-0.001	114814294	1079.338
Sum Aroclor-1016				975832516	5158.172				698832930	5453.258
Average Aroclor-1016					1031.634					1090.652
Aroclor-1260	4.699	4.698	-0.001	259229295	1035.297	5.261	5.260	-0.001	189563341	1093.227
Aroclor-1260 {2}	4.895	4.893	-0.002	380462061	1068.717	5.407	5.406	-0.001	226623203	1110.161
Aroclor-1260 {3}	5.171	5.169	-0.002	249654856	1058.010	5.726	5.725	-0.001	173219688	1082.328
Aroclor-1260 {4}	5.559	5.557	-0.002	554843367	1087.948	6.108	6.106	-0.002	416363947	1120.911
Aroclor-1260 {5}	5.757	5.755	-0.002	263147454	1084.602	6.367	6.365	-0.002	288801228	1090.995
Sum Aroclor-1260				1707337033	5334.574				1294571407	5497.623
Average Aroclor-1260					1066.915					1099.525

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2318.D



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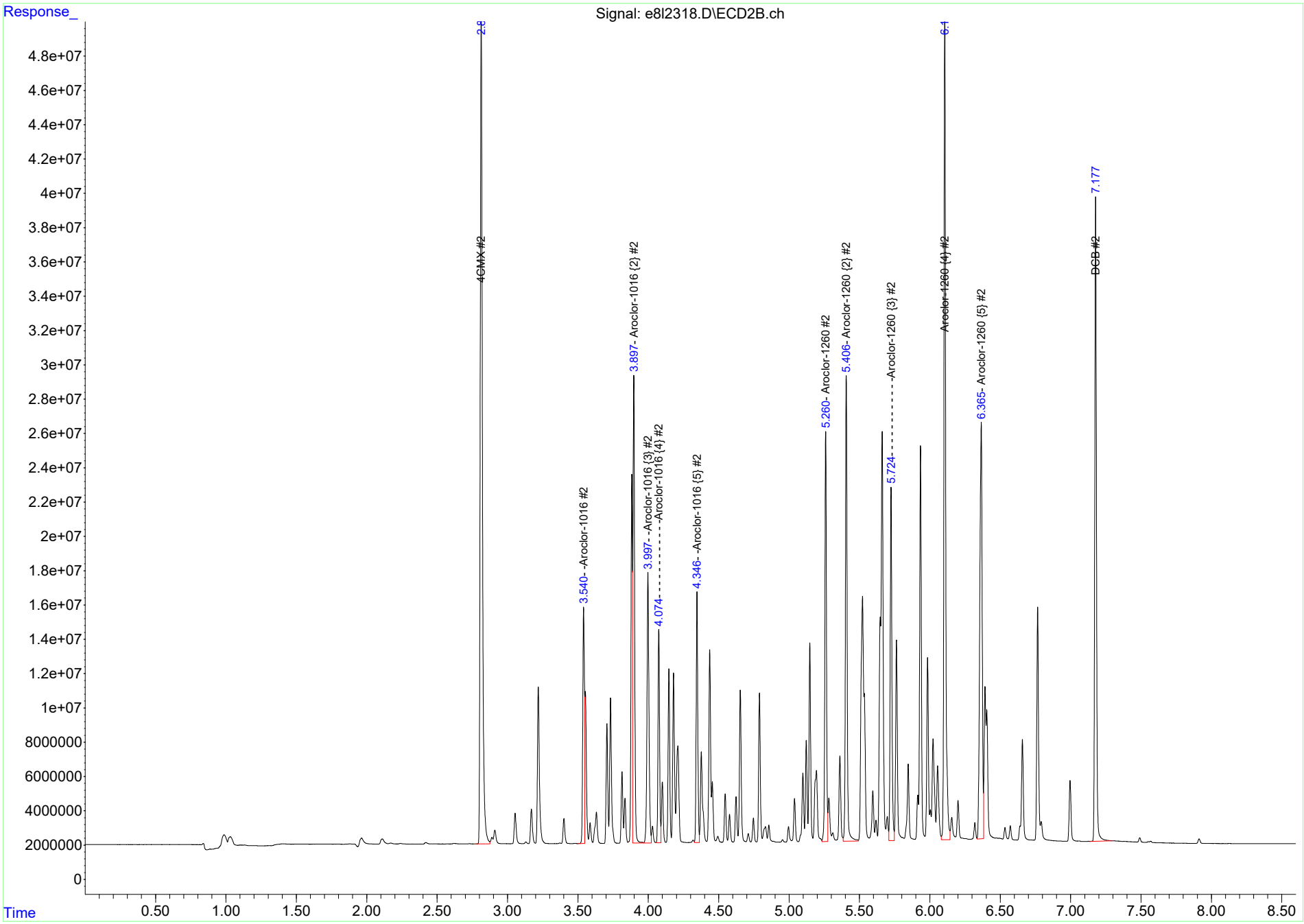


ECD8_8082_122022.m Fri Dec 23 10:32:04 2022 Page: 3

Lab Name: GEL Laboratories LLC **Client SDG:** 2023-289

GC Column: Description: RTX-CLP

Instrument ID: ECD8A.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

Mean Surrogate RT From Initial Calibration: **RT Range Based on Calibration Verification:**				2.5 2.47 2.53 #	6.51 6.48 6.54 #
File	**Sample Number**	**Lab Sample ID**	**Analysis Date**	**4cmx**	**Decachlorobiphenyl**
e8l2012.D	ICAL	WAR221218-01	20-DEC-22 10:40	2.5	6.51
e8l2013.D	ICAL	WAR221218-02	20-DEC-22 10:53	2.5	6.51
e8l2014.D	ICAL	WAR221218-03	20-DEC-22 11:05	2.5	6.51
e8l2015.D	ICAL	WAR221218-04	20-DEC-22 11:17	2.5	6.51
e8l2016.D	ICAL	IAR220908-01	20-DEC-22 11:30	2.5	6.51
e8l2017.D	ICV	WAR221130-60	20-DEC-22 11:42	2.5	6.51

Column used to flag retention time values with an asterisk.

Lab Name: GEL Laboratories LLC **Client SDG:** 2023-289

GC Column: PEST2

Instrument ID: ECD8A.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

Mean Surrogate RT From Initial Calibration:				2.81	7.18
RT Range Based on Calibration Verification:				2.78 2.84 #	7.15 7.21 #
File	**Sample Number**	**Lab Sample ID**	**Analysis Date**	**4cmx**	**Decachlorobiphenyl**
e8l2012.D	ICAL	WAR221218-01	20-DEC-22 10:40	2.81	7.18
e8l2013.D	ICAL	WAR221218-02	20-DEC-22 10:53	2.81	7.18
e8l2014.D	ICAL	WAR221218-03	20-DEC-22 11:05	2.81	7.18
e8l2015.D	ICAL	WAR221218-04	20-DEC-22 11:17	2.81	7.18
e8l2016.D	ICAL	IAR220908-01	20-DEC-22 11:30	2.82	7.18
e8l2017.D	ICV	WAR221130-60	20-DEC-22 11:42	2.81	7.18

Column used to flag retention time values with an asterisk.

Lab Name: GEL Laboratories LLC **Client SDG:** 2023-289

GC Column: Description: RTX-CLP

Instrument ID: ECD8A.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

Mean Surrogate RT From Initial Calibration:				2.5	6.51
RT Range Based on Calibration Verification:				2.47 2.53 #	6.48 6.54 #
File	**Sample Number**	**Lab Sample ID**	**Analysis Date**	**4cmx**	**Decachlorobiphenyl**
e8l2201.D	CCB	WAR220725-99	22-DEC-22 08:48	2.5	6.52
e8l2202.D	ZZZZZZZ	ZZZZZZZ	22-DEC-22 09:00	NA	NA
e8l2203.D	CCV	WAR221130-60	22-DEC-22 09:12	2.5	6.51
e8l2204.D	CCV	WAR220811-54	22-DEC-22 09:24	NA	NA
e8l2205.D	CCV	WAR221206-42	22-DEC-22 09:37	NA	NA
e8l2206.D	CCV	WAR221216-48	22-DEC-22 09:49	NA	NA
e8l2207.D	CCV	WAR220915-68	22-DEC-22 10:01	NA	NA
e8l2208.D	CCV	WAR221114-62	22-DEC-22 10:14	NA	NA
e8l2209.D	CCV	WAR221209-32	22-DEC-22 10:26	NA	NA
e8l2210.D	CCV	WAR221219-21	22-DEC-22 10:38	NA	NA
e8l2211.D	CCB	WAR220725-99	22-DEC-22 10:51	2.5	6.51
e8l2212.D	CCV	WAR221130-60	22-DEC-22 12:25	2.5	6.51
e8l2213.D	CCB	WAR220725-99	22-DEC-22 12:41	2.5	6.52
e8l2221.D	CCV	WAR221130-60	22-DEC-22 14:49	2.5	6.51
e8l2222.D	CCB	WAR220725-99	22-DEC-22 15:02	2.5	6.51
e8l2224.D	MB	1205278292	22-DEC-22 15:51	2.5	6.51
e8l2225.D	BLK01LCS	1205278293	22-DEC-22 16:03	2.5	6.51
e8l2230.D	SMEB02-23-265372	604449006	22-DEC-22 17:33	2.5	6.51
e8l2231.D	SMEB02-23-265382	604449008	22-DEC-22 17:52	2.5	6.51
e8l2232.D	SMEB03-23-265373	604449010	22-DEC-22 18:12	2.5	6.51
e8l2233.D	SMEB03-23-265383	604449012	22-DEC-22 18:31	2.5	6.51
e8l2234.D	CCV	WAR221130-60	22-DEC-22 18:50	2.5	6.51
e8l2235.D	CCB	WAR220725-99	22-DEC-22 19:03	2.5	6.51
e8l2236.D	SMEB04-23-265374	604449014	22-DEC-22 19:15	2.5	6.51
e8l2237.D	SMEB04-23-265384	604449016	22-DEC-22 19:34	2.5	6.51
e8l2240.D	CCV	WAR221130-60	22-DEC-22 20:32	2.5	6.51
e8l2241.D	CCB	WAR220725-99	22-DEC-22 20:45	2.5	6.51

Column used to flag retention time values with an asterisk.

Lab Name: GEL Laboratories LLC **Client SDG:** 2023-289

GC Column: PEST2

Instrument ID: ECD8A.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

Mean Surrogate RT From Initial Calibration:				2.82	7.18
RT Range Based on Calibration Verification:				2.79 2.85 #	7.15 7.21 #
File	**Sample Number**	**Lab Sample ID**	**Analysis Date**	**4cmx**	**Decachlorobiphenyl**
e8l2201.D	CCB	WAR220725-99	22-DEC-22 08:48	2.81	7.18
e8l2202.D	ZZZZZZZ	ZZZZZZZ	22-DEC-22 09:00	NA	NA
e8l2203.D	CCV	WAR221130-60	22-DEC-22 09:12	2.82	7.18
e8l2204.D	CCV	WAR220811-54	22-DEC-22 09:24	NA	NA
e8l2205.D	CCV	WAR221206-42	22-DEC-22 09:37	NA	NA
e8l2206.D	CCV	WAR221216-48	22-DEC-22 09:49	NA	NA
e8l2207.D	CCV	WAR220915-68	22-DEC-22 10:01	NA	NA
e8l2208.D	CCV	WAR221114-62	22-DEC-22 10:14	NA	NA
e8l2209.D	CCV	WAR221209-32	22-DEC-22 10:26	NA	NA
e8l2210.D	CCV	WAR221219-21	22-DEC-22 10:38	NA	NA
e8l2211.D	CCB	WAR220725-99	22-DEC-22 10:51	2.81	7.18
e8l2212.D	CCV	WAR221130-60	22-DEC-22 12:25	2.82	7.18
e8l2213.D	CCB	WAR220725-99	22-DEC-22 12:41	2.81	7.18
e8l2221.D	CCV	WAR221130-60	22-DEC-22 14:49	2.81	7.18
e8l2222.D	CCB	WAR220725-99	22-DEC-22 15:02	2.81	7.18
e8l2224.D	MB	1205278292	22-DEC-22 15:51	2.81	7.18
e8l2225.D	BLK01LCS	1205278293	22-DEC-22 16:03	2.81	7.18
e8l2230.D	SMEB02-23-265372	604449006	22-DEC-22 17:33	2.81	7.18
e8l2231.D	SMEB02-23-265382	604449008	22-DEC-22 17:52	2.81	7.18
e8l2232.D	SMEB03-23-265373	604449010	22-DEC-22 18:12	2.81	7.18
e8l2233.D	SMEB03-23-265383	604449012	22-DEC-22 18:31	2.81	7.18
e8l2234.D	CCV	WAR221130-60	22-DEC-22 18:50	2.82	7.18
e8l2235.D	CCB	WAR220725-99	22-DEC-22 19:03	2.81	7.18
e8l2236.D	SMEB04-23-265374	604449014	22-DEC-22 19:15	2.81	7.18
e8l2237.D	SMEB04-23-265384	604449016	22-DEC-22 19:34	2.82	7.18
e8l2240.D	CCV	WAR221130-60	22-DEC-22 20:32	2.81	7.18
e8l2241.D	CCB	WAR220725-99	22-DEC-22 20:45	2.81	7.18

Column used to flag retention time values with an asterisk.

Lab Name: GEL Laboratories LLC **Client SDG:** 2023-289

GC Column: Description: RTX-CLP

Instrument ID: ECD8A.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

Mean Surrogate RT From Initial Calibration: **RT Range Based on Calibration Verification:**				2.5 2.47 2.53 #	6.51 6.48 6.54 #
File	**Sample Number**	**Lab Sample ID**	**Analysis Date**	**4cmx**	**Decachlorobiphenyl**
e8l2301.D	CCB	WAR220725-99	23-DEC-22 05:23	2.5	6.51
e8l2302.D	ZZZZZZZ	ZZZZZZZ	23-DEC-22 05:35	NA	NA
e8l2303.D	CCV	WAR221130-60	23-DEC-22 05:47	2.5	6.51
e8l2304.D	CCV	WAR220811-54	23-DEC-22 06:00	NA	NA
e8l2305.D	CCV	WAR221206-42	23-DEC-22 06:12	NA	NA
e8l2306.D	CCV	WAR221216-48	23-DEC-22 06:24	NA	NA
e8l2307.D	CCV	WAR220915-68	23-DEC-22 06:37	NA	NA
e8l2308.D	CCV	WAR221114-62	23-DEC-22 06:49	NA	NA
e8l2309.D	CCV	WAR221209-32	23-DEC-22 07:01	NA	NA
e8l2310.D	CCV	WAR221219-21	23-DEC-22 07:13	NA	NA
e8l2311.D	CCB	WAR220725-99	23-DEC-22 07:26	2.5	6.51
e8l2312.D	SMEB01-23-265371	604449002	23-DEC-22 07:38	2.5	6.51
e8l2313.D	SMEB01-23-265381	604449004	23-DEC-22 07:58	2.5	6.51
e8l2314.D	SMEB01-23-265381MS	1205278294	23-DEC-22 08:17	2.5	6.51
e8l2315.D	SMEB01-23-265381MSD	1205278295	23-DEC-22 08:36	2.5	6.51
e8l2316.D	SMEB05-23-265375	604449018	23-DEC-22 08:56	2.5	6.51
e8l2317.D	SMEB05-23-265385	604449020	23-DEC-22 09:15	2.5	6.51
e8l2318.D	CCV	WAR221130-60	23-DEC-22 09:35	2.5	6.51
e8l2319.D	CCB	WAR220725-99	23-DEC-22 09:47	2.5	6.51

Column used to flag retention time values with an asterisk.

Lab Name: GEL Laboratories LLC **Client SDG:** 2023-289

GC Column: PEST2

Instrument ID: ECD8A.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

				2.81 2.78 2.84 #	7.18 7.15 7.21 #
Mean Surrogate RT From Initial Calibration: **RT Range Based on Calibration Verification:**					
File	**Sample Number**	**Lab Sample ID**	**Analysis Date**	**4cmx**	**Decachlorobiphenyl**
e8l2301.D	CCB	WAR220725-99	23-DEC-22 05:23	2.81	7.18
e8l2302.D	ZZZZZZZ	ZZZZZZZ	23-DEC-22 05:35	NA	NA
e8l2303.D	CCV	WAR221130-60	23-DEC-22 05:47	2.81	7.18
e8l2304.D	CCV	WAR220811-54	23-DEC-22 06:00	NA	NA
e8l2305.D	CCV	WAR221206-42	23-DEC-22 06:12	NA	NA
e8l2306.D	CCV	WAR221216-48	23-DEC-22 06:24	NA	NA
e8l2307.D	CCV	WAR220915-68	23-DEC-22 06:37	NA	NA
e8l2308.D	CCV	WAR221114-62	23-DEC-22 06:49	NA	NA
e8l2309.D	CCV	WAR221209-32	23-DEC-22 07:01	NA	NA
e8l2310.D	CCV	WAR221219-21	23-DEC-22 07:13	NA	NA
e8l2311.D	CCB	WAR220725-99	23-DEC-22 07:26	2.81	7.18
e8l2312.D	SMEB01-23-265371	604449002	23-DEC-22 07:38	2.81	7.18
e8l2313.D	SMEB01-23-265381	604449004	23-DEC-22 07:58	2.81	7.18
e8l2314.D	SMEB01-23-265381MS	1205278294	23-DEC-22 08:17	2.81	7.18
e8l2315.D	SMEB01-23-265381MSD	1205278295	23-DEC-22 08:36	2.81	7.18
e8l2316.D	SMEB05-23-265375	604449018	23-DEC-22 08:56	2.82	7.18
e8l2317.D	SMEB05-23-265385	604449020	23-DEC-22 09:15	2.81	7.18
e8l2318.D	CCV	WAR221130-60	23-DEC-22 09:35	2.81	7.18
e8l2319.D	CCB	WAR220725-99	23-DEC-22 09:47	2.81	7.18

Column used to flag retention time values with an asterisk.

Quality Control Data

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**			**Matrix:**	**WATER**
Lab Sample ID:	**1205278292**				
Client Sample:	**QC for batch 2359875**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**MB for batch 2359875**	**Method:**	**SW846 3535A/8082A**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**2359880**	**Inst:**	**ECD8A.I**	**Dilution:**	**1**
Run Date:	**12/22/2022 15:51**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/22/2022 05:48**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**122222\e8l2224.D**	**Column:**	**1 Description: RTX-CLP**		
	122222\e8l2224.D		**2 PEST2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	0.0333	ug/L	0.0333	0.100	1
11104-28-2	Aroclor-1221	U	0.0333	ug/L	0.0333	0.100	1
11141-16-5	Aroclor-1232	U	0.0333	ug/L	0.0333	0.100	1
53469-21-9	Aroclor-1242	U	0.0333	ug/L	0.0333	0.100	1
12672-29-6	Aroclor-1248	U	0.0333	ug/L	0.0333	0.100	1
11097-69-1	Aroclor-1254	U	0.0333	ug/L	0.0333	0.100	1
11096-82-5	Aroclor-1260	U	0.0333	ug/L	0.0333	0.100	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
4cmx	0.119	0.200	ug/L	59	(26%-108%)
Decachlorobiphenyl	0.175	0.200	ug/L	88	(32%-135%)

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2224.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On   : 22 Dec 2022 15:51 (#1); 22 Dec 2022 15:51 (#2)
Operator : JXM   InstName : ECD8
Sample   : |1205278292|2359880|1|SVA|1|MB|||
Misc   : |ECD5A2A_1L|WATER|QC A|||
ALS Vial : 24   Sample Multiplier: 1

Jxm 12/23/2022

JC 12/23/2022

Quant Time: Dec 23 04:59:24 2022
Quant Method : D:\MSDCHEM\1\DATA\122222\ECD8_8082_122022.m
Quant Title : ECD8   SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1   Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um   Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.502	2.502	0.000	748040317	118.580	2.815	2.812	-0.003	629517641	123.151
DCB	6.513	6.513	0.000	845266817	175.044	7.181	7.179	-0.002	553832159	176.238

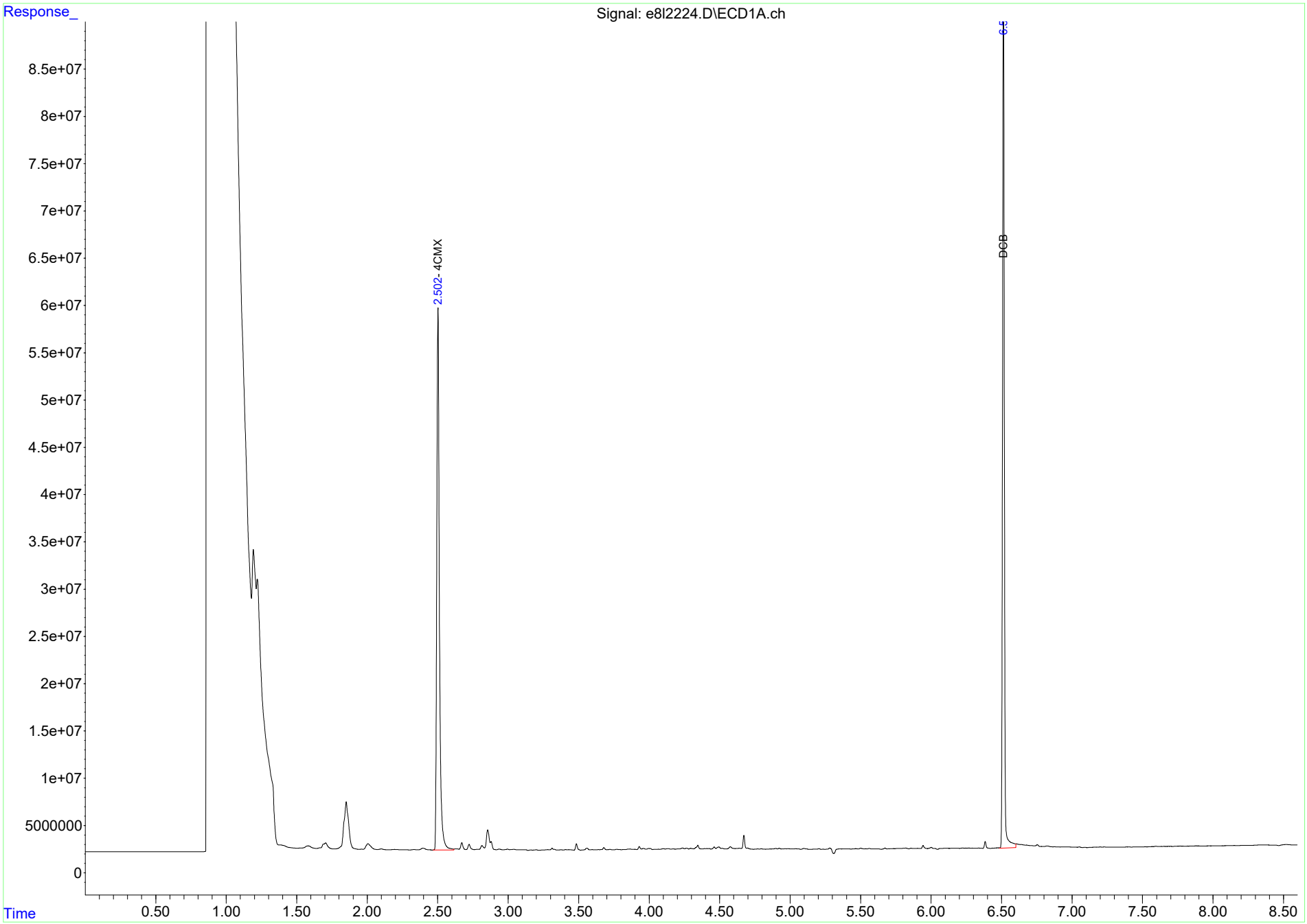
Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	59%	62%
DCB	200.000	No Limits	88%	88%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2

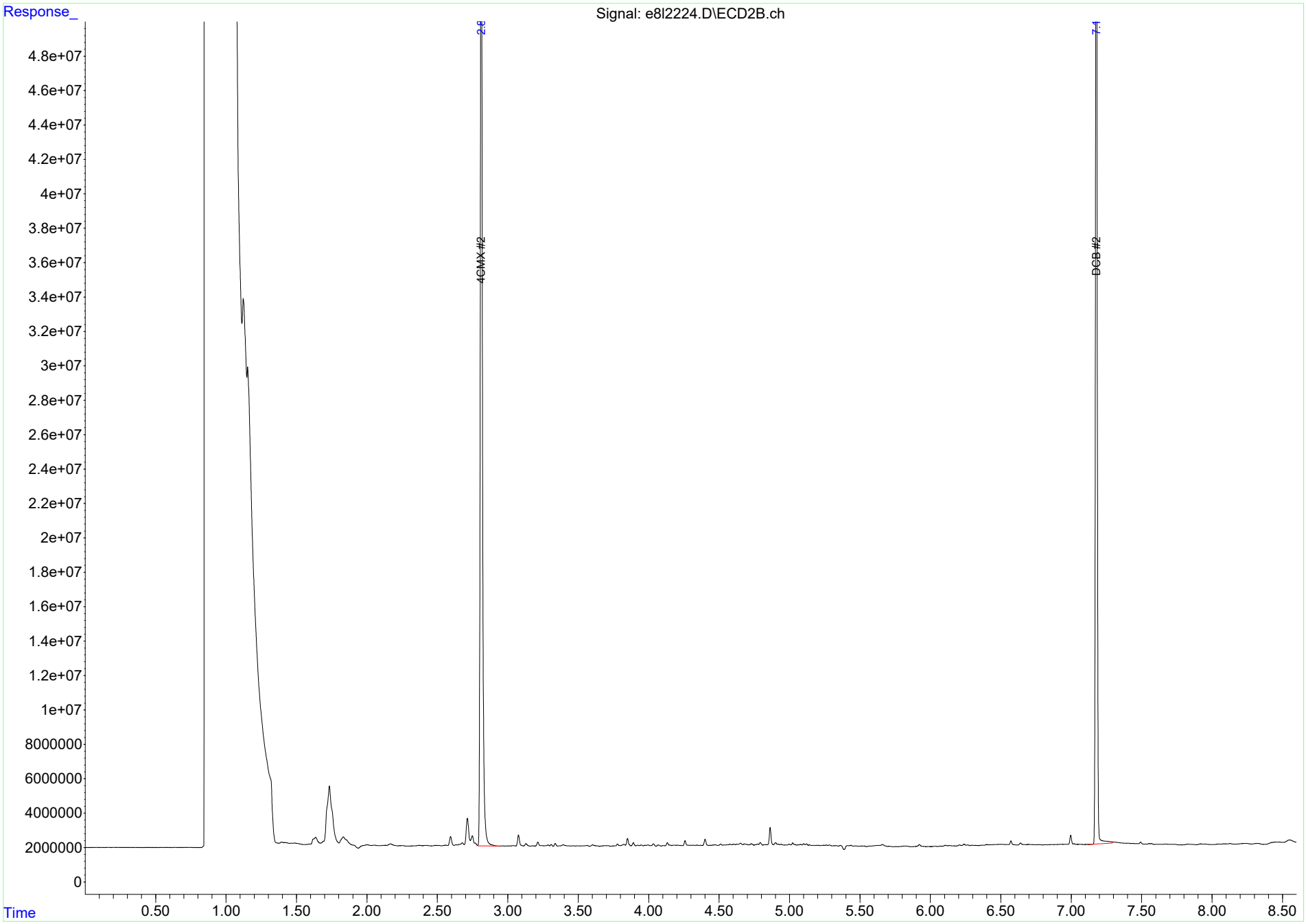
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2224.D



ECD8_8082_122022.m Fri Dec 23 05:02:13 2022 Page: 2

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2224.D



ECD8_8082_122022.m Fri Dec 23 05:02:13 2022 Page: 3

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.502	2.502	0.000	748040317	118.580	2.815	2.812	-0.003	629517641	123.151
DCB	6.513	6.513	0.000	845266817	175.044	7.181	7.179	-0.002	553832159	176.238

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	59%	62%
DCB	200.000	No Limits	88%	88%
4CMX	200.000	No Limits	59%	62%
DCB	200.000	No Limits	88%	88%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016 {2}	3.423	0.000	-3.423	0	N.D.	3.899	3.891	-0.008	1877565	9.604
Aroclor-1016 {4}	3.659	3.679	0.020f	2908174	27.746	4.076	4.067	-0.009	810469	9.260
Aroclor-1016 {5}	3.824	3.848	0.024f	665347	4.761	4.348	0.000	-4.348	0	N.D.
Sum Aroclor-1016				3573521	32.507				2688034	18.864 #
Average Aroclor-1016					<MDL					<MDL
Aroclor-1221	2.642	2.640	-0.002	1401852	23.262	3.055	3.076	0.021f	5899103	136.489
Aroclor-1221 {3}	2.791	2.814	0.023f	6588394	47.819	3.220	3.214	-0.006	1915264	19.046
Sum Aroclor-1221				7990246	71.082				7814367	155.535 #
Average Aroclor-1221					35.541					77.768 #
Aroclor-1232 {2}	3.421	0.000	-3.421	0	N.D.	3.897	3.891	-0.006	1877565	25.687
Aroclor-1232 {4}	3.658	3.679	0.021f	2908174	85.946	4.075	4.067	-0.008	810469	22.860
Aroclor-1232 {5}	3.822	3.848	0.026f	665347	13.319	4.346	0.000	-4.346	0	N.D.
Sum Aroclor-1232				3573521	99.264				2688034	48.547 #
Average Aroclor-1232					49.632					<MDL
Aroclor-1242 {2}	3.423	0.000	-3.423	0	N.D.	3.898	3.891	-0.007	1877565	12.452
Aroclor-1242 {4}	3.659	3.679	0.020f	2908174	37.810	4.076	4.067	-0.009	810469	11.758
Aroclor-1242 {5}	3.823	3.848	0.025f	665347	5.990	4.347	0.000	-4.347	0	N.D.
Sum Aroclor-1242				3573521	43.799				2688034	24.210 #
Average Aroclor-1242					<MDL					<MDL
Aroclor-1248	3.423	0.000	-3.423	0	N.D.	3.898	3.891	-0.007	1877565	24.916
Aroclor-1248 {2}	3.659	3.679	0.020f	2908174	23.413	4.147	4.151	0.004	302899	3.420
Aroclor-1248 {3}	3.822	3.848	0.026f	665347	4.194	4.347	0.000	-4.347	0	N.D.
Aroclor-1248 {4}	4.129	4.128	-0.001	427656	2.421	4.624	4.601	-0.023f	917915	7.235
Aroclor-1248 {5}	4.290	4.294	0.004	980674	6.799	4.823	0.000	-4.823	0	N.D.
Sum Aroclor-1248				4981851	36.827				3098379	35.571
Average Aroclor-1248					<MDL					<MDL
Aroclor-1254	4.099	4.101	0.002	872040	4.136	4.655	4.652	-0.003	1733831	10.433
Aroclor-1254 {2}	4.286	4.294	0.008	980674	3.651	4.790	4.793	0.003	1651130	9.132
Aroclor-1254 {3}	4.571	4.576	0.005	4593378	13.262	5.123	5.121	-0.002	660304	2.457

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1254 {5}	4.896	4.899	0.003	823563	3.005	5.407	5.417	0.010	3048397	25.099
Sum Aroclor-1254				7269655	24.054				7093663	47.121 #
Average Aroclor-1254					<MDL					<MDL
Aroclor-1260	4.701	4.699	-0.002	1631694	6.517	5.263	0.000	-5.263	0	N.D.
Aroclor-1260 {2}	4.896	4.899	0.003	823563	2.313	5.409	5.417	0.008	3048397	14.933
Aroclor-1260 {4}	5.560	5.562	0.002	3895003	7.637	6.108	6.106	-0.002	370454	0.997
Sum Aroclor-1260				6350260	16.467				3418852	15.931
Average Aroclor-1260					<MDL					<MDL
Aroclor-1262	4.700	4.699	-0.001	1631694	9.397	5.261	0.000	-5.261	0	N.D.
Aroclor-1262 {2}	4.894	4.899	0.005	823563	3.827	5.407	5.417	0.010	3048397	22.922
Aroclor-1262 {4}	5.559	5.562	0.003	3895003	7.993	6.107	6.106	-0.001	370454	1.130
Sum Aroclor-1262				6350260	21.218				3418852	24.052
Average Aroclor-1262					<MDL					<MDL
Aroclor-1268 {2}	5.805	5.819	0.014	1656210	2.131	6.393	6.400	0.007	171519	0.386
Aroclor-1268 {3}	5.939	5.943	0.004	5078867	8.010	6.572	6.572	0.000	1781009	4.748
Aroclor-1268 {5}	6.380	6.384	0.004	6176151	3.301	6.997	6.996	-0.001	4010046	3.695
Sum Aroclor-1268				12911228	13.441				5962575	8.829 #
Average Aroclor-1268					<MDL					<MDL
4,4' DDT	5.114	5.098	-0.016f	4538481	<MDL	5.659	5.661	0.002	1891593	2.202
4,4' DDD	4.919	4.922	0.003	785258	0.279	5.437	5.435	-0.002	2316883	1.512 #
4,4' DDE	4.494	4.495	0.001	3520032	0.853	5.024	5.023	-0.001	1177036	0.452 #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2224.D

Aroclor-1016	Multi	-	Deletion ==	DMP
Aroclor-1221	Multi	-	Deletion ==	DMP
Aroclor-1232	Multi	-	Deletion ==	DMP
Aroclor-1242	Multi	-	Deletion ==	DMP
Aroclor-1248	Multi	-	Deletion ==	DMP
Aroclor-1254	Multi	-	Deletion ==	DMP
Aroclor-1260	Multi	-	Deletion ==	DMP
Aroclor-1262	Multi	-	Deletion ==	DMP
Aroclor-1268	Multi	-	Deletion ==	DMP
4,4' DDT	Both	-	Deletion ==	DMP
4,4' DDD	Both	-	Deletion ==	DMP
4,4' DDE	Both	-	Deletion ==	DMP

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**			**Matrix:**	**WATER**
Lab Sample ID:	**1205278293**				
Client Sample:	**QC for batch 2359875**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**LCS for batch 2359875**	**Method:**	**SW846 3535A/8082A**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**2359880**	**Inst:**	**ECD8A.I**	**Dilution:**	**1**
Run Date:	**12/22/2022 16:03**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/22/2022 05:48**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**122222\e8l2225.D**	**Column:**	**1 Description: RTX-CLP**		
	122222\e8l2225.D		**2 PEST2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		0.742	ug/L	0.0333	0.100	1
11104-28-2	Aroclor-1221	U	0.0333	ug/L	0.0333	0.100	1
11141-16-5	Aroclor-1232	U	0.0333	ug/L	0.0333	0.100	1
53469-21-9	Aroclor-1242	U	0.0333	ug/L	0.0333	0.100	1
12672-29-6	Aroclor-1248	U	0.0333	ug/L	0.0333	0.100	1
11097-69-1	Aroclor-1254	U	0.0333	ug/L	0.0333	0.100	1
11096-82-5	Aroclor-1260		0.836	ug/L	0.0333	0.100	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
4cmx	0.126	0.200	ug/L	63	(26%-108%)
Decachlorobiphenyl	0.182	0.200	ug/L	91	(32%-135%)

Quantitation (Manual Int.) Report
GEL Laboratories, LLC

JXM 12/23/2022

JC 12/23/2022

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2225.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On   : 22 Dec 2022 16:03 (#1); 22 Dec 2022 16:03 (#2)
Operator : JXM   InstName : ECD8
Sample   : |1205278293|2359880|1|SVA|1|LCS|||
Misc   : |ECD5A2A_1L|WATER|QC A|||
ALS Vial : 25   Sample Multiplier: 1

Quant Time: Dec 23 05:02:59 2022
Quant Method : D:\MSDCHEM\1\DATA\122222\ECD8_8082_122022.m
Quant Title : ECD8   SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1   Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um   Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.502	2.501	-0.001	795092794	126.039	2.815	2.814	-0.001	659997189	129.114
DCB	6.513	6.511	-0.002	876860657	181.587m	7.181	7.179	-0.002	564154619	179.523m

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	63%	65%
DCB	200.000	No Limits	91%	90%

Target Compounds

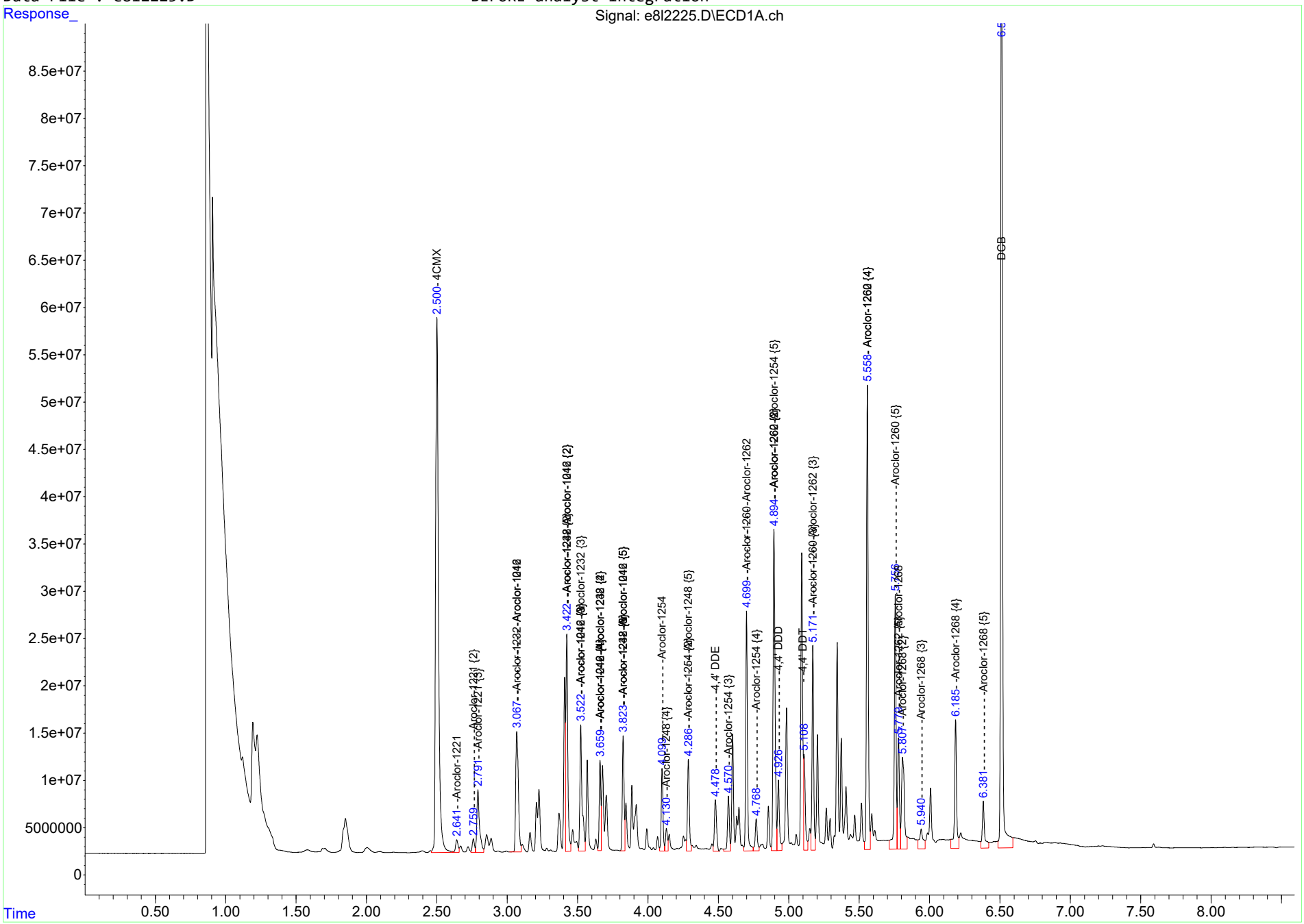
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016	3.068	3.067	-0.001	167617728	730.003	3.542	3.542	0.000	82197716	746.894
Aroclor-1016 {2}	3.423	3.423	0.000	213619539	767.440	3.899	3.899	0.000	159363515	815.141
Aroclor-1016 {3}	3.522	3.522	0.000	144201909	749.955	3.999	3.999	0.000	107685669	787.759
Aroclor-1016 {4}	3.659	3.659	0.000	75219823	717.653	4.076	4.076	0.000	71168454	813.118
Aroclor-1016 {5}	3.824	3.823	-0.001	104242713	745.907	4.348	4.347	-0.001	81009973	761.553
Sum Aroclor-1016				704901711	3710.958				501425328	3924.466
Average Aroclor-1016					742.192					784.893
Aroclor-1260	4.701	4.699	-0.002	215192257	859.424m	5.263	5.261	-0.002	150575643	868.382
Aroclor-1260 {2}	4.896	4.894	-0.002	320779318	901.068m	5.409	5.407	-0.002	171479363	840.027m
Aroclor-1260 {3}	5.172	5.170	-0.002	171987407	728.864m	5.726	5.725	-0.001	116360260	727.054m
Aroclor-1260 {4}	5.560	5.558	-0.002	396287641	777.049m	6.108	6.107	-0.001	285285513	768.029m
Aroclor-1260 {5}	5.758	5.756	-0.002	222036469	915.157m	6.368	6.366	-0.002	208340075	787.039m
Sum Aroclor-1260				1326283090	4181.562				932040854	3990.532
Average Aroclor-1260					836.312					798.106

Quantitation (Manual Int.) Report
GEL Laboratories, LLC

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

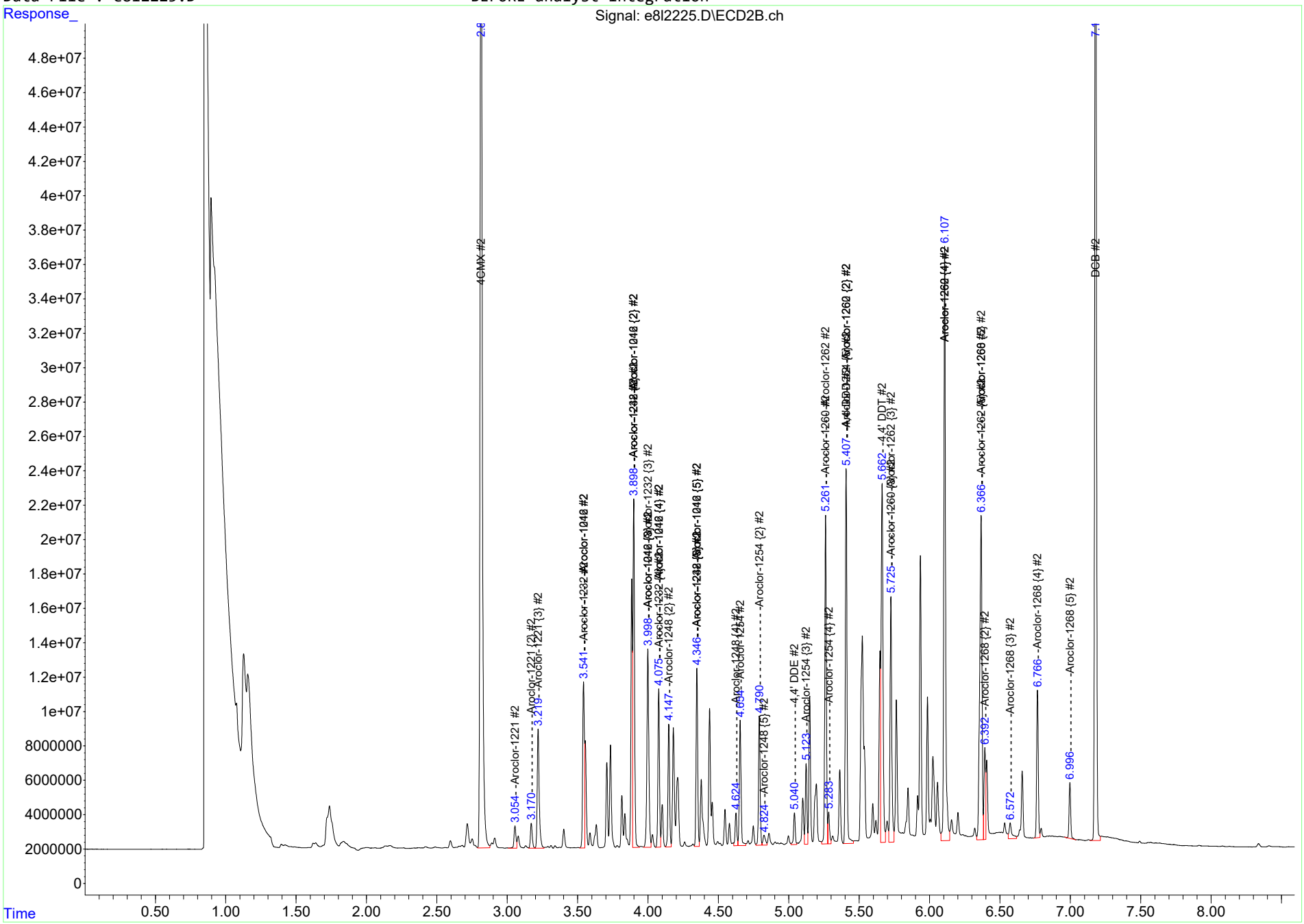
Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2225.D

BEFORE analyst integration



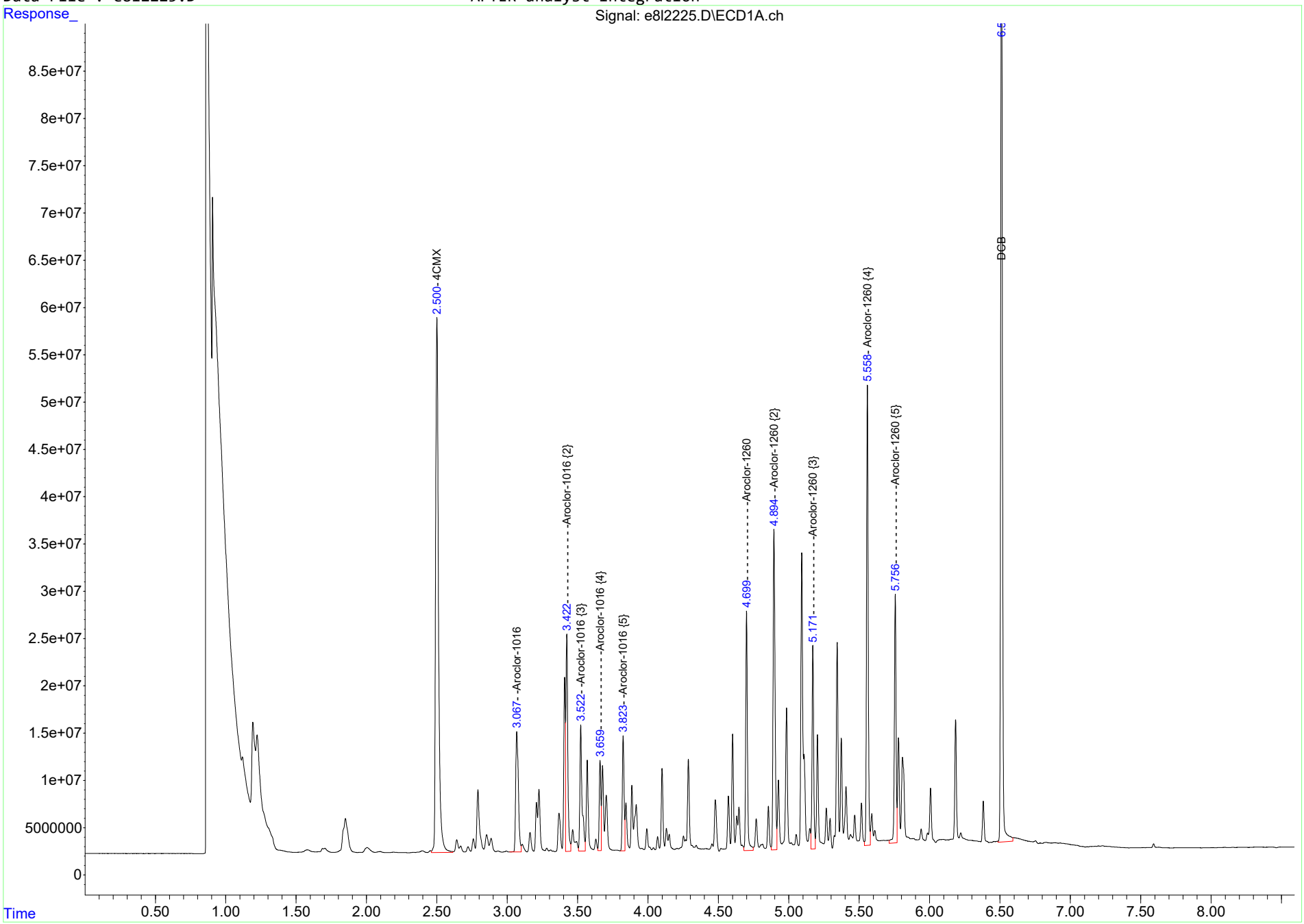
ECD8_8082_122022.m Fri Dec 23 05:03:28 2022 Page: 3

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2225.D BEFORE analyst integration



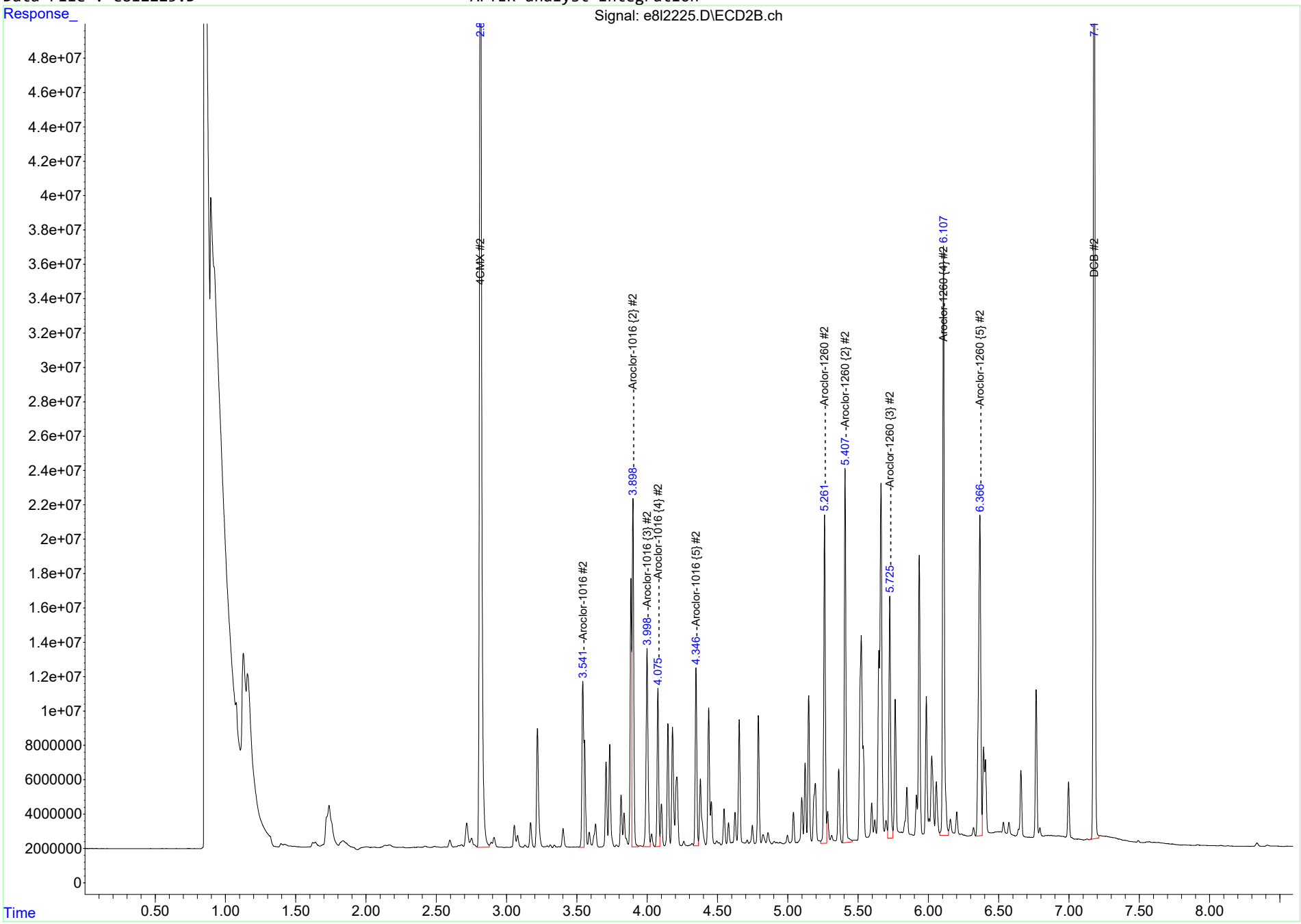
ECD8_8082_122022.m Fri Dec 23 05:03:28 2022 Page: 4

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2225.D AFTER analyst integration



ECD8_8082_122022.m Fri Dec 23 05:03:29 2022 Page: 5

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2225.D AFTER analyst integration



ECD8_8082_122022.m Fri Dec 23 05:03:30 2022 Page: 6

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.502	2.501	-0.001	795092794	126.039	2.815	2.814	-0.001	659997189	129.114
DCB	6.513	6.511	-0.002	917407031	189.983	7.181	7.180	-0.001	566902629	180.397

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	63%	65%
DCB	200.000	No Limits	91%	90%
4CMX	200.000	No Limits	63%	65%
DCB	200.000	No Limits	95%	90%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016	3.068	3.067	-0.001	167617728	730.003	3.542	3.542	0.000	82197716	746.894
Aroclor-1016 {2}	3.423	3.423	0.000	213619539	767.440	3.899	3.899	0.000	159363515	815.141
Aroclor-1016 {3}	3.522	3.522	0.000	144201909	749.955	3.999	3.999	0.000	107685669	787.759
Aroclor-1016 {4}	3.659	3.659	0.000	75219823	717.653	4.076	4.076	0.000	71168454	813.118
Aroclor-1016 {5}	3.824	3.823	-0.001	104242713	745.907	4.348	4.347	-0.001	81009973	761.553
Sum Aroclor-1016				704901711	3710.958				501425328	3924.466
Average Aroclor-1016					742.192					784.893
Aroclor-1221	2.642	2.641	-0.001	16559409	274.786	3.055	3.055	0.000	12410876	287.153
Aroclor-1221 {2}	2.759	2.759	0.000	15562808	462.169	3.170	3.170	0.000	13220380	457.442
Aroclor-1221 {3}	2.791	2.792	0.001	87474312	634.899	3.220	3.219	-0.001	67516545	671.421
Sum Aroclor-1221				119596530	1371.853				93147801	1416.015
Average Aroclor-1221					457.284					472.005
Aroclor-1232	3.066	3.067	0.001	167617728	1799.330	3.540	3.542	0.002	82197716	1713.634
Aroclor-1232 {2}	3.421	3.423	0.002	213619539	1937.224	3.897	3.899	0.002	159363515	2180.290
Aroclor-1232 {3}	3.520	3.522	0.002	144201909	1934.222	3.998	3.999	0.001	107685669	1976.000
Aroclor-1232 {4}	3.658	3.659	0.001	75219823	2222.980	4.075	4.076	0.001	71168454	2007.369
Aroclor-1232 {5}	3.822	3.823	0.001	104242713	2086.721	4.346	4.347	0.001	81009973	2088.509
Sum Aroclor-1232				704901711	9980.477				501425328	9965.803
Average Aroclor-1232					1996.095					1993.161
Aroclor-1242	3.067	3.067	0.000	167617728	920.910	3.542	3.542	0.000	82197716	938.170
Aroclor-1242 {2}	3.423	3.423	0.000	213619539	983.387	3.898	3.899	0.001	159363515	1056.924
Aroclor-1242 {3}	3.521	3.522	0.001	144201909	956.002	3.999	3.999	0.000	107685669	993.041
Aroclor-1242 {4}	3.659	3.659	0.000	75219823	977.945	4.076	4.076	0.000	71168454	1032.477
Aroclor-1242 {5}	3.823	3.823	0.000	104242713	938.401	4.347	4.347	0.000	81009973	949.379
Sum Aroclor-1242				704901711	4776.644				501425328	4969.990
Average Aroclor-1242					955.329					993.998
Aroclor-1248	3.423	3.423	0.000	213619539	1894.938	3.898	3.899	0.001	159363515	2114.847
Aroclor-1248 {2}	3.659	3.659	0.000	75219823	605.572	4.147	4.147	0.000	56852083	641.837
Aroclor-1248 {3}	3.822	3.823	0.001	104242713	657.062	4.347	4.347	0.000	81009973	683.628
Aroclor-1248 {4}	4.129	4.131	0.002	22753872	128.792	4.624	4.625	0.001	15674947	123.552

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
Aroclor-1248 {5}	4.290	4.287	-0.003	88098339	610.820	4.823	4.824	0.001	6877273	48.012	
Sum Aroclor-1248				503934286	3897.184				319777791	3611.875	
Average Aroclor-1248					779.437					722.375	
Aroclor-1254	4.099	4.100	0.001	74397163	352.890	4.655	4.655	0.000	62123292	373.821	
Aroclor-1254 {2}	4.286	4.287	0.001	88098339	327.953	4.790	4.791	0.001	58788258	325.146	
Aroclor-1254 {3}	4.571	4.571	0.000	54129155	156.282	5.123	5.123	0.000	36386823	135.381	
Aroclor-1254 {4}	4.767	4.769	0.002	35211964	139.886	5.284	5.283	-0.001	14698790	80.693	
Aroclor-1254 {5}	4.896	4.895	-0.001	323206357	1179.215	5.407	5.407	0.000	172338771	1418.958	
Sum Aroclor-1254				575042979	2156.225				344335935	2333.998	
Average Aroclor-1254					431.245					466.800	
Aroclor-1260	4.701	4.700	-0.001	216948392	866.438	5.263	5.261	-0.002	150575643	868.382	
Aroclor-1260 {2}	4.896	4.895	-0.001	323206357	907.886	5.409	5.407	-0.002	172338771	844.237	
Aroclor-1260 {3}	5.172	5.171	-0.001	174452709	739.311	5.726	5.725	-0.001	121372902	758.374	
Aroclor-1260 {4}	5.560	5.558	-0.002	407140351	798.329	6.108	6.107	-0.001	295811878	796.368	
Aroclor-1260 {5}	5.758	5.756	-0.002	241557167	995.615	6.368	6.366	-0.002	213403636	806.168	
Sum Aroclor-1260				1363304976	4307.579				953502830	4073.529	
Average Aroclor-1260					861.516					814.706	
Aroclor-1262	4.700	4.700	0.000	216948392	1249.469	5.261	5.261	0.000	150575643	1276.336	
Aroclor-1262 {2}	4.894	4.895	0.001	323206357	1501.927	5.407	5.407	0.000	172338771	1295.881	
Aroclor-1262 {3}	5.171	5.171	0.000	174452709	621.160	5.726	5.725	-0.001	121372902	665.702	
Aroclor-1262 {4}	5.559	5.558	-0.001	407140351	835.510	6.107	6.107	0.000	295811878	902.205	
Aroclor-1262 {5}	5.779	5.779	0.000	103456311	484.847	6.362	6.366	0.004	213403636	900.037	
Sum Aroclor-1262				1225204120	4692.913				953502830	5040.161	
Average Aroclor-1262					938.583					1008.032	
Aroclor-1268	5.778	5.779	0.001	103456311	143.255	6.359	6.366	0.007	213403636	460.566	
Aroclor-1268 {2}	5.805	5.808	0.003	139963872	180.061	6.393	6.393	0.000	42327719	95.254	
Aroclor-1268 {3}	5.939	5.940	0.001	38039036	59.990	6.572	6.573	0.001	12851026	34.259	
Aroclor-1268 {4}	6.184	6.185	0.001	132741218	518.256	6.767	6.766	-0.001	68317295	426.350	
Aroclor-1268 {5}	6.380	6.382	0.002	57184036	30.560	6.997	6.997	0.000	25895178	23.864	
Sum Aroclor-1268				471384474	932.121				362794854	1040.293	
Average Aroclor-1268					186.424					208.059	
4,4' DDT	5.114	5.108	-0.006	84763706	51.564	5.659	5.663	0.004	196672483	228.906	#
4,4' DDD	4.919	4.926	0.007	71078456	25.241	5.437	5.407	-0.030f	172338771	112.504	#
4,4' DDE	4.494	4.478	-0.016	58185950	14.093	5.024	5.040	0.016	15262344	5.863	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2225.D

DCB - Manual Integration ==	AB/AP	DCB #2 - Manual Integration ==	AB/AP		
Aroclor-1221 Multi - Deletion ==	DMP				
Aroclor-1232 Multi - Deletion ==	DMP				
Aroclor-1242 Multi - Deletion ==	DMP				
Aroclor-1248 Multi - Deletion ==	DMP				
Aroclor-1254 Multi - Deletion ==	DMP				
Aroclor-1260 - Manual Integration ==	AB/AP				
Aroclor-1260 {2} - Manual Integration ==	AB/AP	Aroclor-1260 {2} #2 - Manual Integration ==	AB/AP		
Aroclor-1260 {3} - Manual Integration ==	AB/AP	Aroclor-1260 {3} #2 - Manual Integration ==	AB/AP		
Aroclor-1260 {4} - Manual Integration ==	AB/AP	Aroclor-1260 {4} #2 - Manual Integration ==	AB/AP		
Aroclor-1260 {5} - Manual Integration ==	AB/AP	Aroclor-1260 {5} #2 - Manual Integration ==	AB/AP		
Aroclor-1262 Multi - Deletion ==	DMP				
Aroclor-1268 Multi - Deletion ==	DMP				
4,4' DDT Both - Deletion ==	DMP				
4,4' DDD Both - Deletion ==	DMP				
4,4' DDE Both - Deletion ==	DMP				

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**1205278294**	**Date Received:**	**12/16/2022 09:15**		
Client Sample:	**QC for batch 2359875**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265381MS**	**Method:**	**SW846 3535A/8082A**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**2359880**	**Inst:**	**ECD8A.I**	**Dilution:**	**10**
Run Date:	**12/23/2022 08:17**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/22/2022 05:48**	**Aliquot:**	**450 mL**	**Final Volume:**	**.5 mL**
Data File:	**122322\e8l2314.D**	**Column:**	**1 Description: RTX-CLP**		
	122322\e8l2314.D		**2 PEST2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	J	0.709	ug/L	0.370	1.11	1
11104-28-2	Aroclor-1221	U	0.370	ug/L	0.370	1.11	1
11141-16-5	Aroclor-1232	U	0.370	ug/L	0.370	1.11	1
53469-21-9	Aroclor-1242	U	0.370	ug/L	0.370	1.11	1
12672-29-6	Aroclor-1248	U	0.370	ug/L	0.370	1.11	1
11097-69-1	Aroclor-1254	U	0.370	ug/L	0.370	1.11	1
11096-82-5	Aroclor-1260	J	0.462	ug/L	0.370	1.11	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
4cmx	0.0690	0.222	ug/L	31	(26%-108%)
Decachlorobiphenyl	0.0710	0.222	ug/L	32	(32%-135%)

Quantitation (Manual Int.) Report
GEL Laboratories, LLC

JXM 12/23/2022

JC 12/23/2022

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2314.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On   : 23 Dec 2022 08:17 (#1); 23 Dec 2022 08:17 (#2)
Operator : JXM   InstName : ECD8
Sample   : |1205278294|2359880|10|SVA|1|MS|||
Misc   : |ECD5A2A_1L|WATER|QC A|||
ALS Vial : 14   Sample Multiplier: 10

Quant Time: Dec 23 09:02:17 2022
Quant Method : D:\MSDCHEM\1\DATA\122322\ECD8_8082_122022.m
Quant Title : ECD8   SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1   Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um   Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.500	2.499	-0.001	39155084	62.069	2.814	2.814	0.000	31682472	61.980m
DCB	6.512	6.509	-0.003	30861884	63.911	7.180	7.178	-0.002	21089579	67.110

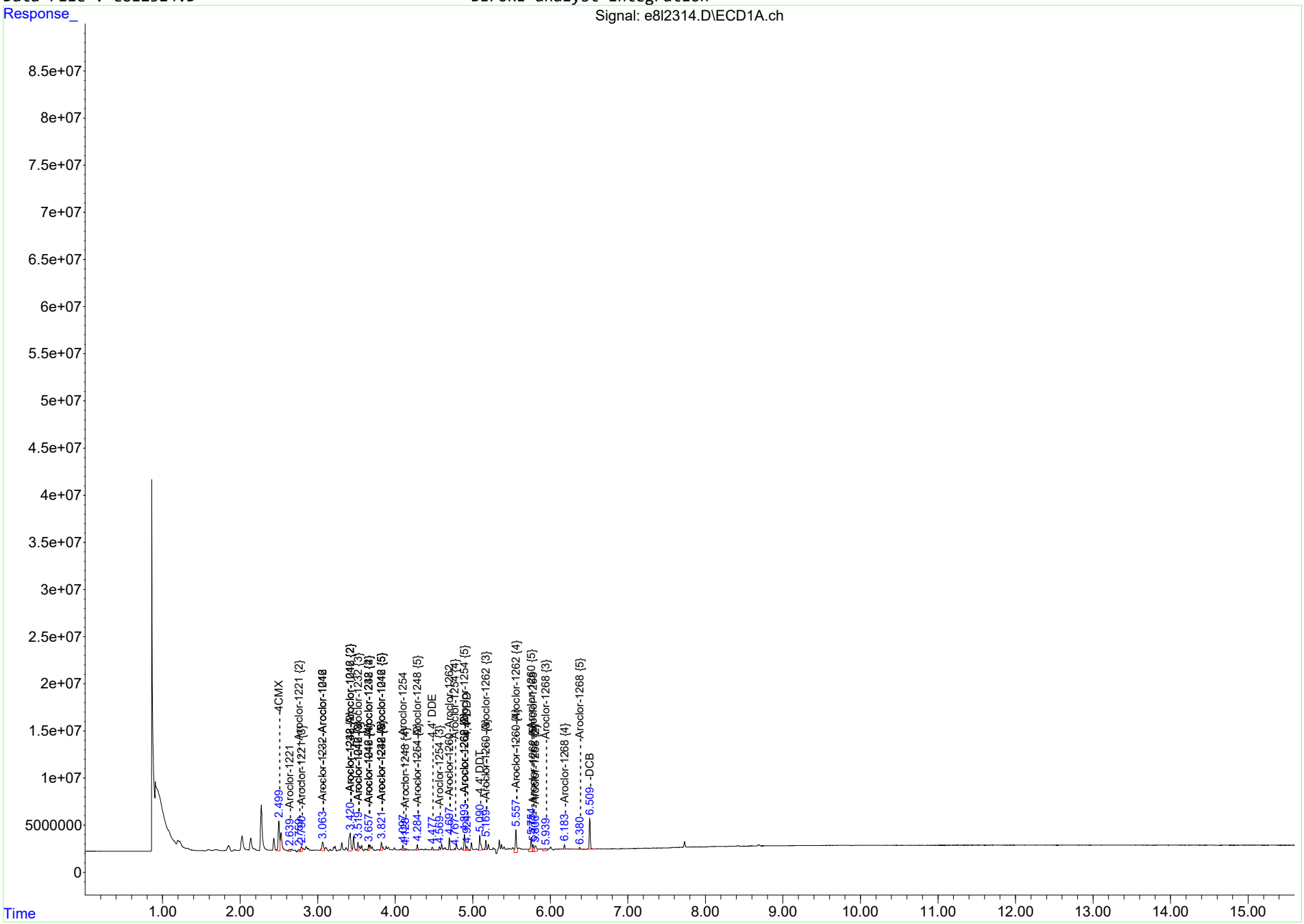
Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	31%	31%
DCB	200.000	No Limits	32%	34%

Target Compounds

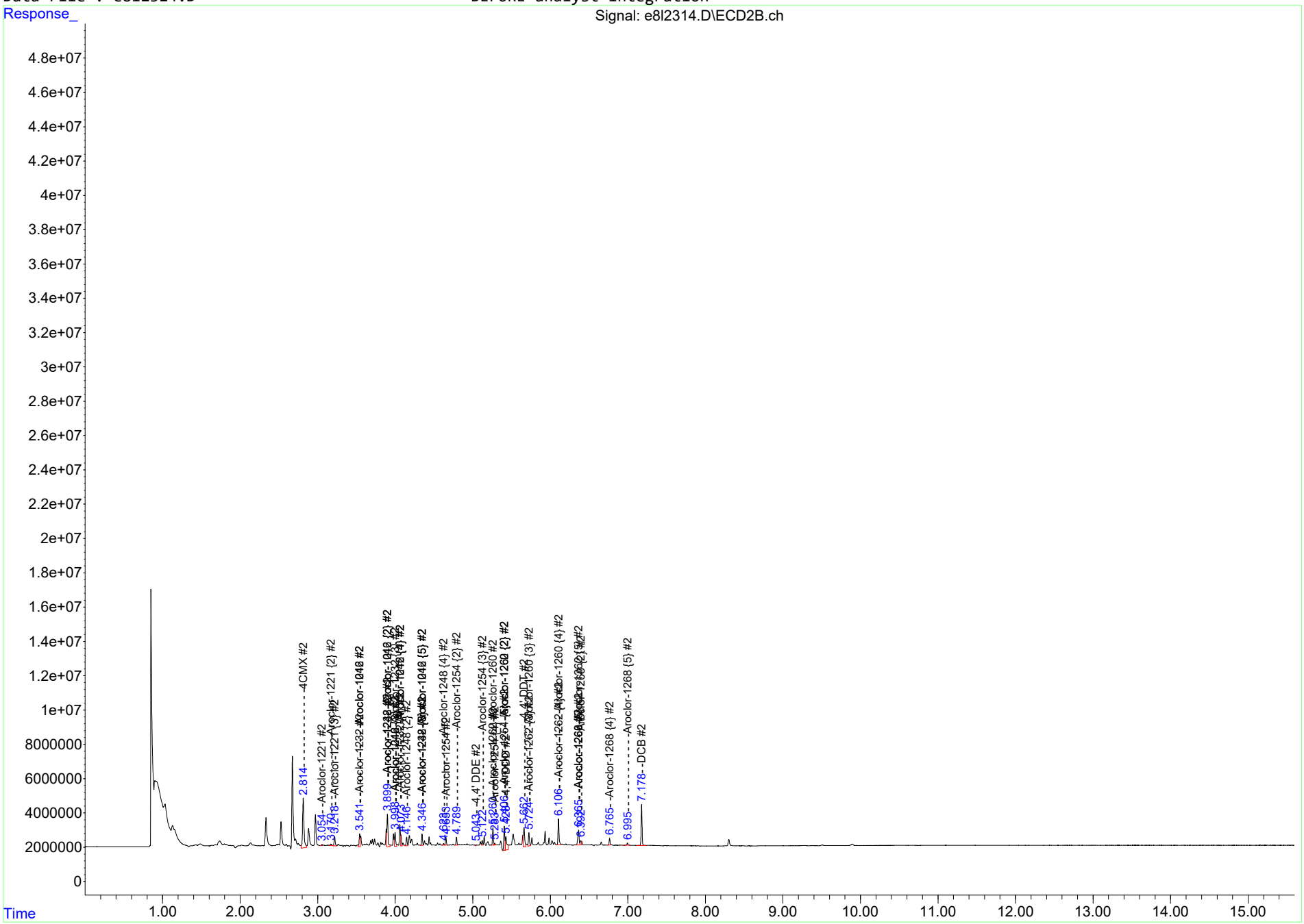
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016	3.067	3.064	-0.003	13889626	60.492	3.541	3.541	0.000	5998171	54.503m
Aroclor-1016 {2}	3.422	3.420	-0.002	20074812	72.120m	3.898	3.899	0.001	16714509	85.494m
Aroclor-1016 {3}	3.521	3.519	-0.002	13746027	71.489m	3.998	3.998	0.000	7295077	53.366m
Aroclor-1016 {4}	3.659	3.657	-0.002	5439019	51.892	4.076	4.073	-0.003	4129809	47.184m
Aroclor-1016 {5}	3.823	3.822	-0.001	8787241	62.877	4.347	4.346	-0.001	5238920	49.250
Sum Aroclor-1016				61936726	318.870				39376485	289.797
Average Aroclor-1016					63.774					57.959
Aroclor-1260	4.699	4.698	-0.001	10808980	43.168	5.261	5.261	0.000	8221447	47.414
Aroclor-1260 {2}	4.895	4.893	-0.002	18070615	50.760	5.407	5.406	-0.001	11980060	58.687m
Aroclor-1260 {3}	5.171	5.169	-0.002	8220065	34.836	5.726	5.724	-0.002	6013391	37.573m
Aroclor-1260 {4}	5.559	5.557	-0.002	18362909	36.006m	6.108	6.106	-0.002	13606084	36.630
Aroclor-1260 {5}	5.757	5.754	-0.003	10507006	43.306m	6.367	6.366	-0.001	10173442	38.432
Sum Aroclor-1260				65969574	208.077				49994425	218.735
Average Aroclor-1260					41.615					43.747

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

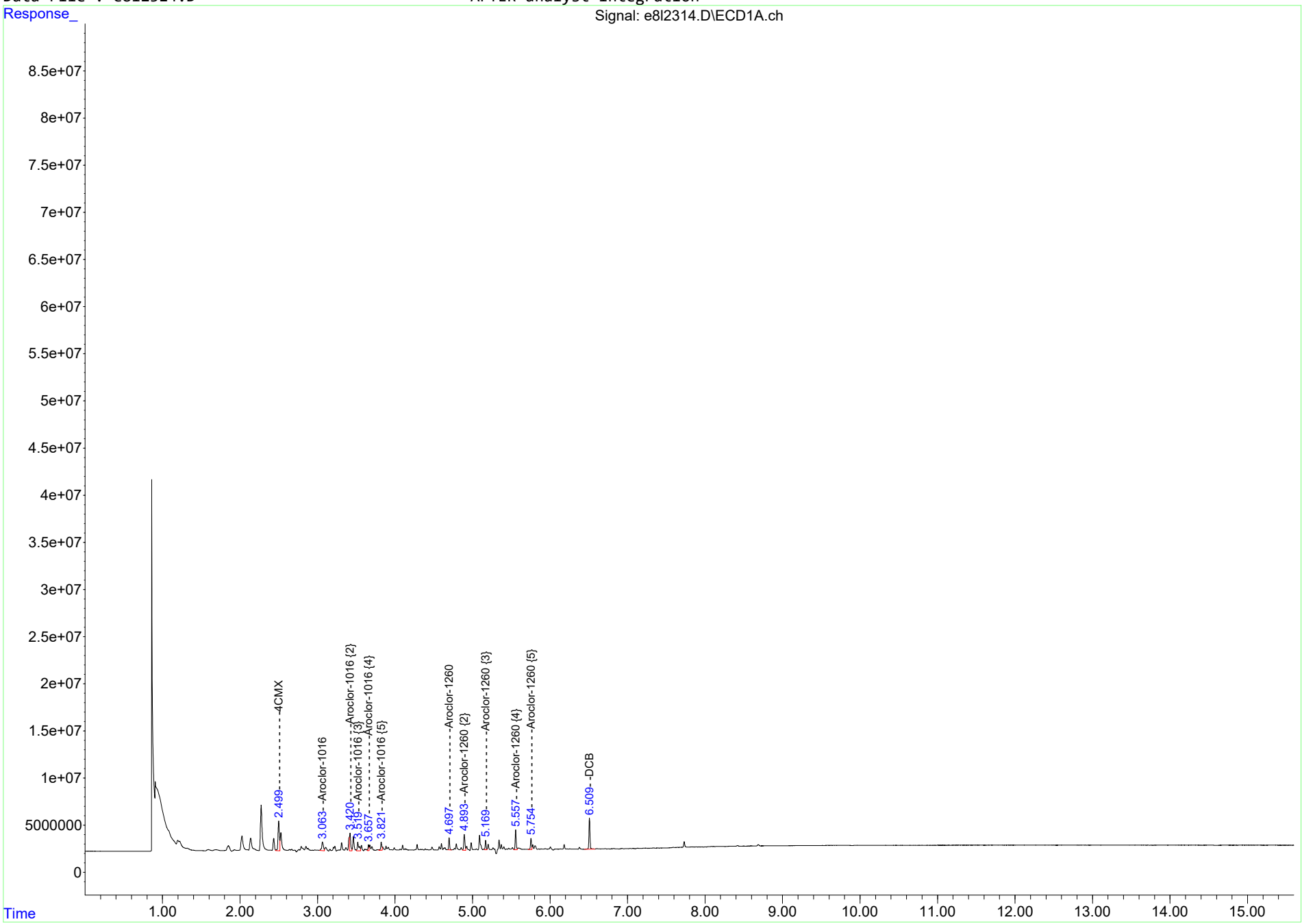
Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2314.D BEFORE analyst integration



Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2314.D BEFORE analyst integration

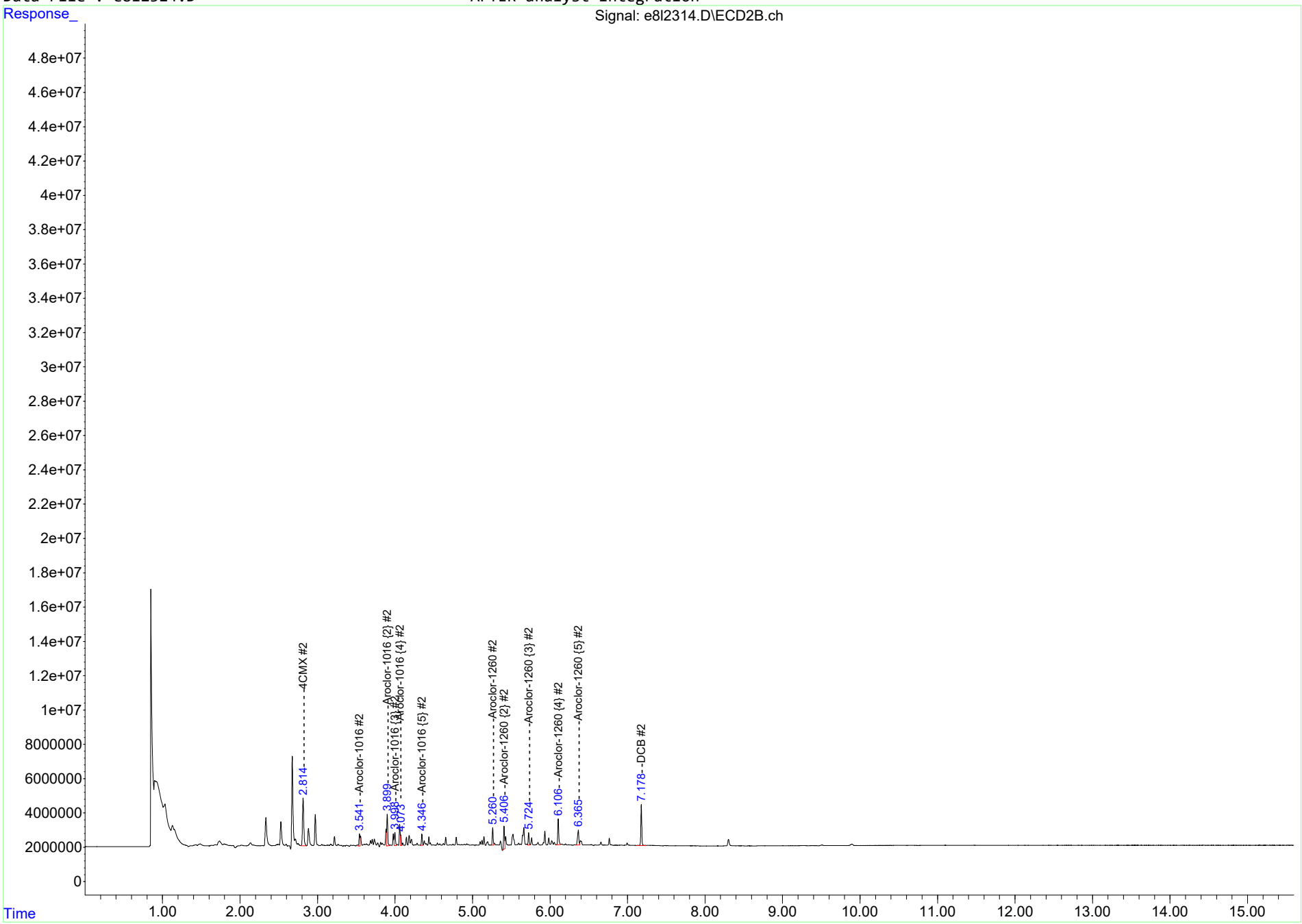


Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2314.D AFTER analyst integration



ECD8_8082_122022.m Fri Dec 23 09:03:19 2022 Page: 5

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2314.D AFTER analyst integration



ECD8_8082_122022.m Fri Dec 23 09:03:20 2022 Page: 6

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.500	2.499	-0.001	39155084	62.069	2.814	2.814	0.000	36622873	71.645
DCB	6.512	6.509	-0.003	30861884	63.911	7.180	7.178	-0.002	21089579	67.110

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	31%	31%
DCB	200.000	No Limits	32%	34%
4CMX	200.000	No Limits	31%	36%
DCB	200.000	No Limits	32%	34%

Target Compounds Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016	3.067	3.064	-0.003	13889626	60.492	3.541	3.541	0.000	6498315	59.047
Aroclor-1016 {2}	3.422	3.420	-0.002	31119659	111.799	3.898	3.899	0.001	17963495	91.883
Aroclor-1016 {3}	3.521	3.520	-0.001	8722396	45.363	3.998	3.998	0.000	8163813	59.721
Aroclor-1016 {4}	3.659	3.657	-0.002	5439019	51.892	4.076	4.074	-0.002	4588964	52.430
Aroclor-1016 {5}	3.823	3.822	-0.001	8787241	62.877	4.347	4.346	-0.001	5238920	49.250
Sum Aroclor-1016				67957941	332.423				42453507	312.331
Average Aroclor-1016					66.485					62.466
Aroclor-1221	2.643	2.640	-0.003	3890986	64.567	3.055	3.055	0.000	650160	15.043
Aroclor-1221 {2}	2.760	2.759	-0.001	3751478	111.408	3.171	3.170	-0.001	1064749	36.842
Aroclor-1221 {3}	2.792	2.790	-0.002	6300750	45.732	3.220	3.219	-0.001	5273313	52.441
Sum Aroclor-1221				13943214	221.706				6988221	104.325 #
Average Aroclor-1221					73.902					34.775 #
Aroclor-1232	3.066	3.064	-0.002	13889626	149.101	3.540	3.541	0.001	6498315	135.475
Aroclor-1232 {2}	3.422	3.420	-0.002	31119659	282.211	3.897	3.899	0.002	17963495	245.763
Aroclor-1232 {3}	3.521	3.520	-0.001	8722396	116.996	3.998	3.998	0.000	8163813	149.804
Aroclor-1232 {4}	3.658	3.657	-0.001	5439019	160.740	4.075	4.074	-0.001	4588964	129.436
Aroclor-1232 {5}	3.823	3.822	-0.001	8787241	175.902	4.346	4.346	0.000	5238920	135.064
Sum Aroclor-1232				67957941	884.950				42453507	795.541
Average Aroclor-1232					176.990					159.108
Aroclor-1242	3.067	3.064	-0.003	13889626	76.311	3.542	3.541	-0.001	6498315	74.169
Aroclor-1242 {2}	3.423	3.420	-0.003	31119659	143.258	3.898	3.899	0.001	17963495	119.137
Aroclor-1242 {3}	3.522	3.520	-0.002	8722396	57.826	3.999	3.998	-0.001	8163813	75.284
Aroclor-1242 {4}	3.659	3.657	-0.002	5439019	70.714	4.076	4.074	-0.002	4588964	66.574
Aroclor-1242 {5}	3.823	3.822	-0.001	8787241	79.103	4.347	4.346	-0.001	5238920	61.396
Sum Aroclor-1242				67957941	427.212				42453507	396.560
Average Aroclor-1242					85.442					79.312
Aroclor-1248	3.423	3.420	-0.003	31119659	276.051	3.898	3.899	0.001	17963495	238.386
Aroclor-1248 {2}	3.659	3.657	-0.002	5439019	43.788	4.147	4.147	0.000	4512144	50.940
Aroclor-1248 {3}	3.824	3.822	-0.002	8787241	55.388	4.347	4.346	-0.001	5238920	44.210
Aroclor-1248 {4}	4.130	4.129	-0.001	1519814	8.603	4.624	4.624	0.000	767358	6.048

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
Aroclor-1248 {5}	4.291	4.285	-0.006	5307586	36.800	4.824	0.000	-4.824	0	N.D.	
Sum Aroclor-1248				52173319	420.628				28481917	339.585	
Average Aroclor-1248					84.126					84.896	
Aroclor-1254	4.100	4.098	-0.002	4724379	22.409	4.655	4.654	-0.001	3785338	22.778	
Aroclor-1254 {2}	4.287	4.285	-0.002	5307586	19.758	4.791	4.790	-0.001	3790190	20.963	
Aroclor-1254 {3}	4.571	4.570	-0.001	3046165	8.795	5.124	5.122	-0.002	2296377	8.544	
Aroclor-1254 {4}	4.767	4.767	0.000	1387817	5.513	5.284	5.283	-0.001	816317	4.481	
Aroclor-1254 {5}	4.897	4.893	-0.004	18070615	65.930	5.408	5.407	-0.001	12739925	104.895	
Sum Aroclor-1254				32536561	122.406				23428147	161.661	
Average Aroclor-1254					<MDL					<MDL	
Aroclor-1260	4.699	4.698	-0.001	10808980	43.168	5.261	5.261	0.000	8221447	47.414	
Aroclor-1260 {2}	4.895	4.893	-0.002	18070615	50.760	5.407	5.407	0.000	12739925	62.409	
Aroclor-1260 {3}	5.171	5.169	-0.002	8220065	34.836	5.726	5.724	-0.002	7183343	44.884	
Aroclor-1260 {4}	5.559	5.557	-0.002	26359614	51.686	6.108	6.106	-0.002	13606084	36.630	
Aroclor-1260 {5}	5.757	5.755	-0.002	17076697	70.384	6.367	6.366	-0.001	10173442	38.432	
Sum Aroclor-1260				80535970	250.835				51924242	229.768	
Average Aroclor-1260					50.167					45.954	
Aroclor-1262	4.700	4.698	-0.002	10808980	62.252	5.261	5.261	0.000	8221447	69.688	
Aroclor-1262 {2}	4.894	4.893	-0.001	18070615	83.973	5.407	5.407	0.000	12739925	95.796	
Aroclor-1262 {3}	5.171	5.169	-0.002	8220065	29.269	5.726	5.724	-0.002	7183343	39.399	
Aroclor-1262 {4}	5.559	5.557	-0.002	26359614	54.094	6.107	6.106	-0.001	13606084	41.498	
Aroclor-1262 {5}	5.779	5.778	-0.001	7530260	35.290	6.362	6.366	0.004	10173442	42.907	
Sum Aroclor-1262				70989533	264.878				51924242	289.288	
Average Aroclor-1262					52.976					57.858	
Aroclor-1268	5.779	5.778	-0.001	7530260	10.427	6.359	6.366	0.007	10173442	21.956	
Aroclor-1268 {2}	5.806	5.806	0.000	11013919	14.169	6.393	6.393	0.000	2113042	4.755	
Aroclor-1268 {3}	5.940	5.939	-0.001	7025405	11.079	6.572	0.000	-6.572	0	N.D.	
Aroclor-1268 {4}	6.185	6.183	-0.002	4437937	17.327	6.766	6.765	-0.001	2987750	18.646	
Aroclor-1268 {5}	6.381	6.380	-0.001	2074705	1.109	6.997	6.996	-0.001	1199645	1.106	
Sum Aroclor-1268				32082226	54.111				16473878	46.463	
Average Aroclor-1268					<MDL					<MDL	
4,4' DDT	5.113	5.091	-0.022f	18833923	<MDL	5.657	5.662	0.005	12205706	14.206	
4,4' DDD	4.918	4.925	0.007	5580433	1.982	5.435	5.428	-0.007	11066480	7.224	#
4,4' DDE	4.493	4.477	-0.016	3202352	0.776	5.023	5.043	0.020	273582	0.105	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2314.D

Aroclor-1016 {2} - Manual Integration ==	AB/AP
Aroclor-1016 {3} - Manual Integration ==	AB/AP
Aroclor-1221 Multi - Deletion ==	DMP
Aroclor-1232 Multi - Deletion ==	DMP
Aroclor-1242 Multi - Deletion ==	DMP
Aroclor-1248 Multi - Deletion ==	DMP
Aroclor-1254 Multi - Deletion ==	DMP
Aroclor-1260 {4} - Manual Integration ==	AB/AP
Aroclor-1260 {5} - Manual Integration ==	AB/AP
Aroclor-1262 Multi - Deletion ==	DMP
Aroclor-1268 Multi - Deletion ==	DMP
4,4' DDT Both - Deletion ==	DMP
4,4' DDD Both - Deletion ==	DMP
4,4' DDE Both - Deletion ==	DMP
4CMX #2 - Manual Integration ==	AB/AP
Aroclor-1016 #2 - Manual Integration ==	AB/AP
Aroclor-1016 {2} #2 - Manual Integration ==	AB/AP
Aroclor-1016 {3} #2 - Manual Integration ==	AB/AP
Aroclor-1016 {4} #2 - Manual Integration ==	AB/AP
Aroclor-1260 {2} #2 - Manual Integration ==	AB/AP
Aroclor-1260 {3} #2 - Manual Integration ==	AB/AP

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**2023-289**	**Date Collected:**	**12/14/2022 09:28**	**Matrix:**	**W**
Lab Sample ID:	**1205278295**	**Date Received:**	**12/16/2022 09:15**		
Client Sample:	**QC for batch 2359875**	**Client:**	**TNSL001**	**Project:**	**TNSL00100**
Client ID:	**SMEB01-23-265381MSD**	**Method:**	**SW846 3535A/8082A**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**2359880**	**Inst:**	**ECD8A.I**	**Dilution:**	**10**
Run Date:	**12/23/2022 08:36**	**Analyst:**	**JXM**	**Inj. Vol:**	**1 uL**
Prep Date:	**12/22/2022 05:48**	**Aliquot:**	**450 mL**	**Final Volume:**	**.5 mL**
Data File:	**122322\e8l2315.D**	**Column:**	**1 Description: RTX-CLP**		
	122322\e8l2315.D		**2 PEST2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	J	0.724	ug/L	0.370	1.11	1
11104-28-2	Aroclor-1221	U	0.370	ug/L	0.370	1.11	1
11141-16-5	Aroclor-1232	U	0.370	ug/L	0.370	1.11	1
53469-21-9	Aroclor-1242	U	0.370	ug/L	0.370	1.11	1
12672-29-6	Aroclor-1248	U	0.370	ug/L	0.370	1.11	1
11097-69-1	Aroclor-1254	U	0.370	ug/L	0.370	1.11	1
11096-82-5	Aroclor-1260	J	0.519	ug/L	0.370	1.11	1

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
4cmx	0.0645	0.222	ug/L	29	(26%-108%)
Decachlorobiphenyl	0.0871	0.222	ug/L	39	(32%-135%)

Quantitation (Manual Int.) Report
GEL Laboratories, LLC

JXM 12/23/2022

JC 12/23/2022

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2315.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On   : 23 Dec 2022 08:36 (#1); 23 Dec 2022 08:36 (#2)
Operator : JXM   InstName : ECD8
Sample   : |1205278295|2359880|10|SVA|1|MSD|||
Misc   : |ECD5A2A_1L|WATER|QC A|||
ALS Vial : 15   Sample Multiplier: 10

Quant Time: Dec 23 09:04:20 2022
Quant Method : D:\MSDCHEM\1\DATA\122322\ECD8_8082_122022.m
Quant Title : ECD8   SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1   Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um   Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.500	2.499	-0.001	36624089	58.057	2.814	2.813	-0.001	37981298	74.302
DCB	6.512	6.510	-0.002	37840901	78.364	7.180	7.178	-0.002	25937648	82.538

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	29%	37%
DCB	200.000	No Limits	39%	41%

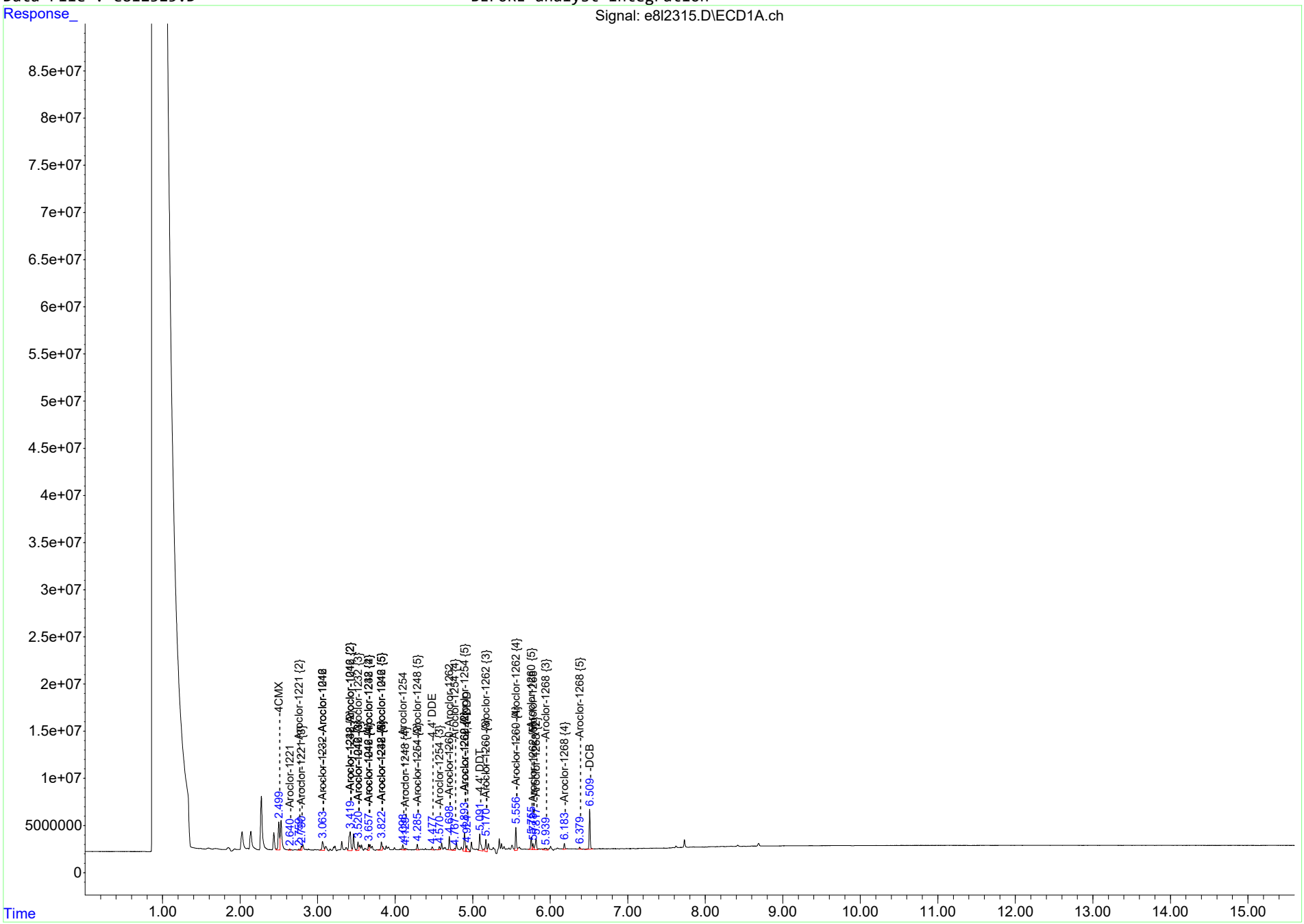
Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016	3.067	3.064	-0.003	13129700	57.182	3.541	3.541	0.000	6246244	56.757m
Aroclor-1016 {2}	3.422	3.419	-0.003	20276357	72.844m	3.898	3.899	0.001	17571729	89.879m
Aroclor-1016 {3}	3.521	3.520	-0.001	14107967	73.372m	3.998	3.997	-0.001	7515234	54.977m
Aroclor-1016 {4}	3.659	3.657	-0.002	5517408	52.640m	4.076	4.073	-0.003	4162584	47.559m
Aroclor-1016 {5}	3.823	3.822	-0.001	9750600	69.770	4.347	4.346	-0.001	5629799	52.924
Sum Aroclor-1016				62782034	325.808				41125590	302.095
Average Aroclor-1016					65.162					60.419
Aroclor-1260	4.699	4.698	-0.001	12474796	49.821	5.261	5.260	-0.001	9400092	54.211m
Aroclor-1260 {2}	4.895	4.893	-0.002	19430665	54.581m	5.407	5.406	-0.001	12964110	63.507m
Aroclor-1260 {3}	5.171	5.170	-0.001	9741174	41.282m	5.726	5.724	-0.002	6757477	42.223m
Aroclor-1260 {4}	5.559	5.556	-0.003	20193358	39.596m	6.108	6.106	-0.002	15783612	42.492
Aroclor-1260 {5}	5.757	5.755	-0.002	11676032	48.125	6.367	6.366	-0.001	11799246	44.574
Sum Aroclor-1260				73516026	233.404				56704538	247.007
Average Aroclor-1260					46.681					49.401

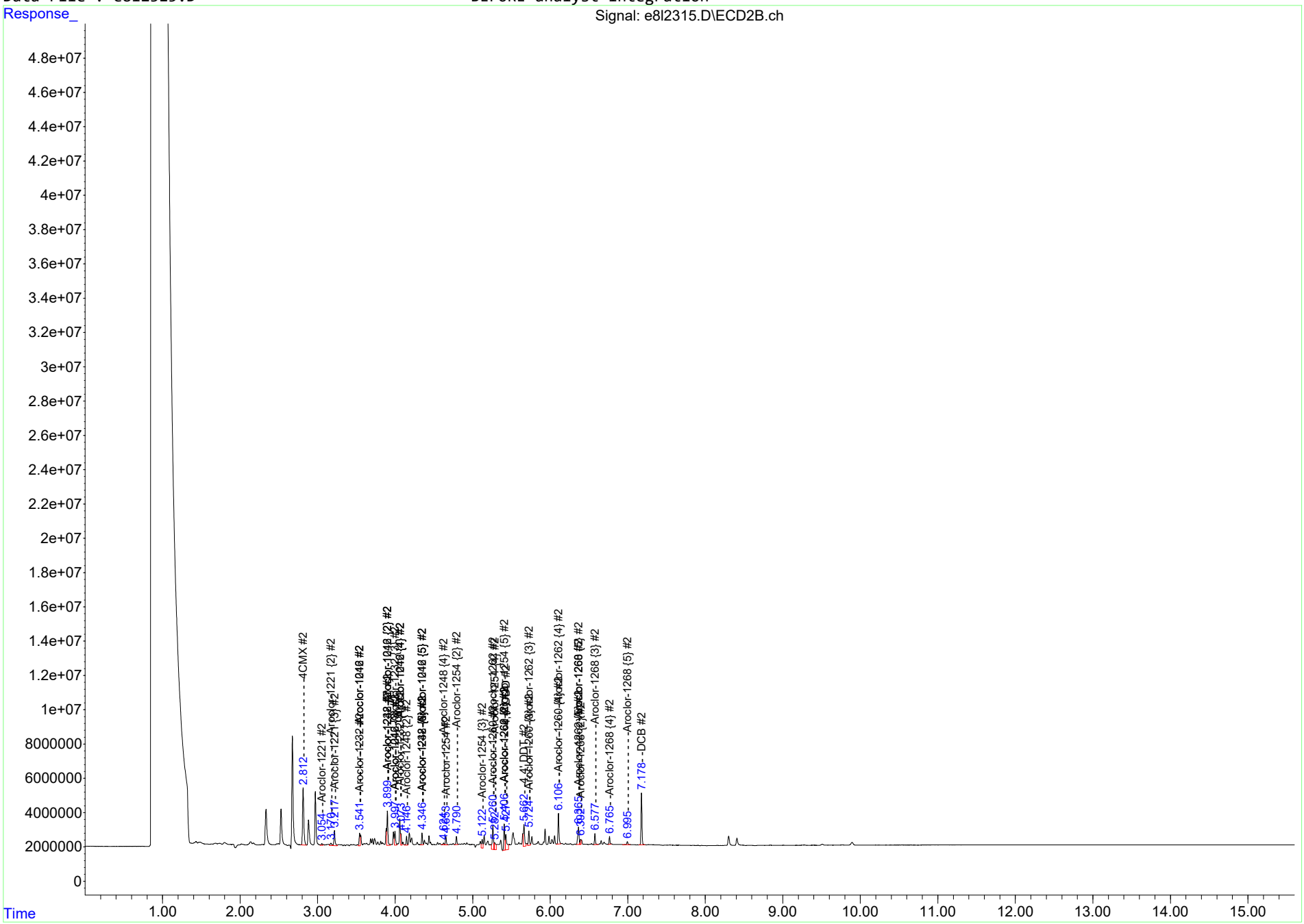
Quantitation (Manual Int.) Report
GEL Laboratories, LLC

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

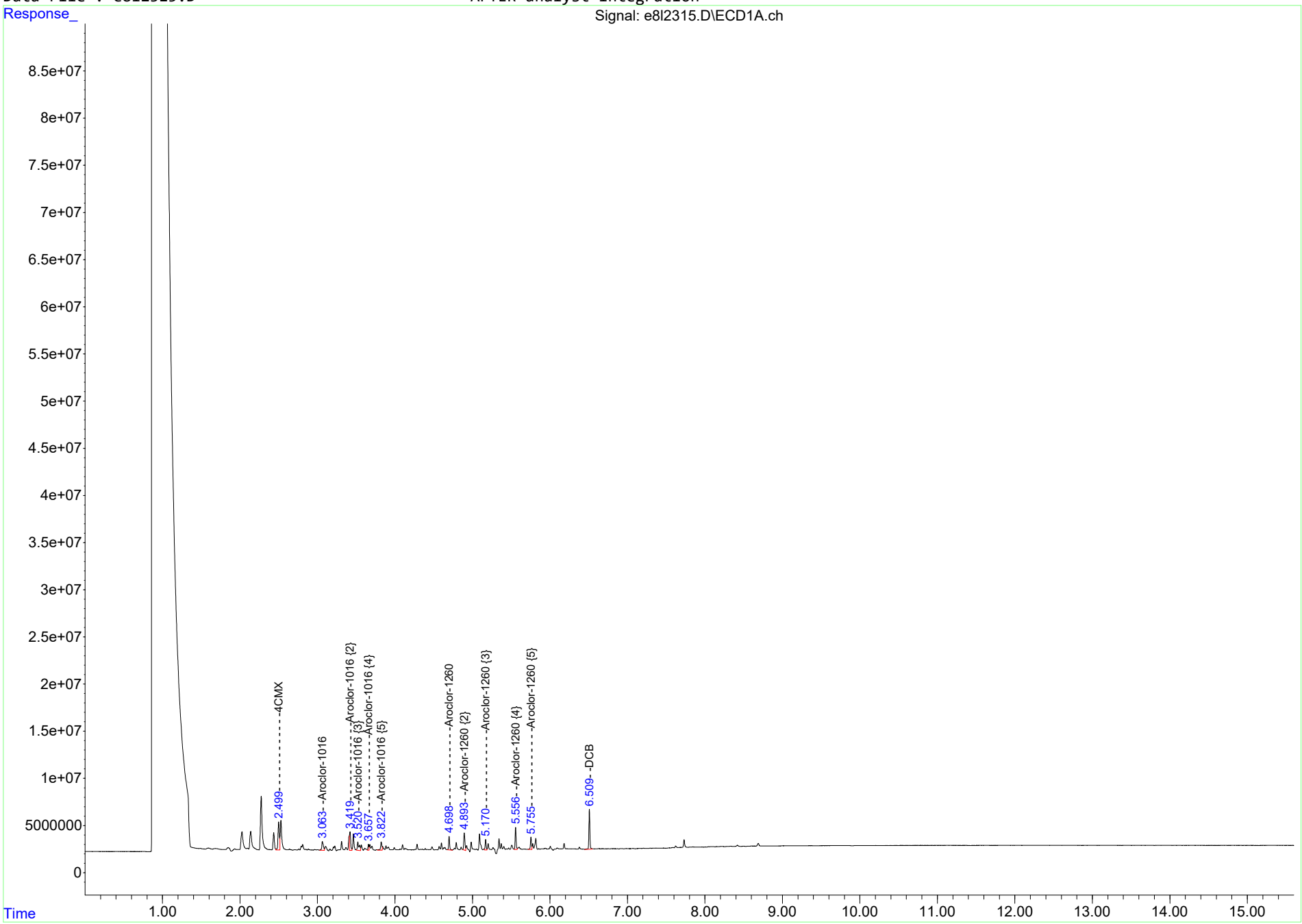
Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2315.D BEFORE analyst integration



Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2315.D BEFORE analyst integration

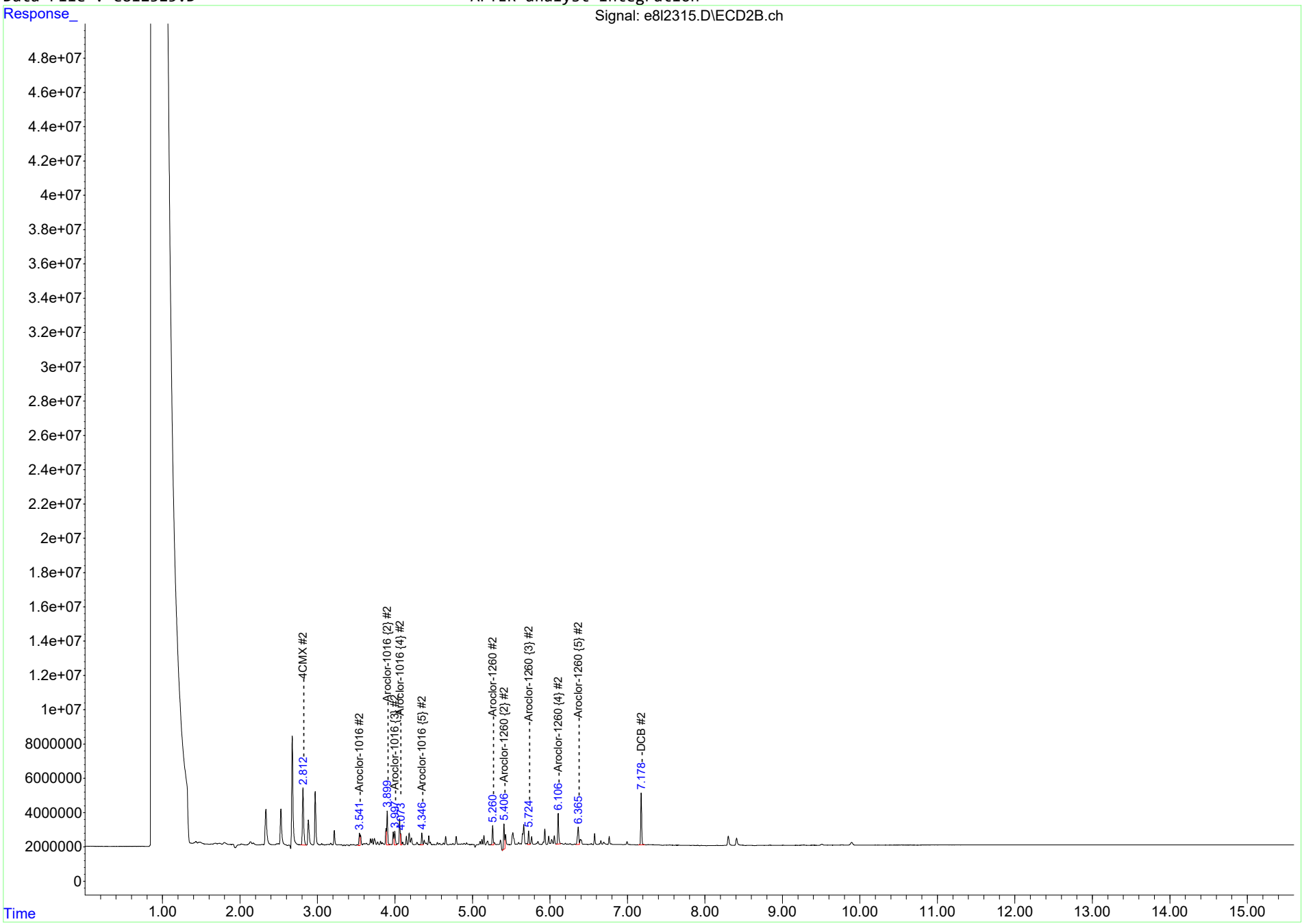


Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2315.D AFTER analyst integration



ECD8_8082_122022.m Fri Dec 23 09:05:11 2022 Page: 5

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2315.D AFTER analyst integration



The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.500	2.499	-0.001	36624089	58.057	2.814	2.813	-0.001	37981298	74.302
DCB	6.512	6.510	-0.002	37840901	78.364	7.180	7.178	-0.002	25937648	82.538

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	29%	37%
DCB	200.000	No Limits	39%	41%
4CMX	200.000	No Limits	29%	37%
DCB	200.000	No Limits	39%	41%

Target Compounds Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016	3.067	3.064	-0.003	13129700	57.182	3.541	3.541	0.000	6155451	55.932
Aroclor-1016 {2}	3.422	3.420	-0.002	32904117	118.210	3.898	3.899	0.001	18395116	94.091
Aroclor-1016 {3}	3.521	3.520	-0.001	9494806	49.380	3.998	3.998	0.000	7952645	58.176
Aroclor-1016 {4}	3.659	3.658	-0.001	5715330	54.528	4.076	4.074	-0.002	4463992	51.002
Aroclor-1016 {5}	3.823	3.822	-0.001	9750600	69.770	4.347	4.346	-0.001	5629799	52.924
Sum Aroclor-1016				70994554	349.071				42597003	312.125
Average Aroclor-1016					69.814					62.425
Aroclor-1221	2.643	2.641	-0.002	1441814	23.925	3.055	3.054	-0.001	1285654	29.746
Aroclor-1221 {2}	2.760	2.759	-0.001	1147515	34.078	3.171	3.171	0.000	2119646	73.342
Aroclor-1221 {3}	2.792	2.790	-0.002	3584308	26.015	3.220	3.217	-0.003	9260625	92.093
Sum Aroclor-1221				6173637	84.018				12665925	195.181 #
Average Aroclor-1221					<MDL					65.060
Aroclor-1232	3.066	3.064	-0.002	13129700	140.944	3.540	3.541	0.001	6155451	128.327
Aroclor-1232 {2}	3.422	3.420	-0.002	32904117	298.393	3.897	3.899	0.002	18395116	251.668
Aroclor-1232 {3}	3.521	3.520	-0.001	9494806	127.357	3.998	3.998	0.000	7952645	145.929
Aroclor-1232 {4}	3.658	3.658	0.000	5715330	168.906	4.075	4.074	-0.001	4463992	125.911
Aroclor-1232 {5}	3.823	3.822	-0.001	9750600	195.187	4.346	4.346	0.000	5629799	145.141
Sum Aroclor-1232				70994554	930.786				42597003	796.976
Average Aroclor-1232					186.157					159.395
Aroclor-1242	3.067	3.064	-0.003	13129700	72.136	3.542	3.541	-0.001	6155451	70.256
Aroclor-1242 {2}	3.423	3.420	-0.003	32904117	151.472	3.898	3.899	0.001	18395116	121.999
Aroclor-1242 {3}	3.522	3.520	-0.002	9494806	62.947	3.999	3.998	-0.001	7952645	73.337
Aroclor-1242 {4}	3.659	3.658	-0.001	5715330	74.306	4.076	4.074	-0.002	4463992	64.761
Aroclor-1242 {5}	3.823	3.822	-0.001	9750600	87.776	4.347	4.346	-0.001	5629799	65.977
Sum Aroclor-1242				70994554	448.637				42597003	396.330
Average Aroclor-1242					89.727					79.266
Aroclor-1248	3.423	3.420	-0.003	32904117	291.880	3.898	3.899	0.001	18395116	244.114
Aroclor-1248 {2}	3.659	3.658	-0.001	5715330	46.012	4.147	4.147	0.000	4346541	49.071
Aroclor-1248 {3}	3.824	3.822	-0.002	9750600	61.460	4.347	4.346	-0.001	5629799	47.509
Aroclor-1248 {4}	4.130	4.129	-0.001	1515142	8.576	4.624	4.624	0.000	979651	7.722

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2	
Aroclor-1248 {5}	4.291	4.285	-0.006	5537399	38.393	4.824	0.000	-4.824	0	N.D.	
Sum Aroclor-1248				55422589	446.321				29351106	348.415	
Average Aroclor-1248					89.264					87.104	
Aroclor-1254	4.100	4.098	-0.002	5014775	23.787	4.655	4.654	-0.001	4247099	25.557	
Aroclor-1254 {2}	4.287	4.285	-0.002	5537399	20.613	4.791	4.790	-0.001	4123533	22.806	
Aroclor-1254 {3}	4.571	4.570	-0.001	3006101	8.679	5.124	5.122	-0.002	5217438	19.412	
Aroclor-1254 {4}	4.767	4.768	0.001	2557260	10.159	5.284	5.283	-0.001	5826506	31.986	
Aroclor-1254 {5}	4.897	4.894	-0.003	22439408	81.870	5.408	5.407	-0.001	13567142	111.706	
Sum Aroclor-1254				38554943	145.108				32981717	211.467	
Average Aroclor-1254					<MDL					42.293	
Aroclor-1260	4.699	4.698	-0.001	12474796	49.821	5.261	5.261	0.000	14896382	85.909	
Aroclor-1260 {2}	4.895	4.894	-0.001	22439408	63.032	5.407	5.407	0.000	13567142	66.461	
Aroclor-1260 {3}	5.171	5.170	-0.001	13217891	56.016	5.726	5.725	-0.001	7877179	49.219	
Aroclor-1260 {4}	5.559	5.557	-0.002	22747763	44.604	6.108	6.106	-0.002	15783612	42.492	
Aroclor-1260 {5}	5.757	5.755	-0.002	11676032	48.125	6.367	6.366	-0.001	11799246	44.574	
Sum Aroclor-1260				82555890	261.598				63923561	288.654	
Average Aroclor-1260					52.320					57.731	
Aroclor-1262	4.700	4.698	-0.002	12474796	71.846	5.261	5.261	0.000	14896382	126.267	
Aroclor-1262 {2}	4.894	4.894	0.000	22439408	104.275	5.407	5.407	0.000	13567142	102.017	
Aroclor-1262 {3}	5.171	5.170	-0.001	13217891	47.064	5.726	5.725	-0.001	7877179	43.204	
Aroclor-1262 {4}	5.559	5.557	-0.002	22747763	46.682	6.107	6.106	-0.001	15783612	48.139	
Aroclor-1262 {5}	5.779	5.778	-0.001	5495058	25.753	6.362	6.366	0.004	11799246	49.764	
Sum Aroclor-1262				76374916	295.619				63923561	369.391	
Average Aroclor-1262					59.124					73.878	
Aroclor-1268	5.779	5.778	-0.001	5495058	7.609	6.359	6.366	0.007	11799246	25.465	
Aroclor-1268 {2}	5.806	5.818	0.012	14359480	18.473	6.393	6.393	0.000	2393568	5.386	
Aroclor-1268 {3}	5.940	5.939	-0.001	6144145	9.690	6.572	6.577	0.005	5527612	14.736	
Aroclor-1268 {4}	6.185	6.183	-0.002	5924911	23.132	6.766	6.765	-0.001	3580336	22.344	
Aroclor-1268 {5}	6.381	6.380	-0.001	2276729	1.217	6.997	6.996	-0.001	1654874	1.525	
Sum Aroclor-1268				34200324	60.121				24955636	69.456	
Average Aroclor-1268					<MDL					<MDL	
4,4' DDT	5.113	5.091	-0.022f	22503746	<MDL	5.657	5.662	0.005	13496355	15.708	
4,4' DDD	4.918	4.924	0.006	9665666	3.432	5.435	5.427	-0.008	12712611	8.299	#
4,4' DDE	4.493	4.477	-0.016	3616872	0.876	5.023	0.000	-5.023	0	N.D.	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2315.D

Aroclor-1016 {2} - Manual Integration ==	AB/AP
Aroclor-1016 {3} - Manual Integration ==	AB/AP
Aroclor-1016 {4} - Manual Integration ==	AB/AP
Aroclor-1221 Multi - Deletion ==	DMP
Aroclor-1232 Multi - Deletion ==	DMP
Aroclor-1242 Multi - Deletion ==	DMP
Aroclor-1248 Multi - Deletion ==	DMP
Aroclor-1254 Multi - Deletion ==	DMP
Aroclor-1260 {2} - Manual Integration ==	AB/AP
Aroclor-1260 {3} - Manual Integration ==	AB/AP
Aroclor-1260 {4} - Manual Integration ==	AB/AP
Aroclor-1262 Multi - Deletion ==	DMP
Aroclor-1268 Multi - Deletion ==	DMP
4,4' DDT Both - Deletion ==	DMP
4,4' DDD Both - Deletion ==	DMP
4,4' DDE - Deletion ==	DMP

Aroclor-1016 #2 - Manual Integration ==	AB/AP
Aroclor-1016 {2} #2 - Manual Integration ==	AB/AP
Aroclor-1016 {3} #2 - Manual Integration ==	AB/AP
Aroclor-1016 {4} #2 - Manual Integration ==	AB/AP
Aroclor-1260 #2 - Manual Integration ==	AB/AP
Aroclor-1260 {2} #2 - Manual Integration ==	AB/AP
Aroclor-1260 {3} #2 - Manual Integration ==	AB/AP

Quantitation Report
GEL Laboratories, LLC

JXM 12/22/2022

JC 12/23/2022

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2201.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Dec 2022 08:48 (#1); 22 Dec 2022 08:48 (#2)
Operator : JXM InstName : ECD8
Sample : |WAR220725-99|BLANK|1|SVA|1|IBLK
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 22 09:33:09 2022
Quant Method : D:\MSDCHEM\1\DATA\122222\ECD8_8082_122022.m
Quant Title : ECD8 SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1 Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.502	2.503	0.001	1644756072	260.728	2.815	2.813	-0.002	1439606095	281.627
DCB	6.513	6.516	0.003	1423311008	294.750	7.181	7.181	0.000	918914631	292.413

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	130%	141%
DCB	200.000	No Limits	147%	146%

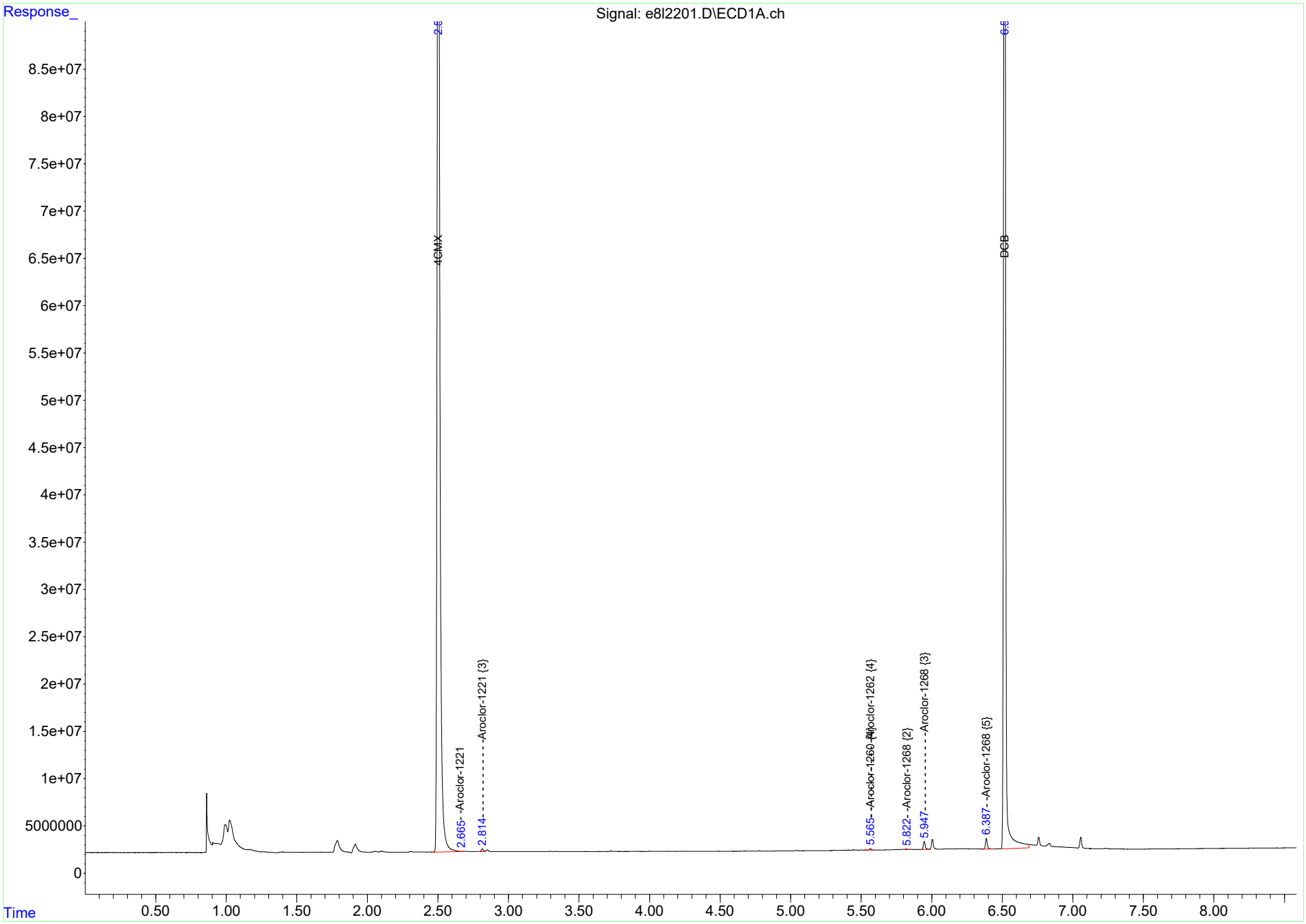
Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016 {2}	3.423	0.000	-3.423	0	N.D.	3.899	3.926	0.027f	1000095	5.115
Sum Aroclor-1016				0	N.D.				1000095	5.115
Average Aroclor-1016					N.D.					<MDL
Aroclor-1221	2.641	2.665	0.024f	157912	2.620	3.055	0.000	-3.055	0	N.D.
Aroclor-1221 {3}	2.790	2.814	0.024f	3077973	22.340	3.219	0.000	-3.219	0	N.D.
Sum Aroclor-1221				3235885	24.961				0	N.D.
Average Aroclor-1221					<MDL					N.D.
Aroclor-1232 {2}	3.422	0.000	-3.422	0	N.D.	3.898	3.926	0.028f	1000095	13.683
Sum Aroclor-1232				0	N.D.				1000095	13.683
Average Aroclor-1232					N.D.					<MDL
Aroclor-1242 {2}	3.422	0.000	-3.422	0	N.D.	3.898	3.926	0.028f	1000095	6.633
Sum Aroclor-1242				0	N.D.				1000095	6.633

Average Aroclor-1242					N.D.						<MDL
Aroclor-1248	3.423	0.000	-3.423	0	N.D.	3.899	3.926	0.027f	1000095	13.272	
Sum Aroclor-1248				0	N.D.				1000095	13.272	
Average Aroclor-1248					N.D.						<MDL
Aroclor-1260 {4}	5.560	5.566	0.006	1251933	2.455	6.108	0.000	-6.108	0	N.D.	
Sum Aroclor-1260				1251933	2.455				0	N.D.	
Average Aroclor-1260					<MDL					N.D.	
Aroclor-1262 {4}	5.557	5.566	0.009	1251933	2.569	6.107	0.000	-6.107	0	N.D.	
Sum Aroclor-1262				1251933	2.569				0	N.D.	
Average Aroclor-1262					<MDL					N.D.	
Aroclor-1268 {2}	5.804	5.823	0.019f	567801	0.730	6.391	0.000	-6.391	0	N.D.	
Aroclor-1268 {3}	5.938	5.948	0.010	8000546	12.617	6.571	6.575	0.004	5248882	13.993	
Aroclor-1268 {5}	6.378	6.387	0.009	10251199	5.478	6.995	6.999	0.004	7175221	6.612	
Sum Aroclor-1268				18819547	18.826				12424102	20.605	
Average Aroclor-1268					<MDL						<MDL
4,4' DDT	5.112	0.000	-5.112	0	N.D.	5.658	5.669	0.011	599992	0.698	#

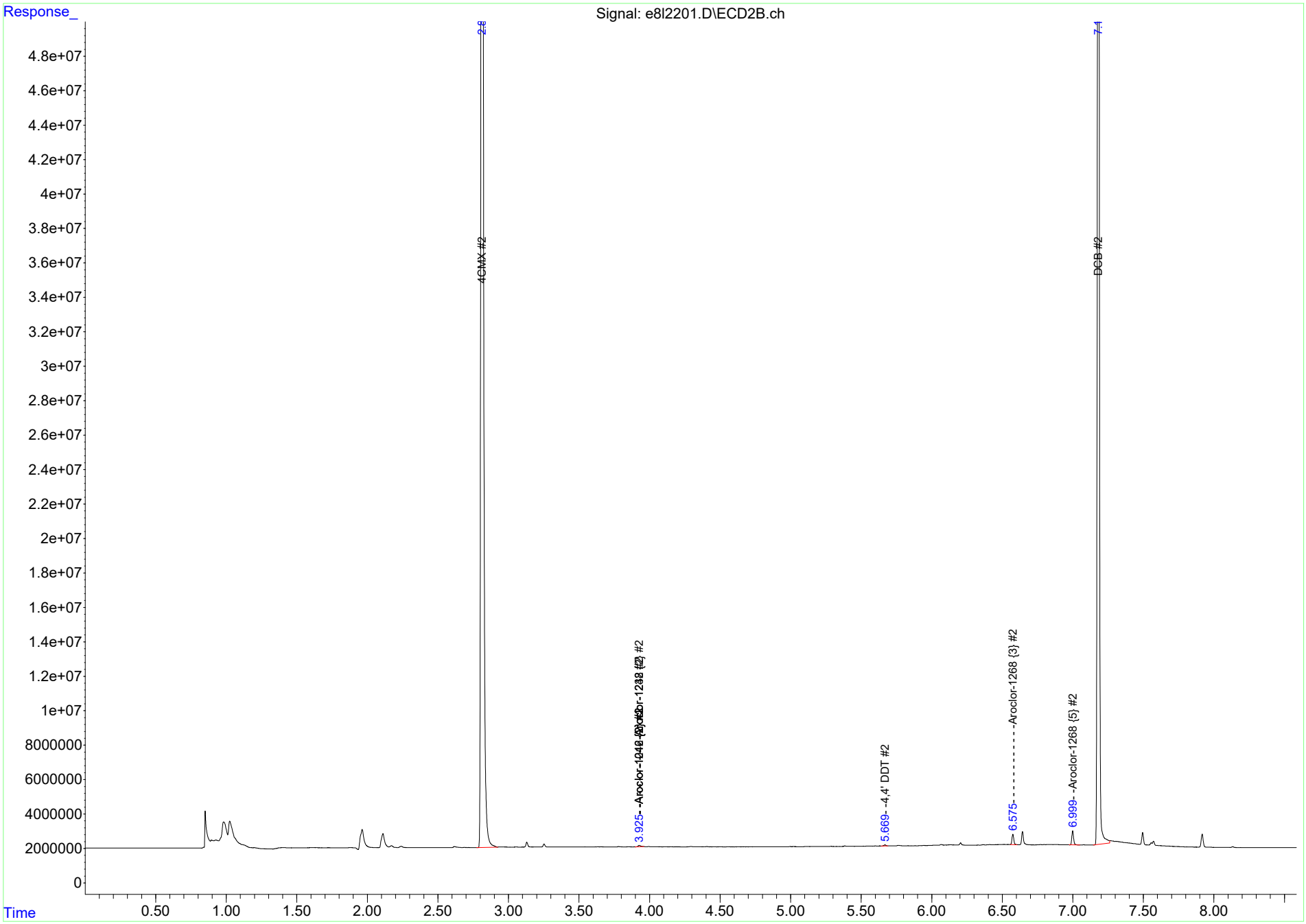
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2201.D



ECD8_8082_122022.m Thu Dec 22 10:03:20 2022 Page: 3

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2201.D



Quantitation Report
GEL Laboratories, LLC

Jxm 12/23/2022

JC 12/23/2022

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2222.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On   : 22 Dec 2022 15:02 (#1); 22 Dec 2022 15:02 (#2)
Operator : JXM   InstName : ECD8
Sample   : |WAR220725-99|BLANK|1|SVA|1|IBLK
Misc   :
ALS Vial : 22   Sample Multiplier: 1

Quant Time: Dec 22 15:43:35 2022
Quant Method : D:\MSDCHEM\1\DATA\122222\ECD8_8082_122022.m
Quant Title : ECD8   SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1   Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um   Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.502	2.501	-0.001	1723726349	273.247	2.815	2.814	-0.001	1460547155	285.724
DCB	6.513	6.511	-0.002	1443535288	298.938	7.181	7.179	-0.002	920009987	292.761

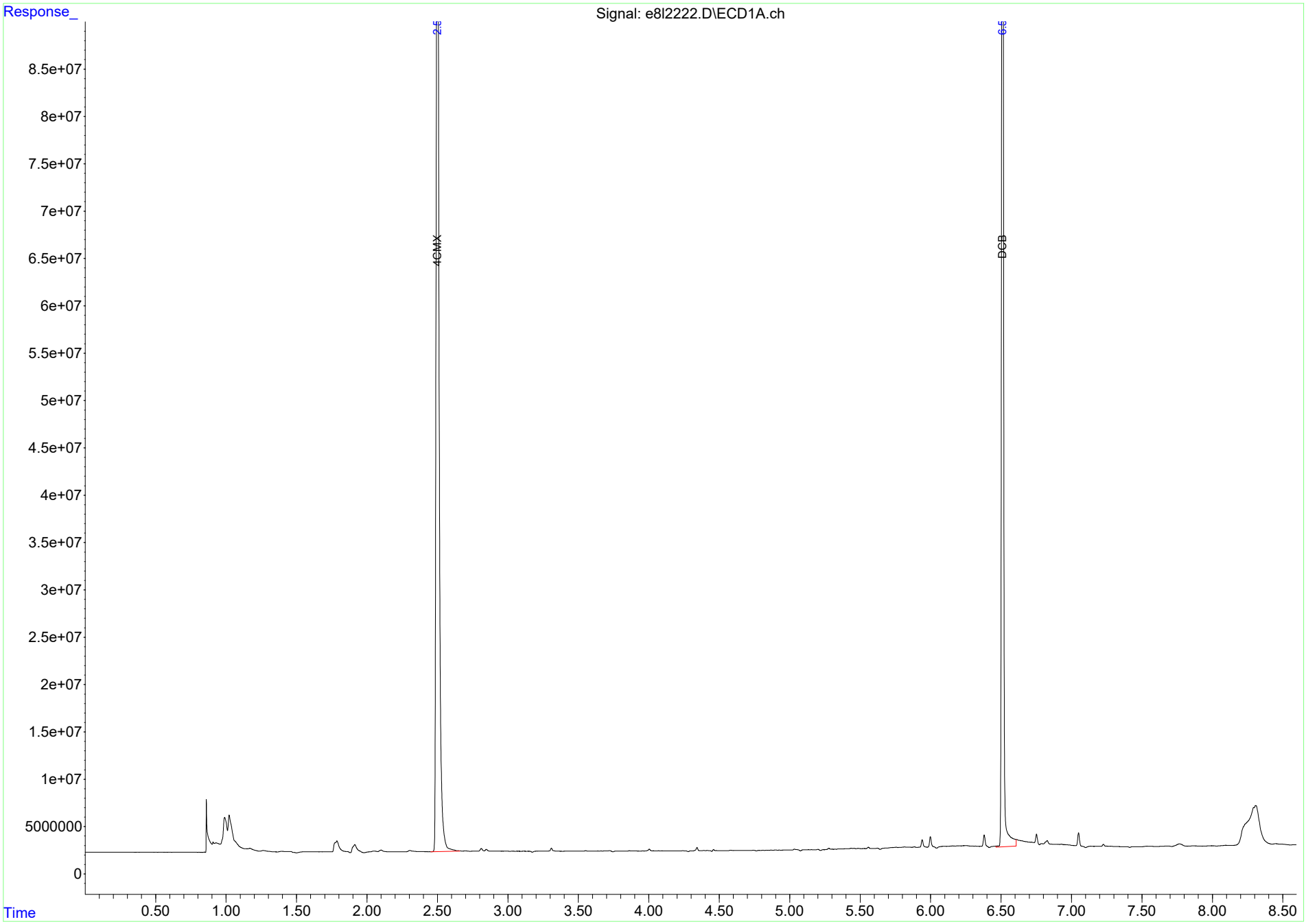
Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	137%	143%
DCB	200.000	No Limits	149%	146%

Target Compounds

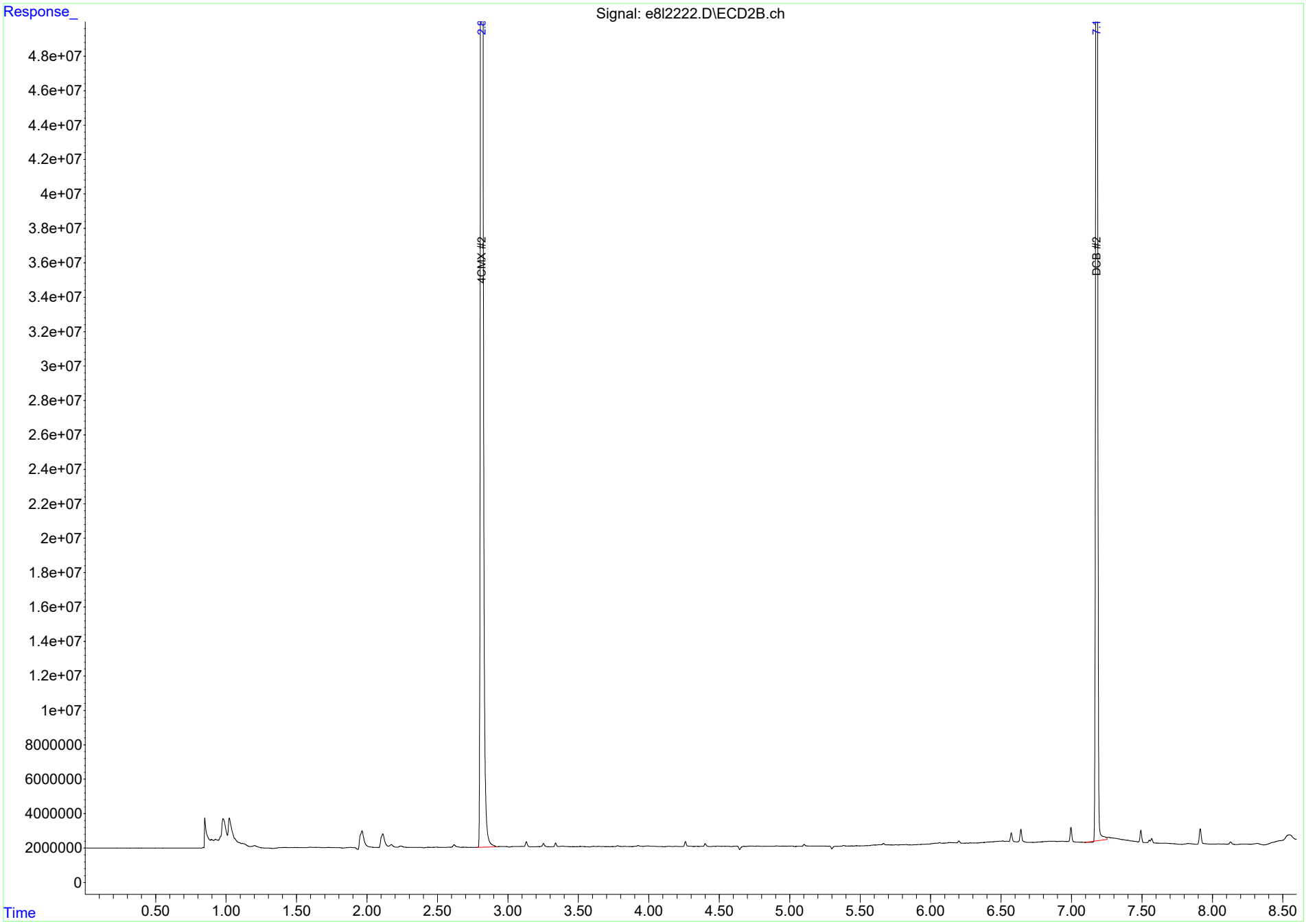
Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2222.D



Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2222.D



ECD8_8082_122022.m Thu Dec 22 15:48:57 2022 Page: 3

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.502	2.501	-0.001	1723726349	273.247	2.815	2.814	-0.001	1460547155	285.724
DCB	6.513	6.511	-0.002	1443535288	298.938	7.181	7.179	-0.002	920009987	292.761

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	137%	143%
DCB	200.000	No Limits	149%	146%
4CMX	200.000	No Limits	137%	143%
DCB	200.000	No Limits	149%	146%

Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016 {2}	3.423	0.000	-3.423	0	N.D.	3.899	3.924	0.025f	500654	2.561
Aroclor-1016 {3}	3.522	3.551	0.029f	546720	2.843	3.999	0.000	-3.999	0	N.D.
Aroclor-1016 {5}	3.824	3.795	-0.029f	288657	2.065	4.348	0.000	-4.348	0	N.D.
Sum Aroclor-1016				835377	4.909				500654	2.561 #
Average Aroclor-1016					<MDL					<MDL
Aroclor-1221	2.642	2.660	0.018f	211258	3.506	3.055	0.000	-3.055	0	N.D.
Aroclor-1221 {3}	2.791	2.812	0.021f	3265443	23.701	3.220	0.000	-3.220	0	N.D.
Sum Aroclor-1221				3476701	27.207				0	N.D.
Average Aroclor-1221					<MDL					N.D.
Aroclor-1232 {2}	3.421	0.000	-3.421	0	N.D.	3.897	3.924	0.027f	500654	6.850
Aroclor-1232 {5}	3.822	3.795	-0.027f	288657	5.778	4.346	0.000	-4.346	0	N.D.
Sum Aroclor-1232				288657	5.778				500654	6.850
Average Aroclor-1232					<MDL					<MDL
Aroclor-1242 {2}	3.423	0.000	-3.423	0	N.D.	3.898	3.924	0.026f	500654	3.320
Aroclor-1242 {3}	3.521	3.551	0.030f	546720	3.625	3.999	0.000	-3.999	0	N.D.
Aroclor-1242 {5}	3.823	3.795	-0.028f	288657	2.599	4.347	0.000	-4.347	0	N.D.
Sum Aroclor-1242				835377	6.223				500654	3.320 #
Average Aroclor-1242					<MDL					<MDL
Aroclor-1248	3.423	0.000	-3.423	0	N.D.	3.898	3.924	0.026f	500654	6.644
Aroclor-1248 {3}	3.822	3.795	-0.027f	288657	1.819	4.347	0.000	-4.347	0	N.D.
Aroclor-1248 {5}	4.290	4.296	0.006	948311	6.575	4.823	0.000	-4.823	0	N.D.
Sum Aroclor-1248				1236968	8.394				500654	6.644
Average Aroclor-1248					<MDL					<MDL
Aroclor-1254 {2}	4.286	4.296	0.010	948311	3.530	4.790	0.000	-4.790	0	N.D.
Aroclor-1254 {3}	4.571	4.581	0.010	557391	1.609	5.123	5.102	-0.021f	1039924	3.869
Aroclor-1254 {4}	4.767	4.783	0.016f	613035	2.435	5.284	0.000	-5.284	0	N.D.
Aroclor-1254 {5}	4.896	4.898	0.002	339643	1.239	5.407	5.417	0.010	724200	5.963
Sum Aroclor-1254				2458381	8.814				1764124	9.832
Average Aroclor-1254					<MDL					<MDL

The following values were generated by the chromatography software before the analyst manually integrated or deleted peaks.
These values should NOT be used for reporting. Refer to the begining of this report for reportable values.

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1260 {2}	4.896	4.898	0.002	339643	0.954	5.409	5.417	0.008	724200	3.548
Aroclor-1260 {3}	5.172	5.172	0.000	877875	3.720	5.726	0.000	-5.726	0	N.D.
Aroclor-1260 {4}	5.560	5.558	-0.002	1210778	2.374	6.108	6.094	-0.014	55486	0.149
Aroclor-1260 {5}	5.758	5.755	-0.003	3630504	14.964	6.368	0.000	-6.368	0	N.D.
Sum Aroclor-1260				6058800	22.012				779686	3.697 #
Average Aroclor-1260					<MDL					<MDL
Aroclor-1262 {2}	4.894	4.898	0.004	339643	1.578	5.407	5.417	0.010	724200	5.446
Aroclor-1262 {3}	5.171	5.172	0.001	877875	3.126	5.726	0.000	-5.726	0	N.D.
Aroclor-1262 {4}	5.559	5.558	-0.001	1210778	2.485	6.107	6.094	-0.013	55486	0.169
Aroclor-1262 {5}	5.779	5.755	-0.024f	3630504	17.014	6.362	0.000	-6.362	0	N.D.
Sum Aroclor-1262				6058800	24.203				779686	5.615 #
Average Aroclor-1262					<MDL					<MDL
Aroclor-1268	5.778	5.755	-0.023f	3630504	5.027	6.359	0.000	-6.359	0	N.D.
Aroclor-1268 {2}	5.805	5.813	0.008	6108669	7.859	6.393	6.407	0.014	1135653	2.556
Aroclor-1268 {3}	5.939	5.941	0.002	12530474	19.761	6.572	6.573	0.001	7425719	19.796
Aroclor-1268 {4}	6.184	6.189	0.005	1396882	5.454	6.767	0.000	-6.767	0	N.D.
Aroclor-1268 {5}	6.380	6.381	0.001	12460138	6.659	6.997	6.996	-0.001	6890936	6.350
Sum Aroclor-1268				36126666	44.760				15452308	28.702 #
Average Aroclor-1268					<MDL					<MDL
4,4' DDT	5.114	5.133	0.019f	3477903	<MDL	5.659	5.666	0.007	888257	1.034 #
4,4' DDD	4.919	4.898	-0.021f	339643	0.121	5.437	5.434	-0.003	684312	0.447 #
4,4' DDE	4.494	4.479	-0.015	405846	0.098	5.024	0.000	-5.024	0	N.D. #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2222.D

Aroclor-1016	Multi -	Deletion ==	DMP
Aroclor-1221	Multi -	Deletion ==	DMP
Aroclor-1232	Multi -	Deletion ==	DMP
Aroclor-1242	Multi -	Deletion ==	DMP
Aroclor-1248	Multi -	Deletion ==	DMP
Aroclor-1254	Multi -	Deletion ==	DMP
Aroclor-1260	Multi -	Deletion ==	DMP
Aroclor-1262	Multi -	Deletion ==	DMP
Aroclor-1268	Multi -	Deletion ==	DMP
4,4' DDT	Both -	Deletion ==	DMP
4,4' DDD	Both -	Deletion ==	DMP
4,4' DDE	-	Deletion ==	DMP

Quantitation Report
GEL Laboratories, LLC

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2235.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Dec 2022 19:03 (#1); 22 Dec 2022 19:03 (#2)
Operator : JXM InstName : ECD8
Sample : |WAR220725-99|BLANK|1|SVA|1|IBLK
Misc :
ALS Vial : 35 Sample Multiplier: 1

JXM 12/23/2022

JC 12/23/2022

Quant Time: Dec 23 04:59:46 2022
Quant Method : D:\MSDCHEM\1\DATA\122222\ECD8_8082_122022.m
Quant Title : ECD8 SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1 Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.502	2.500	-0.002	1137828579	180.370	2.815	2.814	-0.001	901508391	176.360
DCB	6.513	6.510	-0.003	893341187	185.000	7.181	7.178	-0.003	600495668	191.087

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	90%	88%
DCB	200.000	No Limits	93%	96%

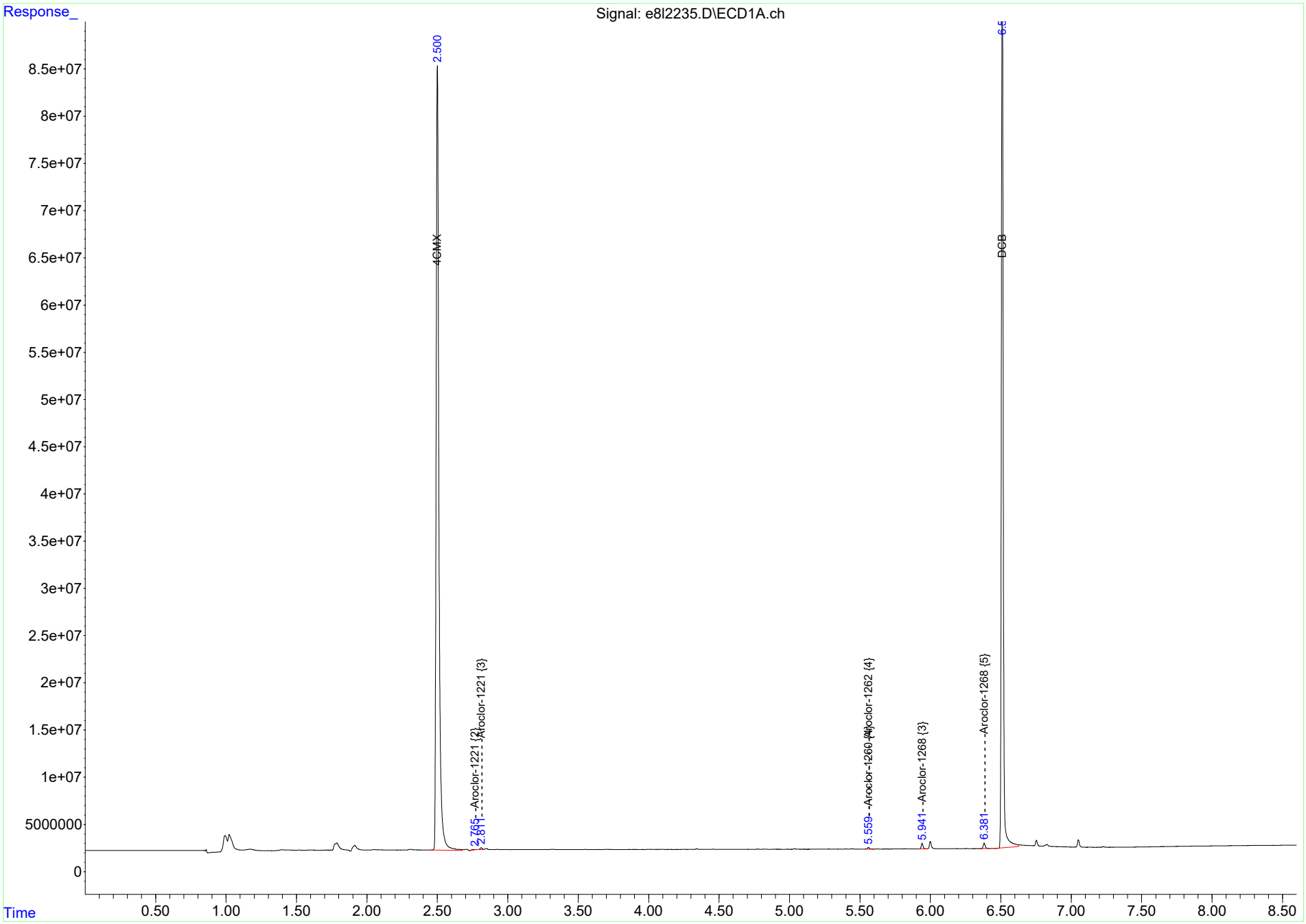
Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1221 {2}	2.759	2.766	0.007	938493	27.870	3.170	0.000	-3.170	0	N.D.
Aroclor-1221 {3}	2.791	2.811	0.020f	2275326	16.515	3.220	0.000	-3.220	0	N.D.
Sum Aroclor-1221				3213819	44.385				0	N.D.
Average Aroclor-1221					<MDL					N.D.
Aroclor-1260 {4}	5.560	5.559	-0.001	1607967	3.153	6.108	0.000	-6.108	0	N.D.
Sum Aroclor-1260				1607967	3.153				0	N.D.
Average Aroclor-1260					<MDL					N.D.
Aroclor-1262 {4}	5.559	5.559	0.000	1607967	3.300	6.107	0.000	-6.107	0	N.D.
Sum Aroclor-1262				1607967	3.300				0	N.D.
Average Aroclor-1262					<MDL					N.D.
Aroclor-1268 {3}	5.939	5.941	0.002	5406936	8.527	6.572	6.573	0.001	3771783	10.055
Aroclor-1268 {5}	6.380	6.382	0.002	5559237	2.971	6.997	6.997	0.000	4018976	3.704

Sum Aroclor-1268					10966173	11.498				7790759	13.759
Average Aroclor-1268						<MDL					<MDL
4,4' DDT	5.114	0.000	-5.114	0	N.D.	5.659	5.667	0.008		452570	0.527 #

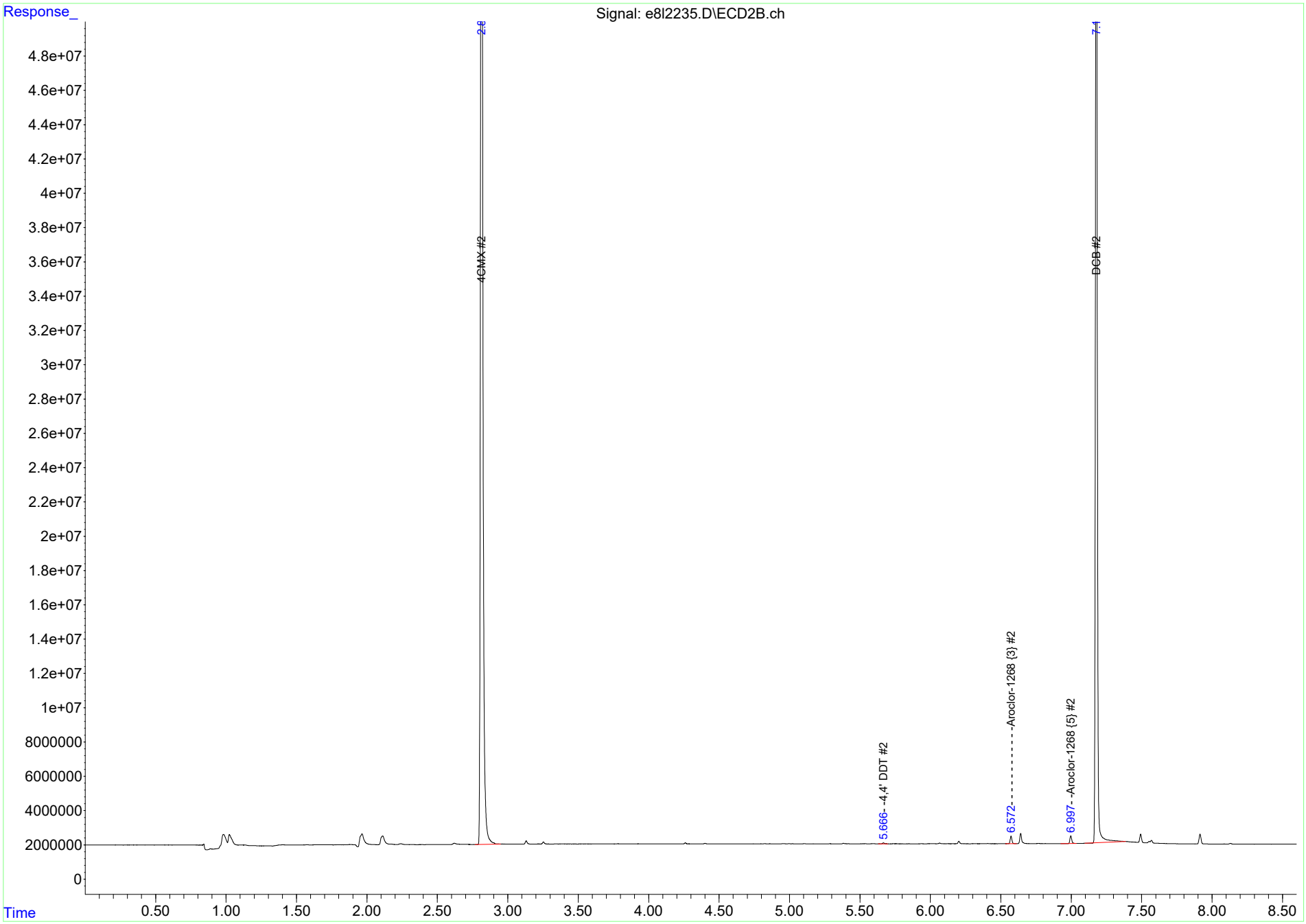
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2235.D



ECD8_8082_122022.m Fri Dec 23 05:06:57 2022 Page: 3

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2235.D



Quantitation Report
GEL Laboratories, LLC

JXM 12/23/2022

JC 12/23/2022

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2241.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Dec 2022 20:45 (#1); 22 Dec 2022 20:45 (#2)
Operator : JXM InstName : ECD8
Sample : |WAR220725-99|BLANK|1|SVA|1|IBLK
Misc :
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Dec 23 04:59:58 2022
Quant Method : D:\MSDCHEM\1\DATA\122222\ECD8_8082_122022.m
Quant Title : ECD8 SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1 Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.502	2.501	-0.001	1139142396	180.578	2.815	2.814	-0.001	964757810	188.734
DCB	6.513	6.511	-0.002	908775939	188.196	7.181	7.178	-0.003	606737071	193.073

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	90%	94%
DCB	200.000	No Limits	94%	97%

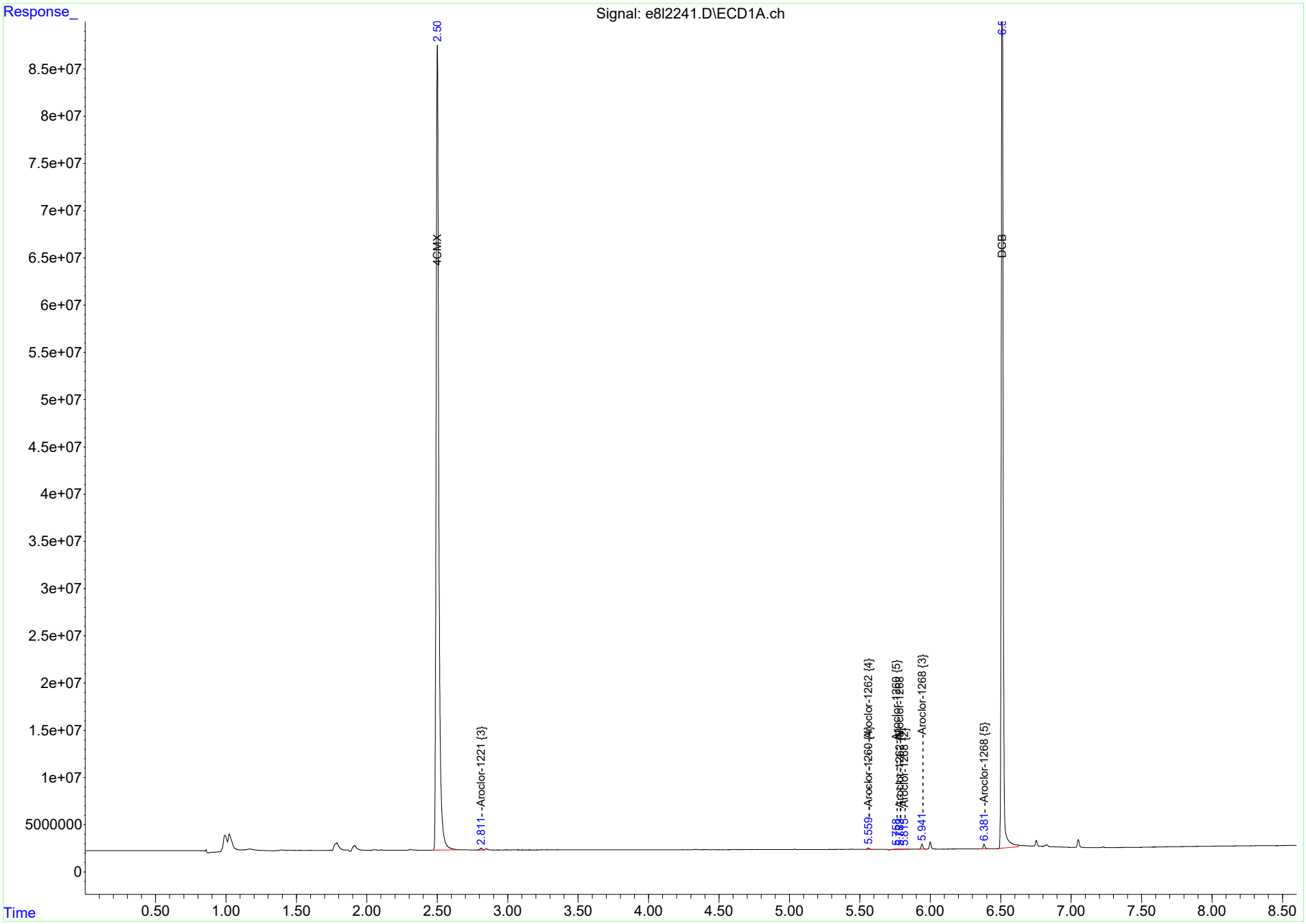
Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1221 {3}	2.791	2.811	0.020f	2247212	16.311	3.220	0.000	-3.220	0	N.D.
Sum Aroclor-1221				2247212	16.311				0	N.D.
Average Aroclor-1221					<MDL					N.D.
Aroclor-1260 {4}	5.560	5.559	-0.001	1276007	2.502	6.108	0.000	-6.108	0	N.D.
Aroclor-1260 {5}	5.758	5.758	0.000	700115	2.886	6.368	0.000	-6.368	0	N.D.
Sum Aroclor-1260				1976122	5.388				0	N.D.
Average Aroclor-1260					<MDL					N.D.
Aroclor-1262 {4}	5.559	5.559	0.000	1276007	2.619	6.107	0.000	-6.107	0	N.D.
Aroclor-1262 {5}	5.779	5.783	0.004	320654	1.503	6.362	0.000	-6.362	0	N.D.
Sum Aroclor-1262				1596662	4.121				0	N.D.
Average Aroclor-1262					<MDL					N.D.
Aroclor-1268	5.778	5.783	0.005	320654	0.444	6.359	0.000	-6.359	0	N.D.

Aroclor-1268 {2}	5.805	5.816	0.011	398292	0.512	6.393	0.000	-6.393	0	N.D.
Aroclor-1268 {3}	5.939	5.941	0.002	4969168	7.837	6.572	6.573	0.001	3545247	9.451
Aroclor-1268 {5}	6.380	6.381	0.001	4477758	2.393	6.997	6.997	0.000	3444368	3.174
Sum Aroclor-1268				10165871	11.186				6989615	12.625
Average Aroclor-1268					<MDL					<MDL

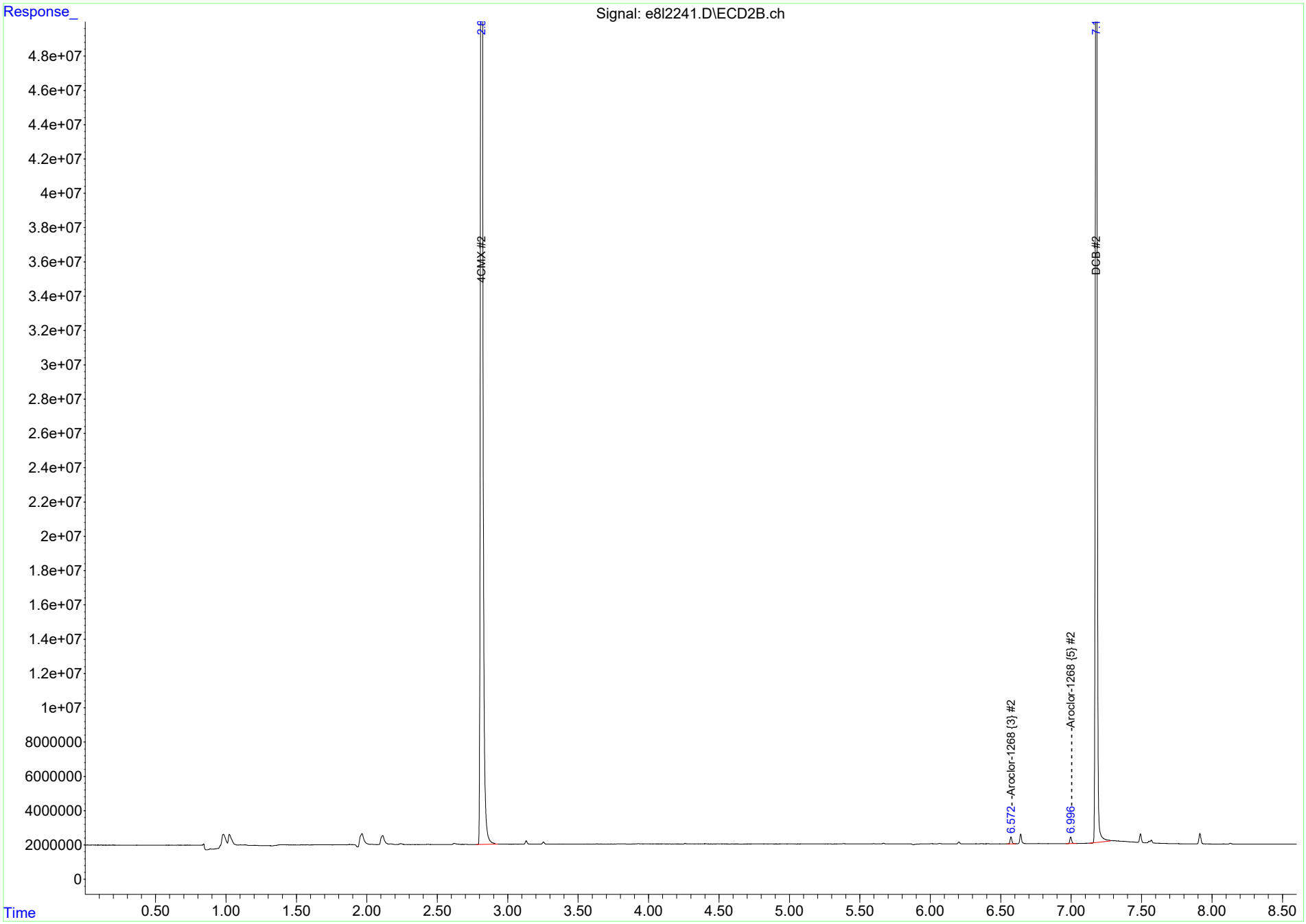
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2241.D



ECD8_8082_122022.m Fri Dec 23 05:10:31 2022 Page: 3

Data Path : D:\MSDCHEM\1\DATA\122222\
Data File : e8l2241.D



ECD8_8082_122022.m Fri Dec 23 05:10:32 2022 Page: 4

Quantitation Report
GEL Laboratories, LLC

Jxm 12/23/2022

JC 12/23/2022

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2301.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 23 Dec 2022 05:23 (#1); 23 Dec 2022 05:23 (#2)
Operator : JXM InstName : ECD8
Sample : |WAR220725-99|BLANK|1|SVA|1|IBLK
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 23 06:08:47 2022
Quant Method : D:\MSDCHEM\1\DATA\122322\ECD8_8082_122022.m
Quant Title : ECD8 SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1 Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.500	2.500	0.000	1865494336	295.720	2.814	2.814	0.000	1650957428	322.974
DCB	6.512	6.509	-0.003	1552647082	321.534	7.180	7.178	-0.002	1026052152	326.505

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	148%	161%
DCB	200.000	No Limits	161%	163%

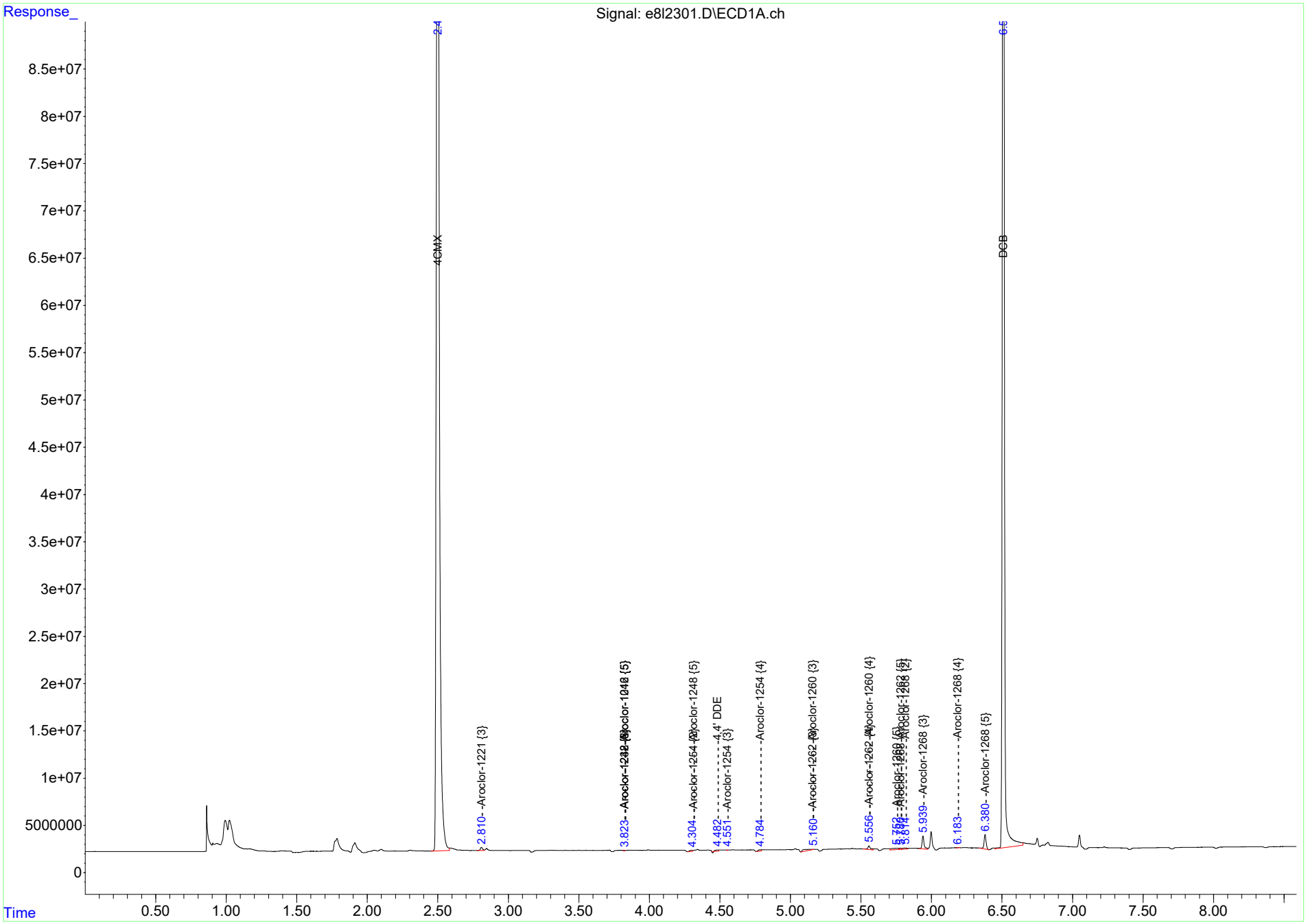
Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016 {2}	3.422	0.000	-3.422	0	N.D.	3.898	3.925	0.027f	512983	2.624
Aroclor-1016 {5}	3.823	3.823	0.000	415581	2.974	4.347	0.000	-4.347	0	N.D.
Sum Aroclor-1016				415581	2.974				512983	2.624
Average Aroclor-1016					<MDL					<MDL
Aroclor-1221	2.642	0.000	-2.642	0	N.D.	3.055	3.049	-0.006	728774	16.862
Aroclor-1221 {3}	2.791	2.810	0.019f	3516148	25.521	3.220	0.000	-3.220	0	N.D.
Sum Aroclor-1221				3516148	25.521				728774	16.862 #
Average Aroclor-1221					<MDL					<MDL
Aroclor-1232 {2}	3.421	0.000	-3.421	0	N.D.	3.897	3.925	0.028f	512983	7.018
Aroclor-1232 {5}	3.822	3.823	0.001	415581	8.319	4.346	0.000	-4.346	0	N.D.
Sum Aroclor-1232				415581	8.319				512983	7.018
Average Aroclor-1232					<MDL					<MDL

Aroclor-1242 {2}	3.423	0.000	-3.423	0	N.D.	3.898	3.925	0.027f	512983	3.402	
Aroclor-1242 {5}	3.823	3.823	0.000	415581	3.741	4.347	0.000	-4.347	0	N.D.	
Sum Aroclor-1242				415581	3.741				512983	3.402	
Average Aroclor-1242					<MDL					<MDL	
Aroclor-1248	3.423	0.000	-3.423	0	N.D.	3.898	3.925	0.027f	512983	6.808	
Aroclor-1248 {2}	3.659	0.000	-3.659	0	N.D.	4.147	4.150	0.003	1256607	14.187	
Aroclor-1248 {3}	3.822	3.823	0.001	415581	2.619	4.347	0.000	-4.347	0	N.D.	
Aroclor-1248 {4}	4.129	0.000	-4.129	0	N.D.	4.624	4.624	0.000	8854984	69.796	
Aroclor-1248 {5}	4.290	4.304	0.014	1658240	11.497	4.823	4.808	-0.015	268628	1.875	
Sum Aroclor-1248				2073820	14.117				10893201	92.665 #	
Average Aroclor-1248					<MDL					<MDL	
Aroclor-1254	4.099	0.000	-4.099	0	N.D.	4.655	4.681	0.026f	6129541	36.884	
Aroclor-1254 {2}	4.286	4.304	0.018f	1658240	6.173	4.790	4.802	0.012	789762	4.368	
Aroclor-1254 {3}	4.571	4.552	-0.019f	294819	0.851	5.123	5.131	0.008	120584	0.449	
Aroclor-1254 {4}	4.767	4.784	0.017f	1900258	7.549	5.284	0.000	-5.284	0	N.D.	
Aroclor-1254 {5}	4.896	0.000	-4.896	0	N.D.	5.407	5.419	0.012	4247222	34.970	
Sum Aroclor-1254				3853317	14.573				11287109	76.670 #	
Average Aroclor-1254					<MDL					<MDL	
Aroclor-1260 {2}	4.895	0.000	-4.895	0	N.D.	5.407	5.419	0.012	4247222	20.806	
Aroclor-1260 {3}	5.171	5.157	-0.014	6165182	26.127	5.726	0.000	-5.726	0	N.D.	
Aroclor-1260 {4}	5.559	5.557	-0.002	5019299	9.842	6.108	6.129	0.021f	262539	0.707	
Aroclor-1260 {5}	5.757	5.752	-0.005	5159857	21.267	6.367	6.367	0.000	1996984	7.544	
Sum Aroclor-1260				16344338	57.236				6506745	29.057 #	
Average Aroclor-1260					<MDL					<MDL	
Aroclor-1262 {2}	4.894	0.000	-4.894	0	N.D.	5.407	5.419	0.012	4247222	31.936	
Aroclor-1262 {3}	5.171	5.157	-0.014	6165182	21.952	5.726	0.000	-5.726	0	N.D.	
Aroclor-1262 {4}	5.559	5.557	-0.002	5019299	10.300	6.107	6.129	0.022f	262539	0.801	
Aroclor-1262 {5}	5.779	5.781	0.002	1240561	5.814	6.362	6.367	0.005	1996984	8.422	
Sum Aroclor-1262				12425043	38.066				6506745	41.160	
Average Aroclor-1262					<MDL					<MDL	
Aroclor-1268	5.778	5.781	0.003	1240561	1.718	6.359	6.367	0.008	1996984	4.310	
Aroclor-1268 {2}	5.805	5.814	0.009	2618728	3.369	6.393	6.367	-0.026f	1996984	4.494	
Aroclor-1268 {3}	5.939	5.940	0.001	13874421	21.881	6.572	6.573	0.001	8488362	22.629	
Aroclor-1268 {4}	6.184	6.184	0.000	492691	1.924	6.767	0.000	-6.767	0	N.D.	
Aroclor-1268 {5}	6.380	6.380	0.000	15228738	8.139	6.997	6.997	0.000	11792648	10.868	
Sum Aroclor-1268				33455140	37.030				24274978	42.300	
Average Aroclor-1268					<MDL					<MDL	
4,4' DDT	5.114	0.000	-5.114	0	N.D.	5.659	5.667	0.008	923567	1.075 #	
4,4' DDD	4.919	0.000	-4.919	0	N.D.	5.437	5.419	-0.018f	4247222	2.773 #	
4,4' DDE	4.494	4.483	-0.011	1474787	0.357	5.024	0.000	-5.024	0	N.D. #	

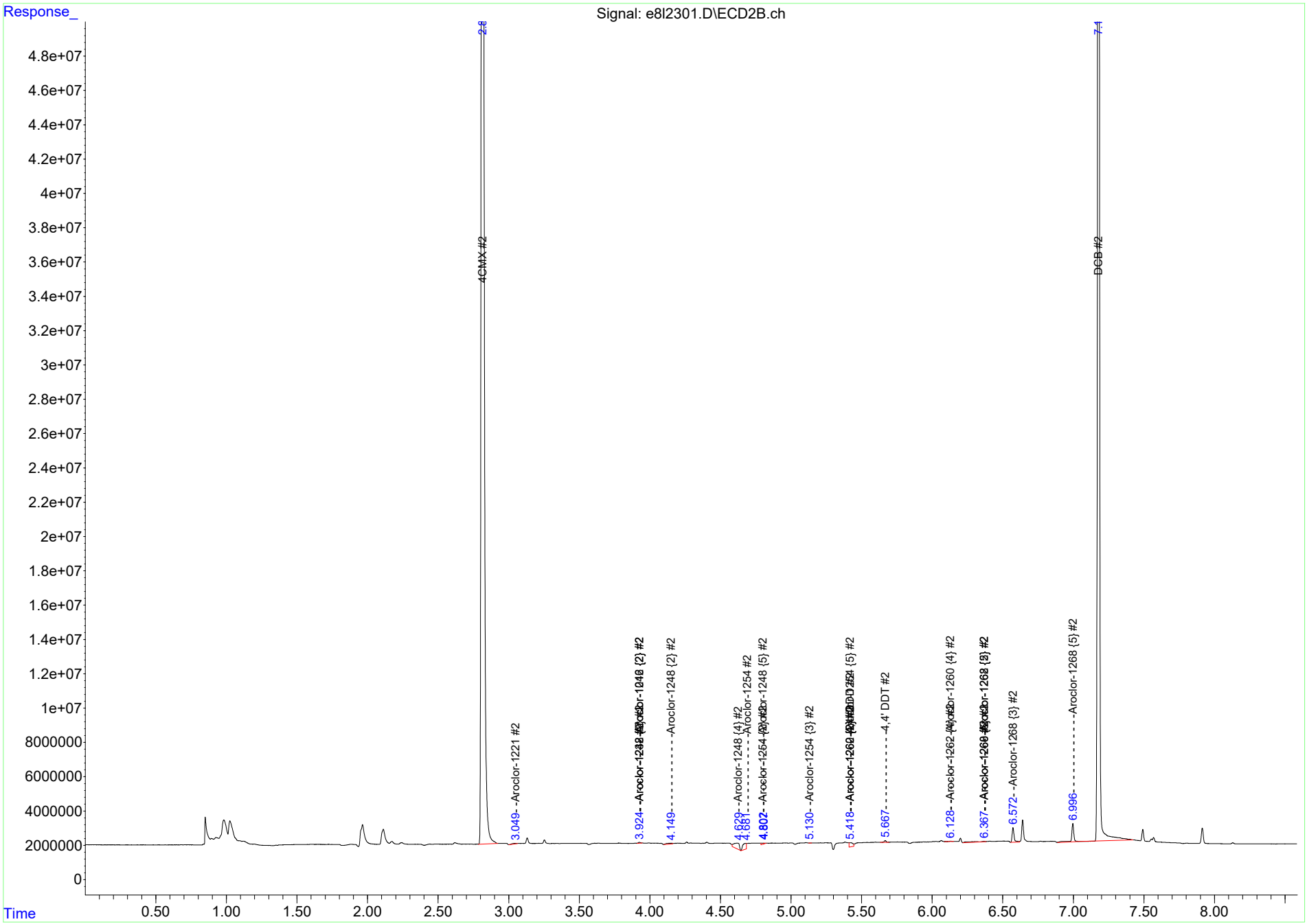
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2301.D



ECD8_8082_122022.m Fri Dec 23 07:55:22 2022 Page: 3

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2301.D



Quantitation Report
GEL Laboratories, LLC

Jxm 12/23/2022

JC 12/23/2022

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2311.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 23 Dec 2022 07:26 (#1); 23 Dec 2022 07:26 (#2)
Operator : JXM InstName : ECD8
Sample : |WAR220725-99|BLANK|1|SVA|1|IBLK
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 23 07:55:04 2022
Quant Method : D:\MSDCHEM\1\DATA\122322\ECD8_8082_122022.m
Quant Title : ECD8 SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1 Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.500	2.500	0.000	1499359629	237.680	2.814	2.813	-0.001	1313636693	256.984
DCB	6.512	6.511	-0.001	1205701912	249.686	7.180	7.178	-0.002	815019907	259.352

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	119%	128%
DCB	200.000	No Limits	125%	130%

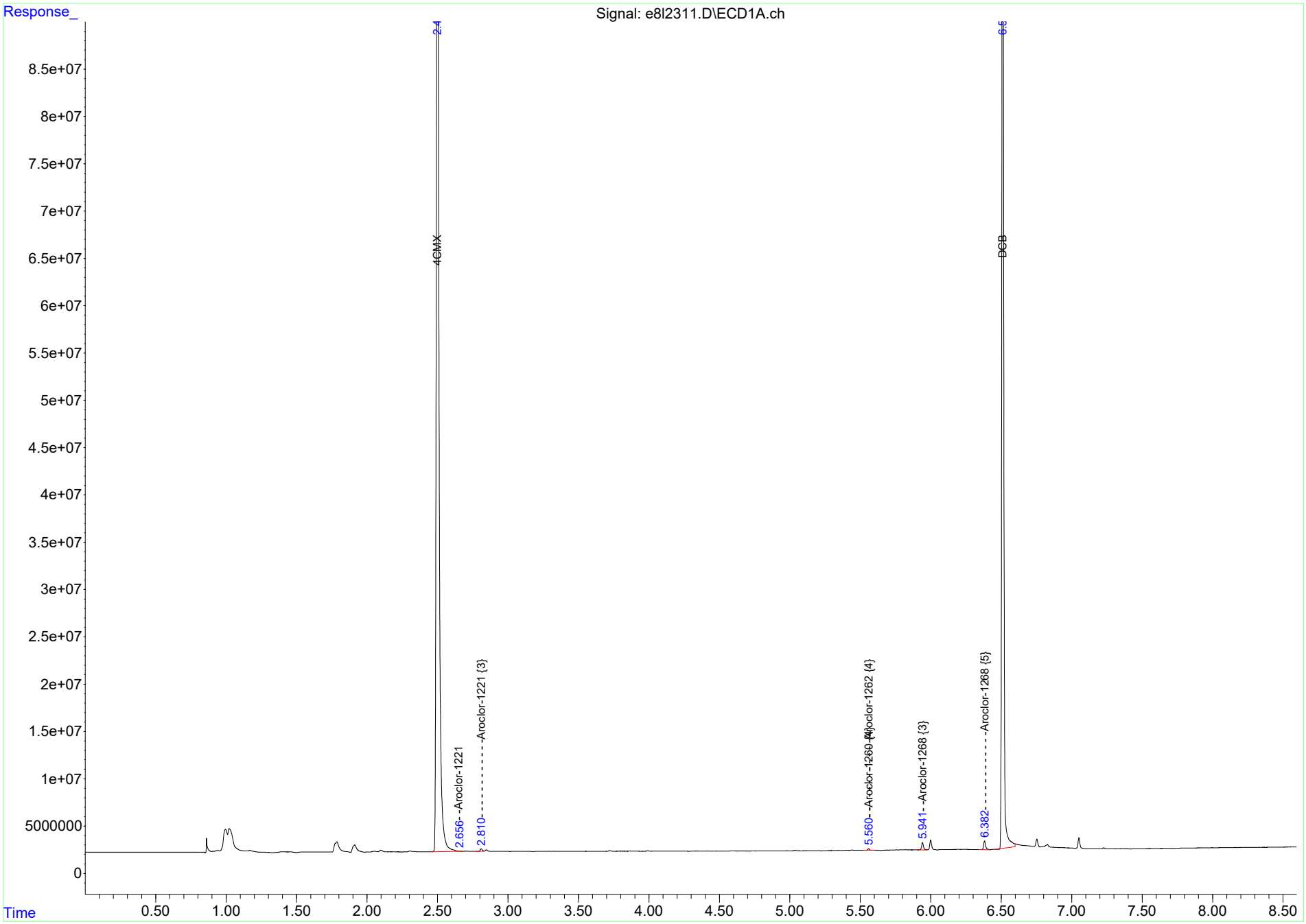
Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1016 {2}	3.422	0.000	-3.422	0	N.D.	3.898	3.923	0.025f	1064701	5.446
Sum Aroclor-1016				0	N.D.				1064701	5.446
Average Aroclor-1016					N.D.					<MDL
Aroclor-1221	2.643	2.657	0.014	302955	5.027	3.055	0.000	-3.055	0	N.D.
Aroclor-1221 {3}	2.792	2.811	0.019f	2886298	20.949	3.220	0.000	-3.220	0	N.D.
Sum Aroclor-1221				3189253	25.976				0	N.D.
Average Aroclor-1221					<MDL					N.D.
Aroclor-1232 {2}	3.422	0.000	-3.422	0	N.D.	3.897	3.923	0.026f	1064701	14.566
Sum Aroclor-1232				0	N.D.				1064701	14.566
Average Aroclor-1232					N.D.					<MDL
Aroclor-1242 {2}	3.423	0.000	-3.423	0	N.D.	3.898	3.923	0.025f	1064701	7.061
Sum Aroclor-1242				0	N.D.				1064701	7.061

Average Aroclor-1242					N.D.						<MDL
Aroclor-1248	3.423	0.000	-3.423	0	N.D.	3.898	3.923	0.025f	1064701	14.129	
Sum Aroclor-1248				0	N.D.				1064701	14.129	
Average Aroclor-1248					N.D.						<MDL
Aroclor-1260 {4}	5.559	5.560	0.001	1570454	3.079	6.108	0.000	-6.108	0	N.D.	
Sum Aroclor-1260				1570454	3.079				0	N.D.	
Average Aroclor-1260					<MDL					N.D.	
Aroclor-1262 {4}	5.559	5.560	0.001	1570454	3.223	6.107	0.000	-6.107	0	N.D.	
Sum Aroclor-1262				1570454	3.223				0	N.D.	
Average Aroclor-1262					<MDL					N.D.	
Aroclor-1268 {3}	5.940	5.941	0.001	7266195	11.459	6.572	6.572	0.000	4745528	12.651	
Aroclor-1268 {5}	6.381	6.382	0.001	8987492	4.803	6.997	6.997	0.000	6004584	5.534	
Sum Aroclor-1268				16253687	16.262				10750112	18.184	
Average Aroclor-1268					<MDL						<MDL
4,4' DDT	5.113	0.000	-5.113	0	N.D.	5.657	5.667	0.010	538822	0.627	#

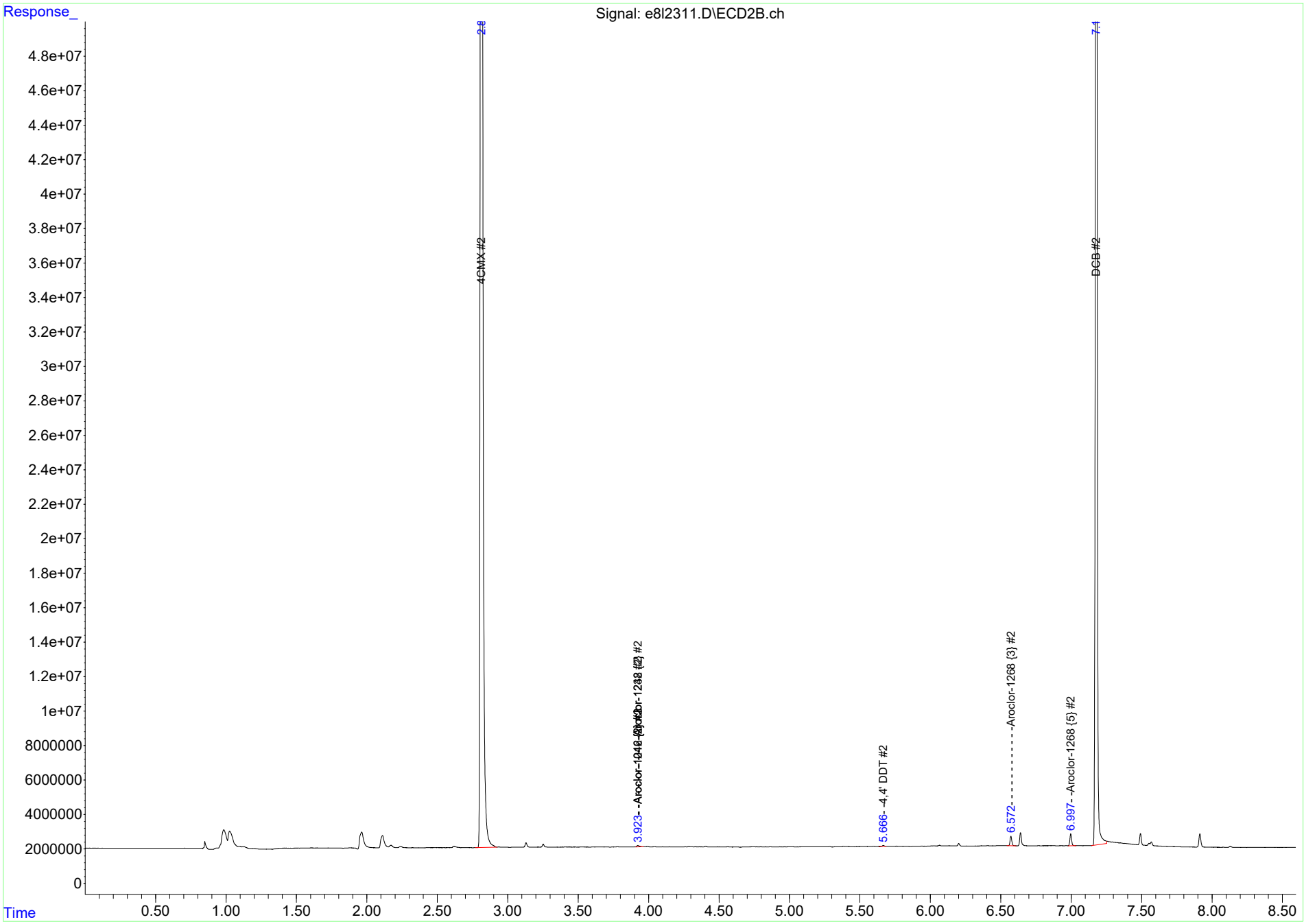
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2311.D



ECD8_8082_122022.m Fri Dec 23 07:56:13 2022 Page: 3

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2311.D



Quantitation Report
GEL Laboratories, LLC

JM 12/23/2022

JC 12/23/2022

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2319.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 23 Dec 2022 09:47 (#1); 23 Dec 2022 09:47 (#2)
Operator : JXM InstName : ECD8
Sample : |WAR220725-99|BLANK|1|SVA|1|IBLK
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 23 10:31:15 2022
Quant Method : D:\MSDCHEM\1\DATA\122322\ECD8_8082_122022.m
Quant Title : ECD8 SubList :
QLast Update : Wed Dec 21 04:50:48 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0 ul
Signal #1 Phase : RTX-CLPEST 1 Signal #2 Phase: RTX-CLPEST 2
Signal #1 Info : 250 um Signal #2 Info : 250 um

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
System Monitoring Compounds										
4CMX	2.500	2.500	0.000	1334252026	211.507	2.814	2.814	0.000	1120440016	219.190
DCB	6.512	6.510	-0.002	1055529607	218.587	7.180	7.178	-0.002	720708939	229.341

Compound	Amount	Range	Recovery1	Recovery2
4CMX	200.000	No Limits	106%	110%
DCB	200.000	No Limits	109%	115%

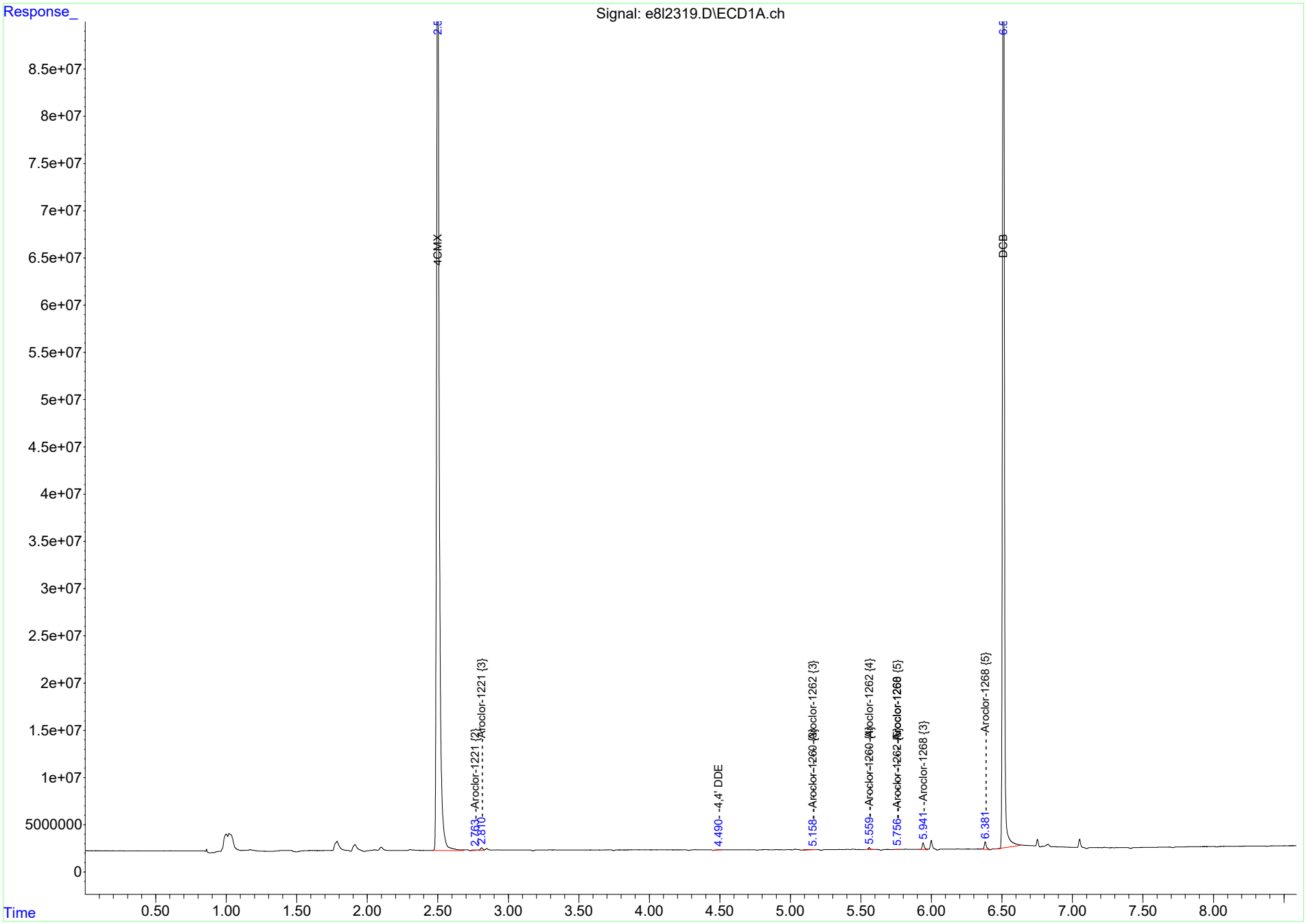
Target Compounds

Compound	Exp#1	RT#1	Dlt#1	Resp#1	ug/L#1	Exp#2	RT#2	Dlt#2	Resp#2	ug/L#2
Aroclor-1221 {2}	2.760	2.764	0.004	1203289	35.734	3.171	0.000	-3.171	0	N.D.
Aroclor-1221 {3}	2.792	2.811	0.019f	3590346	26.059	3.220	0.000	-3.220	0	N.D.
Sum Aroclor-1221				4793635	61.793				0	N.D.
Average Aroclor-1221					<MDL					N.D.
Aroclor-1254 {5}	4.897	0.000	-4.897	0	N.D.	5.408	5.383	-0.025f	434307	3.576
Sum Aroclor-1254				0	N.D.				434307	3.576
Average Aroclor-1254					N.D.					<MDL
Aroclor-1260 {2}	4.895	0.000	-4.895	0	N.D.	5.407	5.383	-0.024f	434307	2.128
Aroclor-1260 {3}	5.171	5.159	-0.012	1802416	7.638	5.726	0.000	-5.726	0	N.D.
Aroclor-1260 {4}	5.559	5.559	0.000	1761911	3.455	6.108	0.000	-6.108	0	N.D.
Aroclor-1260 {5}	5.757	5.756	-0.001	308254	1.271	6.367	0.000	-6.367	0	N.D.
Sum Aroclor-1260				3872581	12.364				434307	2.128 #
Average Aroclor-1260					<MDL					<MDL

Aroclor-1262 {2}	4.894	0.000	-4.894	0	N.D.	5.407	5.383	-0.024f	434307	3.266	
Aroclor-1262 {3}	5.171	5.159	-0.012	1802416	6.418	5.726	0.000	-5.726	0	N.D.	
Aroclor-1262 {4}	5.559	5.559	0.000	1761911	3.616	6.107	0.000	-6.107	0	N.D.	
Aroclor-1262 {5}	5.779	5.756	-0.023f	308254	1.445	6.362	0.000	-6.362	0	N.D.	
Sum Aroclor-1262				3872581	11.478				434307	3.266	#
Average Aroclor-1262					<MDL					<MDL	
Aroclor-1268	5.779	5.756	-0.023f	308254	0.427	6.359	0.000	-6.359	0	N.D.	
Aroclor-1268 {3}	5.940	5.941	0.001	7442209	11.737	6.572	6.573	0.001	4242064	11.309	
Aroclor-1268 {5}	6.381	6.381	0.000	8292230	4.432	6.997	6.997	0.000	5035174	4.640	
Sum Aroclor-1268				16042692	16.595				9277239	15.949	
Average Aroclor-1268					<MDL					<MDL	
4,4' DDT	5.113	0.000	-5.113	0	N.D.	5.657	5.667	0.010	549094	0.639	#
4,4' DDE	4.493	4.491	-0.002	181387	0.044	5.023	0.000	-5.023	0	N.D.	#

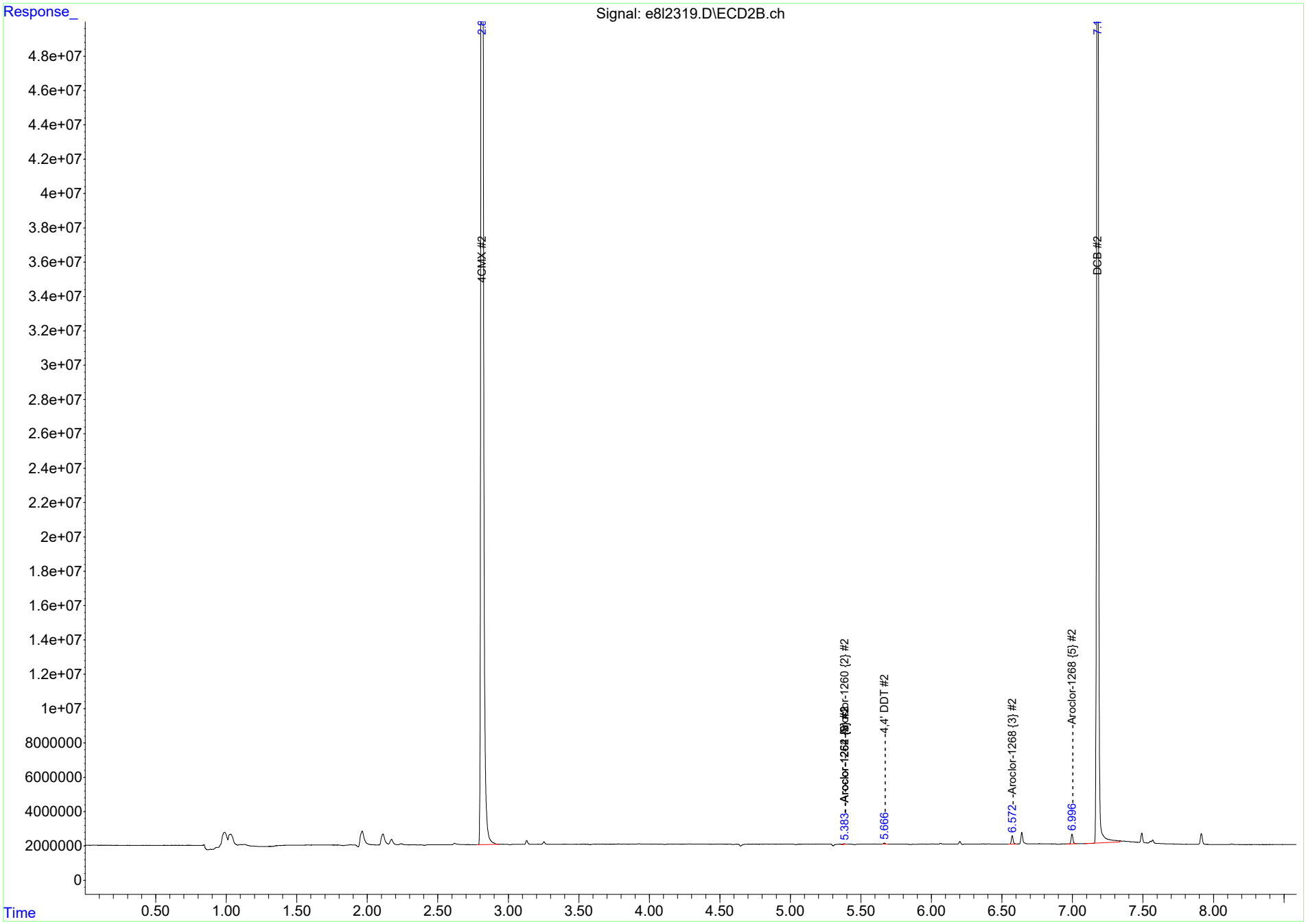
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int. (A) = Over the calibration range (d) = deleted

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2319.D



ECD8_8082_122022.m Fri Dec 23 10:32:20 2022 Page: 3

Data Path : D:\MSDCHEM\1\DATA\122322\
Data File : e8l2319.D



Miscellaneous

Prep Logbook

Solid-Phase Extraction

Batch ID: 2359875 **Verified by:** _____
Analyst: Lakia White
Method: SW846 3535A

Lab SOP: GL-OA-E-070 REV# 11
Instrument: Semi-Volatiles Manual

Sample ID	Prep Date	Initial Wt (g)	Final Wt (g)	Initial Volume (mL)	Ph 1	Ph 2	Clean Up	Final Volume (mL)	Prepped Factor (mL/mL)
1205278292 MB	22-DEC-2022 05:48:00			1000	7	1	H2SO4/KMnO4	1	0.001
1205278293 LCS	22-DEC-2022 05:48:00			1000	7	1	H2SO4/KMnO4	1	0.001
604449002	22-DEC-2022 05:48:00	1482.81	440.11	1042.7	10	1	H2SO4/KMnO4	1	0.00096
604449004	22-DEC-2022 05:48:00			1000	10	1	H2SO4/KMnO4	1	0.001
1205278294 MS (604449004)	22-DEC-2022 05:48:00			450	10	1	H2SO4/KMnO4	0.5	0.00111
1205278295 MSD (604449004)	22-DEC-2022 05:48:00			450	10	1	H2SO4/KMnO4	0.5	0.00111
604449006	22-DEC-2022 05:48:00	1487.41	444.07	1043.34	10	1	H2SO4/KMnO4	1	0.00096
604449008	22-DEC-2022 05:48:00	1483.81	443.2	1040.61	10	1	H2SO4/KMnO4	1	0.00096
604449010	22-DEC-2022 05:48:00	1544.28	441.82	1102.46	10	1	H2SO4/KMnO4	1	0.00091
604449012	22-DEC-2022 05:48:00	1545.38	438.99	1106.39	10	1	H2SO4/KMnO4	1	0.0009
604449014	22-DEC-2022 05:48:00	1498.41	442.01	1056.4	10	1	H2SO4/KMnO4	1	0.00095
604449016	22-DEC-2022 05:48:00	1477.78	439.96	1037.82	10	1	H2SO4/KMnO4	1	0.00096
604449018	22-DEC-2022 05:48:00	1463.15	447.09	1016.06	10	1	H2SO4/KMnO4	1	0.00098
604449020	22-DEC-2022 05:48:00	1429.6	440.72	988.88	10	1	H2SO4/KMnO4	1	0.00101
604581001	22-DEC-2022 05:48:00			200	7	1	H2SO4/KMnO4	1	0.005

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1205278293	PCB Laboratory Control	WE221201-06	1	mL
MS	1205278294	PCB Laboratory Control	WE221201-06	.5	mL
MSD	1205278295	PCB Laboratory Control	WE221201-06	.5	mL
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	WE221107-12	.5	mL
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	WE221107-12	1	mL
REGNT	All	Methylene Chloride	3483519	100	mL
REGNT	All	Hexane	3527680	10	mL
REGNT	All	5% Potassium Permanganate	3527700	5	mL
REGNT	All	Acetone	3534989-B4	5	mL
REGNT	All	Sulfuric Acid 1:1 H2SO4/H2O	3648652	20	mL
SOURC	All	SODIUM SULFATE	3493987	30	g

Comments:

Balance #: OPWBAL-01
All of the sample contain sediments and clog the cartridge .
Turbovap #: 1,4
Logbook Reviewer: Donna Frazier
Cartridge lot #: 070798-CO
Final Solvent: Hexane
Clean up SOP: GL-OA-E-037
Verified by: Donna Frazier

ORGANIC RUN LOG - INSTRUMENT ID#ECD8

Jxm 12/21/2022

GEL ORGANIC RUN LOG 122022

DATE: 20-Dec-22 METHOD: See Data OPERATOR: JXM

Solvent ID: 3417010
Alumina ID: 221101A
Copper ID: 220414B.01

Calibration Information:
Initial Calibration Dates: See Calibration History
Initial Calibration Std ID's: See associated data and run log
GEL SOP: GL-OA-E-040

Sequence Number: 122022

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Dil. Factor	AS Slot #	Analyst	Comments
12/20/2022 08:26	e8l2001.D	WAR220725-99	IBLK	BLANK	1	1	JXM	CLEAN
12/20/2022 08:38	e8l2002.D	WAR220721-DDT	DDT	ICS	1	2	JXM	DDT
12/20/2022 08:50	e8l2003.D	WAR221130-60	1660	CCV	1	3	JXM	DUSE
12/20/2022 09:02	e8l2004.D	WAR220811-54	1254	CCV	1	4	JXM	DUSE
12/20/2022 09:14	e8l2005.D	WAR221130-60	1660	CCV	1	5	JXM	DUSE
12/20/2022 09:27	e8l2006.D	WAR221206-42	1242	CCV	1	6	JXM	DUSE
12/20/2022 09:39	e8l2007.D	WAR221216-48	1248	CCV	1	7	JXM	PASSES BOTH COLUMNS
12/20/2022 09:51	e8l2008.D	WAR220915-68	1268	CCV	1	8	JXM	PASSES BOTH COLUMNS
12/20/2022 10:04	e8l2009.D	WAR221114-62	1262	CCV	1	9	JXM	PASSES BOTH COLUMNS
12/20/2022 10:16	e8l2010.D	WAR221209-32	1232	CCV	1	10	JXM	PASSES BOTH COLUMNS
12/20/2022 10:28	e8l2011.D	WAR221219-21	1221	CCV	1	11	JXM	PATTERN ONLY
12/20/2022 10:40	e8l2012.D	WAR221218-01	1660-1	ICAL	1	12	JXM	1660 LEVEL 1
12/20/2022 10:53	e8l2013.D	WAR221218-02	1660-2	ICAL	1	13	JXM	1660 LEVEL 2
12/20/2022 11:05	e8l2014.D	WAR221218-03	1660-3	ICAL	1	14	JXM	1660 LEVEL 3
12/20/2022 11:17	e8l2015.D	WAR221218-04	1660-4	ICAL	1	15	JXM	1660 LEVEL 4
12/20/2022 11:30	e8l2016.D	IAR220908-01	1660-5	ICAL	1	16	JXM	1660 LEVEL 5
12/20/2022 11:42	e8l2017.D	WAR221130-60	1660	ICV	1	17	JXM	PASSES BOTH COLUMNS
12/20/2022 11:54	e8l2018.D	WAR221218-05	1254-1	ICAL	1	18	JXM	1254 LEVEL 1
12/20/2022 12:06	e8l2019.D	WAR221218-06	1254-2	ICAL	1	19	JXM	1254 LEVEL 2
12/20/2022 12:19	e8l2020.D	WAR221218-07	1254-3	ICAL	1	20	JXM	1254 LEVEL 3
12/20/2022 12:31	e8l2021.D	WAR221218-08	1254-4	ICAL	1	21	JXM	1254 LEVEL 4
12/20/2022 12:43	e8l2022.D	IAR220811-01	1254-5	ICAL	1	22	JXM	1254 LEVEL 5
12/20/2022 12:55	e8l2023.D	WAR220811-54	1254	ICV	1	23	JXM	PASSES BOTH COLUMNS
12/20/2022 13:08	e8l2024.D	WAR221218-09	1242-1	ICAL	1	24	JXM	1242 LEVEL 1
12/20/2022 13:20	e8l2025.D	WAR221218-10	1242-2	ICAL	1	25	JXM	1242 LEVEL 2
12/20/2022 13:32	e8l2026.D	WAR221218-11	1242-3	ICAL	1	26	JXM	1242 LEVEL 3
12/20/2022 13:44	e8l2027.D	WAR221218-12	1242-4	ICAL	1	27	JXM	1242 LEVEL 4
12/20/2022 13:57	e8l2028.D	IAR220929-01	1242-5	ICAL	1	28	JXM	1242 LEVEL 5

GEL ORGANIC RUN LOG 122022

12/20/2022 14:09	e8l2029.D	WAR221206-42	1242	ICV	1	29	JXM	PASSES BOTH COLUMNS
12/20/2022 14:21	e8l2030.D	WAR220725-99	IBLK	BLANK	1	30	JXM	CLEAN

ORGANIC RUN LOG - INSTRUMENT ID#ECD8

Jxm 12/23/2022

GEL ORGANIC RUN LOG 122222

DATE: 22-Dec-22 METHOD: See Data OPERATOR: JXM

Solvent ID: 3417010
Alumina ID: 221101A
Copper ID: 220414B.01

Calibration Information:
Initial Calibration Dates: See Calibration History
Initial Calibration Std ID's: See associated data and run log
GEL SOP: GL-OA-E-040

Sequence Number: 122222

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Dil. Factor	AS Slot #	Analyst	Comments
12/22/2022	08:48	e8l2201.D	WAR220725-99	IBLK	BLANK	1	1	JXM	
12/22/2022	09:00	e8l2202.D	WAR220721-DDT	DDT	ICS	1	2	JXM	
12/22/2022	09:12	e8l2203.D	WAR221130-60	1660	CCV	1	3	JXM	
12/22/2022	09:24	e8l2204.D	WAR220811-54	1254	CCV	1	4	JXM	
12/22/2022	09:37	e8l2205.D	WAR221206-42	1242	CCV	1	5	JXM	
12/22/2022	09:49	e8l2206.D	WAR221216-48	1248	CCV	1	6	JXM	
12/22/2022	10:01	e8l2207.D	WAR220915-68	1268	CCV	1	7	JXM	
12/22/2022	10:14	e8l2208.D	WAR221114-62	1262	CCV	1	8	JXM	
12/22/2022	10:26	e8l2209.D	WAR221209-32	1232	CCV	1	9	JXM	
12/22/2022	10:38	e8l2210.D	WAR221219-21	1221	CCV	1	10	JXM	
12/22/2022	10:51	e8l2211.D	WAR220725-99	IBLK	BLANK	1	11	JXM	
12/22/2022	12:25	e8l2212.D	WAR221130-60	1660	CCV	1	12	JXM	
12/22/2022	12:41	e8l2213.D	WAR220725-99	IBLK	BLANK	1	13	JXM	
12/22/2022	12:53	e8l2214.D	12----	MB	SCREEN	1	14	JXM	
12/22/2022	13:07	e8l2215.D	12----	LCS-1	SCREEN	1	15	JXM	
12/22/2022	13:22	e8l2216.D	12----	LCS-2	SCREEN	1	16	JXM	
12/22/2022	13:36	e8l2217.D	12----	LCS-3	SCREEN	1	17	JXM	
12/22/2022	13:50	e8l2218.D	12----	LCS-4	SCREEN	1	18	JXM	
12/22/2022	14:05	e8l2219.D	12----	LCS-5	SCREEN	1	19	JXM	
12/22/2022	14:35	e8l2220.D	12----	QCQA	SCREEN	1	20	JXM	
12/22/2022	14:49	e8l2221.D	WAR221130-60	1660	CCV	1	21	JXM	
12/22/2022	15:02	e8l2222.D	WAR220725-99	IBLK	BLANK	1	22	JXM	
12/22/2022	15:14	e8l2223.D	WE221221-12	SURR	SCREEN	1	22	JXM	
12/22/2022	15:51	e8l2224.D	1205278292	MB	2359880	1	24	JXM	
12/22/2022	16:03	e8l2225.D	1205278293	LCS	2359880	1	25	JXM	
12/22/2022	16:15	e8l2226.D	604449002	TNSL	2359880	10	26	JXM	RR due to sulfur still in extract
12/22/2022	16:35	e8l2227.D	604449004	TNSL	2359880	10	27	JXM	RR due to sulfur still in extract
12/22/2022	16:54	e8l2228.D	1205278294	MS	2359880	10	28	JXM	RR due to sulfur still in extract

GEL ORGANIC RUN LOG 122222

12/22/2022 17:13	e8l2229.D	1205278295	MSD	2359880	10	29	JXM	RR due to sulfur still in extract
12/22/2022 17:33	e8l2230.D	604449006	TNSL	2359880	10	30	JXM	
12/22/2022 17:52	e8l2231.D	604449008	TNSL	2359880	10	31	JXM	
12/22/2022 18:12	e8l2232.D	604449010	TNSL	2359880	10	32	JXM	
12/22/2022 18:31	e8l2233.D	604449012	TNSL	2359880	10	33	JXM	
12/22/2022 18:50	e8l2234.D	WAR221130-60	1660	CCV	1	34	JXM	
12/22/2022 19:03	e8l2235.D	WAR220725-99	IBLK	BLANK	1	35	JXM	
12/22/2022 19:15	e8l2236.D	604449014	TNSL	2359880	10	36	JXM	
12/22/2022 19:34	e8l2237.D	604449016	TNSL	2359880	10	37	JXM	
12/22/2022 19:54	e8l2238.D	604449018	TNSL	2359880	10	38	JXM	RR due to sulfur still in extract
12/22/2022 20:13	e8l2239.D	604449020	TNSL	2359880	10	39	JXM	RR due to sulfur still in extract
12/22/2022 20:32	e8l2240.D	WAR221130-60	1660	CCV	1	40	JXM	
12/22/2022 20:45	e8l2241.D	WAR220725-99	IBLK	BLANK	1	41	JXM	
12/22/2022 20:57	e8l2242.D	604581001	TETR	2359880	10	42	JXM	
12/22/2022 21:16	e8l2243.D	WAR221130-60	1660	CCV	1	43	JXM	
12/22/2022 21:29	e8l2244.D	WAR220725-99	IBLK	BLANK	1	44	JXM	

ORGANIC RUN LOG - INSTRUMENT ID#ECD8

JXM 12/23/2022

GEL ORGANIC RUN LOG 122322

DATE: 23-Dec-22 METHOD: See Data OPERATOR: JXM

Solvent ID: 3417010
Alumina ID: 221101A
Copper ID: 220414B.01

Calibration Information:
Initial Calibration Dates: See Calibration History
Initial Calibration Std ID's: See associated data and run log
GEL SOP: GL-OA-E-040

Sequence Number: 122322

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Dil. Factor	AS Slot #	Analyst	Comments
12/23/2022 05:23	e8l2301.D	WAR220725-99	IBLK	BLANK	1	1	JXM	CLEAN
12/23/2022 05:35	e8l2302.D	WAR220721-DDT	DDT	ICS	1	2	JXM	DDT
12/23/2022 05:47	e8l2303.D	WAR221130-60	1660	CCV	1	3	JXM	PASSES BOTH COLUMNS
12/23/2022 06:00	e8l2304.D	WAR220811-54	1254	CCV	1	4	JXM	PASSES BOTH COLUMNS
12/23/2022 06:12	e8l2305.D	WAR221206-42	1242	CCV	1	5	JXM	PASSES BOTH COLUMNS
12/23/2022 06:24	e8l2306.D	WAR221216-48	1248	CCV	1	6	JXM	PASSES BOTH COLUMNS
12/23/2022 06:37	e8l2307.D	WAR220915-68	1268	CCV	1	7	JXM	PASSES BOTH COLUMNS
12/23/2022 06:49	e8l2308.D	WAR221114-62	1262	CCV	1	8	JXM	HIGH
12/23/2022 07:01	e8l2309.D	WAR221209-32	1232	CCV	1	9	JXM	PASSES AVERAGE
12/23/2022 07:13	e8l2310.D	WAR221219-21	1221	CCV	1	10	JXM	PATTERN ONLY
12/23/2022 07:26	e8l2311.D	WAR220725-99	IBLK	BLANK	1	11	JXM	CLEAN
12/23/2022 07:38	e8l2312.D	604449002	TNSL	2359880	10	12	JXM	USE: LOWER, Cu and alumina cleanup
12/23/2022 07:58	e8l2313.D	604449004	TNSL	2359880	10	13	JXM	USE: LOWER, Cu and alumina cleanup
12/23/2022 08:17	e8l2314.D	1205278294	MS	2359880	10	14	JXM	USE: LOWER, Cu and alumina cleanup
12/23/2022 08:36	e8l2315.D	1205278295	MSD	2359880	10	15	JXM	USE: LOWER, Cu and alumina cleanup
12/23/2022 08:56	e8l2316.D	604449018	TNSL	2359880	10	16	JXM	USE: LOWER, Cu and alumina cleanup
12/23/2022 09:15	e8l2317.D	604449020	TNSL	2359880	10	17	JXM	USE: LOWER, Cu and alumina cleanup
12/23/2022 09:35	e8l2318.D	WAR221130-60	1660	CCV	1	18	JXM	PASSES BOTH COLUMNS
12/23/2022 09:47	e8l2319.D	WAR220725-99	IBLK	BLANK	1	19	JXM	CLEAN

Metals Analysis

Case Narrative

Metals
Technical Case Narrative
Triad National Security, LLC
SDG #: 2023-289
Work Order #: 604449

Product: **Determination of Metals by ICP**
Analytical Method: EPA 200.7
Analytical Procedure: GL-MA-E-013 REV# 32
Analytical Batch: 2357704

Product: **Determination of Metals by ICP-MS**
Analytical Method: EPA 200.8 DOE-AL
Analytical Procedure: GL-MA-E-014 REV# 35
Analytical Batches: 2357703 and 2359022

Product: **Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer**
Analytical Method: EPA 245.1/245.2
Analytical Procedure: GL-MA-E-010 REV# 39
Analytical Batch: 2358207

Preparation Method: EPA 200.2
Preparation Procedure: GL-MA-E-016 REV# 18
Preparation Batches: 2357701, 2357702 and 2359021

Preparation Method: EPA 245.1/245.2 Prep
Preparation Procedure: GL-MA-E-010 REV# 39
Preparation Batch: 2358206

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
604449001	SMEB01-23-265344
604449002	SMEB01-23-265371
604449005	SMEB02-23-265345
604449006	SMEB02-23-265372
604449009	SMEB03-23-265346
604449010	SMEB03-23-265373
604449013	SMEB04-23-265347
604449014	SMEB04-23-265374
604449017	SMEB05-23-265348
604449018	SMEB05-23-265375
1205274084	Method Blank (MB)**ICP**
1205274085	Laboratory Control Sample (LCS)
1205274088	604449001(SMEB01-23-265344L) Serial Dilution (SD)
1205274086	604449001(SMEB01-23-265344D) Sample Duplicate (DUP)
1205274087	604449001(SMEB01-23-265344S) Matrix Spike (MS)
1205274079	Method Blank (MB)**ICP-MS**
1205276604	Method Blank (MB)**ICP-MS**
1205274080	Laboratory Control Sample (LCS)

1205276605	Laboratory Control Sample (LCS)
1205274083	604449001(SMEB01-23-265344L) Serial Dilution (SD)
1205276608	604449001(SMEB01-23-265344L) Serial Dilution (SD)
1205274081	604449001(SMEB01-23-265344D) Sample Duplicate (DUP)
1205276606	604449001(SMEB01-23-265344D) Sample Duplicate (DUP)
1205274082	604449001(SMEB01-23-265344S) Matrix Spike (MS)
1205276607	604449001(SMEB01-23-265344S) Matrix Spike (MS)
1205275052	Method Blank (MB)**CVAA**
1205275053	Laboratory Control Sample (LCS)
1205275056	604449001(SMEB01-23-265344L) Serial Dilution (SD)
1205275054	604449001(SMEB01-23-265344D) Sample Duplicate (DUP)
1205275055	604449001(SMEB01-23-265344S) Matrix Spike (MS)
1205275066	604449001(SMEB01-23-265344PS) Post Spike (PS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Calibration Information

ICSA/ICSAB Statement
For the ICP-MS analysis, the ICSA solution contains analyte concentrations which are verified trace impurities indigenous to the purchased standard.

Quality Control (QC) Information

Matrix Spike (MS/MSD) Recovery Statement
The percent recoveries (%R) obtained from the MS/MSD analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MS/MSD (See Below) did not meet the recommended quality control acceptance criteria for percent recoveries for the following applicable analyte.

Sample	Analyte	Value
1205274082 (SMEB01-23-265344MS)	Chromium	0* (75%-125%)
	Selenium	44* (75%-125%)

The MS/MSD (See Below) did not meet the recommended quality control acceptance criteria for percent recoveries for the following applicable analyte. The post spike also did not meet the required control limits; thus, confirming matrix interferences and/or sample non-homogeneity.

Sample	Analyte	Value
1205275055 (SMEB01-23-265344MS)	Mercury	27.7* (75%-125%)

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations 25x the

IDL/MDL for CVAA, 50X the IDL/MDL for ICP and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. Not all the applicable analytes were within the established acceptance criteria. Matrix suppression may be suspected. The data has been qualified.

Sample	Analyte	Value
1205274088 (SMEB01-23-265344SDILT)	Boron	12.6 *(0%-10%)

Post Spike (PS) Recovery Statement
The percent recoveries (%R) obtained from the PS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The PS did not meet the recommended quality control acceptance criteria for percent recoveries for all applicable analytes and verifies the presence of matrix interferences.

Sample	Analyte	Value
1205275066 (SMEB01-23-265344PS)	Mercury	29* (80%-120%)

Technical Information

Sample Dilutions
Dilutions may be required for many reasons, including to minimize matrix interferences or to bring over range target analyte concentrations into the linear calibration range. Per the SOP, samples , 604449001 (SMEB01-23-265344), 604449005 (SMEB02-23-265345), 604449009 (SMEB03-23-265346), 604449013 (SMEB04-23-265347) and 604449017 (SMEB05-23-265348)-ICP-MS were diluted due to internal standard recoveries outside the acceptable control limits.

Analyte	604449				
	001	005	009	013	017
Aluminum	25X	25X	25X	25X	25X
Antimony	25X	25X	25X	25X	25X
Arsenic	25X	25X	50X	25X	25X
Barium	25X	25X	25X	25X	25X
Beryllium	25X	25X	25X	25X	25X
Cadmium	25X	25X	25X	25X	25X
Chromium	25X	25X	25X	25X	25X
Cobalt	25X	25X	25X	25X	25X
Copper	25X	25X	25X	25X	25X
Lead	25X	25X	25X	25X	25X
Molybdenum	25X	25X	25X	25X	25X
Nickel	25X	25X	25X	25X	25X
Selenium	25X	25X	50X	25X	25X
Silver	25X	25X	25X	25X	25X
Thallium	25X	25X	25X	25X	25X
Uranium	25X	25X	25X	25X	25X

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Qualifier Definition Report
for

TNSL001 Triad National Security, LLC (620266)

Client SDG: 2023-289 GEL Work Order: 604449

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria
E %difference of sample and SD is >10%. Sample concentration must meet flagging criteria
J Value is estimated
N Metals--The Matrix spike sample recovery is not within specified control limits
U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature:  **Name: Alan Stanley**

Date: 21 DEC 2022 **Title: Team Leader**

Sample Data Summary

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 2023−289 **CONTRACT:** TNSL00100 **METHOD TYPE:** EPA

SAMPLE ID: 604449001 **BASIS:** As Received **DATE COLLECTED** 14−DEC−22

CLIENT ID: SMEB01−23−265344 **LEVEL:** Low **DATE RECEIVED** 16−DEC−22

MATRIX: W **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429−90−5	Aluminum	483	ug/L	U	483	1250	1250	25	MS	BAJ	12/20/22 02:52	221219−2	2357703
7440−36−0	Antimony	25.0	ug/L	U	25.0	75.0	75.0	25	MS	BAJ	12/20/22 02:52	221219−2	2357703
7440−38−2	Arsenic	50.0	ug/L	U	50.0	125	125	25	MS	BAJ	12/20/22 02:52	221219−2	2357703
7440−39−3	Barium	221	ug/L		16.8	100	100	25	MS	BAJ	12/20/22 02:52	221219−2	2357703
7440−41−7	Beryllium	5.00	ug/L	U	5.00	12.5	12.5	25	MS	SKJ	12/21/22 14:19	221221−4	2359022
7440−42−8	Boron	3780	ug/L	E	15.0	50.0	50.0	1	P	HSC	12/19/22 14:12	121922−1	2357704
7440−43−9	Cadmium	7.50	ug/L	U	7.50	25.0	25.0	25	MS	BAJ	12/20/22 02:52	221219−2	2357703
7440−47−3	Chromium	75.0	ug/L	UN	75.0	250	250	25	MS	BAJ	12/20/22 02:52	221219−2	2357703
7440−48−4	Cobalt	7.50	ug/L	U	7.50	25.0	25.0	25	MS	SKJ	12/21/22 14:19	221221−4	2359022
7440−50−8	Copper	7.50	ug/L	U	7.50	50.0	50.0	25	MS	SKJ	12/21/22 14:19	221221−4	2359022
7439−89−6	Iron	32.4	ug/L	J	30.0	100	100	1	P	HSC	12/19/22 14:12	121922−1	2357704
7439−92−1	Lead	12.5	ug/L	U	12.5	50.0	50.0	25	MS	BAJ	12/20/22 02:52	221219−2	2357703
7439−96−5	Manganese	8.87	ug/L	J	2.00	10.0	10.0	1	P	HSC	12/19/22 14:12	121922−1	2357704
7439−97−6	Mercury	0.236	ug/L	N	0.0670	0.200	0.200	1	AV	JP2	12/20/22 09:54	122022W1−5	2358207
7439−98−7	Molybdenum	252	ug/L		5.00	25.0	25.0	25	MS	BAJ	12/20/22 02:52	221219−2	2357703
7440−02−0	Nickel	28.1	ug/L	J	15.0	50.0	50.0	25	MS	BAJ	12/20/22 02:52	221219−2	2357703
7782−49−2	Selenium	37.5	ug/L	UN	37.5	125	125	25	MS	BAJ	12/20/22 02:52	221219−2	2357703
7440−22−4	Silver	7.50	ug/L	U	7.50	25.0	25.0	25	MS	BAJ	12/20/22 02:52	221219−2	2357703
7440−28−0	Thallium	15.0	ug/L	U	15.0	50.0	50.0	25	MS	BAJ	12/20/22 02:52	221219−2	2357703
7440−61−1	Uranium	1.68	ug/L	U	1.68	5.00	5.00	25	MS	BAJ	12/20/22 02:52	221219−2	2357703
7440−66−6	Zinc	16.7	ug/L	J	3.30	20.0	20.0	1	P	HSC	12/19/22 14:12	121922−1	2357704

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2357704	2357701	EPA 200.2	50	mL	50	mL	12/16/22	EM2
2357703	2357702	EPA 200.2	50	mL	50	mL	12/16/22	EM2
2358207	2358206	EPA 245.1/245.2 Prep	20	mL	20	mL	12/19/22	RM4
2359022	2359021	EPA 200.2	50	mL	50	mL	12/20/22	CD3

***Analytical Methods:**

MS **EPA 200.8 DOE−AL**
P **EPA 200.7**
AV **EPA 245.1/245.2**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 2023−289 **CONTRACT:** TNSL00100 **METHOD TYPE:** EPA

SAMPLE ID: 604449002 **BASIS:** As Received **DATE COLLECTED** 14−DEC−22

CLIENT ID: SMEB01−23−265371 **LEVEL:** Low **DATE RECEIVED** 16−DEC−22

MATRIX: W **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7439−97−6	Mercury	0.396	ug/L	N	0.0670	0.200	0.200	1	AV	JP2	12/20/22 10:02	122022W1−5	2358207

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2358207	2358206	EPA 245.1/245.2 Prep	20	mL	20	mL	12/19/22	RM4

***Analytical Methods:**

AV **EPA 245.1/245.2**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 2023−289 **CONTRACT:** TNSL00100 **METHOD TYPE:** EPA

SAMPLE ID: 604449005 **BASIS:** As Received **DATE COLLECTED** 14−DEC−22

CLIENT ID: SMEB02−23−265345 **LEVEL:** Low **DATE RECEIVED** 16−DEC−22

MATRIX: W **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429−90−5	Aluminum	483	ug/L	U	483	1250	1250	25	MS	BAJ	12/20/22 03:12	221219−2	2357703
7440−36−0	Antimony	25.0	ug/L	U	25.0	75.0	75.0	25	MS	BAJ	12/20/22 03:12	221219−2	2357703
7440−38−2	Arsenic	50.0	ug/L	U	50.0	125	125	25	MS	BAJ	12/20/22 03:12	221219−2	2357703
7440−39−3	Barium	265	ug/L		16.8	100	100	25	MS	BAJ	12/20/22 03:12	221219−2	2357703
7440−41−7	Beryllium	5.00	ug/L	U	5.00	12.5	12.5	25	MS	SKJ	12/21/22 14:32	221221−4	2359022
7440−42−8	Boron	3590	ug/L	E	15.0	50.0	50.0	1	P	HSC	12/19/22 14:32	121922−1	2357704
7440−43−9	Cadmium	7.50	ug/L	U	7.50	25.0	25.0	25	MS	BAJ	12/20/22 03:12	221219−2	2357703
7440−47−3	Chromium	75.0	ug/L	UN	75.0	250	250	25	MS	BAJ	12/20/22 03:12	221219−2	2357703
7440−48−4	Cobalt	7.50	ug/L	U	7.50	25.0	25.0	25	MS	SKJ	12/21/22 14:32	221221−4	2359022
7440−50−8	Copper	7.50	ug/L	U	7.50	50.0	50.0	25	MS	SKJ	12/21/22 14:32	221221−4	2359022
7439−89−6	Iron	30.0	ug/L	U	30.0	100	100	1	P	HSC	12/19/22 14:32	121922−1	2357704
7439−92−1	Lead	12.5	ug/L	U	12.5	50.0	50.0	25	MS	BAJ	12/20/22 03:12	221219−2	2357703
7439−96−5	Manganese	2.45	ug/L	J	2.00	10.0	10.0	1	P	HSC	12/19/22 14:32	121922−1	2357704
7439−97−6	Mercury	0.107	ug/L	JN	0.0670	0.200	0.200	1	AV	JP2	12/20/22 10:07	122022W1−5	2358207
7439−98−7	Molybdenum	383	ug/L		5.00	25.0	25.0	25	MS	BAJ	12/20/22 03:12	221219−2	2357703
7440−02−0	Nickel	25.5	ug/L	J	15.0	50.0	50.0	25	MS	BAJ	12/20/22 03:12	221219−2	2357703
7782−49−2	Selenium	37.5	ug/L	UN	37.5	125	125	25	MS	BAJ	12/20/22 03:12	221219−2	2357703
7440−22−4	Silver	7.50	ug/L	U	7.50	25.0	25.0	25	MS	BAJ	12/20/22 03:12	221219−2	2357703
7440−28−0	Thallium	15.0	ug/L	U	15.0	50.0	50.0	25	MS	BAJ	12/20/22 03:12	221219−2	2357703
7440−61−1	Uranium	1.68	ug/L	U	1.68	5.00	5.00	25	MS	BAJ	12/20/22 03:12	221219−2	2357703
7440−66−6	Zinc	16.1	ug/L	J	3.30	20.0	20.0	1	P	HSC	12/19/22 14:32	121922−1	2357704

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2357704	2357701	EPA 200.2	50	mL	50	mL	12/16/22	EM2
2357703	2357702	EPA 200.2	50	mL	50	mL	12/16/22	EM2
2358207	2358206	EPA 245.1/245.2 Prep	20	mL	20	mL	12/19/22	RM4
2359022	2359021	EPA 200.2	50	mL	50	mL	12/20/22	CD3

***Analytical Methods:**

MS **EPA 200.8 DOE−AL**
P **EPA 200.7**
AV **EPA 245.1/245.2**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 2023−289 **CONTRACT:** TNSL00100 **METHOD TYPE:** EPA

SAMPLE ID: 604449006 **BASIS:** As Received **DATE COLLECTED** 14−DEC−22

CLIENT ID: SMEB02−23−265372 **LEVEL:** Low **DATE RECEIVED** 16−DEC−22

MATRIX: W **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7439−97−6	Mercury	0.187	ug/L	JN	0.0670	0.200	0.200	1	AV	JP2	12/20/22 10:09	122022W1−5	2358207

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2358207	2358206	EPA 245.1/245.2 Prep	20	mL	20	mL	12/19/22	RM4

***Analytical Methods:**

AV **EPA 245.1/245.2**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 2023−289 **CONTRACT:** TNSL00100 **METHOD TYPE:** EPA

SAMPLE ID: 604449009 **BASIS:** As Received **DATE COLLECTED** 14−DEC−22

CLIENT ID: SMEB03−23−265346 **LEVEL:** Low **DATE RECEIVED** 16−DEC−22

MATRIX: W **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429−90−5	Aluminum	483	ug/L	U	483	1250	1250	25	MS	BAJ	12/20/22 03:15	221219−2	2357703
7440−36−0	Antimony	25.0	ug/L	U	25.0	75.0	75.0	25	MS	BAJ	12/20/22 03:15	221219−2	2357703
7440−38−2	Arsenic	100	ug/L	U	100	250	250	50	MS	BAJ	12/20/22 11:10	221220−3	2357703
7440−39−3	Barium	261	ug/L		16.8	100	100	25	MS	BAJ	12/20/22 03:15	221219−2	2357703
7440−41−7	Beryllium	5.00	ug/L	U	5.00	12.5	12.5	25	MS	SKJ	12/21/22 14:34	221221−4	2359022
7440−42−8	Boron	6280	ug/L	E	15.0	50.0	50.0	1	P	HSC	12/19/22 14:36	121922−1	2357704
7440−43−9	Cadmium	7.50	ug/L	U	7.50	25.0	25.0	25	MS	BAJ	12/20/22 03:15	221219−2	2357703
7440−47−3	Chromium	75.0	ug/L	UN	75.0	250	250	25	MS	BAJ	12/20/22 03:15	221219−2	2357703
7440−48−4	Cobalt	7.50	ug/L	U	7.50	25.0	25.0	25	MS	SKJ	12/21/22 14:34	221221−4	2359022
7440−50−8	Copper	7.55	ug/L	J	7.50	50.0	50.0	25	MS	SKJ	12/21/22 14:34	221221−4	2359022
7439−89−6	Iron	36.0	ug/L	J	30.0	100	100	1	P	HSC	12/19/22 14:36	121922−1	2357704
7439−92−1	Lead	12.5	ug/L	U	12.5	50.0	50.0	25	MS	BAJ	12/20/22 03:15	221219−2	2357703
7439−96−5	Manganese	13.9	ug/L		2.00	10.0	10.0	1	P	HSC	12/19/22 14:36	121922−1	2357704
7439−97−6	Mercury	0.144	ug/L	JN	0.0670	0.200	0.200	1	AV	JP2	12/20/22 10:10	122022W1−5	2358207
7439−98−7	Molybdenum	393	ug/L		5.00	25.0	25.0	25	MS	BAJ	12/20/22 03:15	221219−2	2357703
7440−02−0	Nickel	124	ug/L		15.0	50.0	50.0	25	MS	BAJ	12/20/22 03:15	221219−2	2357703
7782−49−2	Selenium	75.0	ug/L	UN	75.0	250	250	50	MS	BAJ	12/20/22 11:10	221220−3	2357703
7440−22−4	Silver	7.50	ug/L	U	7.50	25.0	25.0	25	MS	BAJ	12/20/22 03:15	221219−2	2357703
7440−28−0	Thallium	15.0	ug/L	U	15.0	50.0	50.0	25	MS	BAJ	12/20/22 03:15	221219−2	2357703
7440−61−1	Uranium	1.68	ug/L	U	1.68	5.00	5.00	25	MS	BAJ	12/20/22 03:15	221219−2	2357703
7440−66−6	Zinc	19.4	ug/L	J	3.30	20.0	20.0	1	P	HSC	12/19/22 14:36	121922−1	2357704

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2357704	2357701	EPA 200.2	50	mL	50	mL	12/16/22	EM2
2357703	2357702	EPA 200.2	50	mL	50	mL	12/16/22	EM2
2358207	2358206	EPA 245.1/245.2 Prep	20	mL	20	mL	12/19/22	RM4
2359022	2359021	EPA 200.2	50	mL	50	mL	12/20/22	CD3

***Analytical Methods:**

MS **EPA 200.8 DOE−AL**
P **EPA 200.7**
AV **EPA 245.1/245.2**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 2023−289 **CONTRACT:** TNSL00100 **METHOD TYPE:** EPA

SAMPLE ID: 604449010 **BASIS:** As Received **DATE COLLECTED** 14−DEC−22

CLIENT ID: SMEB03−23−265373 **LEVEL:** Low **DATE RECEIVED** 16−DEC−22

MATRIX: W **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7439−97−6	Mercury	0.197	ug/L	JN	0.0670	0.200	0.200	1	AV	JP2	12/20/22 10:12	122022W1−5	2358207

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2358207	2358206	EPA 245.1/245.2 Prep	20	mL	20	mL	12/19/22	RM4

***Analytical Methods:**

AV **EPA 245.1/245.2**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 2023−289 **CONTRACT:** TNSL00100 **METHOD TYPE:** EPA

SAMPLE ID: 604449013 **BASIS:** As Received **DATE COLLECTED** 14−DEC−22

CLIENT ID: SMEB04−23−265347 **LEVEL:** Low **DATE RECEIVED** 16−DEC−22

MATRIX: W **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429−90−5	Aluminum	483	ug/L	U	483	1250	1250	25	MS	BAJ	12/20/22 03:18	221219−2	2357703
7440−36−0	Antimony	25.0	ug/L	U	25.0	75.0	75.0	25	MS	BAJ	12/20/22 03:18	221219−2	2357703
7440−38−2	Arsenic	50.0	ug/L	U	50.0	125	125	25	MS	BAJ	12/20/22 03:18	221219−2	2357703
7440−39−3	Barium	197	ug/L		16.8	100	100	25	MS	BAJ	12/20/22 03:18	221219−2	2357703
7440−41−7	Beryllium	5.00	ug/L	U	5.00	12.5	12.5	25	MS	SKJ	12/21/22 14:36	221221−4	2359022
7440−42−8	Boron	2900	ug/L	E	15.0	50.0	50.0	1	P	HSC	12/19/22 14:40	121922−1	2357704
7440−43−9	Cadmium	7.50	ug/L	U	7.50	25.0	25.0	25	MS	BAJ	12/20/22 03:18	221219−2	2357703
7440−47−3	Chromium	75.0	ug/L	UN	75.0	250	250	25	MS	BAJ	12/20/22 03:18	221219−2	2357703
7440−48−4	Cobalt	7.50	ug/L	U	7.50	25.0	25.0	25	MS	SKJ	12/21/22 14:36	221221−4	2359022
7440−50−8	Copper	7.50	ug/L	U	7.50	50.0	50.0	25	MS	SKJ	12/21/22 14:36	221221−4	2359022
7439−89−6	Iron	30.0	ug/L	U	30.0	100	100	1	P	HSC	12/19/22 14:40	121922−1	2357704
7439−92−1	Lead	12.5	ug/L	U	12.5	50.0	50.0	25	MS	BAJ	12/20/22 03:18	221219−2	2357703
7439−96−5	Manganese	2.00	ug/L	U	2.00	10.0	10.0	1	P	HSC	12/19/22 14:40	121922−1	2357704
7439−97−6	Mercury	0.100	ug/L	JN	0.0670	0.200	0.200	1	AV	JP2	12/20/22 10:14	122022W1−5	2358207
7439−98−7	Molybdenum	333	ug/L		5.00	25.0	25.0	25	MS	BAJ	12/20/22 03:18	221219−2	2357703
7440−02−0	Nickel	23.4	ug/L	J	15.0	50.0	50.0	25	MS	BAJ	12/20/22 03:18	221219−2	2357703
7782−49−2	Selenium	40.0	ug/L	JN	37.5	125	125	25	MS	BAJ	12/20/22 03:18	221219−2	2357703
7440−22−4	Silver	7.50	ug/L	U	7.50	25.0	25.0	25	MS	BAJ	12/20/22 03:18	221219−2	2357703
7440−28−0	Thallium	15.0	ug/L	U	15.0	50.0	50.0	25	MS	BAJ	12/20/22 03:18	221219−2	2357703
7440−61−1	Uranium	1.68	ug/L	U	1.68	5.00	5.00	25	MS	BAJ	12/20/22 03:18	221219−2	2357703
7440−66−6	Zinc	11.5	ug/L	J	3.30	20.0	20.0	1	P	HSC	12/19/22 14:40	121922−1	2357704

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2357704	2357701	EPA 200.2	50	mL	50	mL	12/16/22	EM2
2357703	2357702	EPA 200.2	50	mL	50	mL	12/16/22	EM2
2358207	2358206	EPA 245.1/245.2 Prep	20	mL	20	mL	12/19/22	RM4
2359022	2359021	EPA 200.2	50	mL	50	mL	12/20/22	CD3

***Analytical Methods:**

MS **EPA 200.8 DOE−AL**
P **EPA 200.7**
AV **EPA 245.1/245.2**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 2023−289 **CONTRACT:** TNSL00100 **METHOD TYPE:** EPA

SAMPLE ID: 604449014 **BASIS:** As Received **DATE COLLECTED** 14−DEC−22

CLIENT ID: SMEB04−23−265374 **LEVEL:** Low **DATE RECEIVED** 16−DEC−22

MATRIX: W **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7439−97−6	Mercury	0.152	ug/L	JN	0.0670	0.200	0.200	1	AV	JP2	12/20/22 10:15	122022W1−5	2358207

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2358207	2358206	EPA 245.1/245.2 Prep	20	mL	20	mL	12/19/22	RM4

***Analytical Methods:**

AV **EPA 245.1/245.2**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 2023−289 **CONTRACT:** TNSL00100 **METHOD TYPE:** EPA

SAMPLE ID: 604449017 **BASIS:** As Received **DATE COLLECTED** 14−DEC−22

CLIENT ID: SMEB05−23−265348 **LEVEL:** Low **DATE RECEIVED** 16−DEC−22

MATRIX: W **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429−90−5	Aluminum	483	ug/L	U	483	1250	1250	25	MS	BAJ	12/20/22 03:22	221219−2	2357703
7440−36−0	Antimony	25.0	ug/L	U	25.0	75.0	75.0	25	MS	BAJ	12/20/22 03:22	221219−2	2357703
7440−38−2	Arsenic	50.0	ug/L	U	50.0	125	125	25	MS	BAJ	12/20/22 03:22	221219−2	2357703
7440−39−3	Barium	202	ug/L		16.8	100	100	25	MS	BAJ	12/20/22 03:22	221219−2	2357703
7440−41−7	Beryllium	5.00	ug/L	U	5.00	12.5	12.5	25	MS	SKJ	12/21/22 14:38	221221−4	2359022
7440−42−8	Boron	2670	ug/L	E	15.0	50.0	50.0	1	P	HSC	12/19/22 14:44	121922−1	2357704
7440−43−9	Cadmium	7.50	ug/L	U	7.50	25.0	25.0	25	MS	BAJ	12/20/22 03:22	221219−2	2357703
7440−47−3	Chromium	75.0	ug/L	UN	75.0	250	250	25	MS	BAJ	12/20/22 03:22	221219−2	2357703
7440−48−4	Cobalt	7.50	ug/L	U	7.50	25.0	25.0	25	MS	SKJ	12/21/22 14:38	221221−4	2359022
7440−50−8	Copper	7.50	ug/L	U	7.50	50.0	50.0	25	MS	SKJ	12/21/22 14:38	221221−4	2359022
7439−89−6	Iron	30.0	ug/L	U	30.0	100	100	1	P	HSC	12/19/22 14:44	121922−1	2357704
7439−92−1	Lead	12.5	ug/L	U	12.5	50.0	50.0	25	MS	BAJ	12/20/22 03:22	221219−2	2357703
7439−96−5	Manganese	2.10	ug/L	J	2.00	10.0	10.0	1	P	HSC	12/19/22 14:44	121922−1	2357704
7439−97−6	Mercury	0.0950	ug/L	JN	0.0670	0.200	0.200	1	AV	JP2	12/20/22 10:17	122022W1−5	2358207
7439−98−7	Molybdenum	180	ug/L		5.00	25.0	25.0	25	MS	BAJ	12/20/22 03:22	221219−2	2357703
7440−02−0	Nickel	19.0	ug/L	J	15.0	50.0	50.0	25	MS	BAJ	12/20/22 03:22	221219−2	2357703
7782−49−2	Selenium	37.5	ug/L	UN	37.5	125	125	25	MS	BAJ	12/20/22 03:22	221219−2	2357703
7440−22−4	Silver	7.50	ug/L	U	7.50	25.0	25.0	25	MS	BAJ	12/20/22 03:22	221219−2	2357703
7440−28−0	Thallium	15.0	ug/L	U	15.0	50.0	50.0	25	MS	BAJ	12/20/22 03:22	221219−2	2357703
7440−61−1	Uranium	1.68	ug/L	U	1.68	5.00	5.00	25	MS	BAJ	12/20/22 03:22	221219−2	2357703
7440−66−6	Zinc	11.2	ug/L	J	3.30	20.0	20.0	1	P	HSC	12/19/22 14:44	121922−1	2357704

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2357704	2357701	EPA 200.2	50	mL	50	mL	12/16/22	EM2
2357703	2357702	EPA 200.2	50	mL	50	mL	12/16/22	EM2
2358207	2358206	EPA 245.1/245.2 Prep	20	mL	20	mL	12/19/22	RM4
2359022	2359021	EPA 200.2	50	mL	50	mL	12/20/22	CD3

***Analytical Methods:**

MS **EPA 200.8 DOE−AL**
P **EPA 200.7**
AV **EPA 245.1/245.2**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 2023−289 **CONTRACT:** TNSL00100 **METHOD TYPE:** EPA

SAMPLE ID: 604449018 **BASIS:** As Received **DATE COLLECTED** 14−DEC−22

CLIENT ID: SMEB05−23−265375 **LEVEL:** Low **DATE RECEIVED** 16−DEC−22

MATRIX: W **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7439−97−6	Mercury	0.255	ug/L	N	0.0670	0.200	0.200	1	AV	JP2	12/20/22 10:18	122022W1−5	2358207

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2358207	2358206	EPA 245.1/245.2 Prep	20	mL	20	mL	12/19/22	RM4

***Analytical Methods:**

AV **EPA 245.1/245.2**

Quality Control Summary

METALS
−2a−
Initial and Continuing Calibration Verification

SDG No: 2023−289

Contract: TNSL00100 **Lab Code:** GEL

Instrument ID: AVIO3,HG7,ICPMS12,ICPMS14

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M*	Analysis Date/Time	Run Number
ICV01										
	Boron	522	ug/L	500	ug/L	104.4	90.0 − 110.0	P	19−DEC−22 12:51	121922−1
	Iron	5130	ug/L	5000	ug/L	102.6	90.0 − 110.0	P	19−DEC−22 12:51	121922−1
	Manganese	501	ug/L	500	ug/L	100.2	90.0 − 110.0	P	19−DEC−22 12:51	121922−1
	Zinc	496	ug/L	500	ug/L	99.2	90.0 − 110.0	P	19−DEC−22 12:51	121922−1
	Aluminum	4940	ug/L	5050	ug/L	97.8	90.0 − 110.0	MS	20−DEC−22 01:45	221219−2
	Antimony	51.1	ug/L	50	ug/L	102.1	90.0 − 110.0	MS	20−DEC−22 01:45	221219−2
	Arsenic	49.7	ug/L	50	ug/L	99.4	90.0 − 110.0	MS	20−DEC−22 01:45	221219−2
	Barium	52.2	ug/L	50	ug/L	104.4	90.0 − 110.0	MS	20−DEC−22 01:45	221219−2
	Cadmium	50.2	ug/L	50	ug/L	100.3	90.0 − 110.0	MS	20−DEC−22 01:45	221219−2
	Chromium	49.7	ug/L	50	ug/L	99.4	90.0 − 110.0	MS	20−DEC−22 01:45	221219−2
	Lead	51.5	ug/L	50	ug/L	103.1	90.0 − 110.0	MS	20−DEC−22 01:45	221219−2
	Molybdenum	52	ug/L	50	ug/L	104	90.0 − 110.0	MS	20−DEC−22 01:45	221219−2
	Nickel	53	ug/L	50	ug/L	106.1	90.0 − 110.0	MS	20−DEC−22 01:45	221219−2
	Selenium	50.8	ug/L	50	ug/L	101.7	90.0 − 110.0	MS	20−DEC−22 01:45	221219−2
	Silver	50.9	ug/L	50	ug/L	101.8	90.0 − 110.0	MS	20−DEC−22 01:45	221219−2
	Thallium	50.8	ug/L	50	ug/L	101.6	90.0 − 110.0	MS	20−DEC−22 01:45	221219−2
	Uranium	47.4	ug/L	50	ug/L	94.9	90.0 − 110.0	MS	20−DEC−22 01:45	221219−2
	Mercury	5.05	ug/L	5	ug/L	101	95.0 − 105.0	AV	20−DEC−22 09:16	122022W1−5
	Arsenic	49.2	ug/L	50	ug/L	98.4	90.0 − 110.0	MS	20−DEC−22 10:44	221220−3
	Selenium	51	ug/L	50	ug/L	101.9	90.0 − 110.0	MS	20−DEC−22 10:44	221220−3
	Beryllium	49.3	ug/L	50	ug/L	98.6	90.0 − 110.0	MS	21−DEC−22 13:36	221221−4
	Cobalt	48.6	ug/L	50	ug/L	97.1	90.0 − 110.0	MS	21−DEC−22 13:36	221221−4
	Copper	49.2	ug/L	50	ug/L	98.5	90.0 − 110.0	MS	21−DEC−22 13:36	221221−4
CCV01										
	Boron	606	ug/L	500	ug/L	121.2	90.0 − 110.0 *	P	19−DEC−22 13:14	121922−1
	Iron	5240	ug/L	5000	ug/L	104.8	90.0 − 110.0	P	19−DEC−22 13:14	121922−1
	Manganese	508	ug/L	500	ug/L	101.5	90.0 − 110.0	P	19−DEC−22 13:14	121922−1
	Zinc	506	ug/L	500	ug/L	101.3	90.0 − 110.0	P	19−DEC−22 13:14	121922−1
	Aluminum	5060	ug/L	5050	ug/L	100.2	90.0 − 110.0	MS	20−DEC−22 02:02	221219−2
	Antimony	52.8	ug/L	50	ug/L	105.7	90.0 − 110.0	MS	20−DEC−22 02:02	221219−2
	Arsenic	49	ug/L	50	ug/L	98.1	90.0 − 110.0	MS	20−DEC−22 02:02	221219−2

METALS
−2a−
Initial and Continuing Calibration Verification

SDG No: 2023−289

Contract: TNSL00100 **Lab Code:** GEL

Instrument ID: AVIO3,HG7,ICPMS12,ICPMS14

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M*	Analysis Date/Time	Run Number
	Barium	51.4	ug/L	50	ug/L	102.8	90.0 − 110.0	MS	20−DEC−22 02:02	221219−2
	Cadmium	52.5	ug/L	50	ug/L	105	90.0 − 110.0	MS	20−DEC−22 02:02	221219−2
	Chromium	51.1	ug/L	50	ug/L	102.1	90.0 − 110.0	MS	20−DEC−22 02:02	221219−2
	Lead	50.9	ug/L	50	ug/L	101.9	90.0 − 110.0	MS	20−DEC−22 02:02	221219−2
	Molybdenum	52.7	ug/L	50	ug/L	105.4	90.0 − 110.0	MS	20−DEC−22 02:02	221219−2
	Nickel	54.2	ug/L	50	ug/L	108.5	90.0 − 110.0	MS	20−DEC−22 02:02	221219−2
	Selenium	49.8	ug/L	50	ug/L	99.6	90.0 − 110.0	MS	20−DEC−22 02:02	221219−2
	Silver	50.9	ug/L	50	ug/L	101.9	90.0 − 110.0	MS	20−DEC−22 02:02	221219−2
	Thallium	49.2	ug/L	50	ug/L	98.3	90.0 − 110.0	MS	20−DEC−22 02:02	221219−2
	Uranium	47.3	ug/L	50	ug/L	94.6	90.0 − 110.0	MS	20−DEC−22 02:02	221219−2
	Mercury	5.07	ug/L	5	ug/L	101.3	90.0 − 110.0	AV	20−DEC−22 09:44	122022W1−5
	Arsenic	49.5	ug/L	50	ug/L	98.9	90.0 − 110.0	MS	20−DEC−22 10:55	221220−3
	Selenium	52.1	ug/L	50	ug/L	104.2	90.0 − 110.0	MS	20−DEC−22 10:55	221220−3
	Beryllium	52	ug/L	50	ug/L	104	90.0 − 110.0	MS	21−DEC−22 13:46	221221−4
	Cobalt	51	ug/L	50	ug/L	102	90.0 − 110.0	MS	21−DEC−22 13:46	221221−4
	Copper	52.1	ug/L	50	ug/L	104.2	90.0 − 110.0	MS	21−DEC−22 13:46	221221−4
CCV02										
	Boron	548	ug/L	500	ug/L	109.5	90.0 − 110.0	P	19−DEC−22 13:58	121922−1
	Iron	5240	ug/L	5000	ug/L	104.8	90.0 − 110.0	P	19−DEC−22 13:58	121922−1
	Manganese	506	ug/L	500	ug/L	101.3	90.0 − 110.0	P	19−DEC−22 13:58	121922−1
	Zinc	508	ug/L	500	ug/L	101.5	90.0 − 110.0	P	19−DEC−22 13:58	121922−1
	Aluminum	5020	ug/L	5050	ug/L	99.4	90.0 − 110.0	MS	20−DEC−22 02:12	221219−2
	Antimony	50.3	ug/L	50	ug/L	100.6	90.0 − 110.0	MS	20−DEC−22 02:12	221219−2
	Arsenic	48.6	ug/L	50	ug/L	97.1	90.0 − 110.0	MS	20−DEC−22 02:12	221219−2
	Barium	51.7	ug/L	50	ug/L	103.5	90.0 − 110.0	MS	20−DEC−22 02:12	221219−2
	Cadmium	50.5	ug/L	50	ug/L	100.9	90.0 − 110.0	MS	20−DEC−22 02:12	221219−2
	Chromium	51	ug/L	50	ug/L	102	90.0 − 110.0	MS	20−DEC−22 02:12	221219−2
	Lead	51.4	ug/L	50	ug/L	102.8	90.0 − 110.0	MS	20−DEC−22 02:12	221219−2
	Molybdenum	52	ug/L	50	ug/L	103.9	90.0 − 110.0	MS	20−DEC−22 02:12	221219−2
	Nickel	54	ug/L	50	ug/L	108.1	90.0 − 110.0	MS	20−DEC−22 02:12	221219−2
	Selenium	50.8	ug/L	50	ug/L	101.6	90.0 − 110.0	MS	20−DEC−22 02:12	221219−2

METALS
−2a−
Initial and Continuing Calibration Verification

SDG No: 2023−289

Contract: TNSL00100 **Lab Code:** GEL

Instrument ID: AVIO3,HG7,ICPMS12,ICPMS14

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M*	Analysis Date/Time	Run Number
	Silver	51.9	ug/L	50	ug/L	103.9	90.0 − 110.0	MS	20−DEC−22 02:12	221219−2
	Thallium	49.9	ug/L	50	ug/L	99.8	90.0 − 110.0	MS	20−DEC−22 02:12	221219−2
	Uranium	47.4	ug/L	50	ug/L	94.8	90.0 − 110.0	MS	20−DEC−22 02:12	221219−2
	Mercury	5.44	ug/L	5	ug/L	108.8	90.0 − 110.0	AV	20−DEC−22 10:04	122022W1−5
	Arsenic	49.1	ug/L	50	ug/L	98.3	90.0 − 110.0	MS	20−DEC−22 11:13	221220−3
	Selenium	50.9	ug/L	50	ug/L	101.8	90.0 − 110.0	MS	20−DEC−22 11:13	221220−3
	Beryllium	57.2	ug/L	50	ug/L	114.4	90.0 − 110.0 *	MS	21−DEC−22 13:53	221221−4
	Cobalt	55.6	ug/L	50	ug/L	111.2	90.0 − 110.0 *	MS	21−DEC−22 13:53	221221−4
	Copper	56.2	ug/L	50	ug/L	112.3	90.0 − 110.0 *	MS	21−DEC−22 13:53	221221−4
CCV03										
	Boron	547	ug/L	500	ug/L	109.3	90.0 − 110.0	P	19−DEC−22 14:26	121922−1
	Iron	5190	ug/L	5000	ug/L	103.8	90.0 − 110.0	P	19−DEC−22 14:26	121922−1
	Manganese	503	ug/L	500	ug/L	100.7	90.0 − 110.0	P	19−DEC−22 14:26	121922−1
	Zinc	505	ug/L	500	ug/L	101	90.0 − 110.0	P	19−DEC−22 14:26	121922−1
	Aluminum	5050	ug/L	5050	ug/L	99.9	90.0 − 110.0	MS	20−DEC−22 02:38	221219−2
	Antimony	49.9	ug/L	50	ug/L	99.9	90.0 − 110.0	MS	20−DEC−22 02:38	221219−2
	Arsenic	49.1	ug/L	50	ug/L	98.3	90.0 − 110.0	MS	20−DEC−22 02:38	221219−2
	Barium	51.5	ug/L	50	ug/L	103.1	90.0 − 110.0	MS	20−DEC−22 02:38	221219−2
	Cadmium	52.2	ug/L	50	ug/L	104.4	90.0 − 110.0	MS	20−DEC−22 02:38	221219−2
	Chromium	50.8	ug/L	50	ug/L	101.7	90.0 − 110.0	MS	20−DEC−22 02:38	221219−2
	Lead	50.9	ug/L	50	ug/L	101.8	90.0 − 110.0	MS	20−DEC−22 02:38	221219−2
	Molybdenum	51.2	ug/L	50	ug/L	102.3	90.0 − 110.0	MS	20−DEC−22 02:38	221219−2
	Nickel	52.3	ug/L	50	ug/L	104.5	90.0 − 110.0	MS	20−DEC−22 02:38	221219−2
	Selenium	50.8	ug/L	50	ug/L	101.6	90.0 − 110.0	MS	20−DEC−22 02:38	221219−2
	Silver	48.9	ug/L	50	ug/L	97.9	90.0 − 110.0	MS	20−DEC−22 02:38	221219−2
	Thallium	49.2	ug/L	50	ug/L	98.4	90.0 − 110.0	MS	20−DEC−22 02:38	221219−2
	Uranium	47.4	ug/L	50	ug/L	94.8	90.0 − 110.0	MS	20−DEC−22 02:38	221219−2
	Mercury	4.93	ug/L	5	ug/L	98.5	90.0 − 110.0	AV	20−DEC−22 10:23	122022W1−5
	Beryllium	51.4	ug/L	50	ug/L	102.8	90.0 − 110.0	MS	21−DEC−22 14:09	221221−4
	Cobalt	51.1	ug/L	50	ug/L	102.2	90.0 − 110.0	MS	21−DEC−22 14:09	221221−4
	Copper	51.4	ug/L	50	ug/L	102.9	90.0 − 110.0	MS	21−DEC−22 14:09	221221−4

METALS
−2a−
Initial and Continuing Calibration Verification

SDG No: 2023−289

Contract: TNSL00100 **Lab Code:** GEL

Instrument ID: AVIO3,HG7,ICPMS12,ICPMS14

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M*	Analysis Date/Time	Run Number
CCV04										
	Boron	543	ug/L	500	ug/L	108.6	90.0 − 110.0	P	19−DEC−22 14:53	121922−1
	Iron	5180	ug/L	5000	ug/L	103.7	90.0 − 110.0	P	19−DEC−22 14:53	121922−1
	Manganese	506	ug/L	500	ug/L	101.1	90.0 − 110.0	P	19−DEC−22 14:53	121922−1
	Zinc	506	ug/L	500	ug/L	101.2	90.0 − 110.0	P	19−DEC−22 14:53	121922−1
	Aluminum	4580	ug/L	5050	ug/L	90.7	90.0 − 110.0	MS	20−DEC−22 03:05	221219−2
	Antimony	49.2	ug/L	50	ug/L	98.4	90.0 − 110.0	MS	20−DEC−22 03:05	221219−2
	Arsenic	49	ug/L	50	ug/L	98.1	90.0 − 110.0	MS	20−DEC−22 03:05	221219−2
	Barium	53	ug/L	50	ug/L	106.1	90.0 − 110.0	MS	20−DEC−22 03:05	221219−2
	Cadmium	50.9	ug/L	50	ug/L	101.7	90.0 − 110.0	MS	20−DEC−22 03:05	221219−2
	Chromium	49.2	ug/L	50	ug/L	98.4	90.0 − 110.0	MS	20−DEC−22 03:05	221219−2
	Lead	51	ug/L	50	ug/L	102	90.0 − 110.0	MS	20−DEC−22 03:05	221219−2
	Molybdenum	50.4	ug/L	50	ug/L	100.8	90.0 − 110.0	MS	20−DEC−22 03:05	221219−2
	Nickel	50	ug/L	50	ug/L	99.9	90.0 − 110.0	MS	20−DEC−22 03:05	221219−2
	Selenium	51.8	ug/L	50	ug/L	103.6	90.0 − 110.0	MS	20−DEC−22 03:05	221219−2
	Silver	49.2	ug/L	50	ug/L	98.5	90.0 − 110.0	MS	20−DEC−22 03:05	221219−2
	Thallium	49.8	ug/L	50	ug/L	99.5	90.0 − 110.0	MS	20−DEC−22 03:05	221219−2
	Uranium	46.3	ug/L	50	ug/L	92.5	90.0 − 110.0	MS	20−DEC−22 03:05	221219−2
	Beryllium	51.1	ug/L	50	ug/L	102.1	90.0 − 110.0	MS	21−DEC−22 14:28	221221−4
	Cobalt	51.2	ug/L	50	ug/L	102.4	90.0 − 110.0	MS	21−DEC−22 14:28	221221−4
	Copper	52.5	ug/L	50	ug/L	105	90.0 − 110.0	MS	21−DEC−22 14:28	221221−4
CCV05										
	Aluminum	4690	ug/L	5050	ug/L	93	90.0 − 110.0	MS	20−DEC−22 03:25	221219−2
	Antimony	49.7	ug/L	50	ug/L	99.4	90.0 − 110.0	MS	20−DEC−22 03:25	221219−2
	Arsenic	48.8	ug/L	50	ug/L	97.6	90.0 − 110.0	MS	20−DEC−22 03:25	221219−2
	Barium	53.8	ug/L	50	ug/L	107.7	90.0 − 110.0	MS	20−DEC−22 03:25	221219−2
	Cadmium	48.4	ug/L	50	ug/L	96.7	90.0 − 110.0	MS	20−DEC−22 03:25	221219−2
	Chromium	49.4	ug/L	50	ug/L	98.9	90.0 − 110.0	MS	20−DEC−22 03:25	221219−2
	Lead	50.2	ug/L	50	ug/L	100.5	90.0 − 110.0	MS	20−DEC−22 03:25	221219−2
	Molybdenum	51.2	ug/L	50	ug/L	102.4	90.0 − 110.0	MS	20−DEC−22 03:25	221219−2
	Nickel	49.4	ug/L	50	ug/L	98.8	90.0 − 110.0	MS	20−DEC−22 03:25	221219−2
	Selenium	51.7	ug/L	50	ug/L	103.4	90.0 − 110.0	MS	20−DEC−22 03:25	221219−2

METALS
−2a−
Initial and Continuing Calibration Verification

SDG No: 2023−289

Contract: TNSL00100 **Lab Code:** GEL

Instrument ID: AVIO3,HG7,ICPMS12,ICPMS14

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M*	Analysis Date/Time	Run Number
	Silver	48.8	ug/L	50	ug/L	97.5	90.0 − 110.0	MS	20−DEC−22 03:25	221219−2
	Thallium	49.2	ug/L	50	ug/L	98.3	90.0 − 110.0	MS	20−DEC−22 03:25	221219−2
	Uranium	45.6	ug/L	50	ug/L	91.2	90.0 − 110.0	MS	20−DEC−22 03:25	221219−2
	Beryllium	50.9	ug/L	50	ug/L	101.7	90.0 − 110.0	MS	21−DEC−22 14:40	221221−4
	Cobalt	51.8	ug/L	50	ug/L	103.6	90.0 − 110.0	MS	21−DEC−22 14:40	221221−4
	Copper	52.6	ug/L	50	ug/L	105.1	90.0 − 110.0	MS	21−DEC−22 14:40	221221−4

***Analytical Methods:**

MS **EPA 200.8 DOE−AL**
P **EPA 200.7**
AV **EPA 245.1/245.2**

METALS
−2b−
CRDL Standard for ICP & ICPMS

SDG No: 2023−289

Contract: TNSL00100 **Lab Code:** GEL

Instrument ID: AVIO3,HG7,ICPMS12,ICPMS14

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M*	Analysis Date/Time	Run Number
CRDL01										
	Aluminum	58.1	ug/L	50	ug/L	116.1	70.0 − 130.0	MS	20−DEC−22 01:51	221219−2
	Antimony	3.16	ug/L	3	ug/L	105.3	70.0 − 130.0	MS	20−DEC−22 01:51	221219−2
	Arsenic	5.03	ug/L	5	ug/L	100.5	70.0 − 130.0	MS	20−DEC−22 01:51	221219−2
	Barium	4.38	ug/L	4	ug/L	109.4	70.0 − 130.0	MS	20−DEC−22 01:51	221219−2
	Cadmium	1.06	ug/L	1	ug/L	106.2	70.0 − 130.0	MS	20−DEC−22 01:51	221219−2
	Chromium	10.6	ug/L	10	ug/L	105.9	70.0 − 130.0	MS	20−DEC−22 01:51	221219−2
	Lead	2.21	ug/L	2	ug/L	110.3	70.0 − 130.0	MS	20−DEC−22 01:51	221219−2
	Molybdenum	1.03	ug/L	1	ug/L	103	70.0 − 130.0	MS	20−DEC−22 01:51	221219−2
	Nickel	2.17	ug/L	2	ug/L	108.3	70.0 − 130.0	MS	20−DEC−22 01:51	221219−2
	Selenium	5.12	ug/L	5	ug/L	102.5	70.0 − 130.0	MS	20−DEC−22 01:51	221219−2
	Silver	1.1	ug/L	1	ug/L	109.6	70.0 − 130.0	MS	20−DEC−22 01:51	221219−2
	Thallium	2.1	ug/L	2	ug/L	104.8	70.0 − 130.0	MS	20−DEC−22 01:51	221219−2
	Uranium	.228	ug/L	.2	ug/L	114	70.0 − 130.0	MS	20−DEC−22 01:51	221219−2
	Mercury	.206	ug/L	.2	ug/L	103	70.0 − 130.0	AV	20−DEC−22 09:20	122022W1−5
	Arsenic	4.94	ug/L	5	ug/L	98.7	70.0 − 130.0	MS	20−DEC−22 10:48	221220−3
	Selenium	4.92	ug/L	5	ug/L	98.5	70.0 − 130.0	MS	20−DEC−22 10:48	221220−3
	Beryllium	.556	ug/L	.5	ug/L	111.2	70.0 − 130.0	MS	21−DEC−22 13:40	221221−4
	Cobalt	1.05	ug/L	1	ug/L	105.3	70.0 − 130.0	MS	21−DEC−22 13:40	221221−4
	Copper	2.18	ug/L	2	ug/L	109.1	70.0 − 130.0	MS	21−DEC−22 13:40	221221−4
PQL01										
	Boron	48.3	ug/L	50	ug/L	96.7	70.0 − 130.0	P	19−DEC−22 12:58	121922−1
	Iron	86.9	ug/L	100	ug/L	86.9	70.0 − 130.0	P	19−DEC−22 12:58	121922−1
	Manganese	10	ug/L	10	ug/L	100.4	70.0 − 130.0	P	19−DEC−22 12:58	121922−1
	Zinc	20.4	ug/L	20	ug/L	102.1	70.0 − 130.0	P	19−DEC−22 12:58	121922−1

***Analytical Methods:**

MS	**EPA 200.8 DOE−AL**
P	**EPA 200.7**
AV	**EPA 245.1/245.2**

Metals
−3a−
Initial and Continuing Calibration Blank Summary

SDG No.: 2023−289

Contract: TNSL00100

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M*	Analysis Date/Time	Run
ICB01										
	Boron	15.0	+/−50	U	15.0	50.0	LIQ	P	19−DEC−22 12:54	121922−1
	Iron	30.0	+/−100	U	30.0	100	LIQ	P	19−DEC−22 12:54	121922−1
	Manganese	2.0	+/−10	U	2.0	10.0	LIQ	P	19−DEC−22 12:54	121922−1
	Zinc	4.0	+/−20	J	3.3	20.0	LIQ	P	19−DEC−22 12:54	121922−1
	Aluminum	19.3	+/−50	U	19.3	50.0	LIQ	MS	20−DEC−22 01:48	221219−2
	Antimony	1.0	+/−3	U	1.0	3.0	LIQ	MS	20−DEC−22 01:48	221219−2
	Arsenic	2.0	+/−5	U	2.0	5.0	LIQ	MS	20−DEC−22 01:48	221219−2
	Barium	0.67	+/−4	U	0.67	4.0	LIQ	MS	20−DEC−22 01:48	221219−2
	Cadmium	0.3	+/−1	U	0.3	1.0	LIQ	MS	20−DEC−22 01:48	221219−2
	Chromium	3.0	+/−10	U	3.0	10.0	LIQ	MS	20−DEC−22 01:48	221219−2
	Lead	0.5	+/−2	U	0.5	2.0	LIQ	MS	20−DEC−22 01:48	221219−2
	Molybdenum	0.2	+/−1	U	0.2	1.0	LIQ	MS	20−DEC−22 01:48	221219−2
	Nickel	0.6	+/−2	U	0.6	2.0	LIQ	MS	20−DEC−22 01:48	221219−2
	Selenium	1.5	+/−5	U	1.5	5.0	LIQ	MS	20−DEC−22 01:48	221219−2
	Silver	0.3	+/−1	U	0.3	1.0	LIQ	MS	20−DEC−22 01:48	221219−2
	Thallium	0.6	+/−2	U	0.6	2.0	LIQ	MS	20−DEC−22 01:48	221219−2
	Uranium	0.067	+/−.2	U	0.067	0.2	LIQ	MS	20−DEC−22 01:48	221219−2
	Mercury	0.067	+/−.2	U	0.067	0.2	LIQ	AV	20−DEC−22 09:18	122022W1−5
	Arsenic	2.0	+/−5	U	2.0	5.0	LIQ	MS	20−DEC−22 10:46	221220−3
	Selenium	1.5	+/−5	U	1.5	5.0	LIQ	MS	20−DEC−22 10:46	221220−3
	Beryllium	0.2	+/−.5	U	0.2	0.5	LIQ	MS	21−DEC−22 13:38	221221−4
	Cobalt	0.3	+/−1	U	0.3	1.0	LIQ	MS	21−DEC−22 13:38	221221−4
	Copper	0.3	+/−2	U	0.3	2.0	LIQ	MS	21−DEC−22 13:38	221221−4
CCB01										
	Boron	36.85	+/−50	J	15.0	50.0	LIQ	P	19−DEC−22 13:17	121922−1
	Iron	30.0	+/−100	U	30.0	100	LIQ	P	19−DEC−22 13:17	121922−1
	Manganese	2.0	+/−10	U	2.0	10.0	LIQ	P	19−DEC−22 13:17	121922−1
	Zinc	3.73	+/−20	J	3.3	20.0	LIQ	P	19−DEC−22 13:17	121922−1
	Aluminum	19.3	+/−50	U	19.3	50.0	LIQ	MS	20−DEC−22 02:05	221219−2
	Antimony	1.0	+/−3	U	1.0	3.0	LIQ	MS	20−DEC−22 02:05	221219−2
	Arsenic	2.0	+/−5	U	2.0	5.0	LIQ	MS	20−DEC−22 02:05	221219−2

Metals
−3a−
Initial and Continuing Calibration Blank Summary

SDG No.: 2023−289

Contract: TNSL00100

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M*	Analysis Date/Time	Run
	Barium	0.67	+/−4	U	0.67	4.0	LIQ	MS	20−DEC−22 02:05	221219−2
	Cadmium	0.3	+/−1	U	0.3	1.0	LIQ	MS	20−DEC−22 02:05	221219−2
	Chromium	3.0	+/−10	U	3.0	10.0	LIQ	MS	20−DEC−22 02:05	221219−2
	Lead	0.5	+/−2	U	0.5	2.0	LIQ	MS	20−DEC−22 02:05	221219−2
	Molybdenum	0.341	+/−1	J	0.2	1.0	LIQ	MS	20−DEC−22 02:05	221219−2
	Nickel	0.6	+/−2	U	0.6	2.0	LIQ	MS	20−DEC−22 02:05	221219−2
	Selenium	1.5	+/−5	U	1.5	5.0	LIQ	MS	20−DEC−22 02:05	221219−2
	Silver	0.3	+/−1	U	0.3	1.0	LIQ	MS	20−DEC−22 02:05	221219−2
	Thallium	0.6	+/−2	U	0.6	2.0	LIQ	MS	20−DEC−22 02:05	221219−2
	Uranium	0.067	+/−.2	U	0.067	0.2	LIQ	MS	20−DEC−22 02:05	221219−2
	Mercury	0.067	+/−.2	U	0.067	0.2	LIQ	AV	20−DEC−22 09:46	122022W1−5
	Arsenic	2.0	+/−5	U	2.0	5.0	LIQ	MS	20−DEC−22 10:57	221220−3
	Selenium	1.5	+/−5	U	1.5	5.0	LIQ	MS	20−DEC−22 10:57	221220−3
	Beryllium	0.2	+/−.5	U	0.2	0.5	LIQ	MS	21−DEC−22 13:48	221221−4
	Cobalt	0.3	+/−1	U	0.3	1.0	LIQ	MS	21−DEC−22 13:48	221221−4
	Copper	0.3	+/−2	U	0.3	2.0	LIQ	MS	21−DEC−22 13:48	221221−4
CCB02										
	Boron	15.0	+/−50	U	15.0	50.0	LIQ	P	19−DEC−22 14:01	121922−1
	Iron	30.0	+/−100	U	30.0	100	LIQ	P	19−DEC−22 14:01	121922−1
	Manganese	2.0	+/−10	U	2.0	10.0	LIQ	P	19−DEC−22 14:01	121922−1
	Zinc	3.3	+/−20	U	3.3	20.0	LIQ	P	19−DEC−22 14:01	121922−1
	Aluminum	19.3	+/−50	U	19.3	50.0	LIQ	MS	20−DEC−22 02:15	221219−2
	Antimony	1.0	+/−3	U	1.0	3.0	LIQ	MS	20−DEC−22 02:15	221219−2
	Arsenic	2.0	+/−5	U	2.0	5.0	LIQ	MS	20−DEC−22 02:15	221219−2
	Barium	0.67	+/−4	U	0.67	4.0	LIQ	MS	20−DEC−22 02:15	221219−2
	Cadmium	0.3	+/−1	U	0.3	1.0	LIQ	MS	20−DEC−22 02:15	221219−2
	Chromium	3.0	+/−10	U	3.0	10.0	LIQ	MS	20−DEC−22 02:15	221219−2
	Lead	0.5	+/−2	U	0.5	2.0	LIQ	MS	20−DEC−22 02:15	221219−2
	Molybdenum	0.2	+/−1	U	0.2	1.0	LIQ	MS	20−DEC−22 02:15	221219−2
	Nickel	0.6	+/−2	U	0.6	2.0	LIQ	MS	20−DEC−22 02:15	221219−2
	Selenium	1.5	+/−5	U	1.5	5.0	LIQ	MS	20−DEC−22 02:15	221219−2

Metals
−3a−
Initial and Continuing Calibration Blank Summary

SDG No.: 2023−289

Contract: TNSL00100

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M*	Analysis Date/Time	Run
	Silver	0.3	+/−1	U	0.3	1.0	LIQ	MS	20−DEC−22 02:15	221219−2
	Thallium	0.6	+/−2	U	0.6	2.0	LIQ	MS	20−DEC−22 02:15	221219−2
	Uranium	0.092	+/−.2	J	0.067	0.2	LIQ	MS	20−DEC−22 02:15	221219−2
	Mercury	0.067	+/−.2	U	0.067	0.2	LIQ	AV	20−DEC−22 10:05	122022W1−5
	Arsenic	2.0	+/−5	U	2.0	5.0	LIQ	MS	20−DEC−22 11:15	221220−3
	Selenium	1.5	+/−5	U	1.5	5.0	LIQ	MS	20−DEC−22 11:15	221220−3
	Beryllium	0.2	+/−.5	U	0.2	0.5	LIQ	MS	21−DEC−22 13:55	221221−4
	Cobalt	0.3	+/−1	U	0.3	1.0	LIQ	MS	21−DEC−22 13:55	221221−4
	Copper	0.3	+/−2	U	0.3	2.0	LIQ	MS	21−DEC−22 13:55	221221−4
CCB03										
	Boron	15.0	+/−50	U	15.0	50.0	LIQ	P	19−DEC−22 14:29	121922−1
	Iron	30.0	+/−100	U	30.0	100	LIQ	P	19−DEC−22 14:29	121922−1
	Manganese	2.0	+/−10	U	2.0	10.0	LIQ	P	19−DEC−22 14:29	121922−1
	Zinc	3.3	+/−20	U	3.3	20.0	LIQ	P	19−DEC−22 14:29	121922−1
	Aluminum	19.3	+/−50	U	19.3	50.0	LIQ	MS	20−DEC−22 02:42	221219−2
	Antimony	1.0	+/−3	U	1.0	3.0	LIQ	MS	20−DEC−22 02:42	221219−2
	Arsenic	2.0	+/−5	U	2.0	5.0	LIQ	MS	20−DEC−22 02:42	221219−2
	Barium	0.67	+/−4	U	0.67	4.0	LIQ	MS	20−DEC−22 02:42	221219−2
	Cadmium	0.3	+/−1	U	0.3	1.0	LIQ	MS	20−DEC−22 02:42	221219−2
	Chromium	3.0	+/−10	U	3.0	10.0	LIQ	MS	20−DEC−22 02:42	221219−2
	Lead	0.5	+/−2	U	0.5	2.0	LIQ	MS	20−DEC−22 02:42	221219−2
	Molybdenum	0.2	+/−1	U	0.2	1.0	LIQ	MS	20−DEC−22 02:42	221219−2
	Nickel	0.6	+/−2	U	0.6	2.0	LIQ	MS	20−DEC−22 02:42	221219−2
	Selenium	1.5	+/−5	U	1.5	5.0	LIQ	MS	20−DEC−22 02:42	221219−2
	Silver	0.3	+/−1	U	0.3	1.0	LIQ	MS	20−DEC−22 02:42	221219−2
	Thallium	0.6	+/−2	U	0.6	2.0	LIQ	MS	20−DEC−22 02:42	221219−2
	Uranium	0.067	+/−.2	U	0.067	0.2	LIQ	MS	20−DEC−22 02:42	221219−2
	Mercury	0.067	+/−.2	U	0.067	0.2	LIQ	AV	20−DEC−22 10:25	122022W1−5
	Beryllium	0.2	+/−.5	U	0.2	0.5	LIQ	MS	21−DEC−22 14:11	221221−4
	Cobalt	0.3	+/−1	U	0.3	1.0	LIQ	MS	21−DEC−22 14:11	221221−4
	Copper	0.3	+/−2	U	0.3	2.0	LIQ	MS	21−DEC−22 14:11	221221−4

EPA

Metals
−3a−
Initial and Continuing Calibration Blank Summary

SDG No.: 2023−289

Contract: TNSL00100

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M*	Analysis Date/Time	Run
CCB04										
	Boron	15.0	+/−50	U	15.0	50.0	LIQ	P	19−DEC−22 14:56	121922−1
	Iron	30.0	+/−100	U	30.0	100	LIQ	P	19−DEC−22 14:56	121922−1
	Manganese	2.0	+/−10	U	2.0	10.0	LIQ	P	19−DEC−22 14:56	121922−1
	Zinc	3.3	+/−20	U	3.3	20.0	LIQ	P	19−DEC−22 14:56	121922−1
	Aluminum	19.3	+/−50	U	19.3	50.0	LIQ	MS	20−DEC−22 03:08	221219−2
	Antimony	1.0	+/−3	U	1.0	3.0	LIQ	MS	20−DEC−22 03:08	221219−2
	Arsenic	2.0	+/−5	U	2.0	5.0	LIQ	MS	20−DEC−22 03:08	221219−2
	Barium	0.67	+/−4	U	0.67	4.0	LIQ	MS	20−DEC−22 03:08	221219−2
	Cadmium	0.3	+/−1	U	0.3	1.0	LIQ	MS	20−DEC−22 03:08	221219−2
	Chromium	3.0	+/−10	U	3.0	10.0	LIQ	MS	20−DEC−22 03:08	221219−2
	Lead	0.5	+/−2	U	0.5	2.0	LIQ	MS	20−DEC−22 03:08	221219−2
	Molybdenum	0.2	+/−1	U	0.2	1.0	LIQ	MS	20−DEC−22 03:08	221219−2
	Nickel	0.6	+/−2	U	0.6	2.0	LIQ	MS	20−DEC−22 03:08	221219−2
	Selenium	1.5	+/−5	U	1.5	5.0	LIQ	MS	20−DEC−22 03:08	221219−2
	Silver	0.3	+/−1	U	0.3	1.0	LIQ	MS	20−DEC−22 03:08	221219−2
	Thallium	0.6	+/−2	U	0.6	2.0	LIQ	MS	20−DEC−22 03:08	221219−2
	Uranium	0.067	+/−.2	U	0.067	0.2	LIQ	MS	20−DEC−22 03:08	221219−2
	Beryllium	0.2	+/−.5	U	0.2	0.5	LIQ	MS	21−DEC−22 14:30	221221−4
	Cobalt	0.3	+/−1	U	0.3	1.0	LIQ	MS	21−DEC−22 14:30	221221−4
	Copper	0.3	+/−2	U	0.3	2.0	LIQ	MS	21−DEC−22 14:30	221221−4
CCB05										
	Aluminum	19.3	+/−50	U	19.3	50.0	LIQ	MS	20−DEC−22 03:28	221219−2
	Antimony	1.0	+/−3	U	1.0	3.0	LIQ	MS	20−DEC−22 03:28	221219−2
	Arsenic	2.0	+/−5	U	2.0	5.0	LIQ	MS	20−DEC−22 03:28	221219−2
	Barium	0.67	+/−4	U	0.67	4.0	LIQ	MS	20−DEC−22 03:28	221219−2
	Cadmium	0.3	+/−1	U	0.3	1.0	LIQ	MS	20−DEC−22 03:28	221219−2
	Chromium	3.0	+/−10	U	3.0	10.0	LIQ	MS	20−DEC−22 03:28	221219−2
	Lead	0.5	+/−2	U	0.5	2.0	LIQ	MS	20−DEC−22 03:28	221219−2
	Molybdenum	0.2	+/−1	U	0.2	1.0	LIQ	MS	20−DEC−22 03:28	221219−2
	Nickel	0.6	+/−2	U	0.6	2.0	LIQ	MS	20−DEC−22 03:28	221219−2
	Selenium	1.5	+/−5	U	1.5	5.0	LIQ	MS	20−DEC−22 03:28	221219−2

Metals
−3a−
Initial and Continuing Calibration Blank Summary

SDG No.: 2023−289

Contract: TNSL00100

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M*	Analysis Date/Time	Run
	Silver	0.3	+/−1	U	0.3	1.0	LIQ	MS	20−DEC−22 03:28	221219−2
	Thallium	0.6	+/−2	U	0.6	2.0	LIQ	MS	20−DEC−22 03:28	221219−2
	Uranium	0.067	+/−.2	U	0.067	0.2	LIQ	MS	20−DEC−22 03:28	221219−2
	Beryllium	0.2	+/−.5	U	0.2	0.5	LIQ	MS	21−DEC−22 14:42	221221−4
	Cobalt	0.3	+/−1	U	0.3	1.0	LIQ	MS	21−DEC−22 14:42	221221−4
	Copper	0.3	+/−2	U	0.3	2.0	LIQ	MS	21−DEC−22 14:42	221221−4

***Analytical Methods:**

MS	**EPA 200.8 DOE−AL**
P	**EPA 200.7**
AV	**EPA 245.1/245.2**

METALS
−3b−
PREPARATION BLANK SUMMARY

SDG NO. 2023−289
Contract: TNSL00100
Matrix: W

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M*	MDL	RDL
1205274079								
	Aluminum	19.3	ug/L	+/−50	U	MS	19.3	50.0
	Antimony	1.00	ug/L	+/−3	U	MS	1.00	3.00
	Arsenic	2.00	ug/L	+/−5	U	MS	2.00	5.00
	Barium	0.670	ug/L	+/−4	U	MS	0.670	4.00
	Cadmium	0.300	ug/L	+/−1	U	MS	0.300	1.00
	Chromium	3.00	ug/L	+/−10	U	MS	3.00	10.0
	Lead	0.500	ug/L	+/−2	U	MS	0.500	2.00
	Molybdenum	0.200	ug/L	+/−1	U	MS	0.200	1.00
	Nickel	0.600	ug/L	+/−2	U	MS	0.600	2.00
	Selenium	1.50	ug/L	+/−5	U	MS	1.50	5.00
	Silver	0.300	ug/L	+/−1	U	MS	0.300	1.00
	Thallium	0.600	ug/L	+/−2	U	MS	0.600	2.00
	Uranium	0.0670	ug/L	+/−0.2	U	MS	0.0670	0.200
1205274084								
	Boron	15.0	ug/L	+/−50	U	P	15.0	50.0
	Iron	30.0	ug/L	+/−100	U	P	30.0	100
	Manganese	2.00	ug/L	+/−10	U	P	2.00	10.0
	Zinc	3.30	ug/L	+/−20	U	P	3.30	20.0
1205275052								
	Mercury	0.0670	ug/L	+/−0.2	U	AV	0.0670	0.200
1205276604								
	Beryllium	0.200	ug/L	+/−0.5	U	MS	0.200	0.500
	Cobalt	0.300	ug/L	+/−1	U	MS	0.300	1.00
	Copper	0.300	ug/L	+/−2	U	MS	0.300	2.00

***Analytical Methods:**

MS	**EPA 200.8 DOE−AL**
P	**EPA 200.7**
AV	**EPA 245.1/245.2**

METALS
−4−
Interference Check Sample

SDG No: 2023−289

Contract: TNSL00100 **Lab Code:** GEL

Instrument: AVIO3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Boron	10.2	ug/L					19−DEC−22 13:02	121922−1
	Iron	184000	ug/L	200000	ug/L	92.2	80.0 − 120.0	19−DEC−22 13:02	121922−1
	Manganese	−0.425	ug/L					19−DEC−22 13:02	121922−1
	Zinc	−4.44	ug/L					19−DEC−22 13:02	121922−1
ICSAB01									
	Boron	527	ug/L	500	ug/L	105	80.0 − 120.0	19−DEC−22 13:05	121922−1
	Iron	185000	ug/L	200000	ug/L	92.6	80.0 − 120.0	19−DEC−22 13:05	121922−1
	Manganese	466	ug/L	500	ug/L	93.1	80.0 − 120.0	19−DEC−22 13:05	121922−1
	Zinc	450	ug/L	500	ug/L	90	80.0 − 120.0	19−DEC−22 13:05	121922−1
ICSA02									
	Boron	52.9	ug/L					19−DEC−22 14:47	121922−1
	Iron	194000	ug/L	200000	ug/L	96.8	80.0 − 120.0	19−DEC−22 14:47	121922−1
	Manganese	−0.7	ug/L					19−DEC−22 14:47	121922−1
	Zinc	−8.12	ug/L					19−DEC−22 14:47	121922−1
ICSAB02									
	Boron	534	ug/L	500	ug/L	107	80.0 − 120.0	19−DEC−22 14:50	121922−1
	Iron	189000	ug/L	200000	ug/L	94.6	80.0 − 120.0	19−DEC−22 14:50	121922−1
	Manganese	471	ug/L	500	ug/L	94.3	80.0 − 120.0	19−DEC−22 14:50	121922−1
	Zinc	464	ug/L	500	ug/L	92.8	80.0 − 120.0	19−DEC−22 14:50	121922−1

METALS
−4−
Interference Check Sample

SDG No: 2023−289

Contract: TNSL00100 **Lab Code:** GEL

Instrument: ICPMS12

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	104000	ug/L	100000	ug/L	104	80.0 − 120.0	20−DEC−22 01:55	221219−2
	Antimony	0.095	ug/L					20−DEC−22 01:55	221219−2
	Arsenic	0.421	ug/L					20−DEC−22 01:55	221219−2
	Barium	2.13	ug/L					20−DEC−22 01:55	221219−2
	Cadmium	0.687	ug/L					20−DEC−22 01:55	221219−2
	Chromium	1.74	ug/L					20−DEC−22 01:55	221219−2
	Lead	0.472	ug/L					20−DEC−22 01:55	221219−2
	Molybdenum	2360	ug/L	2000	ug/L	118	80.0 − 120.0	20−DEC−22 01:55	221219−2
	Nickel	1.19	ug/L					20−DEC−22 01:55	221219−2
	Selenium	0.156	ug/L					20−DEC−22 01:55	221219−2
	Silver	0.023	ug/L					20−DEC−22 01:55	221219−2
	Thallium	0.008	ug/L					20−DEC−22 01:55	221219−2
	Uranium	0.023	ug/L					20−DEC−22 01:55	221219−2
ICSAB01									
	Aluminum	101000	ug/L	100000	ug/L	101	80.0 − 120.0	20−DEC−22 01:58	221219−2
	Antimony	20.2	ug/L	20	ug/L	101	80.0 − 120.0	20−DEC−22 01:58	221219−2
	Arsenic	19.8	ug/L	20	ug/L	98.9	80.0 − 120.0	20−DEC−22 01:58	221219−2
	Barium	23.3	ug/L	21.9	ug/L	106	80.0 − 120.0	20−DEC−22 01:58	221219−2
	Cadmium	19.8	ug/L	20.64	ug/L	96.1	80.0 − 120.0	20−DEC−22 01:58	221219−2
	Chromium	21.4	ug/L	20	ug/L	107	80.0 − 120.0	20−DEC−22 01:58	221219−2
	Lead	20.0	ug/L	20	ug/L	100	80.0 − 120.0	20−DEC−22 01:58	221219−2
	Molybdenum	2260	ug/L	2000	ug/L	113	80.0 − 120.0	20−DEC−22 01:58	221219−2
	Nickel	20.3	ug/L	21.2	ug/L	95.8	80.0 − 120.0	20−DEC−22 01:58	221219−2
	Selenium	19.4	ug/L	20	ug/L	97.1	80.0 − 120.0	20−DEC−22 01:58	221219−2
	Silver	18.2	ug/L	20	ug/L	91.2	80.0 − 120.0	20−DEC−22 01:58	221219−2
	Thallium	19.4	ug/L	20	ug/L	97.1	80.0 − 120.0	20−DEC−22 01:58	221219−2
	Uranium	20.2	ug/L	20	ug/L	101	80.0 − 120.0	20−DEC−22 01:58	221219−2

METALS
−4−
Interference Check Sample

SDG No: 2023−289

Contract: TNSL00100 **Lab Code:** GEL

Instrument: ICPMS12

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Arsenic	0.515	ug/L					20−DEC−22 10:51	221220−3
	Selenium	0.439	ug/L					20−DEC−22 10:51	221220−3
ICSAB01									
	Arsenic	20.5	ug/L	20	ug/L	103	80.0 − 120.0	20−DEC−22 10:53	221220−3
	Selenium	19.6	ug/L	20	ug/L	97.9	80.0 − 120.0	20−DEC−22 10:53	221220−3

METALS
−4−
Interference Check Sample

SDG No: 2023−289

Contract: TNSL00100 **Lab Code:** GEL

Instrument: ICPMS14

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Beryllium	0.002	ug/L					21−DEC−22 13:42	221221−4
	Cobalt	0.915	ug/L					21−DEC−22 13:42	221221−4
	Copper	1.06	ug/L					21−DEC−22 13:42	221221−4
ICSAB01									
	Beryllium	19.5	ug/L	20	ug/L	97.3	80.0 − 120.0	21−DEC−22 13:44	221221−4
	Cobalt	20.9	ug/L	20.9	ug/L	100	80.0 − 120.0	21−DEC−22 13:44	221221−4
	Copper	20.2	ug/L	21.03	ug/L	95.9	80.0 − 120.0	21−DEC−22 13:44	221221−4

METALS
−5a−

Matrix Spike Summary

SDG NO. 2023−289 **Client ID** SMEB01−23−265344S

Contract: TNSL00100 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 604449001 **Spike ID:** 1205274082

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M*
Aluminum	ug/L	75−125	1810		483	U	2000	90.7		MS
Antimony	ug/L	75−125	67.6	J	25.0	U	50.0	108		MS
Arsenic	ug/L	75−125	92.2	J	50.0	U	50.0	115		MS
Barium	ug/L		297		221		50.0	152	N/A	MS
Cadmium	ug/L	75−125	42.7		7.50	U	50.0	85.5		MS
Chromium	ug/L	75−125	75.0	U	75.0	U	50.0	0	N	MS
Lead	ug/L	75−125	47.0	J	12.5	U	50.0	92.5		MS
Molybdenum	ug/L		318		252		50.0	132	N/A	MS
Nickel	ug/L	75−125	67.4		28.1	J	50.0	78.7		MS
Selenium	ug/L	75−125	52.7	J	37.5	U	50.0	44	N	MS
Silver	ug/L	75−125	43.7		7.50	U	50.0	87.2		MS
Thallium	ug/L	75−125	48.1	J	15.0	U	50.0	95.4		MS
Uranium	ug/L	75−125	50.5		1.68	U	50.0	98.9		MS

***Analytical Methods:**

MS EPA 200.8 DOE−AL

METALS
−5a−

Matrix Spike Summary

SDG NO. 2023−289 **Client ID** SMEB01−23−265344S

Contract: TNSL00100 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 604449001 **Spike ID:** 1205274087

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M*
Boron	ug/L		4420		3780		500	128	N/A	P
Iron	ug/L	75−125	4860		32.4	J	5000	96.5		P
Manganese	ug/L	75−125	491		8.87	J	500	96.5		P
Zinc	ug/L	75−125	639		16.7	J	500	125		P

***Analytical Methods:**

P **EPA 200.7**

METALS
−5a−

Matrix Spike Summary

SDG NO. 2023−289 **Client ID** SMEB01−23−265344S

Contract: TNSL00100 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 604449001 **Spike ID:** 1205275055

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M*
Mercury	ug/L	75−125	0.789		0.236		2.00	27.7	N	AV

***Analytical Methods:**

AV **EPA 245.1/245.2**

METALS
−5a−

Spike Summary

SDG NO. 2023−289 **Client ID** SMEB01−23−265344PS

Contract: TNSL00100 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 604449001 **Spike ID:** 1205275066

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M*
Mercury	ug/L	80−120	0.815		0.236		2.00	29	N	AV

***Analytical Methods:**

AV **EPA 245.1/245.2**

METALS
−5a−

Matrix Spike Summary

SDG NO. 2023−289 **Client ID** SMEB01−23−265344S

Contract: TNSL00100 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 604449001 **Spike ID:** 1205276607

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M*
Beryllium	ug/L	75−125	43.1		5.00	U	50.0	86.1		MS
Cobalt	ug/L	75−125	46.3		7.50	U	50.0	90.1		MS
Copper	ug/L	75−125	46.5	J	7.50	U	50.0	85.3		MS

***Analytical Methods:**

MS **EPA 200.8 DOE−AL**

Metals
−6−
Duplicate Sample Summary

SDG No.: 2023−289 **Lab Code:** GEL

Contract: TNSL00100 **Client ID:** SMEB01−23−265344D

Matrix: WATER **Level:** Low

Sample ID: 604449001 **Duplicate ID:** 1205274081 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M*
Aluminum	ug/L		483	U	483	U			MS
Antimony	ug/L		25.0	U	25.0	U			MS
Arsenic	ug/L		50.0	U	50.0	U			MS
Barium	ug/L	+/−100	221		232		4.94		MS
Cadmium	ug/L		7.50	U	7.50	U			MS
Chromium	ug/L		75.0	U	75.0	U			MS
Lead	ug/L		12.5	U	12.5	U			MS
Molybdenum	ug/L	+/−20%	252		253		.673		MS
Nickel	ug/L	+/−50	28.1	J	28.4	J	1.06		MS
Selenium	ug/L		37.5	U	37.5	U			MS
Silver	ug/L		7.50	U	7.50	U			MS
Thallium	ug/L		15.0	U	15.0	U			MS
Uranium	ug/L		1.68	U	1.68	U			MS

***Analytical Methods:**
MS EPA 200.8 DOE−AL

Metals
−6−
Duplicate Sample Summary

SDG No.: 2023−289 **Lab Code:** GEL

Contract: TNSL00100 **Client ID:** SMEB01−23−265344D

Matrix: WATER **Level:** Low

Sample ID: 604449001 **Duplicate ID:** 1205274086 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M*
Boron	ug/L	+/−20%	3780		3890		2.98		P
Iron	ug/L	+/−100	32.4	J	32.3	J	.198		P
Manganese	ug/L	+/−10	8.87	J	8.44	J	4.92		P
Zinc	ug/L	+/−20	16.7	J	14.9	J	11.4		P

***Analytical Methods:**
P EPA 200.7

Metals
−6−
Duplicate Sample Summary

SDG No.: 2023−289 **Lab Code:** GEL

Contract: TNSL00100 **Client ID:** SMEB01−23−265344D

Matrix: WATER **Level:** Low

Sample ID: 604449001 **Duplicate ID:** 1205275054 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M*
Mercury	ug/L	+/−.2	0.236		0.218		7.93		AV

***Analytical Methods:**
AV EPA 245.1/245.2

Metals
−6−
Duplicate Sample Summary

SDG No.: 2023−289 **Lab Code:** GEL

Contract: TNSL00100 **Client ID:** SMEB01−23−265344D

Matrix: WATER **Level:** Low

Sample ID: 604449001 **Duplicate ID:** 1205276606 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M*
Beryllium	ug/L		5.00	U	5.00	U			MS
Cobalt	ug/L		7.50	U	7.50	U			MS
Copper	ug/L		7.50	U	7.50	U			MS

***Analytical Methods:**
MS EPA 200.8 DOE−AL

METALS
−7−
Laboratory Control Sample Summary

SDG NO. 2023−289

Contract: TNSL00100

Aqueous LCS Source: Enviromental Express **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M*
1205274080								
	Aluminum	ug/L	2000	2190		109	85−115	MS
	Antimony	ug/L	50.0	55.2		110	85−115	MS
	Arsenic	ug/L	50.0	54.5		109	85−115	MS
	Barium	ug/L	50.0	56.1		112	85−115	MS
	Cadmium	ug/L	50.0	54.9		110	85−115	MS
	Chromium	ug/L	50.0	55.1		110	85−115	MS
	Lead	ug/L	50.0	55.9		112	85−115	MS
	Molybdenum	ug/L	50.0	54.9		110	85−115	MS
	Nickel	ug/L	50.0	57.0		114	85−115	MS
	Selenium	ug/L	50.0	54.4		109	85−115	MS
	Silver	ug/L	50.0	56.4		113	85−115	MS
	Thallium	ug/L	50.0	54.2		108	85−115	MS
	Uranium	ug/L	50.0	51.7		103	85−115	MS

***Analytical Methods:**

MS **EPA 200.8 DOE−AL**

METALS
−7−
Laboratory Control Sample Summary

SDG NO. 2023−289

Contract: TNSL00100

Aqueous LCS Source: ENVIRONMENTAL EX **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M*
1205274085								
	Boron	ug/L	500	523		105	85−115	P
	Iron	ug/L	5000	5220		104	85−115	P
	Manganese	ug/L	500	506		101	85−115	P
	Zinc	ug/L	500	492		98.5	85−115	P

***Analytical Methods:**

P **EPA 200.7**

METALS
−7−
Laboratory Control Sample Summary

SDG NO. 2023−289

Contract: TNSL00100

Aqueous LCS Source: GEL **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M*
1205275053								
	Mercury	ug/L	2.00	2.14		107	85−115	AV

***Analytical Methods:**

AV **EPA 245.1/245.2**

METALS
−7−
Laboratory Control Sample Summary

SDG NO. 2023−289

Contract: TNSL00100

Aqueous LCS Source: Enviromental Express **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M*
1205276605								
	Beryllium	ug/L	50.0	52.9		106	85−115	MS
	Cobalt	ug/L	50.0	53.2		106	85−115	MS
	Copper	ug/L	50.0	54.9		110	85−115	MS

***Analytical Methods:**

MS **EPA 200.8 DOE−AL**

METALS
−9−
Serial Dilution Sample Summary

SDG NO. 2023−289 **Client ID** SMEB01−23−265344L

Contract: TNSL00100

Matrix: LIQUID **Level:** Low

Sample ID: 604449001 **Serial Dilution ID:** 1205274083

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M*
Aluminum	19.3	U	96.5	U				MS
Antimony	1	U	5	U				MS
Arsenic	2	U	10	U				MS
Barium	8.85		9.58	J	8.217			MS
Cadmium	.3	U	1.5	U				MS
Chromium	3	U	15	U				MS
Lead	.5	U	2.5	U				MS
Molybdenum	10.1		9.42		6.446			MS
Nickel	1.12	J	3	U	3.832			MS
Selenium	1.5	U	7.5	U				MS
Silver	.3	U	1.5	U				MS
Thallium	.6	U	3	U				MS
Uranium	.067	U	.335	U				MS

***Analytical Methods:**

MS **EPA 200.8 DOE−AL**

METALS
−9−
Serial Dilution Sample Summary

SDG NO. 2023−289 **Client ID** SMEB01−23−265344L

Contract: TNSL00100

Matrix: LIQUID **Level:** Low

Sample ID: 604449001 **Serial Dilution ID:** 1205274088

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M*
Boron	3780		3300		12.618	E	10	P
Iron	32.4	J	150	U	55.667			P
Manganese	8.87	J	10	U	2.649			P
Zinc	16.7	J	29.6	J	76.789			P

***Analytical Methods:**

P **EPA 200.7**

METALS
−9−
Serial Dilution Sample Summary

SDG NO. 2023−289 **Client ID** SMEB01−23−265344L

Contract: TNSL00100

Matrix: LIQUID **Level:** Low

Sample ID: 604449001 **Serial Dilution ID:** 1205275056

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M*
Mercury	.236		.535	J	126.695			AV

***Analytical Methods:**

AV **EPA 245.1/245.2**

METALS
−9−
Serial Dilution Sample Summary

SDG NO. 2023−289 **Client ID** SMEB01−23−265344L

Contract: TNSL00100

Matrix: LIQUID **Level:** Low

Sample ID: 604449001 **Serial Dilution ID:** 1205276608

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M*
Beryllium	.2	U	1	U				MS
Cobalt	.3	U	1.5	U				MS
Copper	.3	U	1.87	J				MS

***Analytical Methods:**

MS **EPA 200.8 DOE−AL**

METALS
−13−
SAMPLE PREPARATION SUMMARY

SDG No: 2023−289 **Method Type:** P

Contract: TNSL00100 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 2357701							
1205274084	MB for batch 2357701	MB	W	16−DEC−22	50mL	50mL	
1205274085	LCS for batch 2357701	LCS	W	16−DEC−22	50mL	50mL	
1205274087	SMEB01−23−265344S	MS	W	16−DEC−22	50mL	50mL	
1205274086	SMEB01−23−265344D	DUP	W	16−DEC−22	50mL	50mL	
604449001	SMEB01−23−265344	SAMPLE	W	16−DEC−22	50mL	50mL	
604449005	SMEB02−23−265345	SAMPLE	W	16−DEC−22	50mL	50mL	
604449009	SMEB03−23−265346	SAMPLE	W	16−DEC−22	50mL	50mL	
604449013	SMEB04−23−265347	SAMPLE	W	16−DEC−22	50mL	50mL	
604449017	SMEB05−23−265348	SAMPLE	W	16−DEC−22	50mL	50mL	

METALS
−13−
SAMPLE PREPARATION SUMMARY

SDG No: 2023−289 **Method Type:** MS

Contract: TNSL00100 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 2357702							
1205274079	MB for batch 2357702	MB	W	16−DEC−22	50mL	50mL	
1205274080	LCS for batch 2357702	LCS	W	16−DEC−22	50mL	50mL	
1205274082	SMEB01−23−265344S	MS	W	16−DEC−22	50mL	50mL	
1205274081	SMEB01−23−265344D	DUP	W	16−DEC−22	50mL	50mL	
604449001	SMEB01−23−265344	SAMPLE	W	16−DEC−22	50mL	50mL	
604449005	SMEB02−23−265345	SAMPLE	W	16−DEC−22	50mL	50mL	
604449009	SMEB03−23−265346	SAMPLE	W	16−DEC−22	50mL	50mL	
604449013	SMEB04−23−265347	SAMPLE	W	16−DEC−22	50mL	50mL	
604449017	SMEB05−23−265348	SAMPLE	W	16−DEC−22	50mL	50mL	
Batch Number 2359021							
1205276604	MB for batch 2359022	MB	W	20−DEC−22	50mL	50mL	
1205276605	LCS for batch 2359022	LCS	W	20−DEC−22	50mL	50mL	
1205276607	SMEB01−23−265344S	MS	W	20−DEC−22	50mL	50mL	
1205276606	SMEB01−23−265344D	DUP	W	20−DEC−22	50mL	50mL	
604449001	SMEB01−23−265344	SAMPLE	W	20−DEC−22	50mL	50mL	
604449005	SMEB02−23−265345	SAMPLE	W	20−DEC−22	50mL	50mL	
604449009	SMEB03−23−265346	SAMPLE	W	20−DEC−22	50mL	50mL	
604449013	SMEB04−23−265347	SAMPLE	W	20−DEC−22	50mL	50mL	
604449017	SMEB05−23−265348	SAMPLE	W	20−DEC−22	50mL	50mL	

EPA

METALS
−13−
SAMPLE PREPARATION SUMMARY

SDG No: 2023−289 **Method Type:** AV

Contract: TNSL00100 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 2358206							
1205275052	MB for batch 2358206	MB	W	19−DEC−22	20mL	20mL	
1205275053	LCS for batch 2358206	LCS	W	19−DEC−22	20mL	20mL	
1205275055	SMEB01−23−265344S	MS	W	19−DEC−22	20mL	20mL	
1205275054	SMEB01−23−265344D	DUP	W	19−DEC−22	20mL	20mL	
604449001	SMEB01−23−265344	SAMPLE	W	19−DEC−22	20mL	20mL	
604449002	SMEB01−23−265371	SAMPLE	W	19−DEC−22	20mL	20mL	
604449005	SMEB02−23−265345	SAMPLE	W	19−DEC−22	20mL	20mL	
604449006	SMEB02−23−265372	SAMPLE	W	19−DEC−22	20mL	20mL	
604449009	SMEB03−23−265346	SAMPLE	W	19−DEC−22	20mL	20mL	
604449010	SMEB03−23−265373	SAMPLE	W	19−DEC−22	20mL	20mL	
604449013	SMEB04−23−265347	SAMPLE	W	19−DEC−22	20mL	20mL	
604449014	SMEB04−23−265374	SAMPLE	W	19−DEC−22	20mL	20mL	
604449017	SMEB05−23−265348	SAMPLE	W	19−DEC−22	20mL	20mL	
604449018	SMEB05−23−265375	SAMPLE	W	19−DEC−22	20mL	20mL	

Metals
-14-
Analysis Run Log

Contract: TNSL00100

Lab Code : GEL **Client Sdg:** 2023-289

Inst Name: ICPMS12 **Instrument Type:** MS

Start Date: 20-DEC-22 **End Date:** 20-DEC-22 **Data File:** 221219-2

Samp ID	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	Tl	U	Zn
S0.0	1	01:35:16	X	X	X	X			X	X				X			X	X	X	X	X	X	
S10	1	01:38:36	X	X	X	X			X	X				X			X	X	X	X	X	X	
S100	1	01:41:56	X	X	X	X			X	X				X			X	X	X	X	X	X	
ICV01	1	01:45:17	X	X	X	X			X	X				X			X	X	X	X	X	X	
ICB01	1	01:48:38	X	X	X	X			X	X				X			X	X	X	X	X	X	
CRDL01	1	01:51:59	X	X	X	X			X	X				X			X	X	X	X	X	X	
ICSA01	1	01:55:19	X	X	X	X			X	X				X			X	X	X	X	X	X	
ICSAB01	1	01:58:40	X	X	X	X			X	X				X			X	X	X	X	X	X	
CCV01	1	02:02:01	X	X	X	X			X	X				X			X	X	X	X	X	X	
CCB01	1	02:05:22	X	X	X	X			X	X				X			X	X	X	X	X	X	
LR01	1	02:08:43	X	X	X	X			X	X				X			X	X	X	X	X	X	
CCV02	1	02:12:04	X	X	X	X			X	X				X			X	X	X	X	X	X	
CCB02	1	02:15:25	X	X	X	X			X	X				X			X	X	X	X	X	X	
ZZZZZZ	1	02:18:47																					
ZZZZZZ	1	02:22:07																					
ZZZZZZ	20	02:25:28																					
ZZZZZZ	20	02:28:48																					
ZZZZZZ	20	02:32:07																					
ZZZZZZ	100	02:35:28																					
CCV03	1	02:38:48	X	X	X	X			X	X				X			X	X	X	X	X	X	
CCB03	1	02:42:08	X	X	X	X			X	X				X			X	X	X	X	X	X	
1205274079	1	02:45:30	X	X	X	X			X	X				X			X	X	X	X	X	X	
1205274080	1	02:48:50	X	X	X	X			X	X				X			X	X	X	X	X	X	
604449001	25	02:52:10	X	X	X	X			X	X				X			X	X	X	X	X	X	
1205274081	25	02:55:30	X	X	X	X			X	X				X			X	X	X	X	X	X	
1205274082	25	02:58:51	X	X	X	X			X	X				X			X	X	X	X	X	X	
1205274083	125	03:02:11	X	X	X	X			X	X				X			X	X	X	X	X	X	
CCV04	1	03:05:32	X	X	X	X			X	X				X			X	X	X	X	X	X	
CCB04	1	03:08:52	X	X	X	X			X	X				X			X	X	X	X	X	X	
604449005	25	03:12:13	X	X	X	X			X	X				X			X	X	X	X	X	X	
604449009	25	03:15:34	X	X		X			X	X				X			X	X		X	X	X	
604449013	25	03:18:54	X	X	X	X			X	X				X			X	X	X	X	X	X	
604449017	25	03:22:14	X	X	X	X			X	X				X			X	X	X	X	X	X	
CCV05	1	03:25:36	X	X	X	X			X	X				X			X	X	X	X	X	X	
CCB05	1	03:28:57	X	X	X	X			X	X				X			X	X	X	X	X	X	

Metals
-14-
Analysis Run Log

Contract: TNSL00100

Lab Code : GEL **Client Sdg:** 2023-289

Inst Name: ICPMS12 **Instrument Type:** MS

Start Date: 20-DEC-22 **End Date:** 20-DEC-22 **Data File:** 221220-3

Samp ID	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	Tl	U	Zn
S0.0	1	10:37:46			X														X				
S10	1	10:40:00			X														X				
S100	1	10:42:14			X														X				
ICV01	1	10:44:28			X														X				
ICB01	1	10:46:41			X														X				
CRDL01	1	10:48:55			X														X				
ICSA01	1	10:51:09			X														X				
ICSAB01	1	10:53:22			X														X				
CCV01	1	10:55:36			X														X				
CCB01	1	10:57:50			X														X				
ZZZZZZ	1	11:00:05																					
ZZZZZZ	1	11:02:19																					
ZZZZZZ	25	11:04:32																					
ZZZZZZ	25	11:06:47																					
604449009	50	11:10:47			X														X				
CCV02	1	11:13:02			X														X				
CCB02	1	11:15:15			X														X				

Metals
-14-
Analysis Run Log

Contract: TNSL00100

Lab Code : GEL **Client Sdg:** 2023-289

Inst Name: ICPMS14 **Instrument Type:** MS

Start Date: 21-DEC-22 **End Date:** 21-DEC-22 **Data File:** 221221-4

Samp ID	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	Tl	U	Zn
S0.0	1	13:30:06					X				X	X											
S10	1	13:32:11					X				X	X											
S100	1	13:34:16					X				X	X											
ICV01	1	13:36:22					X				X	X											
ICB01	1	13:38:27					X				X	X											
CRDL01	1	13:40:32					X				X	X											
ICSA01	1	13:42:37					X				X	X											
ICSAB01	1	13:44:42					X				X	X											
CCV01	1	13:46:46					X				X	X											
CCB01	1	13:48:52					X				X	X											
LR01	1	13:50:57					X				X	X											
CCV02	1	13:53:02					X				X	X											
CCB02	1	13:55:07					X				X	X											
ZZZZZZ	1	13:57:13																					
ZZZZZZ	1	13:59:18																					
ZZZZZZ	25	14:01:24																					
ZZZZZZ	25	14:03:29																					
ZZZZZZ	25	14:05:34																					
ZZZZZZ	125	14:07:40																					
CCV03	1	14:09:46					X				X	X											
CCB03	1	14:11:51					X				X	X											
1205276604	1	14:15:29					X				X	X											
1205276605	1	14:17:33					X				X	X											
604449001	25	14:19:38					X				X	X											
1205276606	25	14:21:43					X				X	X											
1205276607	25	14:23:48					X				X	X											
1205276608	125	14:25:53					X				X	X											
CCV04	1	14:28:00					X				X	X											
CCB04	1	14:30:05					X				X	X											
604449005	25	14:32:12					X				X	X											
604449009	25	14:34:17					X				X	X											
604449013	25	14:36:22					X				X	X											
604449017	25	14:38:27					X				X	X											
CCV05	1	14:40:34					X				X	X											
CCB05	1	14:42:39					X				X	X											

Metals
-14-
Analysis Run Log

Contract: TNSL00100

Lab Code : GEL **Client Sdg:** 2023-289

Inst Name: AVIO3 **Instrument Type:** P

Start Date: 19-DEC-22 **End Date:** 19-DEC-22 **Data File:** 121922-1

Samp ID	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	Tl	U	Zn
S0.0	1	12:37:00						X					X		X								X
S0.1	1	12:41:13						X							X								X
S0.5	1	12:44:03						X							X								X
SCAL	1	12:46:52						X					X		X								X
S10	1	12:49:48											X										
ICV01	1	12:51:37						X					X		X								X
ICB01	1	12:54:31						X					X		X								X
PQL01	1	12:58:19						X					X		X								X
ICSA01	1	13:02:04						X					X		X								X
ICSAB01	1	13:05:00						X					X		X								X
LR01	1	13:07:55						X					X		X								X
LR02	1	13:11:00						X					X		X								X
CCV01	1	13:14:56						X					X		X								X
CCB01	1	13:17:47						X					X		X								X
CCV	1	13:26:19						X					X		X								X
CCB	1	13:29:19						X					X		X								X
ZZZZZZ	1	13:33:06																					
ZZZZZZ	1	13:36:49																					
ZZZZZZ	100	13:39:35																					
ZZZZZZ	100	13:43:21																					
ZZZZZZ	100	13:47:10																					
ZZZZZZ	500	13:50:57																					
ZZZZZZ	100	13:54:39																					
CCV02	1	13:58:24						X					X		X								X
CCB02	1	14:01:16						X					X		X								X
1205274084	1	14:05:54						X					X		X								X
1205274085	1	14:09:41						X					X		X								X
604449001	1	14:12:27						X					X		X								X
1205274086	1	14:16:07						X					X		X								X
1205274087	1	14:19:48						X					X		X								X
1205274088	5	14:22:34						X					X		X								X
CCV03	1	14:26:15						X					X		X								X
CCB03	1	14:29:10						X					X		X								X
604449005	1	14:32:54						X					X		X								X
604449009	1	14:36:36						X					X		X								X
604449013	1	14:40:22						X					X		X								X
604449017	1	14:44:09						X					X		X								X
ICSA02	1	14:47:53						X					X		X								X
ICSAB02	1	14:50:50						X					X		X								X
CCV04	1	14:53:39						X					X		X								X
CCB04	1	14:56:29						X					X		X								X

Metals
-14-
Analysis Run Log

Contract: TNSL00100

Lab Code : GEL **Client Sdg:** 2023-289

Inst Name: HG7 **Instrument Type:** AV

Start Date: 20-DEC-22 **End Date:** 20-DEC-22 **Data File:** 122022W1-5

Samp ID	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	Tl	U	Zn
S0.0	1	09:07:00														X							
S0.2	1	09:08:00														X							
S0.5	1	09:10:00														X							
S2.0	1	09:11:00														X							
S5.0	1	09:13:00														X							
S10.0	1	09:15:00														X							
ICV01	1	09:16:00														X							
ICB01	1	09:18:00														X							
CRDL01	1	09:20:00														X							
ZZZZZZ	1	09:21:00																					
ZZZZZZ	1	09:23:00																					
ZZZZZZ	1	09:24:00																					
ZZZZZZ	1	09:26:00																					
ZZZZZZ	1	09:28:00																					
ZZZZZZ	1	09:29:00																					
ZZZZZZ	1	09:31:00																					
ZZZZZZ	1	09:32:00																					
ZZZZZZ	1	09:34:00																					
ZZZZZZ	5	09:36:00																					
ZZZZZZ	1	09:37:00																					
ZZZZZZ	1	09:39:00																					
ZZZZZZ	1	09:41:00																					
ZZZZZZ	1	09:42:00																					
CCV01	1	09:44:00														X							
CCB01	1	09:46:00														X							
1205275052	1	09:48:00														X							
1205275053	1	09:49:00														X							
ZZZZZZ	1	09:51:00																					
ZZZZZZ	1	09:52:00																					
604449001	1	09:54:00														X							
1205275054	1	09:56:00														X							
1205275055	1	09:57:00														X							
1205275056	5	09:59:00														X							
1205275066	1	10:00:00														X							
604449002	1	10:02:00														X							
CCV02	1	10:04:00														X							
CCB02	1	10:05:00														X							
604449005	1	10:07:00														X							
604449006	1	10:09:00														X							
604449009	1	10:10:00														X							
604449010	1	10:12:00														X							

Metals
-14-
Analysis Run Log

Contract: TNSL00100

Lab Code : GEL **Client Sdg:** 2023-289

Inst Name: HG7 **Instrument Type:** AV

Start Date: 20-DEC-22 **End Date:** 20-DEC-22 **Data File:** 122022W1-5

Samp ID	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	Tl	U	Zn
604449013	1	10:14:00														X							
604449014	1	10:15:00														X							
604449017	1	10:17:00														X							
604449018	1	10:18:00														X							
ZZZZZZ	1	10:20:00																					
ZZZZZZ	1	10:22:00																					
CCV03	1	10:23:00														X							
CCB03	1	10:25:00														X							

Standards

METALS
−10−
Instrument Detection Limits

SDG NO. 2023−289

Contract: TNSL00100 **Lab Code: GEL** **MDL** **Effective Date:** 08−OCT−21

Instrument(s):	**Verified on:**
ICPMS12	14−DEC−2022
ICPMS14	19−DEC−2022

ICP/MS	**Analyte**	**Wavelength (nm)**	**MDL ug/L**	**RDL ug/L**
LIQUID	Aluminum		19.3	50.0
	Antimony		1.0	3.0
	Arsenic		2.0	5.0
	Barium		0.67	4.0
	Beryllium		0.2	0.5
	Boron		5.2	15.0
	Cadmium		0.3	1.0
	Chromium		3.0	10.0
	Cobalt		0.3	1.0
	Copper		0.3	2.0
	Iron		33.0	100
	Lead		0.5	2.0
	Manganese		1.0	5.0
	Molybdenum		0.2	1.0
	Nickel		0.6	2.0
	Selenium		1.5	5.0
	Silver		0.3	1.0
	Thallium		0.6	2.0
	Uranium		0.067	0.2
	Zinc		3.3	20.0

METALS
−10−
Instrument Detection Limits

SDG NO. 2023−289

Contract: TNSL00100 **Lab Code: GEL** **MDL** **LLHg** **Effective Date:** 01−MAY−12

Instrument(s): HG7 **Verified on:** NA

	Analyte	**Wavelength (nm)**	**MDL ug/L**	**RDL ug/L**
MERCURY				
LIQUID	Mercury		0.067	0.2

METALS
−10−
Instrument Detection Limits

SDG NO. 2023−289

Contract: TNSL00100 **Lab Code: GEL** **MDL** **Effective Date:** 23−JAN−11

Instrument(s): AVIO3 **Verified on:** 12−DEC−2022

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
LIQUID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.5	20.0
	Arsenic	188.979	5.0	30.0
	Barium	233.527	1.0	5.0
	Beryllium	313.107	1.0	5.0
	Boron	249.677	15.0	50.0
	Cadmium	226.502	1.0	5.0
	Chromium	267.716	1.0	10.0
	Cobalt	228.616	1.0	5.0
	Copper	324.752	3.0	20.0
	Iron	238.204	30.0	100
	Lead	220.353	3.3	20.0
	Manganese	257.61	2.0	10.0
	Molybdenum	202.031	2.0	10.0
	Nickel	231.604	1.5	5.0
	Selenium	196.026	6.0	30.0
	Silver	328.068	1.0	5.0
	Thallium	190.801	5.0	20.0
	Uranium	367.007	10.0	50.0
	Zinc	213.857	3.3	20.0

METALS
−11−
Interelement Correction Factors

Lab Code: GEL
GEL Job No: **2023−289**
Contract: **TNSL00100**
Instrument: **AVIO3**
Effective Dates: **01−AUG−22**
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	**396.153**	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	**206.836**	0.01388	0.00000	0.00000	0.00000	0.00000
Arsenic	**188.979**	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	**233.527**	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	**313.107**	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	**249.677**	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	**226.502**	0.00000	0.00000	0.00000	0.00000	0.00000
Calcium	**317.933**	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	**267.716**	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	**228.616**	0.00000	0.00000	0.00000	−0.44900	0.00000
Copper	**324.752**	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	**238.204**	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	**220.353**	−0.04059	0.00000	0.00000	0.00000	0.00000
Magnesium	**279.077**	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	**257.61**	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	**202.031**	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	**231.604**	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	**214.914**	−0.32088	0.00000	0.00000	0.00000	0.00000
Potassium	**766.49**	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	**196.026**	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	**251.611**	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	**328.068**	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	**421.552**	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	**181.975**	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	**190.801**	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	**189.927**	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	**334.94**	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	**367.007**	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	**292.402**	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	**213.857**	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
−11−
Interelement Correction Factors

Lab Code: GEL **GEL Job No:** **2023−289**
Contract: **TNSL00100**
Instrument: **AVIO3** **Effective Dates:** **01−AUG−22**
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Boron	Cadmium	Calcium	Chromium	Cobalt
Aluminum	**396.153**	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	**206.836**	0.00000	0.00000	0.00000	20.4791	0.00000
Arsenic	**188.979**	0.00000	0.00000	0.00000	−5.53333	0.00000
Barium	**233.527**	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	**313.107**	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	**249.677**	0.00000	0.00000	0.00000	0.00000	4.07222
Cadmium	**226.502**	0.00000	0.00000	0.00000	0.00000	0.00000
Calcium	**317.933**	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	**267.716**	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	**228.616**	0.00000	0.00000	0.00000	−0.03332	0.00000
Copper	**324.752**	0.00000	0.00000	0.00000	0.00000	−0.41911
Iron	**238.204**	0.00000	0.00000	0.00000	0.00000	−26.9059
Lead	**220.353**	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	**279.077**	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	**257.61**	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	**202.031**	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	**231.604**	0.00000	0.00000	0.00000	0.00000	0.18673
Phosphorous	**214.914**	0.00000	0.00000	0.00000	3.30499	9.45261
Potassium	**766.49**	0.00000	0.00000	−0.07082	0.00000	0.00000
Selenium	**196.026**	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	**251.611**	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	**328.068**	0.00000	0.00000	−0.00788	0.00000	0.00000
Strontium	**421.552**	0.00000	0.00000	0.02858	0.00000	0.00000
Sulfur	**181.975**	0.00000	0.00000	−0.07039	0.00000	0.00000
Thallium	**190.801**	0.00000	0.00000	−0.07594	0.12591	5.71238
Tin	**189.927**	0.00000	0.00000	0.01463	0.00000	0.00000
Titanium	**334.94**	0.00000	0.00000	−0.02512	0.30873	0.00000
Uranium	**367.007**	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	**292.402**	0.00000	0.00000	0.00000	−3.46864	0.00000
Zinc	**213.857**	0.00000	0.00000	0.05372	0.00000	0.00000

METALS
−11−
Interelement Correction Factors

Lab Code: GEL
GEL Job No: **2023−289**
Contract: **TNSL00100**
Instrument: **AVIO3**
Effective Dates: **01−AUG−22**
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Copper	Iron	Lead	Magnesium	Manganese
Aluminum	**396.153**	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	**206.836**	0.00000	−0.02880	0.00000	0.01423	0.00000
Arsenic	**188.979**	0.00000	−0.04295	0.00000	0.00000	0.00000
Barium	**233.527**	0.00000	0.01760	0.00000	0.02636	0.00000
Beryllium	**313.107**	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	**249.677**	0.00000	−4.18845	0.00000	0.00000	0.00000
Cadmium	**226.502**	0.00000	0.10667	0.00000	0.00000	0.00000
Calcium	**317.933**	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	**267.716**	0.00000	−0.01254	0.00000	0.00000	0.21504
Cobalt	**228.616**	0.00000	0.01763	0.00000	−0.00041	0.01755
Copper	**324.752**	0.00000	−0.11642	0.00000	0.00000	0.00000
Iron	**238.204**	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	**220.353**	0.00000	0.06071	0.00000	0.00310	0.00000
Magnesium	**279.077**	0.00000	−0.23467	0.00000	0.00000	0.00000
Manganese	**257.61**	0.00000	−0.00408	0.00000	0.00000	0.00000
Molybdenum	**202.031**	0.00000	−0.04664	0.00000	0.00000	0.00000
Nickel	**231.604**	0.00000	0.00263	0.00000	−0.00142	0.00000
Phosphorous	**214.914**	40.3107	1.06419	0.00000	−0.04571	0.00000
Potassium	**766.49**	0.00000	0.25847	0.00000	0.10803	0.00000
Selenium	**196.026**	0.00000	−0.68610	0.00000	0.00000	0.00000
Silicon	**251.611**	0.00000	−0.15334	0.00000	0.22221	0.00000
Silver	**328.068**	0.00000	−0.27074	0.00000	0.00000	0.00000
Strontium	**421.552**	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	**181.975**	0.00000	0.25556	0.00000	−0.04081	0.00000
Thallium	**190.801**	0.00000	0.00057	0.00000	0.00328	−1.20055
Tin	**189.927**	0.00000	−0.00576	0.00000	−0.00901	0.00000
Titanium	**334.94**	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	**367.007**	0.00000	3.66154	0.00000	0.00000	0.00000
Vanadium	**292.402**	0.00000	0.05095	0.00000	0.00000	0.00000
Zinc	**213.857**	2.06804	0.12795	0.00000	0.00000	0.00000

METALS
−11−
Interelement Correction Factors

Lab Code: GEL
Contract: **TNSL00100**
Instrument: **AVIO3**
GEL Job No: **2023−289**
Effective Dates: **01−AUG−22**
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Molybdenum	Nickel	Phosphorous	Potassium	Selenium
Aluminum	**396.153**	46.4704	0.00000	0.00000	0.00000	0.00000
Antimony	**206.836**	−9.77839	0.00000	0.00000	0.00000	0.00000
Arsenic	**188.979**	−4.17348	0.00000	0.00000	0.00000	0.00000
Barium	**233.527**	0.14298	0.00000	0.00000	0.00000	0.00000
Beryllium	**313.107**	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	**249.677**	−2.72129	0.00000	0.00000	0.00000	0.00000
Cadmium	**226.502**	0.00000	−0.54391	0.00000	0.00000	0.00000
Calcium	**317.933**	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	**267.716**	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	**228.616**	−0.54161	0.00000	0.00000	0.00000	0.00000
Copper	**324.752**	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	**238.204**	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	**220.353**	−2.69969	0.00000	0.00000	0.00000	0.00000
Magnesium	**279.077**	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	**257.61**	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	**202.031**	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	**231.604**	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	**214.914**	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	**766.49**	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	**196.026**	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	**251.611**	14.1145	0.00000	0.00000	0.00000	0.00000
Silver	**328.068**	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	**421.552**	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	**181.975**	−4.94616	0.00000	0.00000	0.00000	0.00000
Thallium	**190.801**	−0.06712	0.00000	0.00000	0.00000	0.00000
Tin	**189.927**	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	**334.94**	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	**367.007**	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	**292.402**	−12.2837	0.00000	0.00000	0.00000	0.00000
Zinc	**213.857**	0.00000	6.43640	0.00000	0.00000	0.00000

METALS
−11−
Interelement Correction Factors

Lab Code: GEL
GEL Job No: **2023−289**
Contract: **TNSL00100**
Instrument: **AVIO3**
Effective Dates: **01−AUG−22**
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Silicon	Silver	Strontium	Sulfur	Thallium
Aluminum	**396.153**	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	**206.836**	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	**188.979**	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	**233.527**	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	**313.107**	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	**249.677**	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	**226.502**	0.00000	0.00000	0.00000	0.00000	0.00000
Calcium	**317.933**	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	**267.716**	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	**228.616**	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	**324.752**	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	**238.204**	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	**220.353**	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	**279.077**	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	**257.61**	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	**202.031**	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	**231.604**	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	**214.914**	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	**766.49**	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	**196.026**	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	**251.611**	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	**328.068**	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	**421.552**	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	**181.975**	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	**190.801**	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	**189.927**	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	**334.94**	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	**367.007**	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	**292.402**	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	**213.857**	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
−11−
Interelement Correction Factors

Lab Code: GEL
GEL Job No: **2023−289**
Contract: **TNSL00100**
Instrument: **AVIO3**
Effective Dates: **01−AUG−22**
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Tin	Titanium	Uranium	Vanadium	Zinc
Aluminum	**396.153**	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	**206.836**	0.00000	0.00000	0.00000	−1.49689	0.00000
Arsenic	**188.979**	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	**233.527**	0.00000	0.00000	0.00000	−1.67077	0.00000
Beryllium	**313.107**	0.00000	−3.20244	−0.26310	0.00000	0.00000
Boron	**249.677**	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	**226.502**	0.00000	0.00000	0.00000	0.00000	0.00000
Calcium	**317.933**	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	**267.716**	0.00000	0.00000	0.89191	0.00000	0.00000
Cobalt	**228.616**	0.00000	2.02006	0.07218	0.00000	0.00000
Copper	**324.752**	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	**238.204**	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	**220.353**	0.00000	0.00000	0.00000	0.56756	0.00000
Magnesium	**279.077**	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	**257.61**	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	**202.031**	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	**231.604**	0.00000	0.00000	0.22711	0.00000	0.00000
Phosphorous	**214.914**	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	**766.49**	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	**196.026**	0.00000	0.00000	0.00000	1.06693	0.00000
Silicon	**251.611**	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	**328.068**	0.00000	0.00000	0.79871	−0.53207	0.00000
Strontium	**421.552**	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	**181.975**	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	**190.801**	0.00000	−17.5059	−0.36153	−29.8090	0.00000
Tin	**189.927**	0.00000	−2.94086	0.00000	0.00000	0.00000
Titanium	**334.94**	0.00000	0.00000	0.34977	0.00000	0.00000
Uranium	**367.007**	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	**292.402**	0.00000	0.67192	−1.00770	0.00000	0.00000
Zinc	**213.857**	0.00000	−0.78602	0.00000	0.00000	0.00000

METALS
−12−
Linear Ranges

SDG NO. 2023−289

Contract: TNSL00100 **Lab Code: GEL**

Instrument ID ICPMS12

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01−AUG−17
Antimony	1000	250	ug/L	01−AUG−17
Arsenic	1000	1000	ug/L	01−AUG−17
Barium	1000	1000	ug/L	01−AUG−17
Beryllium	1000	1000	ug/L	01−AUG−17
Boron	1000	200	ug/L	01−AUG−17
Cadmium	1000	1000	ug/L	01−AUG−17
Chromium	1000	1000	ug/L	01−AUG−17
Cobalt	1000	1000	ug/L	01−AUG−17
Copper	1000	1000	ug/L	01−AUG−17
Iron	500	50000	ug/L	01−AUG−17
Lead	1000	5000	ug/L	01−AUG−17
Manganese	1000	1000	ug/L	01−AUG−17
Molybdenum	1000	1000	ug/L	01−AUG−17
Nickel	1000	1000	ug/L	01−AUG−17
Selenium	1000	500	ug/L	01−AUG−17
Silver	1000	250	ug/L	01−AUG−17
Thallium	1000	500	ug/L	01−AUG−17
Uranium	1000	5000	ug/L	01−AUG−17
Zinc	1000	2500	ug/L	01−AUG−17

METALS
−12−
Linear Ranges

SDG NO. 2023−289

Contract: TNSL00100 **Lab Code: GEL**

Instrument ID ICPMS14

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01−AUG−17
Antimony	1000	250	ug/L	01−AUG−17
Arsenic	1000	1000	ug/L	01−AUG−17
Barium	1000	1000	ug/L	01−AUG−17
Beryllium	1000	1000	ug/L	01−AUG−17
Boron	1000	200	ug/L	01−AUG−17
Cadmium	1000	1000	ug/L	01−AUG−17
Chromium	1000	1000	ug/L	01−AUG−17
Cobalt	1000	1000	ug/L	01−AUG−17
Copper	1000	1000	ug/L	01−AUG−17
Iron	500	50000	ug/L	01−AUG−17
Lead	1000	5000	ug/L	01−AUG−17
Manganese	1000	1000	ug/L	01−AUG−17
Molybdenum	1000	1000	ug/L	01−AUG−17
Nickel	1000	1000	ug/L	01−AUG−17
Selenium	1000	500	ug/L	01−AUG−17
Silver	1000	250	ug/L	01−AUG−17
Thallium	1000	500	ug/L	01−AUG−17
Uranium	1000	5000	ug/L	01−AUG−17
Zinc	1000	2500	ug/L	01−AUG−17

METALS
−12−
Linear Ranges

SDG NO. 2023−289

Contract: TNSL00100 **Lab Code: GEL**

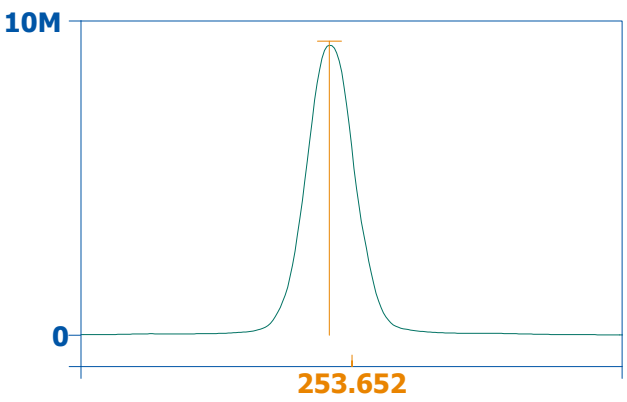
Instrument ID AVIO3

Analyte	Integration Time (sec)	LDR	Units	Effective Date
Aluminum	20	500000	ug/L	15−AUG−18
Antimony	20	1000	ug/L	15−AUG−18
Arsenic	20	10000	ug/L	15−AUG−18
Barium	20	15000	ug/L	15−AUG−18
Beryllium	20	1000	ug/L	15−AUG−18
Boron	20	50000	ug/L	15−AUG−18
Cadmium	20	10000	ug/L	15−AUG−18
Chromium	20	25000	ug/L	15−AUG−18
Cobalt	20	10000	ug/L	15−AUG−18
Copper	20	20000	ug/L	15−AUG−18
Iron	20	500000	ug/L	15−AUG−18
Lead	20	25000	ug/L	15−AUG−18
Manganese	20	10000	ug/L	15−AUG−18
Molybdenum	20	10000	ug/L	15−AUG−18
Nickel	20	10000	ug/L	15−AUG−18
Selenium	20	1000	ug/L	15−AUG−18
Silver	20	1000	ug/L	15−AUG−18
Thallium	20	1000	ug/L	15−AUG−18
Uranium	20	15000	ug/L	15−AUG−18
Zinc	20	15000	ug/L	15−AUG−18

Raw Data

Method: Hg_ReAlign **Sample ID: Hg_ReAlign**
Result: 121922

Hg 253.652 **Rep: 1**



Intensity: 9359727.7
1 **Conc:**

```
================================================================================================
12/19/2022 12:36:23 Hg ReAlign...  Actual peak offset (nm): -0.001
                    Drift (nm): -0.000      Slit adjustment:     0
================================================================================================

================================================================================================
```

Analysis Begun

Start Time: 12/19/2022 12:36:49 **Plasma On Time: 12/19/2022 11:21:04**
Originator: Avio3 **Technique: ICP Continuous**
Spectrometer: Avio 500, S/N 081S1911213 **Autosampler: ESI**

Sample Information File: C:\Users\Public\PerkinElmer Syngistix\ICP\Data\Sample Information\ 121922.sifx
Results Data Set: 121922
Results Library: C:\Users\Public\PerkinElmer Syngistix\ICP\Data\Results\Results.mdb

```
================================================================================================
```

Batch ID:
Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 12/19/2022 12:37:00**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample):

```
------------------------------------------------------------------------------------------------
```

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Al 396.153Radial	-90.8	-90.8	[0.00]	µg/L	12:37:41
1	Ca 317.933Radial	156.0	156.0	[0.00]	µg/L	12:38:01
1	Fe 238.204 Radial	100.0	100.0	[0.00]	µg/L	12:38:01
1	K 766.490 Radial	153.6	153.6	[0.00]	µg/L	12:37:41
1	Mg 279.077 IEC	22.0	22.0	[0.00]	µg/L	12:38:01
1	Na 589.592 Radial	898.5	898.5	[0.00]	µg/L	12:37:41
1	Sr 421.552	-44.2	-44.2	[0.00]	µg/L	12:37:41
1	Ag 328.068	-232.4	-232.4	[0.00]	µg/L	12:39:08
1	As 188.979	-6.8	-6.8	[0.00]	µg/L	12:39:28
1	B 249.677	62.9	62.9	[0.00]	µg/L	12:39:28
1	Ba 233.527	8.4	8.4	[0.00]	µg/L	12:39:28
1	Be 313.107	-127.3	-127.3	[0.00]	µg/L	12:39:08
1	Cd 226.502	-121.1	-121.1	[0.00]	µg/L	12:39:28
1	Co 228.616	-168.8	-168.8	[0.00]	µg/L	12:39:28
1	Cr 267.716	82.1	82.1	[0.00]	µg/L	12:39:28
1	Cu 324.752	230.0	230.0	[0.00]	µg/L	12:39:08
1	Mn 257.610	51.1	51.1	[0.00]	µg/L	12:39:28
1	Mo 202.031	-4.0	-4.0	[0.00]	µg/L	12:39:28
1	Ni 231.604	64.6	64.6	[0.00]	µg/L	12:39:28
1	P 214.914	261.7	261.7	[0.00]	µg/L	12:39:28
1	Pb 220.353	213.9	213.9	[0.00]	µg/L	12:39:28
1	S 181.975 Axial	64.9	64.9	[0.00]	µg/L	12:39:28
1	Sb 206.836	95.8	95.8	[0.00]	µg/L	12:39:28
1	Se 196.026	54.2	54.2	[0.00]	µg/L	12:39:28
1	Si 251.611	40.7	40.7	[0.00]	µg/L	12:39:28
1	SiO2	-45.0	-45.0	[0.00]	µg/L	12:39:28
1	Sn 189.927	-11.6	-11.6	[0.00]	µg/L	12:39:28
1	Ti 334.940	295.0	295.0	[0.00]	µg/L	12:39:08
1	Tl 190.801	25.2	25.2	[0.00]	µg/L	12:39:28
1	U 367.007	-141.8	-141.8	[0.00]	µg/L	12:39:08
1	V 292.402	52.6	52.6	[0.00]	µg/L	12:39:08
1	Zn 213.857	677.2	677.2	[0.00]	µg/L	12:39:28
2	Al 396.153Radial	35.1	35.1	[0.00]	µg/L	12:38:04
2	Ca 317.933Radial	148.1	148.1	[0.00]	µg/L	12:38:24
2	Fe 238.204 Radial	101.8	101.8	[0.00]	µg/L	12:38:24
2	K 766.490 Radial	211.7	211.7	[0.00]	µg/L	12:38:04
2	Mg 279.077 IEC	15.6	15.6	[0.00]	µg/L	12:38:24
2	Na 589.592 Radial	1026.1	1026.1	[0.00]	µg/L	12:38:04
2	Sr 421.552	120.3	120.3	[0.00]	µg/L	12:38:04
2	Ag 328.068	-206.8	-206.8	[0.00]	µg/L	12:39:48
2	As 188.979	-10.1	-10.1	[0.00]	µg/L	12:40:08

2	B 249.677	77.0	77.0	[0.00] µg/L	12:40:08
2	Ba 233.527	-7.2	-7.2	[0.00] µg/L	12:40:08
2	Be 313.107	-121.9	-121.9	[0.00] µg/L	12:39:48
2	Cd 226.502	-119.5	-119.5	[0.00] µg/L	12:40:08
2	Co 228.616	-188.1	-188.1	[0.00] µg/L	12:40:08
2	Cr 267.716	95.0	95.0	[0.00] µg/L	12:40:08
2	Cu 324.752	220.3	220.3	[0.00] µg/L	12:39:48
2	Mn 257.610	51.2	51.2	[0.00] µg/L	12:40:08
2	Mo 202.031	-9.5	-9.5	[0.00] µg/L	12:40:08
2	Ni 231.604	56.8	56.8	[0.00] µg/L	12:40:08
2	P 214.914	275.6	275.6	[0.00] µg/L	12:40:08
2	Pb 220.353	200.7	200.7	[0.00] µg/L	12:40:08
2	S 181.975 Axial	65.4	65.4	[0.00] µg/L	12:40:08
2	Sb 206.836	91.7	91.7	[0.00] µg/L	12:40:08
2	Se 196.026	54.2	54.2	[0.00] µg/L	12:40:08
2	Si 251.611	32.9	32.9	[0.00] µg/L	12:40:08
2	SiO2	-49.6	-49.6	[0.00] µg/L	12:40:08
2	Sn 189.927	1.2	1.2	[0.00] µg/L	12:40:08
2	Ti 334.940	285.6	285.6	[0.00] µg/L	12:39:48
2	Tl 190.801	22.0	22.0	[0.00] µg/L	12:40:08
2	U 367.007	-159.6	-159.6	[0.00] µg/L	12:39:48
2	V 292.402	40.0	40.0	[0.00] µg/L	12:39:48
2	Zn 213.857	702.7	702.7	[0.00] µg/L	12:40:08
3	Al 396.153Radial	4.5	4.5	[0.00] µg/L	12:38:26
3	Ca 317.933Radial	142.6	142.6	[0.00] µg/L	12:38:46
3	Fe 238.204 Radial	104.3	104.3	[0.00] µg/L	12:38:46
3	K 766.490 Radial	78.9	78.9	[0.00] µg/L	12:38:26
3	Mg 279.077 IEC	-7.3	-7.3	[0.00] µg/L	12:38:46
3	Na 589.592 Radial	843.5	843.5	[0.00] µg/L	12:38:26
3	Sr 421.552	140.0	140.0	[0.00] µg/L	12:38:26
3	Ag 328.068	-199.3	-199.3	[0.00] µg/L	12:40:28
3	As 188.979	-9.9	-9.9	[0.00] µg/L	12:40:48
3	B 249.677	76.6	76.6	[0.00] µg/L	12:40:48
3	Ba 233.527	7.9	7.9	[0.00] µg/L	12:40:48
3	Be 313.107	-91.6	-91.6	[0.00] µg/L	12:40:28
3	Cd 226.502	-113.3	-113.3	[0.00] µg/L	12:40:48
3	Co 228.616	-168.3	-168.3	[0.00] µg/L	12:40:48
3	Cr 267.716	96.4	96.4	[0.00] µg/L	12:40:48
3	Cu 324.752	226.2	226.2	[0.00] µg/L	12:40:28
3	Mn 257.610	56.6	56.6	[0.00] µg/L	12:40:48
3	Mo 202.031	-10.1	-10.1	[0.00] µg/L	12:40:48
3	Ni 231.604	64.2	64.2	[0.00] µg/L	12:40:48
3	P 214.914	255.7	255.7	[0.00] µg/L	12:40:48
3	Pb 220.353	202.8	202.8	[0.00] µg/L	12:40:48
3	S 181.975 Axial	67.3	67.3	[0.00] µg/L	12:40:48
3	Sb 206.836	90.2	90.2	[0.00] µg/L	12:40:48
3	Se 196.026	69.0	69.0	[0.00] µg/L	12:40:48
3	Si 251.611	44.7	44.7	[0.00] µg/L	12:40:48
3	SiO2	-45.4	-45.4	[0.00] µg/L	12:40:48
3	Sn 189.927	-1.4	-1.4	[0.00] µg/L	12:40:48
3	Ti 334.940	335.5	335.5	[0.00] µg/L	12:40:28
3	Tl 190.801	26.7	26.7	[0.00] µg/L	12:40:48
3	U 367.007	-156.2	-156.2	[0.00] µg/L	12:40:28
3	V 292.402	38.7	38.7	[0.00] µg/L	12:40:28
3	Zn 213.857	706.9	706.9	[0.00] µg/L	12:40:48

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Ag 328.068	-212.8	17.35	8.15%	[0.00]	µg/L
Al 396.153Radial	-17.1	65.67	384.52%	[0.00]	µg/L
As 188.979	-8.9	1.83	20.48%	[0.00]	µg/L
B 249.677	72.1	8.03	11.13%	[0.00]	µg/L
Ba 233.527	3.0	8.86	294.32%	[0.00]	µg/L
Be 313.107	-113.6	19.24	16.94%	[0.00]	µg/L
Ca 317.933Radial	148.9	6.75	4.53%	[0.00]	µg/L
Cd 226.502	-118.0	4.13	3.50%	[0.00]	µg/L
Co 228.616	-175.1	11.30	6.46%	[0.00]	µg/L
Cr 267.716	91.2	7.87	8.63%	[0.00]	µg/L
Cu 324.752	225.5	4.86	2.16%	[0.00]	µg/L

Fe 238.204 Radial	102.1	2.15	2.11%	[0.00]	µg/L
K 766.490 Radial	148.1	66.56	44.95%	[0.00]	µg/L
Mg 279.077 IEC	10.1	15.36	152.13%	[0.00]	µg/L
Mn 257.610	53.0	3.13	5.91%	[0.00]	µg/L
Mo 202.031	-7.9	3.34	42.33%	[0.00]	µg/L
Na 589.592 Radial	922.7	93.69	10.15%	[0.00]	µg/L
Ni 231.604	61.9	4.37	7.06%	[0.00]	µg/L
P 214.914	264.4	10.20	3.86%	[0.00]	µg/L
Pb 220.353	205.8	7.10	3.45%	[0.00]	µg/L
S 181.975 Axial	65.9	1.27	1.93%	[0.00]	µg/L
Sb 206.836	92.6	2.88	3.11%	[0.00]	µg/L
Se 196.026	59.1	8.52	14.41%	[0.00]	µg/L
Si 251.611	39.4	6.00	15.24%	[0.00]	µg/L
SiO2	-46.7	2.56	5.49%	[0.00]	µg/L
Sn 189.927	-4.0	6.79	171.89%	[0.00]	µg/L
Sr 421.552	72.0	101.11	140.39%	[0.00]	µg/L
Ti 334.940	305.4	26.54	8.69%	[0.00]	µg/L
Tl 190.801	24.6	2.43	9.88%	[0.00]	µg/L
U 367.007	-152.5	9.47	6.21%	[0.00]	µg/L
V 292.402	43.8	7.68	17.54%	[0.00]	µg/L
Zn 213.857	695.6	16.09	2.31%	[0.00]	µg/L

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Batch ID:
Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S0.1 **Date Collected: 12/19/2022 12:41:13**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample): 19

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	49795.1	49795.1	101.23	%	12:41:55
1	K 766.490 Radial†	1267.9	1104.4	[1000]	µg/L	12:41:55
1	Sr 421.552†	34755.1	34260.6	[100]	µg/L	12:41:55
1	Sc 361.383	296206.1	296206.1	98.252	%	12:42:03
1	Y 371.029	210291.2	210291.2	98.327	%	12:42:03
1	Ag 328.068†	3216.6	3486.7	[100]	µg/L	12:42:03
1	As 188.979†	54.6	64.5	[100]	µg/L	12:42:23
1	B 249.677†	852.2	795.2	[100]	µg/L	12:42:03
1	Ba 233.527†	4303.6	4377.1	[100]	µg/L	12:42:03
1	Be 313.107†	62542.7	63768.8	[100]	µg/L	12:42:03
1	Cd 226.502†	2686.7	2852.5	[100]	µg/L	12:42:03
1	Co 228.616†	752.4	940.8	[100]	µg/L	12:42:23
1	Cr 267.716†	2597.4	2552.5	[100]	µg/L	12:42:03
1	Cu 324.752†	4492.1	4346.5	[100]	µg/L	12:42:03
1	Mn 257.610†	10073.2	10199.4	[100]	µg/L	12:42:03
1	Mo 202.031†	643.3	662.6	[100]	µg/L	12:42:23
1	Ni 231.604†	808.7	761.2	[100]	µg/L	12:42:23
1	P 214.914†	435.2	178.6	[500]	µg/L	12:42:23
1	Pb 220.353†	418.9	220.6	[100]	µg/L	12:42:23
1	S 181.975 Axial†	103.5	39.5	[200]	µg/L	12:42:23
1	Sb 206.836†	165.9	76.3	[100]	µg/L	12:42:23
1	Se 196.026†	128.2	71.4	[100]	µg/L	12:42:23
1	Si 251.611†	3854.5	3883.7	[500]	µg/L	12:42:03
1	SiO2†	3701.7	3814.2	[1069.5]	µg/L	12:42:03
1	Sn 189.927†	157.2	163.9	[100]	µg/L	12:42:23
1	Ti 334.940†	15080.5	15043.3	[100]	µg/L	12:42:03
1	Tl 190.801†	51.0	27.3	[100]	µg/L	12:42:23
1	U 367.007†	81.1	235.1	[100]	µg/L	12:42:03
1	V 292.402†	3300.7	3315.7	[100]	µg/L	12:42:03
1	Zn 213.857†	3443.6	2809.2	[100]	µg/L	12:42:03
2	Sc RADIAL	49176.2	49176.2	99.972	%	12:41:57
2	K 766.490 Radial†	1378.5	1230.8	[1000]	µg/L	12:41:57
2	Sr 421.552†	34055.1	33992.5	[100]	µg/L	12:41:57
2	Sc 361.383	306283.4	306283.4	101.60	%	12:42:25
2	Y 371.029	217481.4	217481.4	101.69	%	12:42:25
2	Ag 328.068†	3145.0	3308.5	[100]	µg/L	12:42:25
2	As 188.979†	48.3	56.5	[100]	µg/L	12:42:45
2	B 249.677†	851.0	765.5	[100]	µg/L	12:42:25
2	Ba 233.527†	4392.3	4320.3	[100]	µg/L	12:42:25
2	Be 313.107†	65256.7	64345.8	[100]	µg/L	12:42:25
2	Cd 226.502†	2857.6	2930.7	[100]	µg/L	12:42:25
2	Co 228.616†	743.2	906.6	[100]	µg/L	12:42:45
2	Cr 267.716†	2678.4	2545.2	[100]	µg/L	12:42:25
2	Cu 324.752†	4688.6	4389.5	[100]	µg/L	12:42:25
2	Mn 257.610†	10456.1	10239.0	[100]	µg/L	12:42:25
2	Mo 202.031†	653.5	651.1	[100]	µg/L	12:42:45
2	Ni 231.604†	795.3	721.0	[100]	µg/L	12:42:45
2	P 214.914†	453.0	181.5	[500]	µg/L	12:42:45
2	Pb 220.353†	420.0	207.6	[100]	µg/L	12:42:45
2	S 181.975 Axial†	99.8	32.3	[200]	µg/L	12:42:45
2	Sb 206.836†	158.8	63.8	[100]	µg/L	12:42:45
2	Se 196.026†	112.2	51.3	[100]	µg/L	12:42:45
2	Si 251.611†	3974.3	3872.5	[500]	µg/L	12:42:25
2	SiO2†	3818.1	3804.8	[1069.5]	µg/L	12:42:25
2	Sn 189.927†	165.7	167.0	[100]	µg/L	12:42:45
2	Ti 334.940†	15655.8	15104.6	[100]	µg/L	12:42:25
2	Tl 190.801†	43.8	18.5	[100]	µg/L	12:42:45

2	U 367.007†	54.1	205.8	[100]	µg/L	12:42:25
2	V 292.402†	3464.6	3366.4	[100]	µg/L	12:42:25
2	Zn 213.857†	3515.5	2764.7	[100]	µg/L	12:42:25
3	Sc RADIAL	48598.1	48598.1	98.797	%	12:41:59
3	K 766.490 Radial†	1306.0	1173.9	[1000]	µg/L	12:41:59
3	Sr 421.552†	33926.3	34267.3	[100]	µg/L	12:41:59
3	Sc 361.383	301935.0	301935.0	100.15	%	12:42:48
3	Y 371.029	213834.4	213834.4	99.984	%	12:42:48
3	Ag 328.068†	3122.4	3330.5	[100]	µg/L	12:42:48
3	As 188.979†	48.9	57.8	[100]	µg/L	12:43:08
3	B 249.677†	823.1	749.7	[100]	µg/L	12:42:48
3	Ba 233.527†	4305.6	4296.0	[100]	µg/L	12:42:48
3	Be 313.107†	63977.1	63993.2	[100]	µg/L	12:42:48
3	Cd 226.502†	2710.7	2824.6	[100]	µg/L	12:42:48
3	Co 228.616†	711.4	885.3	[100]	µg/L	12:43:08
3	Cr 267.716†	2557.0	2461.9	[100]	µg/L	12:42:48
3	Cu 324.752†	4617.3	4384.8	[100]	µg/L	12:42:48
3	Mn 257.610†	10239.7	10171.1	[100]	µg/L	12:42:48
3	Mo 202.031†	633.5	640.4	[100]	µg/L	12:43:08
3	Ni 231.604†	796.7	733.7	[100]	µg/L	12:43:08
3	P 214.914†	434.4	169.4	[500]	µg/L	12:43:08
3	Pb 220.353†	418.6	212.2	[100]	µg/L	12:43:08
3	S 181.975 Axial†	98.1	32.1	[200]	µg/L	12:43:08
3	Sb 206.836†	156.9	64.1	[100]	µg/L	12:43:08
3	Se 196.026†	126.2	66.9	[100]	µg/L	12:43:08
3	Si 251.611†	3890.0	3844.7	[500]	µg/L	12:42:48
3	SiO2†	3736.1	3777.0	[1069.5]	µg/L	12:42:48
3	Sn 189.927†	161.9	165.6	[100]	µg/L	12:43:08
3	Ti 334.940†	15264.9	14936.3	[100]	µg/L	12:42:48
3	Tl 190.801†	41.6	16.9	[100]	µg/L	12:43:08
3	U 367.007†	66.4	218.9	[100]	µg/L	12:42:48
3	V 292.402†	3495.2	3446.1	[100]	µg/L	12:42:48
3	Zn 213.857†	3373.6	2672.8	[100]	µg/L	12:42:48

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc RADIAL	49189.8	598.60	1.22%	100.00	%
Sc 361.383	301474.8	5054.38	1.68%	100.00	%
Y 371.029	213869.0	3595.24	1.68%	100.00	%
Ag 328.068†	3375.2	97.15	2.88%	[100]	µg/L
As 188.979†	59.6	4.32	7.25%	[100]	µg/L
B 249.677†	770.1	23.13	3.00%	[100]	µg/L
Ba 233.527†	4331.1	41.61	0.96%	[100]	µg/L
Be 313.107†	64035.9	290.85	0.45%	[100]	µg/L
Cd 226.502†	2869.2	55.01	1.92%	[100]	µg/L
Co 228.616†	910.9	27.98	3.07%	[100]	µg/L
Cr 267.716†	2519.9	50.34	2.00%	[100]	µg/L
Cu 324.752†	4373.6	23.56	0.54%	[100]	µg/L
K 766.490 Radial†	1169.7	63.31	5.41%	[1000]	µg/L
Mn 257.610†	10203.2	34.12	0.33%	[100]	µg/L
Mo 202.031†	651.4	11.12	1.71%	[100]	µg/L
Ni 231.604†	738.6	20.55	2.78%	[100]	µg/L
P 214.914†	176.5	6.32	3.58%	[500]	µg/L
Pb 220.353†	213.4	6.59	3.09%	[100]	µg/L
S 181.975 Axial†	34.6	4.21	12.15%	[200]	µg/L
Sb 206.836†	68.0	7.12	10.47%	[100]	µg/L
Se 196.026†	63.2	10.53	16.66%	[100]	µg/L
Si 251.611†	3867.0	20.07	0.52%	[500]	µg/L
SiO2†	3798.7	19.32	0.51%	[1069.5]	µg/L
Sn 189.927†	165.5	1.54	0.93%	[100]	µg/L
Sr 421.552†	34173.5	156.77	0.46%	[100]	µg/L
Ti 334.940†	15028.1	85.20	0.57%	[100]	µg/L
Tl 190.801†	20.9	5.57	26.68%	[100]	µg/L
U 367.007†	219.9	14.69	6.68%	[100]	µg/L
V 292.402†	3376.1	65.77	1.95%	[100]	µg/L
Zn 213.857†	2748.9	69.53	2.53%	[100]	µg/L

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Batch ID:
Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S0.5 **Date Collected: 12/19/2022 12:44:03**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample): 49

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	50540.0	50540.0	102.74	%	12:44:40
1	Al 396.153Radial†	15800.8	15395.8	[5000]	µg/L	12:44:40
1	Ca 317.933Radial†	30445.3	29483.0	[5000]	µg/L	12:44:40
1	K 766.490 Radial†	6438.5	6118.5	[5000]	µg/L	12:44:38
1	Mg 279.077 IEC†	2720.3	2637.5	[5000]	µg/L	12:44:40
1	Sr 421.552†	175804.1	171035.3	[500]	µg/L	12:44:38
1	Sc 361.383	295156.9	295156.9	97.904	%	12:44:52
1	Y 371.029	207727.6	207727.6	97.128	%	12:44:52
1	Ag 328.068†	15916.3	16469.9	[500]	µg/L	12:44:52
1	As 188.979†	284.1	299.1	[500]	µg/L	12:45:12
1	B 249.677†	3809.7	3819.1	[500]	µg/L	12:44:52
1	Ba 233.527†	20703.8	21144.0	[500]	µg/L	12:44:52
1	Be 313.107†	311652.0	318436.6	[500]	µg/L	12:44:52
1	Cd 226.502†	13364.0	13768.0	[500]	µg/L	12:44:52
1	Co 228.616†	4393.1	4662.2	[500]	µg/L	12:45:12
1	Cr 267.716†	12266.3	12437.6	[500]	µg/L	12:44:52
1	Cu 324.752†	21399.4	21632.0	[500]	µg/L	12:44:52
1	Mn 257.610†	48925.9	49920.2	[500]	µg/L	12:44:52
1	Mo 202.031†	3289.8	3368.1	[500]	µg/L	12:45:12
1	Ni 231.604†	3741.5	3759.7	[500]	µg/L	12:45:12
1	P 214.914†	1221.5	983.3	[2500]	µg/L	12:45:12
1	Pb 220.353†	1207.5	1027.6	[500]	µg/L	12:45:12
1	S 181.975 Axial†	243.4	182.7	[1000]	µg/L	12:45:12
1	Sb 206.836†	417.2	333.5	[500]	µg/L	12:45:12
1	Se 196.026†	368.5	317.3	[500]	µg/L	12:45:12
1	Si 251.611†	19519.9	19898.4	[2500]	µg/L	12:44:52
1	SiO2†	19139.0	19595.4	[5347.5]	µg/L	12:44:52
1	Sn 189.927†	806.7	827.9	[500]	µg/L	12:45:12
1	Ti 334.940†	73139.9	74400.1	[500]	µg/L	12:44:52
1	Tl 190.801†	131.9	110.1	[500]	µg/L	12:45:12
1	U 367.007†	971.0	1144.3	[500]	µg/L	12:44:52
1	V 292.402†	16550.8	16861.3	[500]	µg/L	12:44:52
1	Zn 213.857†	13565.6	13160.4	[500]	µg/L	12:44:52
2	Sc RADIAL	51147.9	51147.9	103.98	%	12:44:44
2	Al 396.153Radial†	15964.8	15370.7	[5000]	µg/L	12:44:44
2	Ca 317.933Radial†	31063.7	29725.6	[5000]	µg/L	12:44:44
2	K 766.490 Radial†	6541.8	6143.3	[5000]	µg/L	12:44:42
2	Mg 279.077 IEC†	2757.9	2642.3	[5000]	µg/L	12:44:44
2	Sr 421.552†	182397.9	175343.2	[500]	µg/L	12:44:42
2	Sc 361.383	303223.2	303223.2	100.58	%	12:45:14
2	Y 371.029	212994.3	212994.3	99.591	%	12:45:14
2	Ag 328.068†	16332.9	16451.5	[500]	µg/L	12:45:14
2	As 188.979†	286.5	293.8	[500]	µg/L	12:45:34
2	B 249.677†	3912.2	3817.5	[500]	µg/L	12:45:14
2	Ba 233.527†	21294.0	21168.2	[500]	µg/L	12:45:14
2	Be 313.107†	319651.1	317921.6	[500]	µg/L	12:45:14
2	Cd 226.502†	13878.6	13916.6	[500]	µg/L	12:45:14
2	Co 228.616†	4471.3	4620.5	[500]	µg/L	12:45:34
2	Cr 267.716†	12632.2	12468.2	[500]	µg/L	12:45:14
2	Cu 324.752†	21794.9	21443.7	[500]	µg/L	12:45:14
2	Mn 257.610†	50365.3	50021.9	[500]	µg/L	12:45:14
2	Mo 202.031†	3319.4	3308.2	[500]	µg/L	12:45:34
2	Ni 231.604†	3801.0	3717.3	[500]	µg/L	12:45:34
2	P 214.914†	1237.4	965.9	[2500]	µg/L	12:45:34
2	Pb 220.353†	1214.4	1001.6	[500]	µg/L	12:45:34
2	S 181.975 Axial†	250.2	182.9	[1000]	µg/L	12:45:34
2	Sb 206.836†	426.6	331.6	[500]	µg/L	12:45:34

2	Se 196.026†	364.7	303.4	[500]	µg/L	12:45:34
2	Si 251.611†	19959.8	19805.3	[2500]	µg/L	12:45:14
2	SiO2†	19569.0	19502.8	[5347.5]	µg/L	12:45:14
2	Sn 189.927†	833.3	832.4	[500]	µg/L	12:45:34
2	Ti 334.940†	74874.4	74137.3	[500]	µg/L	12:45:14
2	Tl 190.801†	128.5	103.1	[500]	µg/L	12:45:34
2	U 367.007†	1021.3	1167.9	[500]	µg/L	12:45:14
2	V 292.402†	17114.1	16971.6	[500]	µg/L	12:45:14
2	Zn 213.857†	13821.8	13046.5	[500]	µg/L	12:45:14
3	Sc RADIAL	50081.0	50081.0	101.81	%	12:44:49
3	Al 396.153Radial†	15721.4	15458.7	[5000]	µg/L	12:44:49
3	Ca 317.933Radial†	30139.7	29454.5	[5000]	µg/L	12:44:49
3	K 766.490 Radial†	6381.7	6120.0	[5000]	µg/L	12:44:46
3	Mg 279.077 IEC†	2767.7	2708.4	[5000]	µg/L	12:44:49
3	Sr 421.552†	178057.1	174816.6	[500]	µg/L	12:44:46
3	Sc 361.383	309259.8	309259.8	102.58	%	12:45:37
3	Y 371.029	217413.3	217413.3	101.66	%	12:45:37
3	Ag 328.068†	16760.0	16550.9	[500]	µg/L	12:45:37
3	As 188.979†	276.0	278.0	[500]	µg/L	12:45:57
3	B 249.677†	4065.6	3891.1	[500]	µg/L	12:45:37
3	Ba 233.527†	21722.9	21173.1	[500]	µg/L	12:45:37
3	Be 313.107†	327408.7	319280.5	[500]	µg/L	12:45:37
3	Cd 226.502†	14181.6	13942.6	[500]	µg/L	12:45:37
3	Co 228.616†	4328.5	4394.6	[500]	µg/L	12:45:57
3	Cr 267.716†	12911.0	12494.8	[500]	µg/L	12:45:37
3	Cu 324.752†	22307.9	21520.9	[500]	µg/L	12:45:37
3	Mn 257.610†	51649.8	50296.6	[500]	µg/L	12:45:37
3	Mo 202.031†	3259.5	3185.3	[500]	µg/L	12:45:57
3	Ni 231.604†	3702.4	3547.3	[500]	µg/L	12:45:57
3	P 214.914†	1192.1	897.8	[2500]	µg/L	12:45:57
3	Pb 220.353†	1171.7	936.4	[500]	µg/L	12:45:57
3	S 181.975 Axial†	236.0	164.1	[1000]	µg/L	12:45:57
3	Sb 206.836†	423.0	319.8	[500]	µg/L	12:45:57
3	Se 196.026†	357.0	288.9	[500]	µg/L	12:45:57
3	Si 251.611†	20471.3	19916.5	[2500]	µg/L	12:45:37
3	SiO2†	20043.3	19585.5	[5347.5]	µg/L	12:45:37
3	Sn 189.927†	810.6	794.1	[500]	µg/L	12:45:57
3	Ti 334.940†	76690.9	74455.0	[500]	µg/L	12:45:37
3	Tl 190.801†	130.9	103.0	[500]	µg/L	12:45:57
3	U 367.007†	1061.6	1187.4	[500]	µg/L	12:45:37
3	V 292.402†	17493.7	17009.6	[500]	µg/L	12:45:37
3	Zn 213.857†	14199.3	13146.2	[500]	µg/L	12:45:37

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc RADIAL	50589.7	535.18	1.06%	102.85	%
Sc 361.383	302546.6	7075.73	2.34%	100.36	%
Y 371.029	212711.7	4849.04	2.28%	99.459	%
Ag 328.068†	16490.8	52.90	0.32%	[500]	µg/L
Al 396.153Radial†	15408.4	45.37	0.29%	[5000]	µg/L
As 188.979†	290.3	10.99	3.79%	[500]	µg/L
B 249.677†	3842.6	42.05	1.09%	[500]	µg/L
Ba 233.527†	21161.8	15.57	0.07%	[500]	µg/L
Be 313.107†	318546.3	686.06	0.22%	[500]	µg/L
Ca 317.933Radial†	29554.4	149.00	0.50%	[5000]	µg/L
Cd 226.502†	13875.7	94.18	0.68%	[500]	µg/L
Co 228.616†	4559.1	143.96	3.16%	[500]	µg/L
Cr 267.716†	12466.9	28.60	0.23%	[500]	µg/L
Cu 324.752†	21532.2	94.65	0.44%	[500]	µg/L
K 766.490 Radial†	6127.3	13.90	0.23%	[5000]	µg/L
Mg 279.077 IEC†	2662.7	39.63	1.49%	[5000]	µg/L
Mn 257.610†	50079.6	194.72	0.39%	[500]	µg/L
Mo 202.031†	3287.2	93.17	2.83%	[500]	µg/L
Ni 231.604†	3674.8	112.39	3.06%	[500]	µg/L
P 214.914†	949.0	45.20	4.76%	[2500]	µg/L
Pb 220.353†	988.5	46.95	4.75%	[500]	µg/L
S 181.975 Axial†	176.6	10.78	6.11%	[1000]	µg/L
Sb 206.836†	328.3	7.44	2.27%	[500]	µg/L
Se 196.026†	303.2	14.20	4.68%	[500]	µg/L

Si 251.611†	19873.4	59.64	0.30%	[2500]	µg/L
SiO2†	19561.2	50.82	0.26%	[5347.5]	µg/L
Sn 189.927†	818.1	20.91	2.56%	[500]	µg/L
Sr 421.552†	173731.7	2349.91	1.35%	[500]	µg/L
Ti 334.940†	74330.8	169.78	0.23%	[500]	µg/L
Tl 190.801†	105.4	4.09	3.88%	[500]	µg/L
U 367.007†	1166.5	21.57	1.85%	[500]	µg/L
V 292.402†	16947.5	77.02	0.45%	[500]	µg/L
Zn 213.857†	13117.7	62.09	0.47%	[500]	µg/L

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Batch ID:
Sequence No.: 4 **Autosampler Location: 4**
Sample ID: SCAL **Date Collected: 12/19/2022 12:46:52**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample): 49

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	50559.0	50559.0	102.78	%	12:47:30
1	Al 396.153Radial†	31418.4	30584.7	[10000]	µg/L	12:47:28
1	Ca 317.933Radial†	60402.1	58617.5	[10000]	µg/L	12:47:30
1	Fe 238.204 Radial†	54284.6	52712.5	[10000]	µg/L	12:47:30
1	K 766.490 Radial†	12343.8	11861.4	[10000]	µg/L	12:47:28
1	Mg 279.077 IEC†	5516.8	5357.3	[10000]	µg/L	12:47:30
1	Na 589.592 Radial†	64991.7	62309.0	[10000]	µg/L	12:47:28
1	Sr 421.552†	352290.1	342677.9	[1000]	µg/L	12:47:28
1	Sc 361.383	307298.4	307298.4	101.93	%	12:47:42
1	Y 371.029	215669.1	215669.1	100.84	%	12:47:42
1	Ag 328.068†	33251.2	32833.9	[1000]	µg/L	12:47:44
1	As 188.979†	574.8	572.8	[1000]	µg/L	12:48:04
1	B 249.677†	7450.8	7237.5	[1000]	µg/L	12:47:44
1	Ba 233.527†	43305.3	42481.6	[1000]	µg/L	12:47:44
1	Be 313.107†	649524.4	637328.9	[1000]	µg/L	12:47:42
1	Cd 226.502†	27796.3	27387.5	[1000]	µg/L	12:47:44
1	Co 228.616†	8725.0	8734.7	[1000]	µg/L	12:47:44
1	Cr 267.716†	25424.3	24851.3	[1000]	µg/L	12:47:44
1	Cu 324.752†	43572.2	42520.9	[1000]	µg/L	12:47:44
1	Mn 257.610†	101902.4	99918.3	[1000]	µg/L	12:47:44
1	Mo 202.031†	6542.4	6426.3	[1000]	µg/L	12:47:44
1	Ni 231.604†	7317.4	7116.9	[1000]	µg/L	12:47:44
1	P 214.914†	2176.4	1870.8	[5000]	µg/L	12:48:04
1	Pb 220.353†	2155.1	1908.4	[1000]	µg/L	12:48:04
1	S 181.975 Axial†	419.2	345.4	[2000]	µg/L	12:48:04
1	Sb 206.836†	745.5	638.8	[1000]	µg/L	12:48:04
1	Se 196.026†	683.9	611.9	[1000]	µg/L	12:48:04
1	Si 251.611†	38085.9	37324.7	[5000]	µg/L	12:47:44
1	SiO2†	37409.9	36747.7	[10695]	µg/L	12:47:44
1	Sn 189.927†	1686.8	1658.7	[1000]	µg/L	12:48:04
1	Ti 334.940†	154335.8	151105.6	[1000]	µg/L	12:47:42
1	Tl 190.801†	238.3	209.1	[1000]	µg/L	12:48:04
1	U 367.007†	2272.3	2381.7	[1000]	µg/L	12:47:44
1	V 292.402†	34557.6	33858.9	[1000]	µg/L	12:47:44
1	Zn 213.857†	26953.5	25747.1	[1000]	µg/L	12:47:44
2	Sc RADIAL	50213.7	50213.7	102.08	%	12:47:34
2	Al 396.153Radial†	31588.2	30961.2	[10000]	µg/L	12:47:32
2	Ca 317.933Radial†	60046.6	58673.3	[10000]	µg/L	12:47:34
2	Fe 238.204 Radial†	53742.0	52544.1	[10000]	µg/L	12:47:34
2	K 766.490 Radial†	12395.1	11994.3	[10000]	µg/L	12:47:32
2	Mg 279.077 IEC†	5387.3	5267.3	[10000]	µg/L	12:47:34
2	Na 589.592 Radial†	65209.4	62957.0	[10000]	µg/L	12:47:32
2	Sr 421.552†	352499.5	345239.6	[1000]	µg/L	12:47:32
2	Sc 361.383	305731.6	305731.6	101.41	%	12:48:07
2	Y 371.029	214306.1	214306.1	100.20	%	12:48:07
2	Ag 328.068†	32992.8	32746.3	[1000]	µg/L	12:48:09
2	As 188.979†	563.0	564.1	[1000]	µg/L	12:48:29
2	B 249.677†	7535.1	7358.1	[1000]	µg/L	12:48:09
2	Ba 233.527†	42842.7	42243.2	[1000]	µg/L	12:48:09
2	Be 313.107†	646222.8	637339.0	[1000]	µg/L	12:48:07
2	Cd 226.502†	27627.0	27360.3	[1000]	µg/L	12:48:09
2	Co 228.616†	8744.0	8797.3	[1000]	µg/L	12:48:09
2	Cr 267.716†	25151.1	24709.7	[1000]	µg/L	12:48:09
2	Cu 324.752†	43180.8	42354.1	[1000]	µg/L	12:48:09
2	Mn 257.610†	100841.4	99384.4	[1000]	µg/L	12:48:09
2	Mo 202.031†	6513.5	6430.7	[1000]	µg/L	12:48:09
2	Ni 231.604†	7224.2	7061.8	[1000]	µg/L	12:48:09

2	P 214.914†	2119.0	1825.1	[5000]	µg/L	12:48:29
2	Pb 220.353†	2115.1	1879.8	[1000]	µg/L	12:48:29
2	S 181.975 Axial†	406.2	334.6	[2000]	µg/L	12:48:29
2	Sb 206.836†	742.5	639.5	[1000]	µg/L	12:48:29
2	Se 196.026†	654.1	585.9	[1000]	µg/L	12:48:29
2	Si 251.611†	37700.7	37136.3	[5000]	µg/L	12:48:09
2	SiO2†	37056.4	36587.1	[10695]	µg/L	12:48:09
2	Sn 189.927†	1641.0	1622.1	[1000]	µg/L	12:48:29
2	Ti 334.940†	153419.4	150977.9	[1000]	µg/L	12:48:07
2	Tl 190.801†	234.2	206.3	[1000]	µg/L	12:48:29
2	U 367.007†	2236.7	2358.1	[1000]	µg/L	12:48:09
2	V 292.402†	34197.8	33677.9	[1000]	µg/L	12:48:09
2	Zn 213.857†	26614.0	25547.8	[1000]	µg/L	12:48:09
3	Sc RADIAL	50316.1	50316.1	102.29	%	12:47:38
3	Al 396.153Radial†	31211.2	30529.7	[10000]	µg/L	12:47:36
3	Ca 317.933Radial†	60178.8	58682.9	[10000]	µg/L	12:47:38
3	Fe 238.204 Radial†	53987.2	52676.7	[10000]	µg/L	12:47:38
3	K 766.490 Radial†	12134.0	11714.3	[10000]	µg/L	12:47:36
3	Mg 279.077 IEC†	5482.5	5349.7	[10000]	µg/L	12:47:38
3	Na 589.592 Radial†	64513.2	62146.4	[10000]	µg/L	12:47:36
3	Sr 421.552†	349193.2	341305.0	[1000]	µg/L	12:47:36
3	Sc 361.383	308154.4	308154.4	102.22	%	12:48:31
3	Y 371.029	216402.6	216402.6	101.18	%	12:48:31
3	Ag 328.068†	33813.5	33293.4	[1000]	µg/L	12:48:33
3	As 188.979†	570.9	567.5	[1000]	µg/L	12:48:53
3	B 249.677†	7664.5	7426.3	[1000]	µg/L	12:48:33
3	Ba 233.527†	43796.2	42843.9	[1000]	µg/L	12:48:33
3	Be 313.107†	649862.4	635889.7	[1000]	µg/L	12:48:31
3	Cd 226.502†	28315.4	27819.6	[1000]	µg/L	12:48:33
3	Co 228.616†	8961.2	8942.0	[1000]	µg/L	12:48:33
3	Cr 267.716†	25818.6	25167.8	[1000]	µg/L	12:48:33
3	Cu 324.752†	44349.4	43162.6	[1000]	µg/L	12:48:33
3	Mn 257.610†	103568.2	101270.3	[1000]	µg/L	12:48:33
3	Mo 202.031†	6673.3	6536.6	[1000]	µg/L	12:48:33
3	Ni 231.604†	7385.6	7163.6	[1000]	µg/L	12:48:33
3	P 214.914†	2131.0	1820.4	[5000]	µg/L	12:48:53
3	Pb 220.353†	2143.6	1891.4	[1000]	µg/L	12:48:53
3	S 181.975 Axial†	412.2	337.4	[2000]	µg/L	12:48:53
3	Sb 206.836†	742.5	633.8	[1000]	µg/L	12:48:53
3	Se 196.026†	659.7	586.3	[1000]	µg/L	12:48:53
3	Si 251.611†	38790.4	37910.2	[5000]	µg/L	12:48:33
3	SiO2†	38084.2	37305.4	[10695]	µg/L	12:48:33
3	Sn 189.927†	1669.1	1636.9	[1000]	µg/L	12:48:53
3	Ti 334.940†	154535.1	150880.1	[1000]	µg/L	12:48:31
3	Tl 190.801†	231.1	201.5	[1000]	µg/L	12:48:53
3	U 367.007†	2296.0	2398.7	[1000]	µg/L	12:48:33
3	V 292.402†	35116.1	34311.1	[1000]	µg/L	12:48:33
3	Zn 213.857†	27408.2	26118.5	[1000]	µg/L	12:48:33

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc RADIAL	50362.9	177.33	0.35%	102.38	%
Sc 361.383	307061.5	1228.64	0.40%	101.85	%
Y 371.029	215459.3	1063.86	0.49%	100.74	%
Ag 328.068†	32957.9	293.88	0.89%	[1000]	µg/L
Al 396.153Radial†	30691.8	234.88	0.77%	[10000]	µg/L
As 188.979†	568.1	4.42	0.78%	[1000]	µg/L
B 249.677†	7340.6	95.59	1.30%	[1000]	µg/L
Ba 233.527†	42522.9	302.48	0.71%	[1000]	µg/L
Be 313.107†	636852.5	833.86	0.13%	[1000]	µg/L
Ca 317.933Radial†	58657.9	35.34	0.06%	[10000]	µg/L
Cd 226.502†	27522.5	257.67	0.94%	[1000]	µg/L
Co 228.616†	8824.7	106.35	1.21%	[1000]	µg/L
Cr 267.716†	24909.6	234.54	0.94%	[1000]	µg/L
Cu 324.752†	42679.2	426.83	1.00%	[1000]	µg/L
Fe 238.204 Radial†	52644.5	88.74	0.17%	[10000]	µg/L
K 766.490 Radial†	11856.7	140.04	1.18%	[10000]	µg/L
Mg 279.077 IEC†	5324.8	49.88	0.94%	[10000]	µg/L
Mn 257.610†	100191.0	972.06	0.97%	[1000]	µg/L

Mo 202.031†	6464.5	62.44	0.97%	[1000]	µg/L
Na 589.592 Radial†	62470.8	428.81	0.69%	[10000]	µg/L
Ni 231.604†	7114.1	50.99	0.72%	[1000]	µg/L
P 214.914†	1838.8	27.81	1.51%	[5000]	µg/L
Pb 220.353†	1893.2	14.41	0.76%	[1000]	µg/L
S 181.975 Axial†	339.1	5.58	1.65%	[2000]	µg/L
Sb 206.836†	637.4	3.11	0.49%	[1000]	µg/L
Se 196.026†	594.7	14.89	2.50%	[1000]	µg/L
Si 251.611†	37457.1	403.56	1.08%	[5000]	µg/L
SiO2†	36880.1	377.00	1.02%	[10695]	µg/L
Sn 189.927†	1639.2	18.45	1.13%	[1000]	µg/L
Sr 421.552†	343074.2	1997.03	0.58%	[1000]	µg/L
Ti 334.940†	150987.9	113.10	0.07%	[1000]	µg/L
Tl 190.801†	205.6	3.85	1.87%	[1000]	µg/L
U 367.007†	2379.5	20.43	0.86%	[1000]	µg/L
V 292.402†	33949.3	326.14	0.96%	[1000]	µg/L
Zn 213.857†	25804.5	289.60	1.12%	[1000]	µg/L

Batch ID:
Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S10 **Date Collected: 12/19/2022 12:49:48**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample): 49

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	52330.9	52330.9	106.39	%	12:50:25
1	Al 396.153Radial†	161905.7	152204.8	[50000]	µg/L	12:50:25
1	Ca 317.933Radial†	327458.0	307654.2	[50000]	µg/L	12:50:25
1	Fe 238.204 Radial†	108433.2	101822.6	[20000]	µg/L	12:50:25
1	Mg 279.077 IEC†	26984.8	25355.0	[50000]	µg/L	12:50:25
1	Na 589.592 Radial†	132975.2	124070.9	[20000]	µg/L	12:50:23
1	Sc 361.383	307570.3	307570.3	102.02	%	12:50:38
1	Y 371.029	215849.1	215849.1	100.93	%	12:50:38
2	Sc RADIAL	51308.2	51308.2	104.31	%	12:50:30
2	Al 396.153Radial†	158321.7	151802.1	[50000]	µg/L	12:50:30
2	Ca 317.933Radial†	319041.4	305720.3	[50000]	µg/L	12:50:30
2	Fe 238.204 Radial†	105640.5	101176.9	[20000]	µg/L	12:50:30
2	Mg 279.077 IEC†	26331.3	25234.0	[50000]	µg/L	12:50:30
2	Na 589.592 Radial†	133221.3	126798.2	[20000]	µg/L	12:50:28
2	Sc 361.383	300828.1	300828.1	99.785	%	12:50:40
2	Y 371.029	210970.2	210970.2	98.645	%	12:50:40
3	Sc RADIAL	51460.6	51460.6	104.62	%	12:50:34
3	Al 396.153Radial†	160090.1	153042.9	[50000]	µg/L	12:50:34
3	Ca 317.933Radial†	322040.6	307681.2	[50000]	µg/L	12:50:34
3	Fe 238.204 Radial†	106616.2	101809.5	[20000]	µg/L	12:50:34
3	Mg 279.077 IEC†	26638.5	25453.0	[50000]	µg/L	12:50:34
3	Na 589.592 Radial†	131532.6	124805.8	[20000]	µg/L	12:50:32
3	Sc 361.383	296598.2	296598.2	98.382	%	12:50:42
3	Y 371.029	207888.2	207888.2	97.204	%	12:50:42

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc RADIAL	51699.9	551.73	1.07%	105.10	%
Sc 361.383	301665.5	5533.76	1.83%	100.06	%
Y 371.029	211569.2	4014.13	1.90%	98.925	%
Al 396.153Radial†	152349.9	633.01	0.42%	[50000]	µg/L
Ca 317.933Radial†	307018.5	1124.44	0.37%	[50000]	µg/L
Fe 238.204 Radial†	101603.0	369.10	0.36%	[20000]	µg/L
Mg 279.077 IEC†	25347.3	109.67	0.43%	[50000]	µg/L
Na 589.592 Radial†	125225.0	1411.15	1.13%	[20000]	µg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	32.97	0.00000	0.999998	
Al 396.153Radial	3	Lin Thru 0	0.0	3.048	0.00000	0.999998	
As 188.979	3	Lin Thru 0	0.0	0.5708	0.00000	0.999954	
B 249.677	3	Lin Thru 0	0.0	7.412	0.00000	0.999822	
Ba 233.527	3	Lin Thru 0	0.0	42.49	0.00000	0.999997	
Be 313.107	3	Lin Thru 0	0.0	636.9	0.00000	1.000000	
Ca 317.933Radial	3	Lin Thru 0	0.0	6.128	0.00000	0.999957	
Cd 226.502	3	Lin Thru 0	0.0	27.58	0.00000	0.999988	
Co 228.616	3	Lin Thru 0	0.0	8.885	0.00000	0.999911	
Cr 267.716	3	Lin Thru 0	0.0	24.92	0.00000	0.999999	
Cu 324.752	3	Lin Thru 0	0.0	42.76	0.00000	0.999991	
Fe 238.204 Radia	2	Lin Thru 0	0.0	5.117	0.00000	0.999896	
K 766.490 Radial	3	Lin Thru 0	0.0	1.193	0.00000	0.999910	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.5082	0.00000	0.999943	
Mn 257.610	3	Lin Thru 0	0.0	100.2	0.00000	0.999999	

Mo 202.031	3	Lin Thru 0	0.0	6.487	0.00000	0.999977
Na 589.592 Radia	2	Lin Thru 0	0.0	6.258	0.00000	1.000000
Ni 231.604	3	Lin Thru 0	0.0	7.163	0.00000	0.999910
P 214.914	3	Lin Thru 0	0.0	0.3700	0.00000	0.999910
Pb 220.353	3	Lin Thru 0	0.0	1.912	0.00000	0.999793
S 181.975 Axial	3	Lin Thru 0	0.0	0.1710	0.00000	0.999866
Sb 206.836	3	Lin Thru 0	0.0	0.6415	0.00000	0.999914
Se 196.026	3	Lin Thru 0	0.0	0.5973	0.00000	0.999956
Si 251.611	3	Lin Thru 0	0.0	7.584	0.00000	0.999709
SiO2	3	Lin Thru 0	0.0	3.491	0.00000	0.999713
Sn 189.927	3	Lin Thru 0	0.0	1.639	0.00000	0.999999
Sr 421.552	3	Lin Thru 0	0.0	343.9	0.00000	0.999987
Ti 334.940	3	Lin Thru 0	0.0	150.5	0.00000	0.999981
Tl 190.801	3	Lin Thru 0	0.0	0.2067	0.00000	0.999951
U 367.007	3	Lin Thru 0	0.0	2.369	0.00000	0.999949
V 292.402	3	Lin Thru 0	0.0	33.94	0.00000	1.000000
Zn 213.857	3	Lin Thru 0	0.0	25.90	0.00000	0.999963

Batch ID:
Sequence No.: 6 **Autosampler Location: 9**
Sample ID: ICV **Date Collected: 12/19/2022 12:51:37**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample): 49

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	48004.0	48004.0	97.589	%	97.589	%	12:52:16
1	Al 396.153Radial†	15127.4	15518.2	5067.6	µg/L	5067.6	ppb	12:52:16
1	Ca 317.933Radial†	28960.3	29526.8	4818.6	µg/L	4818.6	ppb	12:52:16
1	Fe 238.204 Radial†	25613.4	26144.1	5122.8	µg/L	5122.8	ppb	12:52:16
1	K 766.490 Radial†	3279.9	3212.8	2692.9	µg/L	2692.9	ppb	12:52:14
1	Mg 279.077 IEC†	2562.6	2615.8	5149.1	µg/L	5149.1	ppb	12:52:16
1	Na 589.592 Radial†	16872.1	16366.1	2615.1	µg/L	2615.1	ppb	12:52:14
1	Sr 421.552†	173781.0	178002.0	517.46	µg/L	517.46	ppb	12:52:14
1	Sc 361.383	303217.6	303217.6	100.58	%	100.58	%	12:52:28
1	Y 371.029	215085.7	215085.7	100.57	%	100.57	%	12:52:28
1	Ag 328.068†	8177.3	8343.1	253.17	µg/L	253.17	ppb	12:52:28
1	As 188.979†	264.4	271.9	481.25	µg/L	481.25	ppb	12:52:48
1	B 249.677†	3702.3	3608.9	510.64	µg/L	510.64	ppb	12:52:28
1	Ba 233.527†	21364.7	21238.9	500.44	µg/L	500.44	ppb	12:52:28
1	Be 313.107†	160540.7	159731.6	252.52	µg/L	252.52	ppb	12:52:28
1	Cd 226.502†	13734.0	13773.0	499.10	µg/L	499.10	ppb	12:52:28
1	Co 228.616†	4310.4	4460.7	501.33	µg/L	501.33	ppb	12:52:48
1	Cr 267.716†	12538.6	12375.3	495.72	µg/L	495.72	ppb	12:52:28
1	Cu 324.752†	22012.2	21660.2	506.91	µg/L	506.91	ppb	12:52:28
1	Mn 257.610†	50613.7	50269.8	501.63	µg/L	501.63	ppb	12:52:28
1	Mo 202.031†	3274.8	3263.8	503.34	µg/L	503.34	ppb	12:52:48
1	Ni 231.604†	3649.0	3566.2	497.51	µg/L	497.51	ppb	12:52:48
1	P 214.914†	1190.8	919.6	2454.2	µg/L	2454.2	ppb	12:52:48
1	Pb 220.353†	1185.0	972.4	509.57	µg/L	509.57	ppb	12:52:48
1	S 181.975 Axial†	468.2	399.6	2334.9	µg/L	2334.9	ppb	12:52:48
1	Sb 206.836†	432.8	337.7	521.93	µg/L	521.93	ppb	12:52:48
1	Se 196.026†	1584.4	1516.2	2539.7	µg/L	2539.7	ppb	12:52:48
1	Si 251.611†	37014.1	36762.0	4839.2	µg/L	4839.2	ppb	12:52:28
1	SiO2†	36308.8	36146.8	10338	µg/L	10338	ppb	12:52:28
1	Sn 189.927†	813.9	813.2	498.79	µg/L	498.79	ppb	12:52:48
1	Ti 334.940†	75840.3	75099.1	498.61	µg/L	498.61	ppb	12:52:28
1	Tl 190.801†	118.7	93.4	474.14	µg/L	474.14	ppb	12:52:48
1	U 367.007†	1100.3	1246.5	506.50	µg/L	506.50	ppb	12:52:28
1	V 292.402†	17157.7	17015.3	509.85	µg/L	509.85	ppb	12:52:28
1	Zn 213.857†	13688.3	12914.0	493.74	µg/L	493.74	ppb	12:52:28
2	Sc RADIAL	48814.3	48814.3	99.237	%	99.237	%	12:52:20
2	Al 396.153Radial†	15172.0	15305.8	4997.5	µg/L	4997.5	ppb	12:52:20
2	Ca 317.933Radial†	29280.5	29356.9	4790.8	µg/L	4790.8	ppb	12:52:20
2	Fe 238.204 Radial†	26021.8	26119.9	5118.2	µg/L	5118.2	ppb	12:52:20
2	K 766.490 Radial†	3079.5	2955.1	2477.0	µg/L	2477.0	ppb	12:52:18
2	Mg 279.077 IEC†	2568.4	2578.1	5074.8	µg/L	5074.8	ppb	12:52:20
2	Na 589.592 Radial†	16705.3	15911.1	2542.4	µg/L	2542.4	ppb	12:52:18
2	Sr 421.552†	171448.0	172695.0	502.03	µg/L	502.03	ppb	12:52:18
2	Sc 361.383	296616.9	296616.9	98.389	%	98.389	%	12:52:50
2	Y 371.029	209699.5	209699.5	98.050	%	98.050	%	12:52:50
2	Ag 328.068†	7887.0	8229.0	249.70	µg/L	249.70	ppb	12:52:50
2	As 188.979†	268.4	281.7	498.55	µg/L	498.55	ppb	12:53:10
2	B 249.677†	3738.0	3727.1	526.57	µg/L	526.57	ppb	12:52:50
2	Ba 233.527†	20795.9	21133.5	497.95	µg/L	497.95	ppb	12:52:50
2	Be 313.107†	156343.2	159017.4	251.40	µg/L	251.40	ppb	12:52:50
2	Cd 226.502†	13407.0	13744.5	498.07	µg/L	498.07	ppb	12:52:50
2	Co 228.616†	4266.3	4511.2	507.03	µg/L	507.03	ppb	12:53:10
2	Cr 267.716†	12243.9	12353.3	494.82	µg/L	494.82	ppb	12:52:50
2	Cu 324.752†	21446.5	21572.2	504.86	µg/L	504.86	ppb	12:52:50
2	Mn 257.610†	49329.0	50083.9	499.77	µg/L	499.77	ppb	12:52:50
2	Mo 202.031†	3257.6	3318.8	511.82	µg/L	511.82	ppb	12:53:10
2	Ni 231.604†	3603.9	3601.1	502.37	µg/L	502.37	ppb	12:53:10

2	P 214.914†	1169.2	924.0	2466.2 µg/L	2466.2 ppb	12:53:10
2	Pb 220.353†	1184.9	998.5	523.26 µg/L	523.26 ppb	12:53:10
2	S 181.975 Axial†	477.1	419.0	2448.1 µg/L	2448.1 ppb	12:53:10
2	Sb 206.836†	428.5	343.0	530.20 µg/L	530.20 ppb	12:53:10
2	Se 196.026†	1561.0	1527.4	2558.5 µg/L	2558.5 ppb	12:53:10
2	Si 251.611†	36144.3	36696.8	4830.5 µg/L	4830.5 ppb	12:52:50
2	SiO2†	35435.5	36062.6	10313 µg/L	10313 ppb	12:52:50
2	Sn 189.927†	810.2	827.4	507.47 µg/L	507.47 ppb	12:53:10
2	Ti 334.940†	73981.9	74888.2	497.20 µg/L	497.20 ppb	12:52:50
2	Tl 190.801†	120.1	97.5	493.77 µg/L	493.77 ppb	12:53:10
2	U 367.007†	1112.5	1283.2	522.03 µg/L	522.03 ppb	12:52:50
2	V 292.402†	16665.6	16894.8	506.42 µg/L	506.42 ppb	12:52:50
2	Zn 213.857†	13504.8	13030.4	498.21 µg/L	498.21 ppb	12:52:50
3	Sc RADIAL	49960.7	49960.7	101.57 %	101.57 %	12:52:24
3	Al 396.153Radial†	15697.0	15471.9	5052.3 µg/L	5052.3 ppb	12:52:24
3	Ca 317.933Radial†	30204.8	29589.8	4828.8 µg/L	4828.8 ppb	12:52:24
3	Fe 238.204 Radial†	26753.3	26238.4	5141.2 µg/L	5141.2 ppb	12:52:24
3	K 766.490 Radial†	3153.0	2956.3	2478.0 µg/L	2478.0 ppb	12:52:22
3	Mg 279.077 IEC†	2662.6	2611.5	5140.5 µg/L	5140.5 ppb	12:52:24
3	Na 589.592 Radial†	17062.8	15876.8	2536.9 µg/L	2536.9 ppb	12:52:22
3	Sr 421.552†	175880.9	173095.1	503.19 µg/L	503.19 ppb	12:52:22
3	Sc 361.383	300898.0	300898.0	99.809 %	99.809 %	12:53:13
3	Y 371.029	213107.2	213107.2	99.644 %	99.644 %	12:53:13
3	Ag 328.068†	8181.2	8409.7	255.19 µg/L	255.19 ppb	12:53:13
3	As 188.979†	265.9	275.4	487.40 µg/L	487.40 ppb	12:53:33
3	B 249.677†	3808.5	3743.7	528.92 µg/L	528.92 ppb	12:53:13
3	Ba 233.527†	21279.7	21317.5	502.28 µg/L	502.28 ppb	12:53:13
3	Be 313.107†	159143.9	159562.6	252.25 µg/L	252.25 ppb	12:53:13
3	Cd 226.502†	13635.3	13779.5	499.33 µg/L	499.33 ppb	12:53:13
3	Co 228.616†	4270.1	4453.4	500.51 µg/L	500.51 ppb	12:53:33
3	Cr 267.716†	12493.1	12425.9	497.75 µg/L	497.75 ppb	12:53:13
3	Cu 324.752†	21724.3	21540.5	504.12 µg/L	504.12 ppb	12:53:13
3	Mn 257.610†	50178.3	50221.5	501.14 µg/L	501.14 ppb	12:53:13
3	Mo 202.031†	3267.9	3282.1	506.15 µg/L	506.15 ppb	12:53:33
3	Ni 231.604†	3622.0	3567.0	497.62 µg/L	497.62 ppb	12:53:33
3	P 214.914†	1193.2	931.1	2485.4 µg/L	2485.4 ppb	12:53:33
3	Pb 220.353†	1174.3	970.7	508.72 µg/L	508.72 ppb	12:53:33
3	S 181.975 Axial†	471.4	406.4	2374.2 µg/L	2374.2 ppb	12:53:33
3	Sb 206.836†	440.4	348.7	538.98 µg/L	538.98 ppb	12:53:33
3	Se 196.026†	1579.4	1523.3	2551.7 µg/L	2551.7 ppb	12:53:33
3	Si 251.611†	36597.0	36627.8	4821.4 µg/L	4821.4 ppb	12:53:13
3	SiO2†	35897.9	36013.4	10299 µg/L	10299 ppb	12:53:13
3	Sn 189.927†	820.4	825.9	506.57 µg/L	506.57 ppb	12:53:33
3	Ti 334.940†	74931.0	74769.2	496.42 µg/L	496.42 ppb	12:53:13
3	Tl 190.801†	127.9	103.5	522.98 µg/L	522.98 ppb	12:53:33
3	U 367.007†	1098.3	1252.9	509.14 µg/L	509.14 ppb	12:53:13
3	V 292.402†	16957.3	16946.1	507.86 µg/L	507.86 ppb	12:53:13
3	Zn 213.857†	13653.6	12984.2	496.45 µg/L	496.45 ppb	12:53:13

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc RADIAL	48926.3	99.464	%	1.9987	99.464	%	1.9987	2.01%
Sc 361.383	300244.2	99.592	%	1.1107	99.592	%	1.1107	1.12%
Y 371.029	212630.8	99.421	%	1.2739	99.421	%	1.2739	1.28%
Ag 328.068†	8327.3	252.69	µg/L	2.778	252.69	ppb	2.778	1.10%
QC value within limits for Ag 328.068 Recovery = 101.07%								
Al 396.153Radial†	15432.0	5039.1	µg/L	36.84	5039.1	ppb	36.84	0.73%
QC value within limits for Al 396.153Radial Recovery = 100.78%								
As 188.979†	276.3	489.07	µg/L	8.769	489.07	ppb	8.769	1.79%
QC value within limits for As 188.979 Recovery = 97.81%								
B 249.677†	3693.2	522.04	µg/L	9.944	522.04	ppb	9.944	1.90%
QC value within limits for B 249.677 Recovery = 104.41%								
Ba 233.527†	21230.0	500.22	µg/L	2.174	500.22	ppb	2.174	0.43%
QC value within limits for Ba 233.527 Recovery = 100.04%								
Be 313.107†	159437.2	252.06	µg/L	0.585	252.06	ppb	0.585	0.23%
QC value within limits for Be 313.107 Recovery = 100.82%								
Ca 317.933Radial†	29491.2	4812.7	µg/L	19.66	4812.7	ppb	19.66	0.41%
QC value within limits for Ca 317.933Radial Recovery = 96.25%								
Cd 226.502†	13765.7	498.83	µg/L	0.672	498.83	ppb	0.672	0.13%

QC value within limits for Cd 226.502 Recovery = 99.77%

Co 228.616†	4475.1	502.96 µg/L	3.548	502.96 ppb	3.548	0.71%

QC value within limits for Co 228.616 Recovery = 100.59%

Cr 267.716†	12384.8	496.10 µg/L	1.498	496.10 ppb	1.498	0.30%

QC value within limits for Cr 267.716 Recovery = 99.22%

Cu 324.752†	21591.0	505.30 µg/L	1.450	505.30 ppb	1.450	0.29%

QC value within limits for Cu 324.752 Recovery = 101.06%

Fe 238.204 Radial†	26167.5	5127.4 µg/L	12.17	5127.4 ppb	12.17	0.24%

QC value within limits for Fe 238.204 Radial Recovery = 102.55%

K 766.490 Radial†	3041.4	2549.3 µg/L	124.38	2549.3 ppb	124.38	4.88%

QC value within limits for K 766.490 Radial Recovery = 101.97%

Mg 279.077 IEC†	2601.8	5121.5 µg/L	40.63	5121.5 ppb	40.63	0.79%

QC value within limits for Mg 279.077 IEC Recovery = 102.43%

Mn 257.610†	50191.7	500.85 µg/L	0.962	500.85 ppb	0.962	0.19%

QC value within limits for Mn 257.610 Recovery = 100.17%

Mo 202.031†	3288.2	507.10 µg/L	4.320	507.10 ppb	4.320	0.85%

QC value within limits for Mo 202.031 Recovery = 101.42%

Na 589.592 Radial†	16051.3	2564.8 µg/L	43.65	2564.8 ppb	43.65	1.70%

QC value within limits for Na 589.592 Radial Recovery = 102.59%

Ni 231.604†	3578.1	499.17 µg/L	2.776	499.17 ppb	2.776	0.56%

QC value within limits for Ni 231.604 Recovery = 99.83%

P 214.914†	924.9	2468.6 µg/L	15.74	2468.6 ppb	15.74	0.64%

QC value within limits for P 214.914 Recovery = 98.74%

Pb 220.353†	980.5	513.85 µg/L	8.160	513.85 ppb	8.160	1.59%

QC value within limits for Pb 220.353 Recovery = 102.77%

S 181.975 Axial†	408.3	2385.7 µg/L	57.45	2385.7 ppb	57.45	2.41%

QC value within limits for S 181.975 Axial Recovery = 95.43%

Sb 206.836†	343.1	530.37 µg/L	8.527	530.37 ppb	8.527	1.61%

QC value within limits for Sb 206.836 Recovery = 106.07%

Se 196.026†	1522.3	2550.0 µg/L	9.55	2550.0 ppb	9.55	0.37%

QC value within limits for Se 196.026 Recovery = 102.00%

Si 251.611†	36695.5	4830.4 µg/L	8.87	4830.4 ppb	8.87	0.18%

QC value within limits for Si 251.611 Recovery = 96.61%

SiO2†	36074.3	10317 µg/L	19.39	10317 ppb	19.39	0.19%

QC value within limits for SiO2 Recovery = 96.46%

Sn 189.927†	822.2	504.28 µg/L	4.777	504.28 ppb	4.777	0.95%

QC value within limits for Sn 189.927 Recovery = 100.86%

Sr 421.552†	174597.3	507.56 µg/L	8.592	507.56 ppb	8.592	1.69%

QC value within limits for Sr 421.552 Recovery = 101.51%

Ti 334.940†	74918.8	497.41 µg/L	1.111	497.41 ppb	1.111	0.22%

QC value within limits for Ti 334.940 Recovery = 99.48%

Tl 190.801†	98.1	496.97 µg/L	24.575	496.97 ppb	24.575	4.95%

QC value within limits for Tl 190.801 Recovery = 99.39%

U 367.007†	1260.9	512.56 µg/L	8.306	512.56 ppb	8.306	1.62%

QC value within limits for U 367.007 Recovery = 102.51%

V 292.402†	16952.0	508.04 µg/L	1.725	508.04 ppb	1.725	0.34%

QC value within limits for V 292.402 Recovery = 101.61%

Zn 213.857†	12976.2	496.13 µg/L	2.251	496.13 ppb	2.251	0.45%

QC value within limits for Zn 213.857 Recovery = 99.23%

All analyte(s) passed QC.

Batch ID:
Sequence No.: 7 **Autosampler Location: 10**
Sample ID: ICB **Date Collected: 12/19/2022 12:54:31**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample): 49

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	47056.3	47056.3	95.663	%	95.663	%	12:55:06
1	Al 396.153Radial†	72.2	92.5	30.454	µg/L	30.454	ppb	12:55:06
1	Ca 317.933Radial†	188.5	48.2	7.8655	µg/L	7.8655	ppb	12:55:27
1	Fe 238.204 Radial†	97.5	-0.1	-0.0685	µg/L	-0.0685	ppb	12:55:27
1	K 766.490 Radial†	82.3	-62.1	-52.029	µg/L	-52.029	ppb	12:55:06
1	Mg 279.077 IEC†	0.9	-9.1	-17.966	µg/L	-17.966	ppb	12:55:27
1	Na 589.592 Radial†	754.8	-133.7	-21.356	µg/L	-21.356	ppb	12:55:06
1	Sr 421.552†	93.2	25.4	0.0736	µg/L	0.0736	ppb	12:55:06
1	Sc 361.383	282131.7	282131.7	93.584	%	93.584	%	12:56:15
1	Y 371.029	200257.0	200257.0	93.635	%	93.635	%	12:56:15
1	Ag 328.068†	-261.8	-67.0	-2.0286	µg/L	-2.0286	ppb	12:56:15
1	As 188.979†	-6.4	2.1	3.7435	µg/L	3.7435	ppb	12:56:35
1	B 249.677†	87.1	20.9	2.8216	µg/L	2.8216	ppb	12:56:35
1	Ba 233.527†	-12.8	-16.7	-0.3915	µg/L	-0.3915	ppb	12:56:35
1	Be 313.107†	-68.4	40.5	0.0625	µg/L	0.0625	ppb	12:56:15
1	Cd 226.502†	-118.2	-8.3	-0.3028	µg/L	-0.3028	ppb	12:56:35
1	Co 228.616†	-178.0	-15.2	-1.7064	µg/L	-1.7064	ppb	12:56:35
1	Cr 267.716†	78.5	-7.3	-0.2888	µg/L	-0.2888	ppb	12:56:35
1	Cu 324.752†	320.1	116.5	2.7236	µg/L	2.7236	ppb	12:56:15
1	Mn 257.610†	68.2	20.0	0.1992	µg/L	0.1992	ppb	12:56:35
1	Mo 202.031†	-19.6	-13.1	-2.0199	µg/L	-2.0199	ppb	12:56:35
1	Ni 231.604†	51.3	-7.1	-0.9865	µg/L	-0.9865	ppb	12:56:35
1	P 214.914†	281.5	36.4	98.359	µg/L	98.359	ppb	12:56:35
1	Pb 220.353†	207.9	16.4	8.5610	µg/L	8.5610	ppb	12:56:35
1	S 181.975 Axial†	63.0	1.4	8.1327	µg/L	8.1327	ppb	12:56:35
1	Sb 206.836†	102.7	17.2	26.766	µg/L	26.766	ppb	12:56:35
1	Se 196.026†	62.1	7.2	12.078	µg/L	12.078	ppb	12:56:35
1	Si 251.611†	32.7	-4.5	-0.5619	µg/L	-0.5619	ppb	12:56:35
1	SiO2†	-47.2	-3.7	-1.0038	µg/L	-1.0038	ppb	12:56:35
1	Sn 189.927†	2.7	6.9	4.1855	µg/L	4.1855	ppb	12:56:35
1	Ti 334.940†	268.7	-18.3	-0.1202	µg/L	-0.1202	ppb	12:56:15
1	Tl 190.801†	19.4	-3.9	-18.779	µg/L	-18.779	ppb	12:56:35
1	U 367.007†	-148.7	-6.4	-2.6912	µg/L	-2.6912	ppb	12:56:15
1	V 292.402†	54.8	14.8	0.4071	µg/L	0.4071	ppb	12:56:15
1	Zn 213.857†	739.1	94.1	3.6336	µg/L	3.6336	ppb	12:56:35
2	Sc RADIAL	44872.5	44872.5	91.223	%	91.223	%	12:55:29
2	Al 396.153Radial†	-1.1	15.9	5.3369	µg/L	5.3369	ppb	12:55:29
2	Ca 317.933Radial†	161.2	27.8	4.5429	µg/L	4.5429	ppb	12:55:49
2	Fe 238.204 Radial†	107.5	15.8	3.0773	µg/L	3.0773	ppb	12:55:49
2	K 766.490 Radial†	163.1	30.8	25.769	µg/L	25.769	ppb	12:55:29
2	Mg 279.077 IEC†	16.4	7.9	15.559	µg/L	15.559	ppb	12:55:49
2	Na 589.592 Radial†	822.8	-20.8	-3.3190	µg/L	-3.3190	ppb	12:55:29
2	Sr 421.552†	22.9	-46.9	-0.1364	µg/L	-0.1364	ppb	12:55:29
2	Sc 361.383	276610.1	276610.1	91.752	%	91.752	%	12:56:37
2	Y 371.029	196363.8	196363.8	91.815	%	91.815	%	12:56:37
2	Ag 328.068†	-166.1	31.9	0.9636	µg/L	0.9636	ppb	12:56:37
2	As 188.979†	-9.4	-1.3	-2.3516	µg/L	-2.3516	ppb	12:56:57
2	B 249.677†	67.4	1.3	0.1904	µg/L	0.1904	ppb	12:56:57
2	Ba 233.527†	-6.8	-10.4	-0.2458	µg/L	-0.2458	ppb	12:56:57
2	Be 313.107†	-136.9	-35.5	-0.0546	µg/L	-0.0546	ppb	12:56:37
2	Cd 226.502†	-114.7	-7.1	-0.2574	µg/L	-0.2574	ppb	12:56:57
2	Co 228.616†	-163.7	-3.4	-0.3816	µg/L	-0.3816	ppb	12:56:57
2	Cr 267.716†	91.7	8.7	0.3473	µg/L	0.3473	ppb	12:56:57
2	Cu 324.752†	219.5	13.7	0.3211	µg/L	0.3211	ppb	12:56:37
2	Mn 257.610†	65.1	18.0	0.1796	µg/L	0.1796	ppb	12:56:57
2	Mo 202.031†	-24.1	-18.4	-2.8396	µg/L	-2.8396	ppb	12:56:57
2	Ni 231.604†	46.7	-11.0	-1.5317	µg/L	-1.5317	ppb	12:56:57

2	P 214.914†	266.9	26.5	71.613 µg/L	71.613 ppb	12:56:57
2	Pb 220.353†	218.1	31.9	16.690 µg/L	16.690 ppb	12:56:57
2	S 181.975 Axial†	59.0	-1.6	-9.1468 µg/L	-9.1468 ppb	12:56:57
2	Sb 206.836†	103.5	20.3	31.532 µg/L	31.532 ppb	12:56:57
2	Se 196.026†	58.9	5.1	8.4981 µg/L	8.4981 ppb	12:56:57
2	Si 251.611†	31.5	-5.1	-0.6305 µg/L	-0.6305 ppb	12:56:57
2	SiO2†	-53.7	-11.8	-3.3088 µg/L	-3.3088 ppb	12:56:57
2	Sn 189.927†	-12.7	-9.9	-6.0419 µg/L	-6.0419 ppb	12:56:57
2	Ti 334.940†	296.0	17.2	0.1129 µg/L	0.1129 ppb	12:56:37
2	Tl 190.801†	22.3	-0.3	-1.5826 µg/L	-1.5826 ppb	12:56:57
2	U 367.007†	-132.8	7.8	3.2634 µg/L	3.2634 ppb	12:56:37
2	V 292.402†	31.1	-9.9	-0.3207 µg/L	-0.3207 ppb	12:56:37
2	Zn 213.857†	733.8	104.2	4.0304 µg/L	4.0304 ppb	12:56:57
3	Sc RADIAL	45345.3	45345.3	92.184 %	92.184 %	12:55:51
3	Al 396.153Radial†	8.2	26.0	8.5727 µg/L	8.5727 ppb	12:55:51
3	Ca 317.933Radial†	189.7	56.9	9.2924 µg/L	9.2924 ppb	12:56:11
3	Fe 238.204 Radial†	96.4	2.5	0.4275 µg/L	0.4275 ppb	12:56:11
3	K 766.490 Radial†	-27.7	-178.1	-149.26 µg/L	-149.26 ppb	12:55:51
3	Mg 279.077 IEC†	9.6	0.3	0.6039 µg/L	0.6039 ppb	12:56:11
3	Na 589.592 Radial†	920.4	75.8	12.105 µg/L	12.105 ppb	12:55:51
3	Sr 421.552†	227.4	174.7	0.5077 µg/L	0.5077 ppb	12:55:51
3	Sc 361.383	274923.2	274923.2	91.193 %	91.193 %	12:56:59
3	Y 371.029	195158.5	195158.5	91.251 %	91.251 %	12:56:59
3	Ag 328.068†	-257.6	-69.7	-2.1404 µg/L	-2.1404 ppb	12:56:59
3	As 188.979†	-15.2	-7.8	-13.598 µg/L	-13.598 ppb	12:57:20
3	B 249.677†	78.5	14.0	1.8933 µg/L	1.8933 ppb	12:57:20
3	Ba 233.527†	4.4	1.8	0.0443 µg/L	0.0443 ppb	12:57:20
3	Be 313.107†	-57.1	51.0	0.0881 µg/L	0.0881 ppb	12:56:59
3	Cd 226.502†	-124.3	-18.3	-0.6648 µg/L	-0.6648 ppb	12:57:20
3	Co 228.616†	-178.7	-20.9	-2.3564 µg/L	-2.3564 ppb	12:57:20
3	Cr 267.716†	85.7	2.8	0.0804 µg/L	0.0804 ppb	12:57:20
3	Cu 324.752†	193.4	-13.4	-0.3153 µg/L	-0.3153 ppb	12:56:59
3	Mn 257.610†	72.5	26.5	0.2644 µg/L	0.2644 ppb	12:57:20
3	Mo 202.031†	-12.0	-5.3	-0.8195 µg/L	-0.8195 ppb	12:57:20
3	Ni 231.604†	37.2	-21.1	-2.9490 µg/L	-2.9490 ppb	12:57:20
3	P 214.914†	283.9	46.9	126.86 µg/L	126.86 ppb	12:57:20
3	Pb 220.353†	223.0	38.7	20.228 µg/L	20.228 ppb	12:57:20
3	S 181.975 Axial†	68.7	9.4	54.897 µg/L	54.897 ppb	12:57:20
3	Sb 206.836†	95.9	12.5	19.553 µg/L	19.553 ppb	12:57:20
3	Se 196.026†	69.4	16.9	28.373 µg/L	28.373 ppb	12:57:20
3	Si 251.611†	29.9	-6.7	-0.8664 µg/L	-0.8664 ppb	12:57:20
3	SiO2†	-59.5	-18.6	-5.3102 µg/L	-5.3102 ppb	12:57:20
3	Sn 189.927†	-0.9	3.0	1.8354 µg/L	1.8354 ppb	12:57:20
3	Ti 334.940†	228.4	-54.9	-0.3770 µg/L	-0.3770 ppb	12:56:59
3	Tl 190.801†	25.3	3.1	15.024 µg/L	15.024 ppb	12:57:20
3	U 367.007†	-63.5	82.9	34.999 µg/L	34.999 ppb	12:56:59
3	V 292.402†	64.8	27.3	0.8302 µg/L	0.8302 ppb	12:56:59
3	Zn 213.857†	736.0	111.5	4.3225 µg/L	4.3225 ppb	12:57:20

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc RADIAL	45758.0	93.023	%	2.3357	93.023	%	2.3357	2.51%
Sc 361.383	277888.3	92.176	%	1.2507	92.176	%	1.2507	1.36%
Y 371.029	197259.8	92.234	%	1.2460	92.234	%	1.2460	1.35%
Ag 328.068†	-34.9	-1.0685	µg/L	1.76068	-1.0685	ppb	1.76068	164.79%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	44.8	14.788	µg/L	13.6635	14.788	ppb	13.6635	92.40%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.3	-4.0686	µg/L	8.79724	-4.0686	ppb	8.79724	216.22%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	12.1	1.6351	µg/L	1.33447	1.6351	ppb	1.33447	81.61%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-8.4	-0.1976	µg/L	0.22185	-0.1976	ppb	0.22185	112.24%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	18.6	0.0320	µg/L	0.07608	0.0320	ppb	0.07608	237.70%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	44.3	7.2336	µg/L	2.43697	7.2336	ppb	2.43697	33.69%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-11.2	-0.4083	µg/L	0.22328	-0.4083	ppb	0.22328	54.68%

QC value within limits for Cd 226.502 Recovery = Not calculated
Co 228.616† -13.1 -1.4815 µg/L 1.00643 -1.4815 ppb 1.00643 67.94%
QC value within limits for Co 228.616 Recovery = Not calculated
Cr 267.716† 1.4 0.0463 µg/L 0.31942 0.0463 ppb 0.31942 690.33%
QC value within limits for Cr 267.716 Recovery = Not calculated
Cu 324.752† 38.9 0.9098 µg/L 1.60269 0.9098 ppb 1.60269 176.15%
QC value within limits for Cu 324.752 Recovery = Not calculated
Fe 238.204 Radial† 6.1 1.1454 µg/L 1.69134 1.1454 ppb 1.69134 147.66%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated
K 766.490 Radial† -69.8 -58.505 µg/L 87.6922 -58.505 ppb 87.6922 149.89%
QC value within limits for K 766.490 Radial Recovery = Not calculated
Mg 279.077 IEC† -0.3 -0.6010 µg/L 16.79532 -0.6010 ppb 16.79532 >999.9%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated
Mn 257.610† 21.5 0.2144 µg/L 0.04440 0.2144 ppb 0.04440 20.71%
QC value within limits for Mn 257.610 Recovery = Not calculated
Mo 202.031† -12.3 -1.8930 µg/L 1.01599 -1.8930 ppb 1.01599 53.67%
QC value within limits for Mo 202.031 Recovery = Not calculated
Na 589.592 Radial† -26.2 -4.1901 µg/L 16.74728 -4.1901 ppb 16.74728 399.69%
QC value within limits for Na 589.592 Radial Recovery = Not calculated
Ni 231.604† -13.0 -1.8224 µg/L 1.01307 -1.8224 ppb 1.01307 55.59%
QC value within limits for Ni 231.604 Recovery = Not calculated
P 214.914† 36.6 98.945 µg/L 27.6300 98.945 ppb 27.6300 27.92%
QC value within limits for P 214.914 Recovery = Not calculated
Pb 220.353† 29.0 15.160 µg/L 5.9820 15.160 ppb 5.9820 39.46%
QC value within limits for Pb 220.353 Recovery = Not calculated
S 181.975 Axial† 3.1 17.961 µg/L 33.1338 17.961 ppb 33.1338 184.48%
QC value within limits for S 181.975 Axial Recovery = Not calculated
Sb 206.836† 16.7 25.950 µg/L 6.0312 25.950 ppb 6.0312 23.24%
QC value greater than the upper limit for Sb 206.836 Recovery = Not calculated
Se 196.026† 9.7 16.317 µg/L 10.5939 16.317 ppb 10.5939 64.93%
QC value within limits for Se 196.026 Recovery = Not calculated
Si 251.611† -5.4 -0.6862 µg/L 0.15972 -0.6862 ppb 0.15972 23.27%
QC value within limits for Si 251.611 Recovery = Not calculated
SiO2† -11.4 -3.2076 µg/L 2.15498 -3.2076 ppb 2.15498 67.18%
QC value within limits for SiO2 Recovery = Not calculated
Sn 189.927† -0.0 -0.0070 µg/L 5.35686 -0.0070 ppb 5.35686 >999.9%
QC value within limits for Sn 189.927 Recovery = Not calculated
Sr 421.552† 51.0 0.1483 µg/L 0.32847 0.1483 ppb 0.32847 221.50%
QC value within limits for Sr 421.552 Recovery = Not calculated
Ti 334.940† -18.7 -0.1281 µg/L 0.24505 -0.1281 ppb 0.24505 191.27%
QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† -0.4 -1.7794 µg/L 16.90222 -1.7794 ppb 16.90222 949.86%
QC value within limits for Tl 190.801 Recovery = Not calculated
U 367.007† 28.1 11.857 µg/L 20.2616 11.857 ppb 20.2616 170.88%
QC value within limits for U 367.007 Recovery = Not calculated
V 292.402† 10.7 0.3056 µg/L 0.58215 0.3056 ppb 0.58215 190.53%
QC value within limits for V 292.402 Recovery = Not calculated
Zn 213.857† 103.3 3.9955 µg/L 0.34579 3.9955 ppb 0.34579 8.65%
QC value within limits for Zn 213.857 Recovery = Not calculated
QC Failed. Continue with analysis.

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Batch ID:
Sequence No.: 8 **Autosampler Location: 101**
Sample ID: PQL **Date Collected: 12/19/2022 12:58:19**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample): 49

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	70647.2	70647.2	143.62	%	143.62	%	12:58:54
1	Al 396.153Radial†	854.1	611.8	200.33	µg/L	200.33	ppb	12:58:54
1	Ca 317.933Radial†	1887.2	1165.2	190.15	µg/L	190.15	ppb	12:59:14
1	Fe 238.204 Radial†	861.2	497.6	97.385	µg/L	97.385	ppb	12:59:14
1	K 766.490 Radial†	740.4	367.4	307.89	µg/L	307.89	ppb	12:58:54
1	Mg 279.077 IEC†	219.6	142.8	281.03	µg/L	281.03	ppb	12:59:14
1	Na 589.592 Radial†	3518.8	1527.3	244.04	µg/L	244.04	ppb	12:58:54
1	Sr 421.552†	2399.1	1598.4	4.6440	µg/L	4.6440	ppb	12:58:54
1	Sc 361.383	285326.8	285326.8	94.644	%	94.644	%	13:00:02
1	Y 371.029	202700.6	202700.6	94.778	%	94.778	%	13:00:02
1	Ag 328.068†	-34.6	176.3	5.3036	µg/L	5.3036	ppb	13:00:02
1	As 188.979†	9.4	18.9	33.223	µg/L	33.223	ppb	13:00:22
1	B 249.677†	411.4	362.5	49.372	µg/L	49.372	ppb	13:00:22
1	Ba 233.527†	189.3	197.0	4.6366	µg/L	4.6366	ppb	13:00:22
1	Be 313.107†	2807.8	3080.3	4.8688	µg/L	4.8688	ppb	13:00:02
1	Cd 226.502†	4.6	122.8	4.4420	µg/L	4.4420	ppb	13:00:22
1	Co 228.616†	-121.0	47.2	5.3020	µg/L	5.3020	ppb	13:00:22
1	Cr 267.716†	338.7	266.7	10.636	µg/L	10.636	ppb	13:00:22
1	Cu 324.752†	1065.1	899.8	21.048	µg/L	21.048	ppb	13:00:02
1	Mn 257.610†	1019.7	1024.4	10.223	µg/L	10.223	ppb	13:00:22
1	Mo 202.031†	41.8	52.0	8.0196	µg/L	8.0196	ppb	13:00:22
1	Ni 231.604†	73.9	16.2	2.2426	µg/L	2.2426	ppb	13:00:22
1	P 214.914†	339.5	94.3	253.98	µg/L	253.98	ppb	13:00:22
1	Pb 220.353†	245.6	53.7	28.091	µg/L	28.091	ppb	13:00:22
1	S 181.975 Axial†	79.7	18.3	107.21	µg/L	107.21	ppb	13:00:22
1	Sb 206.836†	112.4	26.2	40.704	µg/L	40.704	ppb	13:00:22
1	Se 196.026†	81.9	27.4	45.898	µg/L	45.898	ppb	13:00:22
1	Si 251.611†	696.8	696.9	91.726	µg/L	91.726	ppb	13:00:22
1	SiO2†	596.7	677.1	193.63	µg/L	193.63	ppb	13:00:22
1	Sn 189.927†	3.4	7.6	4.6467	µg/L	4.6467	ppb	13:00:22
1	Ti 334.940†	956.5	705.3	4.6597	µg/L	4.6597	ppb	13:00:02
1	Tl 190.801†	31.4	8.6	41.755	µg/L	41.755	ppb	13:00:22
1	U 367.007†	4.9	157.7	66.199	µg/L	66.199	ppb	13:00:02
1	V 292.402†	213.1	181.4	5.5504	µg/L	5.5504	ppb	13:00:02
1	Zn 213.857†	1187.4	559.0	21.506	µg/L	21.506	ppb	13:00:22
2	Sc RADIAL	70644.0	70644.0	143.62	%	143.62	%	12:59:16
2	Al 396.153Radial†	926.1	661.9	216.79	µg/L	216.79	ppb	12:59:16
2	Ca 317.933Radial†	1394.1	821.9	134.12	µg/L	134.12	ppb	12:59:36
2	Fe 238.204 Radial†	659.0	356.8	69.863	µg/L	69.863	ppb	12:59:36
2	K 766.490 Radial†	695.6	336.2	281.76	µg/L	281.76	ppb	12:59:16
2	Mg 279.077 IEC†	183.9	118.0	232.18	µg/L	232.18	ppb	12:59:36
2	Na 589.592 Radial†	3433.4	1467.9	234.56	µg/L	234.56	ppb	12:59:16
2	Sr 421.552†	2486.5	1659.4	4.8223	µg/L	4.8223	ppb	12:59:16
2	Sc 361.383	295011.6	295011.6	97.856	%	97.856	%	13:00:24
2	Y 371.029	209546.4	209546.4	97.979	%	97.979	%	13:00:24
2	Ag 328.068†	-15.3	197.2	5.9461	µg/L	5.9461	ppb	13:00:24
2	As 188.979†	14.4	23.6	41.476	µg/L	41.476	ppb	13:00:44
2	B 249.677†	408.2	345.0	46.882	µg/L	46.882	ppb	13:00:44
2	Ba 233.527†	202.2	203.6	4.7946	µg/L	4.7946	ppb	13:00:44
2	Be 313.107†	2992.2	3171.3	5.0091	µg/L	5.0091	ppb	13:00:24
2	Cd 226.502†	18.4	136.7	4.9515	µg/L	4.9515	ppb	13:00:44
2	Co 228.616†	-127.6	44.7	5.0172	µg/L	5.0172	ppb	13:00:44
2	Cr 267.716†	342.0	258.3	10.311	µg/L	10.311	ppb	13:00:44
2	Cu 324.752†	1078.0	876.1	20.491	µg/L	20.491	ppb	13:00:24
2	Mn 257.610†	1025.5	995.0	9.9295	µg/L	9.9295	ppb	13:00:44
2	Mo 202.031†	41.2	50.0	7.7160	µg/L	7.7160	ppb	13:00:44
2	Ni 231.604†	75.4	15.2	2.1070	µg/L	2.1070	ppb	13:00:44

2	P 214.914†	349.7	93.0	250.40 µg/L	250.40 ppb	13:00:44
2	Pb 220.353†	245.3	44.9	23.510 µg/L	23.510 ppb	13:00:44
2	S 181.975 Axial†	80.5	16.3	95.376 µg/L	95.376 ppb	13:00:44
2	Sb 206.836†	114.8	24.7	38.445 µg/L	38.445 ppb	13:00:44
2	Se 196.026†	74.8	17.3	29.052 µg/L	29.052 ppb	13:00:44
2	Si 251.611†	692.9	668.7	88.025 µg/L	88.025 ppb	13:00:44
2	SiO2†	594.8	654.5	187.16 µg/L	187.16 ppb	13:00:44
2	Sn 189.927†	4.8	8.8	5.4228 µg/L	5.4228 ppb	13:00:44
2	Ti 334.940†	1022.7	739.7	4.8928 µg/L	4.8928 ppb	13:00:24
2	Tl 190.801†	28.2	4.2	20.390 µg/L	20.390 ppb	13:00:44
2	U 367.007†	-24.2	127.8	53.687 µg/L	53.687 ppb	13:00:24
2	V 292.402†	226.0	187.2	5.7022 µg/L	5.7022 ppb	13:00:24
2	Zn 213.857†	1175.6	505.8	19.459 µg/L	19.459 ppb	13:00:44
3	Sc RADIAL	58250.8	58250.8	118.42 %	118.42 %	12:59:38
3	Al 396.153Radial†	546.0	478.2	156.51 µg/L	156.51 ppb	12:59:38
3	Ca 317.933Radial†	1428.6	1057.5	172.58 µg/L	172.58 ppb	12:59:58
3	Fe 238.204 Radial†	686.3	477.5	93.446 µg/L	93.446 ppb	12:59:58
3	K 766.490 Radial†	626.1	380.6	318.97 µg/L	318.97 ppb	12:59:38
3	Mg 279.077 IEC†	188.6	149.2	293.65 µg/L	293.65 ppb	12:59:58
3	Na 589.592 Radial†	3114.1	1707.0	272.75 µg/L	272.75 ppb	12:59:38
3	Sr 421.552†	2078.5	1683.1	4.8907 µg/L	4.8907 ppb	12:59:38
3	Sc 361.383	286916.0	286916.0	95.171 %	95.171 %	13:00:47
3	Y 371.029	204106.7	204106.7	95.435 %	95.435 %	13:00:47
3	Ag 328.068†	-30.3	181.0	5.4760 µg/L	5.4760 ppb	13:00:47
3	As 188.979†	12.1	21.7	38.073 µg/L	38.073 ppb	13:01:07
3	B 249.677†	409.3	357.9	48.741 µg/L	48.741 ppb	13:01:07
3	Ba 233.527†	194.0	200.8	4.7254 µg/L	4.7254 ppb	13:01:07
3	Be 313.107†	2761.6	3015.3	4.7573 µg/L	4.7573 ppb	13:00:47
3	Cd 226.502†	17.6	136.4	4.9364 µg/L	4.9364 ppb	13:01:07
3	Co 228.616†	-127.3	41.3	4.6343 µg/L	4.6343 ppb	13:01:07
3	Cr 267.716†	321.6	246.7	9.8682 µg/L	9.8682 ppb	13:01:07
3	Cu 324.752†	945.4	767.9	17.961 µg/L	17.961 ppb	13:00:47
3	Mn 257.610†	1001.3	999.2	9.9707 µg/L	9.9707 ppb	13:01:07
3	Mo 202.031†	39.8	49.7	7.6662 µg/L	7.6662 ppb	13:01:07
3	Ni 231.604†	72.8	14.6	2.0286 µg/L	2.0286 ppb	13:01:07
3	P 214.914†	336.1	88.8	239.10 µg/L	239.10 ppb	13:01:07
3	Pb 220.353†	258.3	65.5	34.302 µg/L	34.302 ppb	13:01:07
3	S 181.975 Axial†	80.8	19.0	111.10 µg/L	111.10 ppb	13:01:07
3	Sb 206.836†	112.0	25.1	38.964 µg/L	38.964 ppb	13:01:07
3	Se 196.026†	75.0	19.7	33.015 µg/L	33.015 ppb	13:01:07
3	Si 251.611†	686.9	682.3	89.810 µg/L	89.810 ppb	13:01:07
3	SiO2†	587.0	663.4	189.72 µg/L	189.72 ppb	13:01:07
3	Sn 189.927†	7.5	11.8	7.2215 µg/L	7.2215 ppb	13:01:07
3	Ti 334.940†	1009.6	755.4	5.0069 µg/L	5.0069 ppb	13:00:47
3	Tl 190.801†	27.6	4.3	21.281 µg/L	21.281 ppb	13:01:07
3	U 367.007†	-84.3	64.0	26.637 µg/L	26.637 ppb	13:00:47
3	V 292.402†	208.9	175.7	5.3367 µg/L	5.3367 ppb	13:00:47
3	Zn 213.857†	1163.3	526.7	20.269 µg/L	20.269 ppb	13:01:07

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc RADIAL	66514.0	135.22	%	14.548	135.22	%	14.548	10.76%
Sc 361.383	289084.8	95.890	%	1.7228	95.890	%	1.7228	1.80%
Y 371.029	205451.2	96.064	%	1.6905	96.064	%	1.6905	1.76%
Ag 328.068†	184.8	5.5752	µg/L	0.33253	5.5752	ppb	0.33253	5.96%
QC value within limits for Ag 328.068 Recovery = 111.50%								
Al 396.153Radial†	584.0	191.21	µg/L	31.158	191.21	ppb	31.158	16.29%
QC value within limits for Al 396.153Radial Recovery = 95.61%								
As 188.979†	21.4	37.591	µg/L	4.1477	37.591	ppb	4.1477	11.03%
QC value greater than the upper limit for As 188.979 Recovery = 125.30%								
B 249.677†	355.1	48.332	µg/L	1.2946	48.332	ppb	1.2946	2.68%
QC value within limits for B 249.677 Recovery = 96.66%								
Ba 233.527†	200.5	4.7189	µg/L	0.07922	4.7189	ppb	0.07922	1.68%
QC value within limits for Ba 233.527 Recovery = 94.38%								
Be 313.107†	3089.0	4.8784	µg/L	0.12615	4.8784	ppb	0.12615	2.59%
QC value within limits for Be 313.107 Recovery = 97.57%								
Ca 317.933Radial†	1014.8	165.61	µg/L	28.655	165.61	ppb	28.655	17.30%
QC value within limits for Ca 317.933Radial Recovery = 82.81%								
Cd 226.502†	132.0	4.7766	µg/L	0.28993	4.7766	ppb	0.28993	6.07%

QC value within limits for Cd 226.502 Recovery = 95.53%

Co 228.616†	44.4	4.9845 µg/L	0.33508	4.9845 ppb	0.33508	6.72%

QC value within limits for Co 228.616 Recovery = 99.69%

Cr 267.716†	257.2	10.272 µg/L	0.3854	10.272 ppb	0.3854	3.75%

QC value within limits for Cr 267.716 Recovery = 102.72%

Cu 324.752†	847.9	19.833 µg/L	1.6450	19.833 ppb	1.6450	8.29%

QC value within limits for Cu 324.752 Recovery = 99.17%

Fe 238.204 Radial†	444.0	86.898 µg/L	14.8838	86.898 ppb	14.8838	17.13%

QC value within limits for Fe 238.204 Radial Recovery = 86.90%

K 766.490 Radial†	361.4	302.87 µg/L	19.104	302.87 ppb	19.104	6.31%

QC value greater than the upper limit for K 766.490 Radial Recovery = 121.15%

Mg 279.077 IEC†	136.7	268.95 µg/L	32.463	268.95 ppb	32.463	12.07%

QC value within limits for Mg 279.077 IEC Recovery = 89.65%

Mn 257.610†	1006.2	10.041 µg/L	0.1586	10.041 ppb	0.1586	1.58%

QC value within limits for Mn 257.610 Recovery = 100.41%

Mo 202.031†	50.6	7.8006 µg/L	0.19130	7.8006 ppb	0.19130	2.45%

QC value less than the lower limit for Mo 202.031 Recovery = 78.01%

Na 589.592 Radial†	1567.4	250.45 µg/L	19.889	250.45 ppb	19.889	7.94%

QC value within limits for Na 589.592 Radial Recovery = 83.48%

Ni 231.604†	15.3	2.1261 µg/L	0.10825	2.1261 ppb	0.10825	5.09%

QC value less than the lower limit for Ni 231.604 Recovery = 42.52%

P 214.914†	92.0	247.83 µg/L	7.767	247.83 ppb	7.767	3.13%

QC value greater than the upper limit for P 214.914 Recovery = 165.22%

Pb 220.353†	54.7	28.634 µg/L	5.4162	28.634 ppb	5.4162	18.92%

QC value greater than the upper limit for Pb 220.353 Recovery = 143.17%

S 181.975 Axial†	17.9	104.56 µg/L	8.190	104.56 ppb	8.190	7.83%

QC value within limits for S 181.975 Axial Recovery = 104.56%

Sb 206.836†	25.3	39.371 µg/L	1.1831	39.371 ppb	1.1831	3.00%

QC value greater than the upper limit for Sb 206.836 Recovery = 196.86%

Se 196.026†	21.5	35.988 µg/L	8.8075	35.988 ppb	8.8075	24.47%

QC value within limits for Se 196.026 Recovery = 119.96%

Si 251.611†	682.6	89.853 µg/L	1.8509	89.853 ppb	1.8509	2.06%

QC value within limits for Si 251.611 Recovery = 89.85%

SiO2†	665.0	190.17 µg/L	3.256	190.17 ppb	3.256	1.71%

QC value within limits for SiO2 Recovery = 89.28%

Sn 189.927†	9.4	5.7637 µg/L	1.32081	5.7637 ppb	1.32081	22.92%

QC value less than the lower limit for Sn 189.927 Recovery = 57.64%

Sr 421.552†	1647.0	4.7856 µg/L	0.12736	4.7856 ppb	0.12736	2.66%

QC value within limits for Sr 421.552 Recovery = 95.71%

Ti 334.940†	733.5	4.8531 µg/L	0.17692	4.8531 ppb	0.17692	3.65%

QC value within limits for Ti 334.940 Recovery = 97.06%

Tl 190.801†	5.7	27.809 µg/L	12.0858	27.809 ppb	12.0858	43.46%

QC value greater than the upper limit for Tl 190.801 Recovery = 139.04%

U 367.007†	116.5	48.841 µg/L	20.2215	48.841 ppb	20.2215	41.40%

QC value within limits for U 367.007 Recovery = 97.68%

V 292.402†	181.4	5.5298 µg/L	0.18360	5.5298 ppb	0.18360	3.32%

QC value within limits for V 292.402 Recovery = 110.60%

Zn 213.857†	530.5	20.411 µg/L	1.0312	20.411 ppb	1.0312	5.05%

QC value within limits for Zn 213.857 Recovery = 102.06%

QC Failed. Continue with analysis.

Batch ID:
Sequence No.: 9 **Autosampler Location: 103**
Sample ID: ICSA **Date Collected: 12/19/2022 13:02:04**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample): 49

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	53550.8	53550.8	108.87	%	108.87	%	13:02:43
1	Al 396.153Radial†	1644457.4	1510557.2	495560	µg/L	495560	ppb	13:02:41
1	Ca 317.933Radial†	3056064.8	2807043.5	458090	µg/L	458090	ppb	13:02:41
1	Fe 238.204 Radial†	1026842.7	943119.1	184310	µg/L	184310	ppb	13:02:41
1	K 766.490 Radial†	44.6	-107.1	-34.194	µg/L	-34.194	ppb	13:02:43
1	Mg 279.077 IEC†	263320.6	241866.8	476020	µg/L	476020	ppb	13:02:43
1	Na 589.592 Radial†	1484.7	441.1	70.476	µg/L	70.476	ppb	13:02:43
1	Sr 421.552†	2992.4	2676.7	-0.4726	µg/L	-0.4726	ppb	13:02:43
1	Sc 361.383	275663.7	275663.7	91.438	%	91.438	%	13:02:56
1	Y 371.029	194502.6	194502.6	90.945	%	90.945	%	13:02:56
1	Ag 328.068†	-508.7	-343.5	0.2438	µg/L	0.2438	ppb	13:03:16
1	As 188.979†	-8.2	-0.0	5.4008	µg/L	5.4008	ppb	13:03:16
1	B 249.677†	-5850.8	-6470.7	7.1873	µg/L	7.1873	ppb	13:02:56
1	Ba 233.527†	458.0	497.9	-1.2958	µg/L	-1.2958	ppb	13:03:16
1	Be 313.107†	-189.6	-93.8	0.0446	µg/L	0.0446	ppb	13:02:56
1	Cd 226.502†	415.2	572.0	-1.1570	µg/L	-1.1570	ppb	13:03:16
1	Co 228.616†	-100.2	65.5	0.1060	µg/L	0.1060	ppb	13:03:16
1	Cr 267.716†	408.4	355.5	0.2716	µg/L	0.2716	ppb	13:03:16
1	Cu 324.752†	-93.3	-327.6	-0.4827	µg/L	-0.4827	ppb	13:03:16
1	Mn 257.610†	230.6	199.2	-0.5818	µg/L	-0.5818	ppb	13:02:56
1	Mo 202.031†	-59.0	-56.6	-2.1163	µg/L	-2.1163	ppb	13:03:16
1	Ni 231.604†	85.1	31.1	-2.9431	µg/L	-2.9431	ppb	13:03:16
1	P 214.914†	275.0	36.4	59.423	µg/L	59.423	ppb	13:03:16
1	Pb 220.353†	198.0	10.7	7.7970	µg/L	7.7970	ppb	13:03:16
1	S 181.975 Axial†	106.4	50.4	33.963	µg/L	33.963	ppb	13:03:16
1	Sb 206.836†	98.7	15.4	24.428	µg/L	24.428	ppb	13:03:16
1	Se 196.026†	6.5	-52.0	-21.384	µg/L	-21.384	ppb	13:03:16
1	Si 251.611†	731.1	760.2	25.577	µg/L	25.577	ppb	13:03:16
1	SiO2†	779.7	899.3	76.224	µg/L	76.224	ppb	13:03:16
1	Sn 189.927†	-30.4	-29.3	2.6550	µg/L	2.6550	ppb	13:03:16
1	Ti 334.940†	-50.1	-360.2	-0.7895	µg/L	-0.7895	ppb	13:02:56
1	Tl 190.801†	20.1	-2.7	16.769	µg/L	16.769	ppb	13:03:16
1	U 367.007†	1503.0	1796.3	48.139	µg/L	48.139	ppb	13:02:56
1	V 292.402†	-384.6	-464.4	0.5337	µg/L	0.5337	ppb	13:03:16
1	Zn 213.857†	1410.6	847.0	-4.9908	µg/L	-4.9908	ppb	13:03:16
2	Sc RADIAL	50923.4	50923.4	103.52	%	103.52	%	13:02:48
2	Al 396.153Radial†	1587035.1	1533025.2	502930	µg/L	502930	ppb	13:02:46
2	Ca 317.933Radial†	2932187.0	2832218.6	462200	µg/L	462200	ppb	13:02:46
2	Fe 238.204 Radial†	985898.3	952233.6	186090	µg/L	186090	ppb	13:02:46
2	K 766.490 Radial†	-211.4	-352.3	-239.01	µg/L	-239.01	ppb	13:02:48
2	Mg 279.077 IEC†	248766.7	240287.9	472910	µg/L	472910	ppb	13:02:48
2	Na 589.592 Radial†	1563.0	587.1	93.802	µg/L	93.802	ppb	13:02:48
2	Sr 421.552†	2942.9	2770.7	-0.2734	µg/L	-0.2734	ppb	13:02:48
2	Sc 361.383	277362.1	277362.1	92.002	%	92.002	%	13:03:19
2	Y 371.029	195307.4	195307.4	91.321	%	91.321	%	13:03:19
2	Ag 328.068†	-481.9	-311.0	1.3670	µg/L	1.3670	ppb	13:03:39
2	As 188.979†	0.9	9.9	22.822	µg/L	22.822	ppb	13:03:39
2	B 249.677†	-5865.2	-6447.2	18.870	µg/L	18.870	ppb	13:03:19
2	Ba 233.527†	476.5	514.9	-0.8583	µg/L	-0.8583	ppb	13:03:39
2	Be 313.107†	-48.4	61.0	0.2808	µg/L	0.2808	ppb	13:03:19
2	Cd 226.502†	414.8	568.8	-1.4868	µg/L	-1.4868	ppb	13:03:39
2	Co 228.616†	-100.6	65.7	0.0965	µg/L	0.0965	ppb	13:03:39
2	Cr 267.716†	418.8	364.0	0.5172	µg/L	0.5172	ppb	13:03:39
2	Cu 324.752†	-98.2	-332.2	-0.5220	µg/L	-0.5220	ppb	13:03:39
2	Mn 257.610†	257.4	226.8	-0.3308	µg/L	-0.3308	ppb	13:03:19
2	Mo 202.031†	-62.9	-60.5	-2.6534	µg/L	-2.6534	ppb	13:03:39
2	Ni 231.604†	80.5	25.6	-3.7232	µg/L	-3.7232	ppb	13:03:39

2	P 214.914†	305.0	67.1	142.72 µg/L	142.72 ppb	13:03:39
2	Pb 220.353†	193.9	4.9	4.9074 µg/L	4.9074 ppb	13:03:39
2	S 181.975 Axial†	97.4	39.9	-28.693 µg/L	-28.693 ppb	13:03:39
2	Sb 206.836†	107.1	23.8	37.635 µg/L	37.635 ppb	13:03:39
2	Se 196.026†	34.1	-22.0	29.430 µg/L	29.430 ppb	13:03:39
2	Si 251.611†	733.9	758.3	25.744 µg/L	25.744 ppb	13:03:39
2	SiO2†	787.9	903.0	78.161 µg/L	78.161 ppb	13:03:39
2	Sn 189.927†	-21.1	-18.9	9.0037 µg/L	9.0037 ppb	13:03:39
2	Ti 334.940†	75.4	-223.4	0.1490 µg/L	0.1490 ppb	13:03:19
2	Tl 190.801†	22.5	-0.2	28.967 µg/L	28.967 ppb	13:03:39
2	U 367.007†	1431.1	1708.0	4.0334 µg/L	4.0334 ppb	13:03:19
2	V 292.402†	-409.0	-488.4	-0.0857 µg/L	-0.0857 ppb	13:03:39
2	Zn 213.857†	1429.6	858.2	-4.9125 µg/L	-4.9125 ppb	13:03:39
3	Sc RADIAL	49906.8	49906.8	101.46 %	101.46 %	13:02:52
3	Al 396.153Radial†	1534796.8	1512764.6	496290 µg/L	496290 ppb	13:02:50
3	Ca 317.933Radial†	2824356.7	2783632.4	454270 µg/L	454270 ppb	13:02:50
3	Fe 238.204 Radial†	950151.3	936399.1	183000 µg/L	183000 ppb	13:02:50
3	K 766.490 Radial†	124.0	-25.9	33.427 µg/L	33.427 ppb	13:02:52
3	Mg 279.077 IEC†	242739.4	239242.0	470850 µg/L	470850 ppb	13:02:52
3	Na 589.592 Radial†	1433.1	489.8	78.263 µg/L	78.263 ppb	13:02:52
3	Sr 421.552†	2925.5	2811.4	-0.0120 µg/L	-0.0120 ppb	13:02:52
3	Sc 361.383	270496.2	270496.2	89.724 %	89.724 %	13:03:41
3	Y 371.029	190373.7	190373.7	89.014 %	89.014 %	13:03:41
3	Ag 328.068†	-479.7	-321.8	0.8684 µg/L	0.8684 ppb	13:04:01
3	As 188.979†	-13.7	-6.4	-5.7039 µg/L	-5.7039 ppb	13:04:01
3	B 249.677†	-5717.0	-6443.9	4.5305 µg/L	4.5305 ppb	13:03:41
3	Ba 233.527†	449.9	498.4	-1.1549 µg/L	-1.1549 ppb	13:04:01
3	Be 313.107†	-73.8	31.4	0.2264 µg/L	0.2264 ppb	13:03:41
3	Cd 226.502†	403.1	567.2	-1.1777 µg/L	-1.1777 ppb	13:04:01
3	Co 228.616†	-102.0	61.4	-0.2874 µg/L	-0.2874 ppb	13:04:01
3	Cr 267.716†	438.1	397.1	2.0887 µg/L	2.0887 ppb	13:04:01
3	Cu 324.752†	-92.0	-328.0	-0.5445 µg/L	-0.5445 ppb	13:04:01
3	Mn 257.610†	244.4	219.5	-0.3612 µg/L	-0.3612 ppb	13:03:41
3	Mo 202.031†	-67.3	-67.1	-3.7893 µg/L	-3.7893 ppb	13:04:01
3	Ni 231.604†	74.0	20.6	-4.3330 µg/L	-4.3330 ppb	13:04:01
3	P 214.914†	274.1	41.1	73.948 µg/L	73.948 ppb	13:04:01
3	Pb 220.353†	206.4	24.3	14.993 µg/L	14.993 ppb	13:04:01
3	S 181.975 Axial†	100.0	45.5	7.4887 µg/L	7.4887 ppb	13:04:01
3	Sb 206.836†	100.6	19.5	30.832 µg/L	30.832 ppb	13:04:01
3	Se 196.026†	20.7	-36.0	4.8617 µg/L	4.8617 ppb	13:04:01
3	Si 251.611†	738.9	784.1	29.549 µg/L	29.549 ppb	13:04:01
3	SiO2†	785.6	922.2	84.735 µg/L	84.735 ppb	13:04:01
3	Sn 189.927†	-44.3	-45.4	-7.3039 µg/L	-7.3039 ppb	13:04:01
3	Ti 334.940†	11.1	-293.0	-0.3378 µg/L	-0.3378 ppb	13:03:41
3	Tl 190.801†	23.2	1.3	35.531 µg/L	35.531 ppb	13:04:01
3	U 367.007†	1344.1	1650.5	-8.3225 µg/L	-8.3225 ppb	13:03:41
3	V 292.402†	-400.6	-490.3	-0.4005 µg/L	-0.4005 ppb	13:04:01
3	Zn 213.857†	1413.8	880.2	-3.4274 µg/L	-3.4274 ppb	13:04:01

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc RADIAL	51460.3	104.62	%	3.823	104.62	%	3.823	3.65%
Sc 361.383	274507.4	91.055	%	1.1862	91.055	%	1.1862	1.30%
Y 371.029	193394.6	90.427	%	1.2376	90.427	%	1.2376	1.37%
Ag 328.068†	-325.4	0.8264	µg/L	0.56277	0.8264	ppb	0.56277	68.10%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1518782.3	498260	µg/L	4062.76	498260	ppb	4062.76	0.82%
QC value within limits for Al 396.153Radial Recovery = 99.65%								
As 188.979†	1.2	7.5063	µg/L	14.37900	7.5063	ppb	14.37900	191.56%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-6454.0	10.196	µg/L	7.6282	10.196	ppb	7.6282	74.82%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	503.7	-1.1030	µg/L	0.22331	-1.1030	ppb	0.22331	20.25%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-0.4	0.1839	µg/L	0.12365	0.1839	ppb	0.12365	67.23%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2807631.5	458180	µg/L	3965.33	458180	ppb	3965.33	0.87%
QC value within limits for Ca 317.933Radial Recovery = 91.64%								
Cd 226.502†	569.3	-1.2738	µg/L	0.18471	-1.2738	ppb	0.18471	14.50%

QC value within limits for Cd 226.502 Recovery = Not calculated

Co 228.616†	64.2	-0.0283 µg/L	0.22447	-0.0283 ppb	0.22447	793.42%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	372.2	0.9592 µg/L	0.98592	0.9592 ppb	0.98592	102.79%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-329.3	-0.5164 µg/L	0.03127	-0.5164 ppb	0.03127	6.05%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	943917.3	184470 µg/L	1553.13	184470 ppb	1553.13	0.84%
QC value within limits for Fe 238.204 Radial Recovery = 92.23%							
K 766.490 Radial†	-161.8	-79.924 µg/L	141.8572	-79.924 ppb	141.8572	177.49%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	240465.6	473260 µg/L	2600.48	473260 ppb	2600.48	0.55%
QC value within limits for Mg 279.077 IEC Recovery = 94.65%							
Mn 257.610†	215.2	-0.4246 µg/L	0.13698	-0.4246 ppb	0.13698	32.26%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	-61.4	-2.8530 µg/L	0.85417	-2.8530 ppb	0.85417	29.94%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	506.0	80.847 µg/L	11.8762	80.847 ppb	11.8762	14.69%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	25.8	-3.6664 µg/L	0.69669	-3.6664 ppb	0.69669	19.00%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	48.2	92.031 µg/L	44.4970	92.031 ppb	44.4970	48.35%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	13.3	9.2323 µg/L	5.19348	9.2323 ppb	5.19348	56.25%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	45.3	4.2527 µg/L	31.45307	4.2527 ppb	31.45307	739.59%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	19.6	30.965 µg/L	6.6046	30.965 ppb	6.6046	21.33%
QC value greater than the upper limit for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-36.7	4.3025 µg/L	25.41188	4.3025 ppb	25.41188	590.64%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	767.5	26.957 µg/L	2.2468	26.957 ppb	2.2468	8.33%
QC value within limits for Si 251.611 Recovery = Not calculated							
SiO2†	908.2	79.706 µg/L	4.4609	79.706 ppb	4.4609	5.60%
QC value within limits for SiO2 Recovery = Not calculated							
Sn 189.927†	-31.2	1.4516 µg/L	8.22016	1.4516 ppb	8.22016	566.29%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	2752.9	-0.2526 µg/L	0.23100	-0.2526 ppb	0.23100	91.44%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-292.2	-0.3261 µg/L	0.46936	-0.3261 ppb	0.46936	143.93%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-0.5	27.089 µg/L	9.5213	27.089 ppb	9.5213	35.15%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 367.007†	1718.3	14.617 µg/L	29.6816	14.617 ppb	29.6816	203.06%
QC value within limits for U 367.007 Recovery = Not calculated							
V 292.402†	-481.0	0.0158 µg/L	0.47531	0.0158 ppb	0.47531	>999.9%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	861.8	-4.4436 µg/L	0.88092	-4.4436 ppb	0.88092	19.82%
QC value within limits for Zn 213.857 Recovery = Not calculated							

QC Failed. Continue with analysis.

Batch ID:
Sequence No.: 10 **Autosampler Location: 104**
Sample ID: ICSAB **Date Collected: 12/19/2022 13:05:00**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample): 49

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	51752.5	51752.5	105.21	%	105.21	%	13:05:38
1	Al 396.153Radial†	1625146.1	1544690.6	506740	µg/L	506740	ppb	13:05:36
1	Ca 317.933Radial†	3026875.4	2876844.5	469480	µg/L	469480	ppb	13:05:36
1	Fe 238.204 Radial†	1014471.3	964135.6	188430	µg/L	188430	ppb	13:05:36
1	K 766.490 Radial†	6490.6	6021.2	5102.4	µg/L	5102.4	ppb	13:05:38
1	Mg 279.077 IEC†	253622.8	241054.0	474420	µg/L	474420	ppb	13:05:38
1	Na 589.592 Radial†	34285.1	31664.7	5059.5	µg/L	5059.5	ppb	13:05:38
1	Sr 421.552†	179932.0	170950.3	488.58	µg/L	488.58	ppb	13:05:38
1	Sc 361.383	282607.7	282607.7	93.742	%	93.742	%	13:05:51
1	Y 371.029	199017.7	199017.7	93.056	%	93.056	%	13:05:51
1	Ag 328.068†	7565.3	8283.2	262.10	µg/L	262.10	ppb	13:05:51
1	As 188.979†	251.9	277.7	496.67	µg/L	496.67	ppb	13:06:11
1	B 249.677†	-2444.2	-2679.5	537.87	µg/L	537.87	ppb	13:05:51
1	Ba 233.527†	19835.3	21156.5	485.65	µg/L	485.65	ppb	13:05:51
1	Be 313.107†	146198.5	156072.4	246.95	µg/L	246.95	ppb	13:05:51
1	Cd 226.502†	11587.6	12479.2	430.36	µg/L	430.36	ppb	13:06:11
1	Co 228.616†	3463.4	3869.7	427.59	µg/L	427.59	ppb	13:06:11
1	Cr 267.716†	11713.2	12404.0	483.06	µg/L	483.06	ppb	13:05:51
1	Cu 324.752†	20285.0	21413.8	508.26	µg/L	508.26	ppb	13:05:51
1	Mn 257.610†	44131.0	47024.2	466.68	µg/L	466.68	ppb	13:05:51
1	Mo 202.031†	2851.5	3049.7	476.90	µg/L	476.90	ppb	13:06:11
1	Ni 231.604†	2888.9	3019.9	414.06	µg/L	414.06	ppb	13:06:11
1	P 214.914†	1113.5	923.5	2429.8	µg/L	2429.8	ppb	13:06:11
1	Pb 220.353†	973.8	833.0	439.06	µg/L	439.06	ppb	13:06:11
1	S 181.975 Axial†	491.4	458.3	2417.5	µg/L	2417.5	ppb	13:06:11
1	Sb 206.836†	412.1	347.1	537.03	µg/L	537.03	ppb	13:06:11
1	Se 196.026†	1233.8	1257.0	2171.1	µg/L	2171.1	ppb	13:06:11
1	Si 251.611†	35674.3	38016.6	4931.3	µg/L	4931.3	ppb	13:05:51
1	SiO2†	35045.3	37431.6	10527	µg/L	10527	ppb	13:05:51
1	Sn 189.927†	663.1	711.3	456.09	µg/L	456.09	ppb	13:06:11
1	Ti 334.940†	70994.2	75428.5	502.47	µg/L	502.47	ppb	13:05:51
1	Tl 190.801†	99.3	81.3	445.60	µg/L	445.60	ppb	13:06:11
1	U 367.007†	2455.5	2772.0	444.21	µg/L	444.21	ppb	13:05:51
1	V 292.402†	15629.5	16629.2	512.16	µg/L	512.16	ppb	13:05:51
1	Zn 213.857†	12230.5	12351.4	434.94	µg/L	434.94	ppb	13:06:11
2	Sc RADIAL	51273.9	51273.9	104.24	%	104.24	%	13:05:42
2	Al 396.153Radial†	1579781.1	1515587.9	497190	µg/L	497190	ppb	13:05:40
2	Ca 317.933Radial†	2929232.1	2810024.3	458580	µg/L	458580	ppb	13:05:40
2	Fe 238.204 Radial†	982048.3	942030.8	184110	µg/L	184110	ppb	13:05:40
2	K 766.490 Radial†	6272.3	5869.3	4973.6	µg/L	4973.6	ppb	13:05:42
2	Mg 279.077 IEC†	250298.6	240115.1	472570	µg/L	472570	ppb	13:05:42
2	Na 589.592 Radial†	34086.7	31778.5	5077.7	µg/L	5077.7	ppb	13:05:42
2	Sr 421.552†	178002.0	170695.0	488.04	µg/L	488.04	ppb	13:05:42
2	Sc 361.383	267730.2	267730.2	88.807	%	88.807	%	13:06:13
2	Y 371.029	188727.1	188727.1	88.244	%	88.244	%	13:06:13
2	Ag 328.068†	6967.3	8058.3	254.99	µg/L	254.99	ppb	13:06:13
2	As 188.979†	247.6	287.8	514.32	µg/L	514.32	ppb	13:06:33
2	B 249.677†	-2300.9	-2663.1	519.44	µg/L	519.44	ppb	13:06:13
2	Ba 233.527†	18632.9	20978.4	481.55	µg/L	481.55	ppb	13:06:13
2	Be 313.107†	137801.5	155283.6	245.72	µg/L	245.72	ppb	13:06:13
2	Cd 226.502†	11685.8	13276.7	459.80	µg/L	459.80	ppb	13:06:33
2	Co 228.616†	3468.9	4081.2	451.54	µg/L	451.54	ppb	13:06:33
2	Cr 267.716†	10881.3	12161.6	473.61	µg/L	473.61	ppb	13:06:13
2	Cu 324.752†	19273.7	21477.5	509.59	µg/L	509.59	ppb	13:06:13
2	Mn 257.610†	41664.6	46863.0	465.13	µg/L	465.13	ppb	13:06:13
2	Mo 202.031†	2867.3	3236.6	505.56	µg/L	505.56	ppb	13:06:33
2	Ni 231.604†	2902.7	3206.7	440.23	µg/L	440.23	ppb	13:06:33

2	P 214.914†	1118.0	994.6	2623.6 µg/L	2623.6 ppb	13:06:33
2	Pb 220.353†	975.2	892.3	470.11 µg/L	470.11 ppb	13:06:33
2	S 181.975 Axial†	487.0	482.5	2564.2 µg/L	2564.2 ppb	13:06:33
2	Sb 206.836†	414.2	373.8	579.19 µg/L	579.19 ppb	13:06:33
2	Se 196.026†	1240.2	1337.4	2304.2 µg/L	2304.2 ppb	13:06:33
2	Si 251.611†	33751.4	37966.1	4924.6 µg/L	4924.6 ppb	13:06:13
2	SiO2†	33147.4	37372.0	10510 µg/L	10510 ppb	13:06:13
2	Sn 189.927†	659.6	746.7	477.43 µg/L	477.43 ppb	13:06:33
2	Ti 334.940†	67039.0	75183.2	500.79 µg/L	500.79 ppb	13:06:13
2	Tl 190.801†	90.7	77.5	426.31 µg/L	426.31 ppb	13:06:33
2	U 367.007†	2391.9	2845.9	492.07 µg/L	492.07 ppb	13:06:13
2	V 292.402†	14675.4	16481.3	507.84 µg/L	507.84 ppb	13:06:13
2	Zn 213.857†	12241.7	13089.0	464.13 µg/L	464.13 ppb	13:06:33
3	Sc RADIAL	49575.7	49575.7	100.78 %	100.78 %	13:05:47
3	Al 396.153Radial†	1527758.6	1515885.6	497290 µg/L	497290 ppb	13:05:45
3	Ca 317.933Radial†	2816191.2	2794124.9	455980 µg/L	455980 ppb	13:05:45
3	Fe 238.204 Radial†	945316.4	937857.3	183290 µg/L	183290 ppb	13:05:45
3	K 766.490 Radial†	6336.6	6139.2	5199.5 µg/L	5199.5 ppb	13:05:47
3	Mg 279.077 IEC†	240662.3	238779.2	469940 µg/L	469940 ppb	13:05:47
3	Na 589.592 Radial†	32941.1	31762.0	5075.1 µg/L	5075.1 ppb	13:05:47
3	Sr 421.552†	172584.6	171169.4	489.46 µg/L	489.46 ppb	13:05:47
3	Sc 361.383	277534.4	277534.4	92.059 %	92.059 %	13:06:36
3	Y 371.029	195730.4	195730.4	91.519 %	91.519 %	13:06:36
3	Ag 328.068†	7353.4	8200.5	259.28 µg/L	259.28 ppb	13:06:36
3	As 188.979†	253.6	284.4	508.45 µg/L	508.45 ppb	13:06:56
3	B 249.677†	-2323.0	-2595.5	524.68 µg/L	524.68 ppb	13:06:36
3	Ba 233.527†	19266.2	20925.2	480.37 µg/L	480.37 ppb	13:06:36
3	Be 313.107†	142724.1	155149.2	245.49 µg/L	245.49 ppb	13:06:36
3	Cd 226.502†	11740.9	12871.7	445.21 µg/L	445.21 ppb	13:06:56
3	Co 228.616†	3477.8	3952.8	437.12 µg/L	437.12 ppb	13:06:56
3	Cr 267.716†	11397.8	12289.8	478.85 µg/L	478.85 ppb	13:06:36
3	Cu 324.752†	19894.9	21385.6	507.40 µg/L	507.40 ppb	13:06:36
3	Mn 257.610†	43191.6	46864.4	465.16 µg/L	465.16 ppb	13:06:36
3	Mo 202.031†	2886.2	3143.0	491.10 µg/L	491.10 ppb	13:06:56
3	Ni 231.604†	2913.3	3102.7	425.76 µg/L	425.76 ppb	13:06:56
3	P 214.914†	1118.1	950.2	2504.9 µg/L	2504.9 ppb	13:06:56
3	Pb 220.353†	1003.6	884.3	465.96 µg/L	465.96 ppb	13:06:56
3	S 181.975 Axial†	485.1	461.1	2440.0 µg/L	2440.0 ppb	13:06:56
3	Sb 206.836†	421.5	365.3	565.62 µg/L	565.62 ppb	13:06:56
3	Se 196.026†	1253.1	1302.1	2244.8 µg/L	2244.8 ppb	13:06:56
3	Si 251.611†	34945.4	37920.4	4919.2 µg/L	4919.2 ppb	13:06:36
3	SiO2†	34312.6	37319.2	10497 µg/L	10497 ppb	13:06:36
3	Sn 189.927†	664.4	725.7	464.59 µg/L	464.59 ppb	13:06:56
3	Ti 334.940†	69231.1	74897.7	498.89 µg/L	498.89 ppb	13:06:36
3	Tl 190.801†	102.9	87.2	473.11 µg/L	473.11 ppb	13:06:56
3	U 367.007†	2404.1	2764.0	460.64 µg/L	460.64 ppb	13:06:36
3	V 292.402†	15213.2	16481.8	507.60 µg/L	507.60 ppb	13:06:36
3	Zn 213.857†	12349.2	12718.9	450.11 µg/L	450.11 ppb	13:06:56

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc RADIAL	50867.3	103.41	%	2.326	103.41	%	2.326	2.25%
Sc 361.383	275957.4	91.536	%	2.5087	91.536	%	2.5087	2.74%
Y 371.029	194491.8	90.940	%	2.4575	90.940	%	2.4575	2.70%
Ag 328.068†	8180.7	258.79	µg/L	3.583	258.79	ppb	3.583	1.38%
QC value within limits for Ag 328.068 Recovery = 103.52%								
Al 396.153Radial†	1525388.0	500400	µg/L	5484.91	500400	ppb	5484.91	1.10%
QC value within limits for Al 396.153Radial Recovery = 100.08%								
As 188.979†	283.3	506.48	µg/L	8.987	506.48	ppb	8.987	1.77%
QC value within limits for As 188.979 Recovery = 101.30%								
B 249.677†	-2646.0	527.33	µg/L	9.498	527.33	ppb	9.498	1.80%
QC value within limits for B 249.677 Recovery = 105.47%								
Ba 233.527†	21020.0	482.53	µg/L	2.769	482.53	ppb	2.769	0.57%
QC value within limits for Ba 233.527 Recovery = 96.51%								
Be 313.107†	155501.7	246.05	µg/L	0.787	246.05	ppb	0.787	0.32%
QC value within limits for Be 313.107 Recovery = 98.42%								
Ca 317.933Radial†	2826997.9	461350	µg/L	7163.23	461350	ppb	7163.23	1.55%
QC value within limits for Ca 317.933Radial Recovery = 92.27%								
Cd 226.502†	12875.9	445.12	µg/L	14.723	445.12	ppb	14.723	3.31%

QC value within limits for Cd 226.502 Recovery = 89.02%

Co 228.616†	3967.9	438.75 µg/L	12.055	438.75 ppb	12.055	2.75%

QC value within limits for Co 228.616 Recovery = 87.75%

Cr 267.716†	12285.2	478.51 µg/L	4.732	478.51 ppb	4.732	0.99%

QC value within limits for Cr 267.716 Recovery = 95.70%

Cu 324.752†	21425.6	508.42 µg/L	1.102	508.42 ppb	1.102	0.22%

QC value within limits for Cu 324.752 Recovery = 101.68%

Fe 238.204 Radial†	948007.9	185280 µg/L	2759.59	185280 ppb	2759.59	1.49%

QC value within limits for Fe 238.204 Radial Recovery = 92.64%

K 766.490 Radial†	6009.9	5091.9 µg/L	113.32	5091.9 ppb	113.32	2.23%

QC value within limits for K 766.490 Radial Recovery = 101.84%

Mg 279.077 IEC†	239982.8	472310 µg/L	2250.31	472310 ppb	2250.31	0.48%

QC value within limits for Mg 279.077 IEC Recovery = 94.46%

Mn 257.610†	46917.2	465.66 µg/L	0.887	465.66 ppb	0.887	0.19%

QC value within limits for Mn 257.610 Recovery = 93.13%

Mo 202.031†	3143.1	491.19 µg/L	14.327	491.19 ppb	14.327	2.92%

QC value within limits for Mo 202.031 Recovery = 98.24%

Na 589.592 Radial†	31735.1	5070.8 µg/L	9.83	5070.8 ppb	9.83	0.19%

QC value within limits for Na 589.592 Radial Recovery = 101.42%

Ni 231.604†	3109.8	426.68 µg/L	13.112	426.68 ppb	13.112	3.07%

QC value within limits for Ni 231.604 Recovery = 85.34%

P 214.914†	956.1	2519.4 µg/L	97.72	2519.4 ppb	97.72	3.88%

QC value within limits for P 214.914 Recovery = 100.78%

Pb 220.353†	869.9	458.38 µg/L	16.859	458.38 ppb	16.859	3.68%

QC value within limits for Pb 220.353 Recovery = 91.68%

S 181.975 Axial†	467.3	2473.9 µg/L	79.01	2473.9 ppb	79.01	3.19%

QC value within limits for S 181.975 Axial Recovery = 98.96%

Sb 206.836†	362.1	560.61 µg/L	21.523	560.61 ppb	21.523	3.84%

QC value within limits for Sb 206.836 Recovery = 112.12%

Se 196.026†	1298.8	2240.1 µg/L	66.67	2240.1 ppb	66.67	2.98%

QC value within limits for Se 196.026 Recovery = 89.60%

Si 251.611†	37967.7	4925.1 µg/L	6.05	4925.1 ppb	6.05	0.12%

QC value within limits for Si 251.611 Recovery = 98.50%

SiO2†	37374.2	10512 µg/L	15.31	10512 ppb	15.31	0.15%

QC value within limits for SiO2 Recovery = 98.28%

Sn 189.927†	727.9	466.04 µg/L	10.743	466.04 ppb	10.743	2.31%

QC value within limits for Sn 189.927 Recovery = 93.21%

Sr 421.552†	170938.2	488.69 µg/L	0.720	488.69 ppb	0.720	0.15%

QC value within limits for Sr 421.552 Recovery = 97.74%

Ti 334.940†	75169.8	500.72 µg/L	1.791	500.72 ppb	1.791	0.36%

QC value within limits for Ti 334.940 Recovery = 100.14%

Tl 190.801†	82.0	448.34 µg/L	23.520	448.34 ppb	23.520	5.25%

QC value within limits for Tl 190.801 Recovery = 89.67%

U 367.007†	2794.0	465.64 µg/L	24.320	465.64 ppb	24.320	5.22%

QC value within limits for U 367.007 Recovery = 93.13%

V 292.402†	16530.7	509.20 µg/L	2.566	509.20 ppb	2.566	0.50%

QC value within limits for V 292.402 Recovery = 101.84%

Zn 213.857†	12719.8	449.73 µg/L	14.597	449.73 ppb	14.597	3.25%

QC value within limits for Zn 213.857 Recovery = 89.95%

All analyte(s) passed QC.

==========

Batch ID:
Sequence No.: 11 **Autosampler Location: 105**
Sample ID: LR1 **Date Collected: 12/19/2022 13:07:55**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample): 49

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	53279.5	53279.5	108.31	%	108.31	%	13:08:35
1	Al 396.153Radial†	1719880.6	1587883.0	520470	µg/L	520470	ppb	13:08:33
1	Ca 317.933Radial†	3213457.9	2966650.1	484140	µg/L	484140	ppb	13:08:33
1	Fe 238.204 Radial†	2745383.5	2534551.0	495560	µg/L	495560	ppb	13:08:33
1	K 766.490 Radial†	263121.8	242777.0	203510	µg/L	203510	ppb	13:08:35
1	Mg 279.077 IEC†	273483.1	252481.0	496990	µg/L	496990	ppb	13:08:35
1	Na 589.592 Radial†	3604913.2	3327284.2	531650	µg/L	531650	ppb	13:08:31
1	Sr 421.552†	4109080.0	3793602.8	11021	µg/L	11021	ppb	13:08:31
1	Sc 361.383	266227.1	266227.1	88.308	%	88.308	%	13:08:54
1	Y 371.029	184993.4	184993.4	86.498	%	86.498	%	13:08:54
1	Ag 328.068†	-407.1	-248.1	10.915	µg/L	10.915	ppb	13:08:54
1	As 188.979†	5067.2	5747.0	10259	µg/L	10259	ppb	13:09:14
1	B 249.677†	322860.2	365533.9	51674	µg/L	51674	ppb	13:08:54
1	Ba 233.527†	546349.1	618681.2	14558	µg/L	14558	ppb	13:08:54
1	Be 313.107†	-13334.2	-14986.0	13.679	µg/L	13.679	ppb	13:08:54
1	Cd 226.502†	220968.6	250342.2	9023.8	µg/L	9023.8	ppb	13:08:54
1	Co 228.616†	70604.7	80127.6	8992.9	µg/L	8992.9	ppb	13:08:54
1	Cr 267.716†	535849.5	606703.3	24297	µg/L	24297	ppb	13:08:54
1	Cu 324.752†	769935.5	871647.4	20406	µg/L	20406	ppb	13:08:54
1	Mn 257.610†	835785.1	946387.7	9438.1	µg/L	9438.1	ppb	13:08:54
1	Mo 202.031†	57152.9	64727.6	9996.3	µg/L	9996.3	ppb	13:08:54
1	Ni 231.604†	55970.5	63319.0	8820.5	µg/L	8820.5	ppb	13:08:54
1	P 214.914†	709.7	539.3	48.641	µg/L	48.641	ppb	13:09:14
1	Pb 220.353†	38587.1	43490.1	22759	µg/L	22759	ppb	13:08:54
1	S 181.975 Axial†	7849.7	8823.1	51179	µg/L	51179	ppb	13:09:14
1	Sb 206.836†	305.3	253.1	7.8956	µg/L	7.8956	ppb	13:09:14
1	Se 196.026†	-78.0	-147.4	-81.132	µg/L	-81.132	ppb	13:09:14
1	Si 251.611†	331279.3	375100.4	49231	µg/L	49231	ppb	13:08:54
1	SiO2†	324477.5	367484.1	104750	µg/L	104750	ppb	13:08:54
1	Sn 189.927†	-169.8	-188.3	21.812	µg/L	21.812	ppb	13:09:14
1	Ti 334.940†	1370566.9	1551720.8	10298	µg/L	10298	ppb	13:08:54
1	Tl 190.801†	55.9	38.7	704.64	µg/L	704.64	ppb	13:09:14
1	U 367.007†	33206.7	37755.7	14030	µg/L	14030	ppb	13:08:54
1	V 292.402†	303840.7	344024.6	10390	µg/L	10390	ppb	13:08:54
1	Zn 213.857†	331393.5	374573.5	14278	µg/L	14278	ppb	13:08:54
2	Sc RADIAL	50511.6	50511.6	102.69	%	102.69	%	13:08:42
2	Al 396.153Radial†	1552241.6	1511640.8	495450	µg/L	495450	ppb	13:08:40
2	Ca 317.933Radial†	2856192.4	2781304.8	453890	µg/L	453890	ppb	13:08:40
2	Fe 238.204 Radial†	2451538.5	2387286.5	466780	µg/L	466780	ppb	13:08:40
2	K 766.490 Radial†	248543.8	241892.0	202760	µg/L	202760	ppb	13:08:42
2	Mg 279.077 IEC†	254976.8	248294.6	488750	µg/L	488750	ppb	13:08:42
2	Na 589.592 Radial†	3164056.1	3080338.8	492190	µg/L	492190	ppb	13:08:38
2	Sr 421.552†	3614830.2	3520168.0	10227	µg/L	10227	ppb	13:08:38
2	Sc 361.383	257913.1	257913.1	85.550	%	85.550	%	13:09:18
2	Y 371.029	179394.1	179394.1	83.880	%	83.880	%	13:09:18
2	Ag 328.068†	-325.5	-167.7	11.798	µg/L	11.798	ppb	13:09:18
2	As 188.979†	5153.1	6032.4	10758	µg/L	10758	ppb	13:09:38
2	B 249.677†	314768.2	367860.6	51850	µg/L	51850	ppb	13:09:18
2	Ba 233.527†	528190.7	617399.4	14528	µg/L	14528	ppb	13:09:18
2	Be 313.107†	-12871.4	-14931.7	13.797	µg/L	13.797	ppb	13:09:18
2	Cd 226.502†	213086.0	249194.4	8985.6	µg/L	8985.6	ppb	13:09:18
2	Co 228.616†	68072.0	79744.5	8950.6	µg/L	8950.6	ppb	13:09:18
2	Cr 267.716†	517871.8	605249.6	24241	µg/L	24241	ppb	13:09:18
2	Cu 324.752†	749137.1	875441.3	20493	µg/L	20493	ppb	13:09:18
2	Mn 257.610†	808126.1	944566.2	9420.4	µg/L	9420.4	ppb	13:09:18
2	Mo 202.031†	55435.2	64806.2	10007	µg/L	10007	ppb	13:09:18
2	Ni 231.604†	54074.6	63146.0	8797.0	µg/L	8797.0	ppb	13:09:18

2	P 214.914†	704.2	558.8	125.49 µg/L	125.49 ppb	13:09:38
2	Pb 220.353†	37335.6	43435.8	22731 µg/L	22731 ppb	13:09:18
2	S 181.975 Axial†	7991.9	9275.8	53852 µg/L	53852 ppb	13:09:38
2	Sb 206.836†	297.7	255.3	12.751 µg/L	12.751 ppb	13:09:38
2	Se 196.026†	-71.3	-142.5	-83.204 µg/L	-83.204 ppb	13:09:38
2	Si 251.611†	320384.7	374458.4	49148 µg/L	49148 ppb	13:09:18
2	SiO2†	313983.5	367062.2	104640 µg/L	104640 ppb	13:09:18
2	Sn 189.927†	-183.6	-210.7	2.7535 µg/L	2.7535 ppb	13:09:38
2	Ti 334.940†	1328518.3	1552600.6	10304 µg/L	10304 ppb	13:09:18
2	Tl 190.801†	64.6	50.9	760.08 µg/L	760.08 ppb	13:09:38
2	U 367.007†	32275.8	37879.7	14193 µg/L	14193 ppb	13:09:18
2	V 292.402†	294127.2	343761.7	10380 µg/L	10380 ppb	13:09:18
2	Zn 213.857†	320726.9	374202.3	14269 µg/L	14269 ppb	13:09:18
3	Sc RADIAL	48454.0	48454.0	98.504 %	98.504 %	13:08:49
3	Al 396.153Radial†	1565243.5	1589029.1	520840 µg/L	520840 ppb	13:08:47
3	Ca 317.933Radial†	2884308.6	2927958.4	477820 µg/L	477820 ppb	13:08:47
3	Fe 238.204 Radial†	2473185.2	2510638.9	490890 µg/L	490890 ppb	13:08:47
3	K 766.490 Radial†	239228.6	242713.2	203460 µg/L	203460 ppb	13:08:49
3	Mg 279.077 IEC†	243352.0	247037.3	486280 µg/L	486280 ppb	13:08:49
3	Na 589.592 Radial†	3080293.3	3126145.3	499510 µg/L	499510 ppb	13:08:45
3	Sr 421.552†	3515384.9	3568694.6	10367 µg/L	10367 ppb	13:08:45
3	Sc 361.383	263949.0	263949.0	87.553 %	87.553 %	13:09:41
3	Y 371.029	183216.0	183216.0	85.667 %	85.667 %	13:09:41
3	Ag 328.068†	-403.0	-247.5	10.669 µg/L	10.669 ppb	13:09:41
3	As 188.979†	5060.6	5789.0	10333 µg/L	10333 ppb	13:10:01
3	B 249.677†	324330.8	370369.0	52304 µg/L	52304 ppb	13:09:41
3	Ba 233.527†	542878.2	620056.5	14591 µg/L	14591 ppb	13:09:41
3	Be 313.107†	-13366.7	-15153.5	13.545 µg/L	13.545 ppb	13:09:41
3	Cd 226.502†	218971.7	250221.0	9020.0 µg/L	9020.0 ppb	13:09:41
3	Co 228.616†	70083.5	80222.4	9003.7 µg/L	9003.7 ppb	13:09:41
3	Cr 267.716†	532307.6	607894.9	24345 µg/L	24345 ppb	13:09:41
3	Cu 324.752†	766933.2	875743.0	20501 µg/L	20501 ppb	13:09:41
3	Mn 257.610†	830688.2	948734.7	9461.6 µg/L	9461.6 ppb	13:09:41
3	Mo 202.031†	56772.1	64851.3	10015 µg/L	10015 ppb	13:09:41
3	Ni 231.604†	55657.7	63508.7	8847.1 µg/L	8847.1 ppb	13:09:41
3	P 214.914†	718.2	556.0	95.294 µg/L	95.294 ppb	13:10:01
3	Pb 220.353†	38232.8	43462.6	22745 µg/L	22745 ppb	13:09:41
3	S 181.975 Axial†	7801.7	8845.0	51313 µg/L	51313 ppb	13:10:01
3	Sb 206.836†	291.7	240.6	-12.424 µg/L	-12.424 ppb	13:10:01
3	Se 196.026†	-95.2	-167.8	-116.98 µg/L	-116.98 ppb	13:10:01
3	Si 251.611†	329150.6	375906.8	49338 µg/L	49338 ppb	13:09:41
3	SiO2†	322548.0	368451.5	105030 µg/L	105030 ppb	13:09:41
3	Sn 189.927†	-184.9	-207.2	9.3887 µg/L	9.3887 ppb	13:10:01
3	Ti 334.940†	1363811.3	1557399.8	10336 µg/L	10336 ppb	13:09:41
3	Tl 190.801†	50.7	33.3	679.07 µg/L	679.07 ppb	13:10:01
3	U 367.007†	32984.6	37826.6	14078 µg/L	14078 ppb	13:09:41
3	V 292.402†	301922.3	344803.0	10413 µg/L	10413 ppb	13:09:41
3	Zn 213.857†	329661.3	375833.8	14327 µg/L	14327 ppb	13:09:41

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc RADIAL	50748.4	103.17	%	4.923	103.17	%	4.923	4.77%
Sc 361.383	262696.4	87.137	%	1.4251	87.137	%	1.4251	1.64%
Y 371.029	182534.5	85.349	%	1.3378	85.349	%	1.3378	1.57%
Ag 328.068†	-221.1	11.128	µg/L	0.5939	11.128	ppb	0.5939	5.34%
Al 396.153Radial†	1562850.9	512250	µg/L	14550.73	512250	ppb	14550.73	2.84%
QC value within limits for Al 396.153Radial Recovery = 102.45%								
As 188.979†	5856.1	10450	µg/L	269.34	10450	ppb	269.34	2.58%
QC value within limits for As 188.979 Recovery = 104.50%								
B 249.677†	367921.2	51943	µg/L	324.99	51943	ppb	324.99	0.63%
QC value within limits for B 249.677 Recovery = 103.89%								
Ba 233.527†	618712.4	14559	µg/L	31.14	14559	ppb	31.14	0.21%
QC value within limits for Ba 233.527 Recovery = 97.06%								
Be 313.107†	-15023.7	13.673	µg/L	0.1260	13.673	ppb	0.1260	0.92%
Ca 317.933Radial†	2891971.1	471950	µg/L	15955.82	471950	ppb	15955.82	3.38%
QC value within limits for Ca 317.933Radial Recovery = 94.39%								
Cd 226.502†	249919.2	9009.8	µg/L	21.05	9009.8	ppb	21.05	0.23%
Co 228.616†	80031.5	8982.4	µg/L	28.07	8982.4	ppb	28.07	0.31%
Cr 267.716†	606615.9	24294	µg/L	52.27	24294	ppb	52.27	0.22%

QC value within limits for Cr 267.716 Recovery = 97.18%

Cu 324.752†	874277.2	20467 µg/L	53.03	20467 ppb	53.03	0.26%
QC value within limits for Cu 324.752 Recovery = 102.33%						
Fe 238.204 Radial†	2477492.1	484410 µg/L	15445.29	484410 ppb	15445.29	3.19%
QC value within limits for Fe 238.204 Radial Recovery = 96.88%						
K 766.490 Radial†	242460.8	203240 µg/L	416.55	203240 ppb	416.55	0.20%
QC value within limits for K 766.490 Radial Recovery = 101.62%						
Mg 279.077 IEC†	249271.0	490670 µg/L	5610.70	490670 ppb	5610.70	1.14%
QC value within limits for Mg 279.077 IEC Recovery = 98.13%						
Mn 257.610†	946562.9	9440.1 µg/L	20.70	9440.1 ppb	20.70	0.22%
Mo 202.031†	64795.0	10006 µg/L	9.49	10006 ppb	9.49	0.09%
Na 589.592 Radial†	3177922.7	507780 µg/L	20989.79	507780 ppb	20989.79	4.13%
QC value within limits for Na 589.592 Radial Recovery = 101.56%						
Ni 231.604†	63324.5	8821.5 µg/L	25.08	8821.5 ppb	25.08	0.28%
P 214.914†	551.4	89.807 µg/L	38.7151	89.807 ppb	38.7151	43.11%
Pb 220.353†	43462.8	22745 µg/L	13.87	22745 ppb	13.87	0.06%
S 181.975 Axial†	8981.3	52114 µg/L	1506.16	52114 ppb	1506.16	2.89%
QC value within limits for S 181.975 Axial Recovery = 104.23%						
Sb 206.836†	249.7	2.7408 µg/L	13.35561	2.7408 ppb	13.35561	487.28%
Se 196.026†	-152.6	-93.771 µg/L	20.1228	-93.771 ppb	20.1228	21.46%
Si 251.611†	375155.2	49239 µg/L	95.55	49239 ppb	95.55	0.19%
QC value within limits for Si 251.611 Recovery = 98.48%						
SiO2†	367666.0	104810 µg/L	203.67	104810 ppb	203.67	0.19%
QC value within limits for SiO2 Recovery = 98.41%						
Sn 189.927†	-202.1	11.318 µg/L	9.6744	11.318 ppb	9.6744	85.48%
Sr 421.552†	3627488.5	10539 µg/L	423.96	10539 ppb	423.96	4.02%
QC value within limits for Sr 421.552 Recovery = 105.39%						
Ti 334.940†	1553907.0	10312 µg/L	20.30	10312 ppb	20.30	0.20%
QC value within limits for Ti 334.940 Recovery = 103.12%						
Tl 190.801†	41.0	714.60 µg/L	41.412	714.60 ppb	41.412	5.80%
U 367.007†	37820.7	14100 µg/L	83.90	14100 ppb	83.90	0.60%
V 292.402†	344196.5	10394 µg/L	16.86	10394 ppb	16.86	0.16%
QC value within limits for V 292.402 Recovery = 103.94%						
Zn 213.857†	374869.9	14291 µg/L	31.33	14291 ppb	31.33	0.22%

QC value within limits for Zn 213.857 Recovery = 95.27%

All analyte(s) passed QC.

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Batch ID:
Sequence No.: 12 **Autosampler Location: 108**
Sample ID: LR2 **Date Collected: 12/19/2022 13:11:00**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample): 49

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	66385.7	66385.7	134.96	%	134.96	%	13:11:37
1	Al 396.153Radial†	2379.0	1779.8	88.445	µg/L	88.445	ppb	13:11:37
1	Ca 317.933Radial†	709.8	377.0	61.530	µg/L	61.530	ppb	13:11:57
1	Fe 238.204 Radial†	294.2	116.0	315.09	µg/L	315.09	ppb	13:11:57
1	K 766.490 Radial†	233.3	24.8	20.774	µg/L	20.774	ppb	13:11:37
1	Mg 279.077 IEC†	164.7	111.9	220.26	µg/L	220.26	ppb	13:11:57
1	Na 589.592 Radial†	2613.6	1013.9	162.00	µg/L	162.00	ppb	13:11:37
1	Sr 421.552†	828.1	541.6	1.5735	µg/L	1.5735	ppb	13:11:37
1	Sc 361.383	294705.6	294705.6	97.755	%	97.755	%	13:12:46
1	Y 371.029	208474.1	208474.1	97.477	%	97.477	%	13:12:46
1	Ag 328.068†	30.4	244.0	-4.8875	µg/L	-4.8875	ppb	13:12:48
1	As 188.979†	-34.5	-26.3	-1.5068	µg/L	-1.5068	ppb	13:13:08
1	B 249.677†	1270.6	1227.6	150.49	µg/L	150.49	ppb	13:13:08
1	Ba 233.527†	154.6	155.2	2.0539	µg/L	2.0539	ppb	13:12:48
1	Be 313.107†	-1829.8	-1758.3	1.3158	µg/L	1.3158	ppb	13:12:48
1	Cd 226.502†	294025.3	300896.9	10918	µg/L	10918	ppb	13:12:46
1	Co 228.616†	94229.0	96568.4	10873	µg/L	10873	ppb	13:12:48
1	Cr 267.716†	465.3	384.9	-0.4431	µg/L	-0.4431	ppb	13:13:08
1	Cu 324.752†	-167.6	-397.0	-4.7275	µg/L	-4.7275	ppb	13:12:48
1	Mn 257.610†	996797.0	1019639.8	10176	µg/L	10176	ppb	13:12:46
1	Mo 202.031†	67598.1	69158.7	10662	µg/L	10662	ppb	13:12:48
1	Ni 231.604†	91258.1	93292.4	13019	µg/L	13019	ppb	13:12:48
1	P 214.914†	355.3	99.1	165.71	µg/L	165.71	ppb	13:13:08
1	Pb 220.353†	49529.5	50461.4	26424	µg/L	26424	ppb	13:12:48
1	S 181.975 Axial†	67.1	2.7	68.509	µg/L	68.509	ppb	13:13:08
1	Sb 206.836†	-53.2	-147.0	-125.21	µg/L	-125.21	ppb	13:13:08
1	Se 196.026†	43.1	-15.1	-25.173	µg/L	-25.173	ppb	13:13:08
1	Si 251.611†	1105.1	1091.1	-6.6536	µg/L	-6.6536	ppb	13:13:08
1	SiO2†	1001.8	1071.5	-13.589	µg/L	-13.589	ppb	13:13:08
1	Sn 189.927†	-4.3	-0.5	-0.2521	µg/L	-0.2521	ppb	13:13:08
1	Ti 334.940†	1923.2	1662.0	5.6650	µg/L	5.6650	ppb	13:12:48
1	Tl 190.801†	71.3	48.3	189.21	µg/L	189.21	ppb	13:13:08
1	U 367.007†	35417.0	36383.0	15359	µg/L	15359	ppb	13:12:48
1	V 292.402†	-1318.5	-1392.5	105.46	µg/L	105.46	ppb	13:12:48
1	Zn 213.857†	3085.6	2460.9	11.197	µg/L	11.197	ppb	13:13:08
2	Sc RADIAL	49522.0	49522.0	100.68	%	100.68	%	13:11:59
2	Al 396.153Radial†	1848.6	1853.2	125.52	µg/L	125.52	ppb	13:11:59
2	Ca 317.933Radial†	668.2	514.9	84.024	µg/L	84.024	ppb	13:12:20
2	Fe 238.204 Radial†	289.3	185.3	320.77	µg/L	320.77	ppb	13:12:20
2	K 766.490 Radial†	168.1	18.9	15.815	µg/L	15.815	ppb	13:11:59
2	Mg 279.077 IEC†	156.5	145.3	285.98	µg/L	285.98	ppb	13:12:20
2	Na 589.592 Radial†	1988.3	1052.3	168.14	µg/L	168.14	ppb	13:11:59
2	Sr 421.552†	554.8	479.1	1.3915	µg/L	1.3915	ppb	13:11:59
2	Sc 361.383	307415.8	307415.8	101.97	%	101.97	%	13:13:10
2	Y 371.029	217849.8	217849.8	101.86	%	101.86	%	13:13:10
2	Ag 328.068†	192.2	401.3	0.2575	µg/L	0.2575	ppb	13:13:12
2	As 188.979†	-35.7	-26.1	-2.2328	µg/L	-2.2328	ppb	13:13:32
2	B 249.677†	1083.5	990.4	118.98	µg/L	118.98	ppb	13:13:32
2	Ba 233.527†	79.0	74.5	0.1921	µg/L	0.1921	ppb	13:13:12
2	Be 313.107†	-1910.6	-1760.0	1.1895	µg/L	1.1895	ppb	13:13:12
2	Cd 226.502†	307252.6	301432.8	10937	µg/L	10937	ppb	13:13:10
2	Co 228.616†	95643.4	93970.2	10580	µg/L	10580	ppb	13:13:12
2	Cr 267.716†	467.3	367.1	-0.7369	µg/L	-0.7369	ppb	13:13:32
2	Cu 324.752†	-201.6	-423.2	-5.4618	µg/L	-5.4618	ppb	13:13:12
2	Mn 257.610†	1038105.4	1017990.7	10160	µg/L	10160	ppb	13:13:10
2	Mo 202.031†	68665.0	67345.9	10382	µg/L	10382	ppb	13:13:12
2	Ni 231.604†	92797.8	90942.6	12691	µg/L	12691	ppb	13:13:12

2	P 214.914†	345.4	74.4	101.58 µg/L	101.58 ppb	13:13:32
2	Pb 220.353†	50348.0	49169.2	25748 µg/L	25748 ppb	13:13:12
2	S 181.975 Axial†	59.6	-7.5	7.6856 µg/L	7.6856 ppb	13:13:32
2	Sb 206.836†	-58.6	-150.1	-132.82 µg/L	-132.82 ppb	13:13:32
2	Se 196.026†	58.2	-2.0	-3.3184 µg/L	-3.3184 ppb	13:13:32
2	Si 251.611†	1141.2	1079.8	-4.2092 µg/L	-4.2092 ppb	13:13:32
2	SiO2†	1039.7	1066.3	-6.7060 µg/L	-6.7060 ppb	13:13:32
2	Sn 189.927†	-3.1	0.9	0.5982 µg/L	0.5982 ppb	13:13:32
2	Ti 334.940†	1948.1	1605.1	5.4498 µg/L	5.4498 ppb	13:13:12
2	Tl 190.801†	74.8	48.7	192.68 µg/L	192.68 ppb	13:13:32
2	U 367.007†	35821.3	35281.6	14894 µg/L	14894 ppb	13:13:12
2	V 292.402†	-1395.1	-1412.0	100.98 µg/L	100.98 ppb	13:13:12
2	Zn 213.857†	3124.6	2368.6	9.7425 µg/L	9.7425 ppb	13:13:32
3	Sc RADIAL	51227.5	51227.5	104.14 %	104.14 %	13:12:22
3	Al 396.153Radial†	1815.2	1760.0	86.807 µg/L	86.807 ppb	13:12:22
3	Ca 317.933Radial†	644.2	469.7	76.656 µg/L	76.656 ppb	13:12:42
3	Fe 238.204 Radial†	265.5	152.9	320.18 µg/L	320.18 ppb	13:12:42
3	K 766.490 Radial†	111.4	-41.1	-34.400 µg/L	-34.400 ppb	13:12:22
3	Mg 279.077 IEC†	168.6	151.8	298.69 µg/L	298.69 ppb	13:12:42
3	Na 589.592 Radial†	1914.0	915.2	146.23 µg/L	146.23 ppb	13:12:22
3	Sr 421.552†	687.3	588.0	1.7081 µg/L	1.7081 ppb	13:12:22
3	Sc 361.383	304689.9	304689.9	101.07 %	101.07 %	13:13:34
3	Y 371.029	215948.9	215948.9	100.97 %	100.97 %	13:13:34
3	Ag 328.068†	142.9	354.3	-1.3703 µg/L	-1.3703 ppb	13:13:36
3	As 188.979†	-40.3	-30.9	-10.046 µg/L	-10.046 ppb	13:13:57
3	B 249.677†	995.9	913.3	108.15 µg/L	108.15 ppb	13:13:57
3	Ba 233.527†	122.9	118.6	1.2028 µg/L	1.2028 ppb	13:13:36
3	Be 313.107†	-1928.7	-1794.7	1.2026 µg/L	1.2026 ppb	13:13:36
3	Cd 226.502†	306158.3	303045.7	10996 µg/L	10996 ppb	13:13:34
3	Co 228.616†	96712.4	95867.0	10794 µg/L	10794 ppb	13:13:36
3	Cr 267.716†	487.3	391.0	-0.0111 µg/L	-0.0111 ppb	13:13:57
3	Cu 324.752†	-208.9	-432.2	-5.5844 µg/L	-5.5844 ppb	13:13:36
3	Mn 257.610†	1034186.4	1023220.8	10212 µg/L	10212 ppb	13:13:34
3	Mo 202.031†	69204.7	68482.4	10557 µg/L	10557 ppb	13:13:36
3	Ni 231.604†	93942.1	92889.0	12962 µg/L	12962 ppb	13:13:36
3	P 214.914†	344.7	76.7	105.81 µg/L	105.81 ppb	13:13:57
3	Pb 220.353†	50858.4	50115.9	26243 µg/L	26243 ppb	13:13:36
3	S 181.975 Axial†	59.5	-7.0	11.105 µg/L	11.105 ppb	13:13:57
3	Sb 206.836†	-58.8	-150.8	-132.16 µg/L	-132.16 ppb	13:13:57
3	Se 196.026†	42.5	-17.1	-28.529 µg/L	-28.529 ppb	13:13:57
3	Si 251.611†	1167.1	1115.3	-1.9955 µg/L	-1.9955 ppb	13:13:57
3	SiO2†	1059.8	1095.3	-3.6594 µg/L	-3.6594 ppb	13:13:57
3	Sn 189.927†	1.1	5.1	3.1248 µg/L	3.1248 ppb	13:13:57
3	Ti 334.940†	2026.9	1700.2	5.9942 µg/L	5.9942 ppb	13:13:36
3	Tl 190.801†	71.7	46.3	179.81 µg/L	179.81 ppb	13:13:57
3	U 367.007†	36100.3	35871.9	15143 µg/L	15143 ppb	13:13:36
3	V 292.402†	-1436.5	-1465.1	101.82 µg/L	101.82 ppb	13:13:36
3	Zn 213.857†	3176.3	2447.2	11.031 µg/L	11.031 ppb	13:13:57

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc RADIAL	55711.8	113.26	%	18.872	113.26	%	18.872	16.66%
Sc 361.383	302270.4	100.26	%	2.220	100.26	%	2.220	2.21%
Y 371.029	214090.9	100.10	%	2.317	100.10	%	2.317	2.32%
Ag 328.068†	333.2	-2.0001	µg/L	2.62971	-2.0001	ppb	2.62971	131.48%
Al 396.153Radial†	1797.7	100.26	µg/L	21.894	100.26	ppb	21.894	21.84%
As 188.979†	-27.8	-4.5950	µg/L	4.73422	-4.5950	ppb	4.73422	103.03%
B 249.677†	1043.8	125.88	µg/L	21.997	125.88	ppb	21.997	17.47%
Ba 233.527†	116.1	1.1496	µg/L	0.93205	1.1496	ppb	0.93205	81.08%
Be 313.107†	-1771.0	1.2359	µg/L	0.06944	1.2359	ppb	0.06944	5.62%
Ca 317.933Radial†	453.9	74.070	µg/L	11.4676	74.070	ppb	11.4676	15.48%
Cd 226.502†	301791.8	10951	µg/L	40.57	10951	ppb	40.57	0.37%
QC value within limits for Cd 226.502 Recovery = 109.51%								
Co 228.616†	95468.5	10749	µg/L	151.34	10749	ppb	151.34	1.41%
QC value within limits for Co 228.616 Recovery = 107.49%								
Cr 267.716†	381.0	-0.3970	µg/L	0.36509	-0.3970	ppb	0.36509	91.96%
Cu 324.752†	-417.5	-5.2579	µg/L	0.46339	-5.2579	ppb	0.46339	8.81%
Fe 238.204 Radial†	151.4	318.68	µg/L	3.126	318.68	ppb	3.126	0.98%
K 766.490 Radial†	0.9	0.7297	µg/L	30.52405	0.7297	ppb	30.52405	>999.9%

Mg 279.077 IEC†	136.3	268.31 µg/L	42.096	268.31 ppb	42.096	15.69%	
Mn 257.610†	1020283.8	10183 µg/L	26.69	10183 ppb	26.69	0.26%	
QC value within limits for Mn 257.610 Recovery = 101.83%							
Mo 202.031†	68329.0	10534 µg/L	141.22	10534 ppb	141.22	1.34%	
QC value within limits for Mo 202.031 Recovery = 105.34%							
Na 589.592 Radial†	993.8	158.79 µg/L	11.301	158.79 ppb	11.301	7.12%	
Ni 231.604†	92374.7	12891 µg/L	175.33	12891 ppb	175.33	1.36%	
QC value greater than the upper limit for Ni 231.604 Recovery = 128.91%							
P 214.914†	83.4	124.36 µg/L	35.867	124.36 ppb	35.867	28.84%	
Pb 220.353†	49915.5	26138 µg/L	350.33	26138 ppb	350.33	1.34%	
QC value within limits for Pb 220.353 Recovery = 104.55%							
S 181.975 Axial†	-3.9	29.100 µg/L	34.1719	29.100 ppb	34.1719	117.43%	
Sb 206.836†	-149.3	-130.06 µg/L	4.214	-130.06 ppb	4.214	3.24%	
Se 196.026†	-11.4	-19.007 µg/L	13.6897	-19.007 ppb	13.6897	72.03%	
Si 251.611†	1095.4	-4.2861 µg/L	2.33001	-4.2861 ppb	2.33001	54.36%	
SiO2†	1077.7	-7.9849 µg/L	5.08706	-7.9849 ppb	5.08706	63.71%	
Sn 189.927†	1.8	1.1569 µg/L	1.75641	1.1569 ppb	1.75641	151.81%	
Sr 421.552†	536.2	1.5577 µg/L	0.15891	1.5577 ppb	0.15891	10.20%	
Ti 334.940†	1655.7	5.7030 µg/L	0.27422	5.7030 ppb	0.27422	4.81%	
Tl 190.801†	47.8	187.23 µg/L	6.659	187.23 ppb	6.659	3.56%	
U 367.007†	35845.5	15132 µg/L	232.70	15132 ppb	232.70	1.54%	
QC value within limits for U 367.007 Recovery = 100.88%							
V 292.402†	-1423.2	102.75 µg/L	2.379	102.75 ppb	2.379	2.31%	
Zn 213.857†	2425.6	10.657 µg/L	0.7963	10.657 ppb	0.7963	7.47%	

QC Failed. Continue with analysis.

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Batch ID:
Sequence No.: 13 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/19/2022 13:14:56**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample): 49

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	59837.6	59837.6	121.65	%	121.65	%	13:15:35
1	Al 396.153Radial†	20106.8	16546.0	5404.9	µg/L	5404.9	ppb	13:15:33
1	Ca 317.933Radial†	37059.8	30316.4	4947.4	µg/L	4947.4	ppb	13:15:35
1	Fe 238.204 Radial†	32876.6	26924.3	5275.3	µg/L	5275.3	ppb	13:15:35
1	K 766.490 Radial†	7989.9	6420.1	5380.4	µg/L	5380.4	ppb	13:15:33
1	Mg 279.077 IEC†	3386.1	2773.5	5459.3	µg/L	5459.3	ppb	13:15:35
1	Na 589.592 Radial†	83373.7	67615.1	10804	µg/L	10804	ppb	13:15:33
1	Sr 421.552†	223764.3	183874.7	534.53	µg/L	534.53	ppb	13:15:33
1	Sc 361.383	303563.2	303563.2	100.69	%	100.69	%	13:15:48
1	Y 371.029	214370.7	214370.7	100.23	%	100.23	%	13:15:48
1	Ag 328.068†	16585.5	16684.3	506.22	µg/L	506.22	ppb	13:15:48
1	As 188.979†	281.4	288.4	510.23	µg/L	510.23	ppb	13:16:08
1	B 249.677†	4398.5	4296.1	604.06	µg/L	604.06	ppb	13:15:48
1	Ba 233.527†	21590.7	21439.1	505.14	µg/L	505.14	ppb	13:15:48
1	Be 313.107†	326201.7	324071.2	510.54	µg/L	510.54	ppb	13:15:48
1	Cd 226.502†	14111.7	14132.5	512.12	µg/L	512.12	ppb	13:15:48
1	Co 228.616†	4341.6	4486.8	504.27	µg/L	504.27	ppb	13:16:08
1	Cr 267.716†	12766.8	12587.8	504.28	µg/L	504.28	ppb	13:15:48
1	Cu 324.752†	22156.6	21778.7	509.69	µg/L	509.69	ppb	13:15:48
1	Mn 257.610†	51230.3	50824.9	507.16	µg/L	507.16	ppb	13:15:48
1	Mo 202.031†	3269.1	3254.5	501.90	µg/L	501.90	ppb	13:16:08
1	Ni 231.604†	3729.2	3641.7	508.05	µg/L	508.05	ppb	13:16:08
1	P 214.914†	1246.8	973.9	2600.7	µg/L	2600.7	ppb	13:16:08
1	Pb 220.353†	1191.5	977.5	512.24	µg/L	512.24	ppb	13:16:08
1	S 181.975 Axial†	241.5	173.9	1014.6	µg/L	1014.6	ppb	13:16:08
1	Sb 206.836†	412.3	316.9	489.25	µg/L	489.25	ppb	13:16:08
1	Se 196.026†	356.4	294.8	494.91	µg/L	494.91	ppb	13:16:08
1	Si 251.611†	20153.5	19975.4	2625.8	µg/L	2625.8	ppb	13:15:48
1	SiO2†	19637.1	19548.6	5582.6	µg/L	5582.6	ppb	13:15:48
1	Sn 189.927†	791.2	789.7	484.51	µg/L	484.51	ppb	13:16:08
1	Ti 334.940†	76269.3	75439.2	500.88	µg/L	500.88	ppb	13:15:48
1	Tl 190.801†	120.6	95.2	482.95	µg/L	482.95	ppb	13:16:08
1	U 367.007†	994.3	1140.0	460.96	µg/L	460.96	ppb	13:15:48
1	V 292.402†	17238.1	17075.7	511.61	µg/L	511.61	ppb	13:15:48
1	Zn 213.857†	14035.1	13242.9	506.34	µg/L	506.34	ppb	13:15:48
2	Sc RADIAL	55425.0	55425.0	112.68	%	112.68	%	13:15:39
2	Al 396.153Radial†	17870.1	15876.9	5185.3	µg/L	5185.3	ppb	13:15:37
2	Ca 317.933Radial†	33806.2	29854.2	4872.0	µg/L	4872.0	ppb	13:15:39
2	Fe 238.204 Radial†	30132.0	26640.2	5220.0	µg/L	5220.0	ppb	13:15:39
2	K 766.490 Radial†	7404.6	6423.5	5383.2	µg/L	5383.2	ppb	13:15:37
2	Mg 279.077 IEC†	3056.7	2702.7	5320.1	µg/L	5320.1	ppb	13:15:39
2	Na 589.592 Radial†	74265.1	64987.7	10384	µg/L	10384	ppb	13:15:37
2	Sr 421.552†	199701.3	177163.3	515.02	µg/L	515.02	ppb	13:15:37
2	Sc 361.383	302394.4	302394.4	100.31	%	100.31	%	13:16:10
2	Y 371.029	213182.7	213182.7	99.679	%	99.679	%	13:16:10
2	Ag 328.068†	16514.8	16677.4	505.98	µg/L	505.98	ppb	13:16:10
2	As 188.979†	273.9	282.0	499.09	µg/L	499.09	ppb	13:16:30
2	B 249.677†	4436.6	4351.0	611.18	µg/L	611.18	ppb	13:16:10
2	Ba 233.527†	21628.6	21559.8	508.00	µg/L	508.00	ppb	13:16:10
2	Be 313.107†	325340.3	324464.6	511.17	µg/L	511.17	ppb	13:16:10
2	Cd 226.502†	13993.9	14069.3	509.84	µg/L	509.84	ppb	13:16:10
2	Co 228.616†	4385.0	4546.8	511.01	µg/L	511.01	ppb	13:16:30
2	Cr 267.716†	12872.4	12742.1	510.44	µg/L	510.44	ppb	13:16:10
2	Cu 324.752†	22110.2	21817.4	510.60	µg/L	510.60	ppb	13:16:10
2	Mn 257.610†	51138.3	50929.8	508.21	µg/L	508.21	ppb	13:16:10
2	Mo 202.031†	3257.4	3255.4	502.04	µg/L	502.04	ppb	13:16:30
2	Ni 231.604†	3746.6	3673.3	512.46	µg/L	512.46	ppb	13:16:30

2	P 214.914†	1258.4	990.2	2644.7 µg/L	2644.7 ppb	13:16:30
2	Pb 220.353†	1197.9	988.4	517.95 µg/L	517.95 ppb	13:16:30
2	S 181.975 Axial†	236.3	169.7	989.77 µg/L	989.77 ppb	13:16:30
2	Sb 206.836†	417.7	323.8	500.00 µg/L	500.00 ppb	13:16:30
2	Se 196.026†	355.0	294.8	494.92 µg/L	494.92 ppb	13:16:30
2	Si 251.611†	20130.0	20029.4	2632.9 µg/L	2632.9 ppb	13:16:10
2	SiO2†	19641.0	19628.0	5605.4 µg/L	5605.4 ppb	13:16:10
2	Sn 189.927†	800.6	802.1	492.07 µg/L	492.07 ppb	13:16:30
2	Ti 334.940†	76292.9	75755.5	502.97 µg/L	502.97 ppb	13:16:10
2	Tl 190.801†	120.9	95.9	486.43 µg/L	486.43 ppb	13:16:30
2	U 367.007†	1064.3	1213.6	492.26 µg/L	492.26 ppb	13:16:10
2	V 292.402†	17352.2	17255.7	516.96 µg/L	516.96 ppb	13:16:10
2	Zn 213.857†	14009.1	13270.9	507.40 µg/L	507.40 ppb	13:16:10
3	Sc RADIAL	53338.1	53338.1	108.43 %	108.43 %	13:15:44
3	Al 396.153Radial†	16951.3	15650.0	5110.7 µg/L	5110.7 ppb	13:15:42
3	Ca 317.933Radial†	32479.7	29804.8	4863.9 µg/L	4863.9 ppb	13:15:44
3	Fe 238.204 Radial†	29045.0	26684.0	5228.5 µg/L	5228.5 ppb	13:15:44
3	K 766.490 Radial†	6717.4	6046.9	5067.6 µg/L	5067.6 ppb	13:15:42
3	Mg 279.077 IEC†	2957.6	2717.5	5349.2 µg/L	5349.2 ppb	13:15:44
3	Na 589.592 Radial†	70749.5	64324.4	10278 µg/L	10278 ppb	13:15:42
3	Sr 421.552†	190031.0	175179.6	509.25 µg/L	509.25 ppb	13:15:42
3	Sc 361.383	302031.7	302031.7	100.18 %	100.18 %	13:16:32
3	Y 371.029	212715.3	212715.3	99.461 %	99.461 %	13:16:32
3	Ag 328.068†	16485.2	16667.6	505.69 µg/L	505.69 ppb	13:16:32
3	As 188.979†	282.2	290.6	514.16 µg/L	514.16 ppb	13:16:52
3	B 249.677†	4364.7	4284.5	602.27 µg/L	602.27 ppb	13:16:32
3	Ba 233.527†	21546.0	21503.3	506.67 µg/L	506.67 ppb	13:16:32
3	Be 313.107†	324319.3	323835.0	510.18 µg/L	510.18 ppb	13:16:32
3	Cd 226.502†	13964.5	14056.7	509.38 µg/L	509.38 ppb	13:16:32
3	Co 228.616†	4385.5	4552.4	511.65 µg/L	511.65 ppb	13:16:52
3	Cr 267.716†	12810.2	12695.4	508.57 µg/L	508.57 ppb	13:16:32
3	Cu 324.752†	22114.5	21848.2	511.32 µg/L	511.32 ppb	13:16:32
3	Mn 257.610†	50987.4	50840.4	507.32 µg/L	507.32 ppb	13:16:32
3	Mo 202.031†	3288.8	3290.6	507.47 µg/L	507.47 ppb	13:16:52
3	Ni 231.604†	3767.6	3698.8	516.02 µg/L	516.02 ppb	13:16:52
3	P 214.914†	1250.0	983.3	2626.0 µg/L	2626.0 ppb	13:16:52
3	Pb 220.353†	1195.0	987.0	517.22 µg/L	517.22 ppb	13:16:52
3	S 181.975 Axial†	244.2	177.9	1037.9 µg/L	1037.9 ppb	13:16:52
3	Sb 206.836†	412.7	319.4	493.15 µg/L	493.15 ppb	13:16:52
3	Se 196.026†	374.5	314.6	528.08 µg/L	528.08 ppb	13:16:52
3	Si 251.611†	20055.1	19978.7	2626.2 µg/L	2626.2 ppb	13:16:32
3	SiO2†	19544.6	19555.2	5584.3 µg/L	5584.3 ppb	13:16:32
3	Sn 189.927†	812.2	814.7	499.76 µg/L	499.76 ppb	13:16:52
3	Ti 334.940†	76033.4	75587.8	501.86 µg/L	501.86 ppb	13:16:32
3	Tl 190.801†	128.4	103.5	523.27 µg/L	523.27 ppb	13:16:52
3	U 367.007†	1070.1	1220.6	495.19 µg/L	495.19 ppb	13:16:32
3	V 292.402†	17338.8	17263.1	517.24 µg/L	517.24 ppb	13:16:32
3	Zn 213.857†	13933.6	13212.3	505.11 µg/L	505.11 ppb	13:16:32

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc RADIAL	56200.3	114.25	%	6.746	114.25	%	6.746	5.90%
Sc 361.383	302663.1	100.39	%	0.265	100.39	%	0.265	0.26%
Y 371.029	213422.9	99.791	%	0.3990	99.791	%	0.3990	0.40%
Ag 328.068†	16676.4	505.96	µg/L	0.266	505.96	ppb	0.266	0.05%
QC value within limits for Ag 328.068 Recovery = 101.19%								
Al 396.153Radial†	16024.3	5233.6	µg/L	152.93	5233.6	ppb	152.93	2.92%
QC value within limits for Al 396.153Radial Recovery = 104.67%								
As 188.979†	287.0	507.83	µg/L	7.815	507.83	ppb	7.815	1.54%
QC value within limits for As 188.979 Recovery = 101.57%								
B 249.677†	4310.5	605.84	µg/L	4.713	605.84	ppb	4.713	0.78%
QC value greater than the upper limit for B 249.677 Recovery = 121.17%								
Ba 233.527†	21500.7	506.60	µg/L	1.428	506.60	ppb	1.428	0.28%
QC value within limits for Ba 233.527 Recovery = 101.32%								
Be 313.107†	324123.6	510.63	µg/L	0.502	510.63	ppb	0.502	0.10%
QC value within limits for Be 313.107 Recovery = 102.13%								
Ca 317.933Radial†	29991.8	4894.4	µg/L	46.05	4894.4	ppb	46.05	0.94%
QC value within limits for Ca 317.933Radial Recovery = 97.89%								
Cd 226.502†	14086.2	510.45	µg/L	1.468	510.45	ppb	1.468	0.29%

```
   QC value within limits for Cd 226.502  Recovery = 102.09%
Co 228.616†          4528.7      508.98 µg/L         4.092      508.98 ppb          4.092   0.80%
   QC value within limits for Co 228.616  Recovery = 101.80%
Cr 267.716†         12675.1      507.76 µg/L         3.162      507.76 ppb          3.162   0.62%
   QC value within limits for Cr 267.716  Recovery = 101.55%
Cu 324.752†         21814.8      510.54 µg/L         0.815      510.54 ppb          0.815   0.16%
   QC value within limits for Cu 324.752  Recovery = 102.11%
Fe 238.204 Radial†  26749.5      5241.3 µg/L         29.79      5241.3 ppb          29.79   0.57%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.83%
K 766.490 Radial†    6296.8      5277.1 µg/L        181.38      5277.1 ppb         181.38   3.44%
   QC value within limits for K 766.490 Radial  Recovery = 105.54%
Mg 279.077 IEC†      2731.2      5376.2 µg/L         73.43      5376.2 ppb          73.43   1.37%
   QC value within limits for Mg 279.077 IEC  Recovery = 107.52%
Mn 257.610†         50865.0      507.57 µg/L         0.566      507.57 ppb          0.566   0.11%
   QC value within limits for Mn 257.610  Recovery = 101.51%
Mo 202.031†          3266.8      503.81 µg/L         3.178      503.81 ppb          3.178   0.63%
   QC value within limits for Mo 202.031  Recovery = 100.76%
Na 589.592 Radial†  65642.4       10489 µg/L        278.08       10489 ppb         278.08   2.65%
   QC value within limits for Na 589.592 Radial  Recovery = 104.89%
Ni 231.604†          3671.3      512.18 µg/L         3.995      512.18 ppb          3.995   0.78%
   QC value within limits for Ni 231.604  Recovery = 102.44%
P 214.914†            982.5      2623.8 µg/L         22.07      2623.8 ppb          22.07   0.84%
   QC value within limits for P 214.914  Recovery = 104.95%
Pb 220.353†           984.3      515.80 µg/L         3.109      515.80 ppb          3.109   0.60%
   QC value within limits for Pb 220.353  Recovery = 103.16%
S 181.975 Axial†      173.8      1014.1 µg/L         24.08      1014.1 ppb          24.08   2.37%
   QC value within limits for S 181.975 Axial  Recovery = 101.41%
Sb 206.836†           320.0      494.13 µg/L         5.444      494.13 ppb          5.444   1.10%
   QC value within limits for Sb 206.836  Recovery = 98.83%
Se 196.026†           301.4      505.97 µg/L        19.151      505.97 ppb         19.151   3.79%
   QC value within limits for Se 196.026  Recovery = 101.19%
Si 251.611†         19994.5      2628.3 µg/L          4.01      2628.3 ppb           4.01   0.15%
   QC value within limits for Si 251.611  Recovery = 105.13%
SiO2†               19577.3      5590.8 µg/L         12.67      5590.8 ppb          12.67   0.23%
   QC value within limits for SiO2  Recovery = 104.55%
Sn 189.927†           802.2      492.11 µg/L         7.626      492.11 ppb          7.626   1.55%
   QC value within limits for Sn 189.927  Recovery = 98.42%
Sr 421.552†        178739.2      519.60 µg/L        13.248      519.60 ppb         13.248   2.55%
   QC value within limits for Sr 421.552  Recovery = 103.92%
Ti 334.940†         75594.2      501.90 µg/L         1.045      501.90 ppb          1.045   0.21%
   QC value within limits for Ti 334.940  Recovery = 100.38%
Tl 190.801†            98.2      497.55 µg/L        22.344      497.55 ppb         22.344   4.49%
   QC value within limits for Tl 190.801  Recovery = 99.51%
U 367.007†           1191.4      482.80 µg/L        18.975      482.80 ppb         18.975   3.93%
   QC value within limits for U 367.007  Recovery = 96.56%
V 292.402†          17198.1      515.27 µg/L         3.175      515.27 ppb          3.175   0.62%
   QC value within limits for V 292.402  Recovery = 103.05%
Zn 213.857†         13242.0      506.28 µg/L         1.145      506.28 ppb          1.145   0.23%
   QC value within limits for Zn 213.857  Recovery = 101.26%
QC Failed.  Continue with analysis.
```

Batch ID:
Sequence No.: 14 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/19/2022 13:17:47**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample): 49

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	56899.5	56899.5	115.67	%	115.67	%	13:18:22
1	Al 396.153Radial†	-0.9	16.3	5.4391	µg/L	5.4391	ppb	13:18:22
1	Ca 317.933Radial†	145.1	-23.4	-3.8191	µg/L	-3.8191	ppb	13:18:42
1	Fe 238.204 Radial†	100.8	-14.9	-2.9758	µg/L	-2.9758	ppb	13:18:42
1	K 766.490 Radial†	53.1	-102.1	-85.593	µg/L	-85.593	ppb	13:18:22
1	Mg 279.077 IEC†	1.9	-8.5	-16.715	µg/L	-16.715	ppb	13:18:42
1	Na 589.592 Radial†	1207.6	121.3	19.376	µg/L	19.376	ppb	13:18:22
1	Sr 421.552†	-35.8	-103.0	-0.2994	µg/L	-0.2994	ppb	13:18:22
1	Sc 361.383	269478.7	269478.7	89.387	%	89.387	%	13:19:30
1	Y 371.029	191533.7	191533.7	89.557	%	89.557	%	13:19:30
1	Ag 328.068†	67.3	288.2	8.7511	µg/L	8.7511	ppb	13:19:30
1	As 188.979†	-13.0	-5.6	-9.7860	µg/L	-9.7860	ppb	13:19:50
1	B 249.677†	313.0	278.0	37.497	µg/L	37.497	ppb	13:19:50
1	Ba 233.527†	-11.4	-15.7	-0.3648	µg/L	-0.3648	ppb	13:19:50
1	Be 313.107†	-96.0	6.2	0.0060	µg/L	0.0060	ppb	13:19:30
1	Cd 226.502†	-82.6	25.5	0.9240	µg/L	0.9240	ppb	13:19:50
1	Co 228.616†	-172.7	-18.2	-2.0435	µg/L	-2.0435	ppb	13:19:50
1	Cr 267.716†	94.0	14.0	0.5714	µg/L	0.5714	ppb	13:19:50
1	Cu 324.752†	125.0	-85.7	-2.0043	µg/L	-2.0043	ppb	13:19:30
1	Mn 257.610†	66.3	21.2	0.2117	µg/L	0.2117	ppb	13:19:50
1	Mo 202.031†	-18.5	-12.8	-1.9685	µg/L	-1.9685	ppb	13:19:50
1	Ni 231.604†	32.3	-25.7	-3.5905	µg/L	-3.5905	ppb	13:19:50
1	P 214.914†	291.4	61.6	166.67	µg/L	166.67	ppb	13:19:50
1	Pb 220.353†	212.4	31.8	16.624	µg/L	16.624	ppb	13:19:50
1	S 181.975 Axial†	59.4	0.5	3.1515	µg/L	3.1515	ppb	13:19:50
1	Sb 206.836†	95.9	14.7	22.922	µg/L	22.922	ppb	13:19:50
1	Se 196.026†	51.2	-1.8	-3.0558	µg/L	-3.0558	ppb	13:19:50
1	Si 251.611†	37.0	1.9	0.2866	µg/L	0.2866	ppb	13:19:50
1	SiO2†	-43.3	-1.8	-0.4493	µg/L	-0.4493	ppb	13:19:50
1	Sn 189.927†	-11.6	-9.0	-5.4998	µg/L	-5.4998	ppb	13:19:50
1	Ti 334.940†	240.0	-36.9	-0.2413	µg/L	-0.2413	ppb	13:19:30
1	Tl 190.801†	19.1	-3.3	-15.785	µg/L	-15.785	ppb	13:19:50
1	U 367.007†	-160.7	-27.3	-11.496	µg/L	-11.496	ppb	13:19:30
1	V 292.402†	133.0	105.1	3.0617	µg/L	3.0617	ppb	13:19:30
1	Zn 213.857†	696.0	83.1	3.2344	µg/L	3.2344	ppb	13:19:50
2	Sc RADIAL	46968.6	46968.6	95.484	%	95.484	%	13:18:44
2	Al 396.153Radial†	134.5	157.9	51.955	µg/L	51.955	ppb	13:18:44
2	Ca 317.933Radial†	119.5	-23.8	-3.8766	µg/L	-3.8766	ppb	13:19:04
2	Fe 238.204 Radial†	99.1	1.8	0.2702	µg/L	0.2702	ppb	13:19:04
2	K 766.490 Radial†	162.8	22.4	18.773	µg/L	18.773	ppb	13:18:44
2	Mg 279.077 IEC†	10.6	1.0	1.9763	µg/L	1.9763	ppb	13:19:04
2	Na 589.592 Radial†	975.5	98.9	15.806	µg/L	15.806	ppb	13:18:44
2	Sr 421.552†	43.9	-26.1	-0.0758	µg/L	-0.0758	ppb	13:18:44
2	Sc 361.383	261534.3	261534.3	86.752	%	86.752	%	13:19:52
2	Y 371.029	185866.3	185866.3	86.907	%	86.907	%	13:19:52
2	Ag 328.068†	-182.2	2.8	0.0663	µg/L	0.0663	ppb	13:19:52
2	As 188.979†	-8.9	-1.3	-2.2224	µg/L	-2.2224	ppb	13:20:12
2	B 249.677†	302.9	277.0	37.377	µg/L	37.377	ppb	13:20:12
2	Ba 233.527†	-15.6	-21.0	-0.4942	µg/L	-0.4942	ppb	13:20:12
2	Be 313.107†	-43.2	63.8	0.1057	µg/L	0.1057	ppb	13:19:52
2	Cd 226.502†	-76.2	30.1	1.0922	µg/L	1.0922	ppb	13:20:12
2	Co 228.616†	-173.5	-25.0	-2.8130	µg/L	-2.8130	ppb	13:20:12
2	Cr 267.716†	83.6	5.2	0.1897	µg/L	0.1897	ppb	13:20:12
2	Cu 324.752†	268.0	83.4	1.9502	µg/L	1.9502	ppb	13:19:52
2	Mn 257.610†	74.4	32.8	0.3269	µg/L	0.3269	ppb	13:20:12
2	Mo 202.031†	-24.1	-19.9	-3.0708	µg/L	-3.0708	ppb	13:20:12
2	Ni 231.604†	46.6	-8.2	-1.1480	µg/L	-1.1480	ppb	13:20:12

2	P 214.914†	289.6	69.5	187.70 µg/L	187.70 ppb	13:20:12
2	Pb 220.353†	219.5	47.2	24.694 µg/L	24.694 ppb	13:20:12
2	S 181.975 Axial†	64.1	8.0	46.676 µg/L	46.676 ppb	13:20:12
2	Sb 206.836†	94.3	16.1	25.097 µg/L	25.097 ppb	13:20:12
2	Se 196.026†	62.8	13.2	22.160 µg/L	22.160 ppb	13:20:12
2	Si 251.611†	34.9	0.8	0.1527 µg/L	0.1527 ppb	13:20:12
2	SiO2†	-49.1	-9.9	-2.7382 µg/L	-2.7382 ppb	13:20:12
2	Sn 189.927†	-7.1	-4.3	-2.6058 µg/L	-2.6058 ppb	13:20:12
2	Ti 334.940†	241.2	-27.4	-0.1900 µg/L	-0.1900 ppb	13:19:52
2	Tl 190.801†	26.4	5.8	28.262 µg/L	28.262 ppb	13:20:12
2	U 367.007†	-84.2	55.5	23.433 µg/L	23.433 ppb	13:19:52
2	V 292.402†	16.6	-24.7	-0.7407 µg/L	-0.7407 ppb	13:19:52
2	Zn 213.857†	693.8	104.1	4.0228 µg/L	4.0228 ppb	13:20:12
3	Sc RADIAL	47004.8	47004.8	95.558 %	95.558 %	13:19:06
3	Al 396.153Radial†	76.1	96.7	31.822 µg/L	31.822 ppb	13:19:06
3	Ca 317.933Radial†	120.5	-22.8	-3.7188 µg/L	-3.7188 ppb	13:19:26
3	Fe 238.204 Radial†	118.6	22.1	4.2734 µg/L	4.2734 ppb	13:19:26
3	K 766.490 Radial†	110.1	-32.9	-27.528 µg/L	-27.528 ppb	13:19:06
3	Mg 279.077 IEC†	5.5	-4.4	-8.5949 µg/L	-8.5949 ppb	13:19:26
3	Na 589.592 Radial†	1068.1	195.0	31.158 µg/L	31.158 ppb	13:19:06
3	Sr 421.552†	-77.6	-153.3	-0.4456 µg/L	-0.4456 ppb	13:19:06
3	Sc 361.383	270211.8	270211.8	89.630 %	89.630 %	13:20:14
3	Y 371.029	191954.5	191954.5	89.753 %	89.753 %	13:20:14
3	Ag 328.068†	-149.4	46.2	1.4005 µg/L	1.4005 ppb	13:20:14
3	As 188.979†	-8.9	-1.0	-1.8054 µg/L	-1.8054 ppb	13:20:34
3	B 249.677†	301.5	264.3	35.679 µg/L	35.679 ppb	13:20:34
3	Ba 233.527†	3.6	1.0	0.0233 µg/L	0.0233 ppb	13:20:34
3	Be 313.107†	-152.7	-56.8	-0.0905 µg/L	-0.0905 ppb	13:20:14
3	Cd 226.502†	-77.3	31.7	1.1477 µg/L	1.1477 ppb	13:20:34
3	Co 228.616†	-169.5	-14.1	-1.5880 µg/L	-1.5880 ppb	13:20:34
3	Cr 267.716†	97.3	17.4	0.6985 µg/L	0.6985 ppb	13:20:34
3	Cu 324.752†	263.5	68.5	1.6011 µg/L	1.6011 ppb	13:20:14
3	Mn 257.610†	55.8	9.3	0.0927 µg/L	0.0927 ppb	13:20:34
3	Mo 202.031†	-20.4	-14.9	-2.2947 µg/L	-2.2947 ppb	13:20:34
3	Ni 231.604†	45.1	-11.5	-1.6079 µg/L	-1.6079 ppb	13:20:34
3	P 214.914†	287.9	56.9	153.68 µg/L	153.68 ppb	13:20:34
3	Pb 220.353†	216.0	35.2	18.393 µg/L	18.393 ppb	13:20:34
3	S 181.975 Axial†	64.6	6.1	35.815 µg/L	35.815 ppb	13:20:34
3	Sb 206.836†	93.6	11.8	18.335 µg/L	18.335 ppb	13:20:34
3	Se 196.026†	52.1	-1.1	-1.7655 µg/L	-1.7655 ppb	13:20:34
3	Si 251.611†	41.0	6.3	0.8701 µg/L	0.8701 ppb	13:20:34
3	SiO2†	-47.1	-5.9	-1.6076 µg/L	-1.6076 ppb	13:20:34
3	Sn 189.927†	-8.1	-5.0	-3.0769 µg/L	-3.0769 ppb	13:20:34
3	Ti 334.940†	217.6	-62.6	-0.4160 µg/L	-0.4160 ppb	13:20:14
3	Tl 190.801†	25.1	3.3	16.185 µg/L	16.185 ppb	13:20:34
3	U 367.007†	-136.4	0.3	0.1044 µg/L	0.1044 ppb	13:20:14
3	V 292.402†	18.7	-22.9	-0.7009 µg/L	-0.7009 ppb	13:20:14
3	Zn 213.857†	714.4	101.4	3.9202 µg/L	3.9202 ppb	13:20:34

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc RADIAL	50291.0	102.24	%	11.635	102.24	%	11.635	11.38%
Sc 361.383	267074.9	88.589	%	1.5962	88.589	%	1.5962	1.80%
Y 371.029	189784.8	88.739	%	1.5898	88.739	%	1.5898	1.79%
Ag 328.068†	112.4	3.4060	µg/L	4.67684	3.4060	ppb	4.67684	137.31%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	90.3	29.739	µg/L	23.3278	29.739	ppb	23.3278	78.44%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.6	-4.6046	µg/L	4.49205	-4.6046	ppb	4.49205	97.56%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	273.1	36.851	µg/L	1.0168	36.851	ppb	1.0168	2.76%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-11.9	-0.2786	µg/L	0.26932	-0.2786	ppb	0.26932	96.67%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	4.4	0.0071	µg/L	0.09810	0.0071	ppb	0.09810	>999.9%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-23.3	-3.8048	µg/L	0.07988	-3.8048	ppb	0.07988	2.10%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	29.1	1.0546	µg/L	0.11647	1.0546	ppb	0.11647	11.04%

QC value within limits for Cd 226.502 Recovery = Not calculated

Co 228.616†	-19.1	-2.1482 µg/L	0.61913	-2.1482 ppb	0.61913	28.82%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	12.2	0.4865 µg/L	0.26481	0.4865 ppb	0.26481	54.43%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	22.1	0.5157 µg/L	2.18932	0.5157 ppb	2.18932	424.54%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	3.0	0.5226 µg/L	3.63118	0.5226 ppb	3.63118	694.82%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	-37.5	-31.449 µg/L	52.2936	-31.449 ppb	52.2936	166.28%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-4.0	-7.7779 µg/L	9.37238	-7.7779 ppb	9.37238	120.50%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	21.1	0.2104 µg/L	0.11712	0.2104 ppb	0.11712	55.66%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	-15.9	-2.4447 µg/L	0.56626	-2.4447 ppb	0.56626	23.16%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	138.4	22.114 µg/L	8.0336	22.114 ppb	8.0336	36.33%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-15.1	-2.1154 µg/L	1.29795	-2.1154 ppb	1.29795	61.36%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	62.7	169.35 µg/L	17.164	169.35 ppb	17.164	10.14%	
QC value greater than the upper limit for P 214.914 Recovery = Not calculated							
Pb 220.353†	38.1	19.904 µg/L	4.2417	19.904 ppb	4.2417	21.31%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	4.9	28.547 µg/L	22.6541	28.547 ppb	22.6541	79.36%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	14.2	22.118 µg/L	3.4521	22.118 ppb	3.4521	15.61%	
QC value greater than the upper limit for Sb 206.836 Recovery = Not calculated							
Se 196.026†	3.5	5.7795 µg/L	14.20038	5.7795 ppb	14.20038	245.70%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	3.0	0.4365 µg/L	0.38143	0.4365 ppb	0.38143	87.39%	
QC value within limits for Si 251.611 Recovery = Not calculated							
SiO2†	-5.8	-1.5983 µg/L	1.14449	-1.5983 ppb	1.14449	71.60%	
QC value within limits for SiO2 Recovery = Not calculated							
Sn 189.927†	-6.1	-3.7275 µg/L	1.55283	-3.7275 ppb	1.55283	41.66%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-94.1	-0.2736 µg/L	0.18625	-0.2736 ppb	0.18625	68.08%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	-42.3	-0.2825 µg/L	0.11851	-0.2825 ppb	0.11851	41.96%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	2.0	9.5542 µg/L	22.75960	9.5542 ppb	22.75960	238.22%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 367.007†	9.5	4.0136 µg/L	17.78971	4.0136 ppb	17.78971	443.24%	
QC value within limits for U 367.007 Recovery = Not calculated							
V 292.402†	19.1	0.5400 µg/L	2.18391	0.5400 ppb	2.18391	404.40%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	96.2	3.7258 µg/L	0.42865	3.7258 ppb	0.42865	11.50%	
QC value within limits for Zn 213.857 Recovery = Not calculated							

QC Failed. Continue with analysis.

Batch ID:
Sequence No.: 10 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/19/2022 13:58:24**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample): 49

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	59001.1	59001.1	119.95	%	119.95	%	13:59:04
1	Al 396.153Radial†	19199.4	16023.8	5233.3	µg/L	5233.3	ppb	13:59:02
1	Ca 317.933Radial†	36595.5	30361.2	4954.7	µg/L	4954.7	ppb	13:59:04
1	Fe 238.204 Radial†	32519.7	27010.0	5292.2	µg/L	5292.2	ppb	13:59:04
1	K 766.490 Radial†	7575.5	6167.7	5168.9	µg/L	5168.9	ppb	13:59:02
1	Mg 279.077 IEC†	3319.2	2757.2	5427.3	µg/L	5427.3	ppb	13:59:04
1	Na 589.592 Radial†	79592.1	65434.1	10455	µg/L	10455	ppb	13:59:02
1	Sr 421.552†	213064.0	177561.8	516.18	µg/L	516.18	ppb	13:59:02
1	Sc 361.383	309342.4	309342.4	102.61	%	102.61	%	13:59:16
1	Y 371.029	217548.7	217548.7	101.72	%	101.72	%	13:59:16
1	Ag 328.068†	16746.6	16533.5	501.59	µg/L	501.59	ppb	13:59:16
1	As 188.979†	290.1	291.7	516.07	µg/L	516.07	ppb	13:59:36
1	B 249.677†	3996.1	3822.3	540.21	µg/L	540.21	ppb	13:59:16
1	Ba 233.527†	22047.1	21483.3	506.19	µg/L	506.19	ppb	13:59:16
1	Be 313.107†	331137.2	322828.9	508.60	µg/L	508.60	ppb	13:59:16
1	Cd 226.502†	14339.7	14092.9	510.69	µg/L	510.69	ppb	13:59:16
1	Co 228.616†	4478.4	4539.5	510.20	µg/L	510.20	ppb	13:59:36
1	Cr 267.716†	13038.4	12615.7	505.33	µg/L	505.33	ppb	13:59:16
1	Cu 324.752†	22514.1	21716.0	508.23	µg/L	508.23	ppb	13:59:16
1	Mn 257.610†	52004.6	50629.0	505.21	µg/L	505.21	ppb	13:59:16
1	Mo 202.031†	3363.2	3285.5	506.69	µg/L	506.69	ppb	13:59:36
1	Ni 231.604†	3846.1	3686.4	514.28	µg/L	514.28	ppb	13:59:36
1	P 214.914†	1271.2	974.5	2602.3	µg/L	2602.3	ppb	13:59:36
1	Pb 220.353†	1213.8	977.1	512.04	µg/L	512.04	ppb	13:59:36
1	S 181.975 Axial†	248.8	176.6	1030.3	µg/L	1030.3	ppb	13:59:36
1	Sb 206.836†	429.4	325.8	503.27	µg/L	503.27	ppb	13:59:36
1	Se 196.026†	378.6	309.9	520.14	µg/L	520.14	ppb	13:59:36
1	Si 251.611†	20590.1	20027.1	2632.5	µg/L	2632.5	ppb	13:59:16
1	SiO2†	20129.2	19663.9	5615.5	µg/L	5615.5	ppb	13:59:16
1	Sn 189.927†	821.0	804.1	493.30	µg/L	493.30	ppb	13:59:36
1	Ti 334.940†	77595.7	75316.8	500.05	µg/L	500.05	ppb	13:59:16
1	Tl 190.801†	123.8	96.0	486.94	µg/L	486.94	ppb	13:59:36
1	U 367.007†	1190.7	1313.0	533.92	µg/L	533.92	ppb	13:59:16
1	V 292.402†	17679.9	17186.4	515.01	µg/L	515.01	ppb	13:59:16
1	Zn 213.857†	14309.9	13250.4	506.59	µg/L	506.59	ppb	13:59:16
2	Sc RADIAL	52267.7	52267.7	106.26	%	106.26	%	13:59:08
2	Al 396.153Radial†	17685.8	16661.4	5443.6	µg/L	5443.6	ppb	13:59:06
2	Ca 317.933Radial†	31806.6	29784.7	4860.7	µg/L	4860.7	ppb	13:59:08
2	Fe 238.204 Radial†	28304.1	26535.3	5198.8	µg/L	5198.8	ppb	13:59:08
2	K 766.490 Radial†	7071.1	6506.7	5452.9	µg/L	5452.9	ppb	13:59:06
2	Mg 279.077 IEC†	2827.0	2650.5	5217.2	µg/L	5217.2	ppb	13:59:08
2	Na 589.592 Radial†	73309.2	68069.5	10876	µg/L	10876	ppb	13:59:06
2	Sr 421.552†	196338.3	184704.6	536.95	µg/L	536.95	ppb	13:59:06
2	Sc 361.383	319258.3	319258.3	105.90	%	105.90	%	13:59:39
2	Y 371.029	224415.2	224415.2	104.93	%	104.93	%	13:59:39
2	Ag 328.068†	17477.7	16717.0	507.18	µg/L	507.18	ppb	13:59:39
2	As 188.979†	290.5	283.2	501.16	µg/L	501.16	ppb	13:59:59
2	B 249.677†	4190.7	3885.2	548.28	µg/L	548.28	ppb	13:59:39
2	Ba 233.527†	22907.8	21628.8	509.62	µg/L	509.62	ppb	13:59:39
2	Be 313.107†	343896.1	324853.9	511.78	µg/L	511.78	ppb	13:59:39
2	Cd 226.502†	14854.2	14144.8	512.56	µg/L	512.56	ppb	13:59:39
2	Co 228.616†	4406.5	4336.1	487.30	µg/L	487.30	ppb	13:59:59
2	Cr 267.716†	13615.6	12766.0	511.41	µg/L	511.41	ppb	13:59:39
2	Cu 324.752†	23234.2	21714.5	508.18	µg/L	508.18	ppb	13:59:39
2	Mn 257.610†	53970.0	50910.8	508.02	µg/L	508.02	ppb	13:59:39
2	Mo 202.031†	3307.0	3130.7	482.81	µg/L	482.81	ppb	13:59:59
2	Ni 231.604†	3759.2	3487.9	486.58	µg/L	486.58	ppb	13:59:59

2	P 214.914†	1247.5	913.6	2438.1 µg/L	2438.1 ppb	13:59:59
2	Pb 220.353†	1211.3	938.1	491.58 µg/L	491.58 ppb	13:59:59
2	S 181.975 Axial†	243.3	163.9	955.77 µg/L	955.77 ppb	13:59:59
2	Sb 206.836†	412.1	296.6	457.31 µg/L	457.31 ppb	13:59:59
2	Se 196.026†	362.1	282.8	474.73 µg/L	474.73 ppb	13:59:59
2	Si 251.611†	21321.8	20094.7	2641.8 µg/L	2641.8 ppb	13:59:39
2	SiO2†	20836.9	19722.9	5633.2 µg/L	5633.2 ppb	13:59:39
2	Sn 189.927†	810.1	768.9	471.79 µg/L	471.79 ppb	13:59:59
2	Ti 334.940†	80409.2	75624.8	502.10 µg/L	502.10 ppb	13:59:39
2	Tl 190.801†	132.5	100.5	508.64 µg/L	508.64 ppb	13:59:59
2	U 367.007†	1124.7	1214.6	492.75 µg/L	492.75 ppb	13:59:39
2	V 292.402†	18247.0	17186.8	514.70 µg/L	514.70 ppb	13:59:39
2	Zn 213.857†	14852.1	13329.2	509.82 µg/L	509.82 ppb	13:59:39
3	Sc RADIAL	53425.6	53425.6	108.61 %	108.61 %	13:59:12
3	Al 396.153Radial†	17235.8	15886.3	5188.0 µg/L	5188.0 ppb	13:59:10
3	Ca 317.933Radial†	32727.9	29984.2	4893.2 µg/L	4893.2 ppb	13:59:12
3	Fe 238.204 Radial†	29077.8	26670.4	5226.0 µg/L	5226.0 ppb	13:59:12
3	K 766.490 Radial†	6896.5	6201.6	5197.3 µg/L	5197.3 ppb	13:59:10
3	Mg 279.077 IEC†	2911.2	2670.3	5256.3 µg/L	5256.3 ppb	13:59:12
3	Na 589.592 Radial†	71734.9	65124.8	10406 µg/L	10406 ppb	13:59:10
3	Sr 421.552†	192478.3	177145.8	514.97 µg/L	514.97 ppb	13:59:10
3	Sc 361.383	299640.5	299640.5	99.392 %	99.392 %	14:00:01
3	Y 371.029	210952.0	210952.0	98.636 %	98.636 %	14:00:01
3	Ag 328.068†	16380.7	16693.8	506.47 µg/L	506.47 ppb	14:00:01
3	As 188.979†	279.7	290.3	513.70 µg/L	513.70 ppb	14:00:21
3	B 249.677†	3975.4	3927.6	554.09 µg/L	554.09 ppb	14:00:01
3	Ba 233.527†	21305.6	21433.0	505.01 µg/L	505.01 ppb	14:00:01
3	Be 313.107†	320739.6	322816.7	508.57 µg/L	508.57 ppb	14:00:01
3	Cd 226.502†	13728.1	13930.1	504.80 µg/L	504.80 ppb	14:00:01
3	Co 228.616†	4390.9	4592.9	516.21 µg/L	516.21 ppb	14:00:21
3	Cr 267.716†	12598.7	12584.7	504.12 µg/L	504.12 ppb	14:00:01
3	Cu 324.752†	21866.0	21774.4	509.59 µg/L	509.59 ppb	14:00:01
3	Mn 257.610†	50411.8	50667.5	505.59 µg/L	505.59 ppb	14:00:01
3	Mo 202.031†	3292.6	3320.6	512.10 µg/L	512.10 ppb	14:00:21
3	Ni 231.604†	3762.1	3723.3	519.43 µg/L	519.43 ppb	14:00:21
3	P 214.914†	1226.3	969.4	2588.5 µg/L	2588.5 ppb	14:00:21
3	Pb 220.353†	1199.2	1000.7	524.44 µg/L	524.44 ppb	14:00:21
3	S 181.975 Axial†	247.9	183.5	1070.8 µg/L	1070.8 ppb	14:00:21
3	Sb 206.836†	420.8	330.8	511.02 µg/L	511.02 ppb	14:00:21
3	Se 196.026†	364.3	307.4	515.95 µg/L	515.95 ppb	14:00:21
3	Si 251.611†	20000.6	20083.7	2640.0 µg/L	2640.0 ppb	14:00:01
3	SiO2†	19563.2	19729.7	5634.2 µg/L	5634.2 ppb	14:00:01
3	Sn 189.927†	815.6	824.5	505.73 µg/L	505.73 ppb	14:00:21
3	Ti 334.940†	75169.2	75324.0	500.10 µg/L	500.10 ppb	14:00:01
3	Tl 190.801†	122.7	98.8	500.48 µg/L	500.48 ppb	14:00:21
3	U 367.007†	1080.3	1239.4	503.14 µg/L	503.14 ppb	14:00:01
3	V 292.402†	17112.2	17173.2	514.64 µg/L	514.64 ppb	14:00:01
3	Zn 213.857†	13863.8	13253.0	506.66 µg/L	506.66 ppb	14:00:01

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc RADIAL	54898.1	111.60	%	7.319	111.60	%	7.319	6.56%
Sc 361.383	309413.7	102.63	%	3.254	102.63	%	3.254	3.17%
Y 371.029	217638.6	101.76	%	3.148	101.76	%	3.148	3.09%
Ag 328.068†	16648.1	505.08	µg/L	3.045	505.08	ppb	3.045	0.60%
QC value within limits for Ag 328.068 Recovery = 101.02%								
Al 396.153Radial†	16190.5	5288.3	µg/L	136.39	5288.3	ppb	136.39	2.58%
QC value within limits for Al 396.153Radial Recovery = 105.77%								
As 188.979†	288.4	510.31	µg/L	8.012	510.31	ppb	8.012	1.57%
QC value within limits for As 188.979 Recovery = 102.06%								
B 249.677†	3878.3	547.52	µg/L	6.969	547.52	ppb	6.969	1.27%
QC value within limits for B 249.677 Recovery = 109.50%								
Ba 233.527†	21515.0	506.94	µg/L	2.396	506.94	ppb	2.396	0.47%
QC value within limits for Ba 233.527 Recovery = 101.39%								
Be 313.107†	323499.8	509.65	µg/L	1.841	509.65	ppb	1.841	0.36%
QC value within limits for Be 313.107 Recovery = 101.93%								
Ca 317.933Radial†	30043.4	4902.9	µg/L	47.77	4902.9	ppb	47.77	0.97%
QC value within limits for Ca 317.933Radial Recovery = 98.06%								
Cd 226.502†	14055.9	509.35	µg/L	4.053	509.35	ppb	4.053	0.80%

QC value within limits for Cd 226.502 Recovery = 101.87%

Co 228.616†	4489.5	504.57 µg/L	15.256	504.57 ppb	15.256	3.02%
QC value within limits for Co 228.616 Recovery = 100.91%							
Cr 267.716†	12655.5	506.95 µg/L	3.906	506.95 ppb	3.906	0.77%
QC value within limits for Cr 267.716 Recovery = 101.39%							
Cu 324.752†	21735.0	508.67 µg/L	0.802	508.67 ppb	0.802	0.16%
QC value within limits for Cu 324.752 Recovery = 101.73%							
Fe 238.204 Radial†	26738.6	5239.0 µg/L	48.03	5239.0 ppb	48.03	0.92%
QC value within limits for Fe 238.204 Radial Recovery = 104.78%							
K 766.490 Radial†	6292.0	5273.0 µg/L	156.42	5273.0 ppb	156.42	2.97%
QC value within limits for K 766.490 Radial Recovery = 105.46%							
Mg 279.077 IEC†	2692.6	5300.3 µg/L	111.73	5300.3 ppb	111.73	2.11%
QC value within limits for Mg 279.077 IEC Recovery = 106.01%							
Mn 257.610†	50735.7	506.28 µg/L	1.526	506.28 ppb	1.526	0.30%
QC value within limits for Mn 257.610 Recovery = 101.26%							
Mo 202.031†	3245.6	500.53 µg/L	15.583	500.53 ppb	15.583	3.11%
QC value within limits for Mo 202.031 Recovery = 100.11%							
Na 589.592 Radial†	66209.4	10579 µg/L	258.57	10579 ppb	258.57	2.44%
QC value within limits for Na 589.592 Radial Recovery = 105.79%							
Ni 231.604†	3632.5	506.76 µg/L	17.668	506.76 ppb	17.668	3.49%
QC value within limits for Ni 231.604 Recovery = 101.35%							
P 214.914†	952.5	2543.0 µg/L	91.07	2543.0 ppb	91.07	3.58%
QC value within limits for P 214.914 Recovery = 101.72%							
Pb 220.353†	972.0	509.35 µg/L	16.595	509.35 ppb	16.595	3.26%
QC value within limits for Pb 220.353 Recovery = 101.87%							
S 181.975 Axial†	174.7	1019.0 µg/L	58.36	1019.0 ppb	58.36	5.73%
QC value within limits for S 181.975 Axial Recovery = 101.90%							
Sb 206.836†	317.7	490.53 µg/L	29.031	490.53 ppb	29.031	5.92%
QC value within limits for Sb 206.836 Recovery = 98.11%							
Se 196.026†	300.0	503.61 µg/L	25.094	503.61 ppb	25.094	4.98%
QC value within limits for Se 196.026 Recovery = 100.72%							
Si 251.611†	20068.5	2638.1 µg/L	4.91	2638.1 ppb	4.91	0.19%
QC value within limits for Si 251.611 Recovery = 105.52%							
SiO2†	19705.5	5627.6 µg/L	10.52	5627.6 ppb	10.52	0.19%
QC value within limits for SiO2 Recovery = 105.24%							
Sn 189.927†	799.2	490.27 µg/L	17.169	490.27 ppb	17.169	3.50%
QC value within limits for Sn 189.927 Recovery = 98.05%							
Sr 421.552†	179804.1	522.70 µg/L	12.355	522.70 ppb	12.355	2.36%
QC value within limits for Sr 421.552 Recovery = 104.54%							
Ti 334.940†	75421.9	500.75 µg/L	1.172	500.75 ppb	1.172	0.23%
QC value within limits for Ti 334.940 Recovery = 100.15%							
Tl 190.801†	98.4	498.69 µg/L	10.959	498.69 ppb	10.959	2.20%
QC value within limits for Tl 190.801 Recovery = 99.74%							
U 367.007†	1255.7	509.94 µg/L	21.406	509.94 ppb	21.406	4.20%
QC value within limits for U 367.007 Recovery = 101.99%							
V 292.402†	17182.1	514.78 µg/L	0.197	514.78 ppb	0.197	0.04%
QC value within limits for V 292.402 Recovery = 102.96%							
Zn 213.857†	13277.5	507.69 µg/L	1.847	507.69 ppb	1.847	0.36%
QC value within limits for Zn 213.857 Recovery = 101.54%							

All analyte(s) passed QC.

Batch ID:
Sequence No.: 11 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/19/2022 14:01:16**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample): 49

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	54087.7	54087.7	109.96	%	109.96	%	14:01:51
1	Al 396.153Radial†	-26.1	-6.7	-2.0252	µg/L	-2.0252	ppb	14:01:51
1	Ca 317.933Radial†	138.6	-22.8	-3.7210	µg/L	-3.7210	ppb	14:02:11
1	Fe 238.204 Radial†	115.6	3.1	0.5665	µg/L	0.5665	ppb	14:02:11
1	K 766.490 Radial†	59.7	-93.8	-78.569	µg/L	-78.569	ppb	14:01:51
1	Mg 279.077 IEC†	-0.6	-10.6	-20.953	µg/L	-20.953	ppb	14:02:11
1	Na 589.592 Radial†	1136.7	111.1	17.750	µg/L	17.750	ppb	14:01:51
1	Sr 421.552†	-36.8	-105.5	-0.3067	µg/L	-0.3067	ppb	14:01:51
1	Sc 361.383	282635.1	282635.1	93.751	%	93.751	%	14:02:58
1	Y 371.029	200554.8	200554.8	93.775	%	93.775	%	14:02:58
1	Ag 328.068†	-197.7	1.9	0.0553	µg/L	0.0553	ppb	14:02:58
1	As 188.979†	-6.6	1.9	3.3500	µg/L	3.3500	ppb	14:03:18
1	B 249.677†	90.8	24.7	3.3306	µg/L	3.3306	ppb	14:03:18
1	Ba 233.527†	-7.1	-10.6	-0.2490	µg/L	-0.2490	ppb	14:03:18
1	Be 313.107†	-164.4	-61.7	-0.0960	µg/L	-0.0960	ppb	14:02:58
1	Cd 226.502†	-131.1	-21.9	-0.7960	µg/L	-0.7960	ppb	14:03:18
1	Co 228.616†	-176.4	-13.1	-1.4716	µg/L	-1.4716	ppb	14:03:18
1	Cr 267.716†	79.8	-6.0	-0.2447	µg/L	-0.2447	ppb	14:03:18
1	Cu 324.752†	251.3	42.5	0.9935	µg/L	0.9935	ppb	14:02:58
1	Mn 257.610†	60.0	11.1	0.1106	µg/L	0.1106	ppb	14:03:18
1	Mo 202.031†	-30.0	-24.2	-3.7257	µg/L	-3.7257	ppb	14:03:18
1	Ni 231.604†	38.2	-21.1	-2.9520	µg/L	-2.9520	ppb	14:03:18
1	P 214.914†	280.7	35.1	94.821	µg/L	94.821	ppb	14:03:18
1	Pb 220.353†	219.0	27.7	14.504	µg/L	14.504	ppb	14:03:18
1	S 181.975 Axial†	69.5	8.3	48.288	µg/L	48.288	ppb	14:03:18
1	Sb 206.836†	90.7	4.1	6.3680	µg/L	6.3680	ppb	14:03:18
1	Se 196.026†	55.0	-0.4	-0.7401	µg/L	-0.7401	ppb	14:03:18
1	Si 251.611†	41.1	4.4	0.6335	µg/L	0.6335	ppb	14:03:18
1	SiO2†	-46.9	-3.4	-0.8559	µg/L	-0.8559	ppb	14:03:18
1	Sn 189.927†	-9.6	-6.3	-3.8421	µg/L	-3.8421	ppb	14:03:18
1	Ti 334.940†	294.2	8.5	0.0554	µg/L	0.0554	ppb	14:02:58
1	Tl 190.801†	19.2	-4.1	-20.005	µg/L	-20.005	ppb	14:03:18
1	U 367.007†	-137.0	6.4	2.6951	µg/L	2.6951	ppb	14:02:58
1	V 292.402†	17.1	-25.5	-0.7965	µg/L	-0.7965	ppb	14:02:58
1	Zn 213.857†	684.4	34.4	1.3451	µg/L	1.3451	ppb	14:03:18
2	Sc RADIAL	46359.9	46359.9	94.247	%	94.247	%	14:02:13
2	Al 396.153Radial†	45.7	65.6	21.571	µg/L	21.571	ppb	14:02:13
2	Ca 317.933Radial†	128.8	-12.2	-1.9977	µg/L	-1.9977	ppb	14:02:33
2	Fe 238.204 Radial†	95.6	-0.6	-0.1967	µg/L	-0.1967	ppb	14:02:33
2	K 766.490 Radial†	186.2	49.5	41.486	µg/L	41.486	ppb	14:02:13
2	Mg 279.077 IEC†	10.4	0.9	1.7930	µg/L	1.7930	ppb	14:02:33
2	Na 589.592 Radial†	1308.7	465.9	74.438	µg/L	74.438	ppb	14:02:13
2	Sr 421.552†	190.9	130.5	0.3795	µg/L	0.3795	ppb	14:02:13
2	Sc 361.383	276682.2	276682.2	91.776	%	91.776	%	14:03:21
2	Y 371.029	196206.0	196206.0	91.741	%	91.741	%	14:03:21
2	Ag 328.068†	-122.0	79.9	2.4246	µg/L	2.4246	ppb	14:03:21
2	As 188.979†	-5.9	2.6	4.4914	µg/L	4.4914	ppb	14:03:41
2	B 249.677†	76.5	11.2	1.5195	µg/L	1.5195	ppb	14:03:41
2	Ba 233.527†	-5.8	-9.3	-0.2220	µg/L	-0.2220	ppb	14:03:41
2	Be 313.107†	-43.8	65.8	0.1031	µg/L	0.1031	ppb	14:03:21
2	Cd 226.502†	-114.0	-6.3	-0.2304	µg/L	-0.2304	ppb	14:03:41
2	Co 228.616†	-184.2	-25.6	-2.8860	µg/L	-2.8860	ppb	14:03:41
2	Cr 267.716†	91.5	8.5	0.3434	µg/L	0.3434	ppb	14:03:41
2	Cu 324.752†	213.7	7.4	0.1718	µg/L	0.1718	ppb	14:03:21
2	Mn 257.610†	52.8	4.5	0.0454	µg/L	0.0454	ppb	14:03:41
2	Mo 202.031†	-14.4	-7.8	-1.2051	µg/L	-1.2051	ppb	14:03:41
2	Ni 231.604†	26.9	-32.5	-4.5398	µg/L	-4.5398	ppb	14:03:41

2	P 214.914†	295.5	57.7	155.86 µg/L	155.86 ppb	14:03:41
2	Pb 220.353†	224.3	38.6	20.168 µg/L	20.168 ppb	14:03:41
2	S 181.975 Axial†	74.6	15.4	90.223 µg/L	90.223 ppb	14:03:41
2	Sb 206.836†	96.7	12.8	19.920 µg/L	19.920 ppb	14:03:41
2	Se 196.026†	55.6	1.5	2.4325 µg/L	2.4325 ppb	14:03:41
2	Si 251.611†	35.0	-1.2	-0.1473 µg/L	-0.1473 ppb	14:03:41
2	SiO2†	-48.6	-6.3	-1.7784 µg/L	-1.7784 ppb	14:03:41
2	Sn 189.927†	-5.9	-2.4	-1.4900 µg/L	-1.4900 ppb	14:03:41
2	Ti 334.940†	299.1	20.5	0.1368 µg/L	0.1368 ppb	14:03:21
2	Tl 190.801†	26.2	3.9	18.693 µg/L	18.693 ppb	14:03:41
2	U 367.007†	-145.7	-6.3	-2.6383 µg/L	-2.6383 ppb	14:03:21
2	V 292.402†	-10.5	-55.2	-1.6428 µg/L	-1.6428 ppb	14:03:21
2	Zn 213.857†	696.4	63.2	2.4678 µg/L	2.4678 ppb	14:03:41
3	Sc RADIAL	48418.7	48418.7	98.432 %	98.432 %	14:02:35
3	Al 396.153Radial†	34.8	52.4	17.264 µg/L	17.264 ppb	14:02:35
3	Ca 317.933Radial†	147.4	0.9	0.1440 µg/L	0.1440 ppb	14:02:55
3	Fe 238.204 Radial†	102.8	2.4	0.3696 µg/L	0.3696 ppb	14:02:55
3	K 766.490 Radial†	27.7	-120.0	-100.52 µg/L	-100.52 ppb	14:02:35
3	Mg 279.077 IEC†	4.4	-5.6	-11.053 µg/L	-11.053 ppb	14:02:55
3	Na 589.592 Radial†	1154.1	249.8	39.913 µg/L	39.913 ppb	14:02:35
3	Sr 421.552†	129.2	59.2	0.1722 µg/L	0.1722 ppb	14:02:35
3	Sc 361.383	280995.7	280995.7	93.207 %	93.207 %	14:03:43
3	Y 371.029	199267.2	199267.2	93.173 %	93.173 %	14:03:43
3	Ag 328.068†	-259.4	-65.5	-1.9899 µg/L	-1.9899 ppb	14:03:43
3	As 188.979†	-10.1	-1.9	-3.3587 µg/L	-3.3587 ppb	14:04:03
3	B 249.677†	98.5	33.5	4.5346 µg/L	4.5346 ppb	14:04:03
3	Ba 233.527†	-9.3	-13.0	-0.3006 µg/L	-0.3006 ppb	14:04:03
3	Be 313.107†	-78.7	29.1	0.0477 µg/L	0.0477 ppb	14:03:43
3	Cd 226.502†	-103.8	6.6	0.2361 µg/L	0.2361 ppb	14:04:03
3	Co 228.616†	-191.9	-30.8	-3.4704 µg/L	-3.4704 ppb	14:04:03
3	Cr 267.716†	98.8	14.8	0.5897 µg/L	0.5897 ppb	14:04:03
3	Cu 324.752†	221.2	11.8	0.2749 µg/L	0.2749 ppb	14:03:43
3	Mn 257.610†	75.9	28.5	0.2841 µg/L	0.2841 ppb	14:04:03
3	Mo 202.031†	-15.7	-9.0	-1.3846 µg/L	-1.3846 ppb	14:04:03
3	Ni 231.604†	36.5	-22.7	-3.1755 µg/L	-3.1755 ppb	14:04:03
3	P 214.914†	290.6	47.4	128.25 µg/L	128.25 ppb	14:04:03
3	Pb 220.353†	216.0	26.0	13.582 µg/L	13.582 ppb	14:04:03
3	S 181.975 Axial†	62.4	1.1	6.2677 µg/L	6.2677 ppb	14:04:03
3	Sb 206.836†	105.3	20.4	31.782 µg/L	31.782 ppb	14:04:03
3	Se 196.026†	56.9	1.9	3.1619 µg/L	3.1619 ppb	14:04:03
3	Si 251.611†	27.6	-9.8	-1.2766 µg/L	-1.2766 ppb	14:04:03
3	SiO2†	-59.5	-17.1	-4.8654 µg/L	-4.8654 ppb	14:04:03
3	Sn 189.927†	1.4	5.5	3.3404 µg/L	3.3404 ppb	14:04:03
3	Ti 334.940†	313.4	30.9	0.2031 µg/L	0.2031 ppb	14:03:43
3	Tl 190.801†	34.2	12.1	58.601 µg/L	58.601 ppb	14:04:03
3	U 367.007†	-131.2	11.7	4.9497 µg/L	4.9497 ppb	14:03:43
3	V 292.402†	114.9	79.5	2.3317 µg/L	2.3317 ppb	14:03:43
3	Zn 213.857†	708.0	64.0	2.4909 µg/L	2.4909 ppb	14:04:03

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc RADIAL	49622.1	100.88	%	8.136	100.88	%	8.136	8.06%
Sc 361.383	280104.4	92.911	%	1.0200	92.911	%	1.0200	1.10%
Y 371.029	198676.0	92.896	%	1.0445	92.896	%	1.0445	1.12%
Ag 328.068†	5.4	0.1633	µg/L	2.20925	0.1633	ppb	2.20925	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	37.1	12.270	µg/L	12.5659	12.270	ppb	12.5659	102.41%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.9	1.4942	µg/L	4.24133	1.4942	ppb	4.24133	283.85%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	23.1	3.1282	µg/L	1.51772	3.1282	ppb	1.51772	48.52%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-10.9	-0.2572	µg/L	0.03989	-0.2572	ppb	0.03989	15.51%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	11.1	0.0183	µg/L	0.10278	0.0183	ppb	0.10278	562.93%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-11.4	-1.8582	µg/L	1.93629	-1.8582	ppb	1.93629	104.20%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-7.2	-0.2634	µg/L	0.51686	-0.2634	ppb	0.51686	196.19%

QC value within limits for Cd 226.502 Recovery = Not calculated
Co 228.616† -23.2 -2.6093 µg/L 1.02773 -2.6093 ppb 1.02773 39.39%
QC value within limits for Co 228.616 Recovery = Not calculated
Cr 267.716† 5.8 0.2295 µg/L 0.42871 0.2295 ppb 0.42871 186.82%
QC value within limits for Cr 267.716 Recovery = Not calculated
Cu 324.752† 20.6 0.4801 µg/L 0.44762 0.4801 ppb 0.44762 93.24%
QC value within limits for Cu 324.752 Recovery = Not calculated
Fe 238.204 Radial† 1.6 0.2465 µg/L 0.39620 0.2465 ppb 0.39620 160.75%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated
K 766.490 Radial† -54.7 -45.867 µg/L 76.4410 -45.867 ppb 76.4410 166.66%
QC value within limits for K 766.490 Radial Recovery = Not calculated
Mg 279.077 IEC† -5.1 -10.071 µg/L 11.4048 -10.071 ppb 11.4048 113.24%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated
Mn 257.610† 14.7 0.1467 µg/L 0.12338 0.1467 ppb 0.12338 84.12%
QC value within limits for Mn 257.610 Recovery = Not calculated
Mo 202.031† -13.7 -2.1052 µg/L 1.40634 -2.1052 ppb 1.40634 66.80%
QC value within limits for Mo 202.031 Recovery = Not calculated
Na 589.592 Radial† 275.6 44.034 µg/L 28.5681 44.034 ppb 28.5681 64.88%
QC value within limits for Na 589.592 Radial Recovery = Not calculated
Ni 231.604† -25.5 -3.5558 µg/L 0.85949 -3.5558 ppb 0.85949 24.17%
QC value within limits for Ni 231.604 Recovery = Not calculated
P 214.914† 46.7 126.31 µg/L 30.566 126.31 ppb 30.566 24.20%
QC value within limits for P 214.914 Recovery = Not calculated
Pb 220.353† 30.8 16.085 µg/L 3.5664 16.085 ppb 3.5664 22.17%
QC value within limits for Pb 220.353 Recovery = Not calculated
S 181.975 Axial† 8.3 48.259 µg/L 41.9774 48.259 ppb 41.9774 86.98%
QC value within limits for S 181.975 Axial Recovery = Not calculated
Sb 206.836† 12.4 19.357 µg/L 12.7162 19.357 ppb 12.7162 65.69%
QC value within limits for Sb 206.836 Recovery = Not calculated
Se 196.026† 1.0 1.6181 µg/L 2.07458 1.6181 ppb 2.07458 128.21%
QC value within limits for Se 196.026 Recovery = Not calculated
Si 251.611† -2.2 -0.2635 µg/L 0.96032 -0.2635 ppb 0.96032 364.51%
QC value within limits for Si 251.611 Recovery = Not calculated
SiO2† -9.0 -2.4999 µg/L 2.09989 -2.4999 ppb 2.09989 84.00%
QC value within limits for SiO2 Recovery = Not calculated
Sn 189.927† -1.1 -0.6639 µg/L 3.66182 -0.6639 ppb 3.66182 551.54%
QC value within limits for Sn 189.927 Recovery = Not calculated
Sr 421.552† 28.1 0.0816 µg/L 0.35193 0.0816 ppb 0.35193 431.03%
QC value within limits for Sr 421.552 Recovery = Not calculated
Ti 334.940† 19.9 0.1318 µg/L 0.07395 0.1318 ppb 0.07395 56.13%
QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† 3.9 19.096 µg/L 39.3048 19.096 ppb 39.3048 205.83%
QC value within limits for Tl 190.801 Recovery = Not calculated
U 367.007† 4.0 1.6688 µg/L 3.89673 1.6688 ppb 3.89673 233.50%
QC value within limits for U 367.007 Recovery = Not calculated
V 292.402† -0.4 -0.0359 µg/L 2.09362 -0.0359 ppb 2.09362 >999.9%
QC value within limits for V 292.402 Recovery = Not calculated
Zn 213.857† 53.9 2.1012 µg/L 0.65497 2.1012 ppb 0.65497 31.17%
QC value within limits for Zn 213.857 Recovery = Not calculated
All analyte(s) passed QC.

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Analysis Begun

Start Time: 12/19/2022 14:05:44 **Plasma On Time: 12/19/2022 11:21:04**
Originator: Avio3 **Technique: ICP Continuous**
Spectrometer: Avio 500, S/N 081S1911213 **Autosampler: ESI**

Sample Information File: C:\Users\Public\PerkinElmer Syngistix\ICP\Data\Sample Information\ 121922.sifx
Results Data Set: 121922
Results Library: C:\Users\Public\PerkinElmer Syngistix\ICP\Data\Results\Results.mdb

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Batch ID:
Sequence No.: 1 **Autosampler Location: 149**
Sample ID: 1205274084|2357704|1| **Date Collected: 12/19/2022 14:05:54**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample):

Replicate Data: 1205274084|2357704|1|

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	57608.9	57608.9	117.12	%	117.12	%	14:06:36
1	Al 396.153Radial†	2.0	18.8	6.3843	µg/L	6.3843	ppb	14:06:36
1	Ca 317.933Radial†	138.9	-30.2	-4.9335	µg/L	-4.9335	ppb	14:06:56
1	Fe 238.204 Radial†	104.9	-12.5	-2.4466	µg/L	-2.4466	ppb	14:06:56
1	K 766.490 Radial†	127.9	-38.9	-32.593	µg/L	-32.593	ppb	14:06:36
1	Mg 279.077 IEC†	16.7	4.2	8.2693	µg/L	8.2693	ppb	14:06:56
1	Na 589.592 Radial†	1050.6	-25.7	-4.1037	µg/L	-4.1037	ppb	14:06:36
1	Sr 421.552†	-31.0	-98.5	-0.2862	µg/L	-0.2862	ppb	14:06:36
1	Sc 361.383	301328.6	301328.6	99.951	%	99.951	%	14:07:44
1	Y 371.029	214425.8	214425.8	100.26	%	100.26	%	14:07:44
1	Ag 328.068†	-188.8	23.9	0.7006	µg/L	0.7006	ppb	14:07:44
1	As 188.979†	-1.9	7.1	12.332	µg/L	12.332	ppb	14:08:04
1	B 249.677†	87.2	15.1	2.0160	µg/L	2.0160	ppb	14:08:04
1	Ba 233.527†	-8.3	-11.3	-0.2652	µg/L	-0.2652	ppb	14:08:04
1	Be 313.107†	-208.1	-94.6	-0.1428	µg/L	-0.1428	ppb	14:07:44
1	Cd 226.502†	-127.0	-9.1	-0.3307	µg/L	-0.3307	ppb	14:08:04
1	Co 228.616†	-176.7	-1.7	-0.1978	µg/L	-0.1978	ppb	14:08:04
1	Cr 267.716†	99.3	8.2	0.3017	µg/L	0.3017	ppb	14:08:04
1	Cu 324.752†	298.6	73.3	1.7136	µg/L	1.7136	ppb	14:07:44
1	Mn 257.610†	59.8	6.9	0.0688	µg/L	0.0688	ppb	14:08:04
1	Mo 202.031†	-39.3	-31.4	-4.8462	µg/L	-4.8462	ppb	14:08:04
1	Ni 231.604†	33.0	-28.8	-4.0301	µg/L	-4.0301	ppb	14:08:04
1	P 214.914†	300.6	36.4	98.368	µg/L	98.368	ppb	14:08:04
1	Pb 220.353†	224.6	18.9	9.8670	µg/L	9.8670	ppb	14:08:04
1	S 181.975 Axial†	71.9	6.0	35.262	µg/L	35.262	ppb	14:08:04
1	Sb 206.836†	91.1	-1.5	-2.3617	µg/L	-2.3617	ppb	14:08:04
1	Se 196.026†	58.2	-0.9	-1.5212	µg/L	-1.5212	ppb	14:08:04
1	Si 251.611†	30.4	-9.0	-1.1131	µg/L	-1.1131	ppb	14:08:04
1	SiO2†	-60.8	-14.2	-3.9195	µg/L	-3.9195	ppb	14:08:04
1	Sn 189.927†	-3.5	0.4	0.2639	µg/L	0.2639	ppb	14:08:04
1	Ti 334.940†	185.4	-119.8	-0.8073	µg/L	-0.8073	ppb	14:07:44
1	Tl 190.801†	24.4	-0.2	-0.9079	µg/L	-0.9079	ppb	14:08:04
1	U 367.007†	-77.7	74.8	31.571	µg/L	31.571	ppb	14:07:44
1	V 292.402†	46.3	2.5	0.0481	µg/L	0.0481	ppb	14:08:04
1	Zn 213.857†	686.3	-8.9	-0.3228	µg/L	-0.3228	ppb	14:08:04
2	Sc RADIAL	51932.8	51932.8	105.58	%	105.58	%	14:06:58
2	Al 396.153Radial†	32.2	47.5	15.735	µg/L	15.735	ppb	14:06:58
2	Ca 317.933Radial†	101.2	-53.0	-8.6545	µg/L	-8.6545	ppb	14:07:18
2	Fe 238.204 Radial†	99.4	-7.9	-1.5378	µg/L	-1.5378	ppb	14:07:18
2	K 766.490 Radial†	197.9	39.3	32.957	µg/L	32.957	ppb	14:06:58
2	Mg 279.077 IEC†	-0.5	-10.6	-20.852	µg/L	-20.852	ppb	14:07:18
2	Na 589.592 Radial†	1129.3	146.9	23.478	µg/L	23.478	ppb	14:06:58
2	Sr 421.552†	23.3	-50.0	-0.1452	µg/L	-0.1452	ppb	14:06:58
2	Sc 361.383	299792.8	299792.8	99.442	%	99.442	%	14:08:06
2	Y 371.029	213264.5	213264.5	99.717	%	99.717	%	14:08:06

2	Ag 328.068†	-248.1	-36.6	-1.1365 µg/L	-1.1365 ppb	14:08:06
2	As 188.979†	-8.4	0.5	0.8206 µg/L	0.8206 ppb	14:08:26
2	B 249.677†	65.9	-5.9	-0.8101 µg/L	-0.8101 ppb	14:08:26
2	Ba 233.527†	-19.2	-22.3	-0.5237 µg/L	-0.5237 ppb	14:08:26
2	Be 313.107†	-117.1	-4.1	0.0024 µg/L	0.0024 ppb	14:08:06
2	Cd 226.502†	-119.1	-1.8	-0.0663 µg/L	-0.0663 ppb	14:08:26
2	Co 228.616†	-171.0	3.1	0.3458 µg/L	0.3458 ppb	14:08:26
2	Cr 267.716†	94.8	4.1	0.1358 µg/L	0.1358 ppb	14:08:26
2	Cu 324.752†	217.8	-6.4	-0.1504 µg/L	-0.1504 ppb	14:08:06
2	Mn 257.610†	57.9	5.3	0.0529 µg/L	0.0529 ppb	14:08:26
2	Mo 202.031†	-27.5	-19.7	-3.0447 µg/L	-3.0447 ppb	14:08:26
2	Ni 231.604†	32.4	-29.3	-4.0914 µg/L	-4.0914 ppb	14:08:26
2	P 214.914†	295.1	32.4	87.579 µg/L	87.579 ppb	14:08:26
2	Pb 220.353†	223.0	18.4	9.6198 µg/L	9.6198 ppb	14:08:26
2	S 181.975 Axial†	69.8	4.3	24.981 µg/L	24.981 ppb	14:08:26
2	Sb 206.836†	98.5	6.5	10.043 µg/L	10.043 ppb	14:08:26
2	Se 196.026†	67.4	8.6	14.442 µg/L	14.442 ppb	14:08:26
2	Si 251.611†	28.3	-11.0	-1.4010 µg/L	-1.4010 ppb	14:08:26
2	SiO2†	-61.3	-15.0	-4.2031 µg/L	-4.2031 ppb	14:08:26
2	Sn 189.927†	-3.1	0.9	0.5279 µg/L	0.5279 ppb	14:08:26
2	Ti 334.940†	316.3	12.7	0.0725 µg/L	0.0725 ppb	14:08:06
2	Tl 190.801†	21.1	-3.4	-16.659 µg/L	-16.659 ppb	14:08:26
2	U 367.007†	-74.3	77.8	32.837 µg/L	32.837 ppb	14:08:06
2	V 292.402†	56.0	12.6	0.3665 µg/L	0.3665 ppb	14:08:26
2	Zn 213.857†	706.8	15.1	0.6108 µg/L	0.6108 ppb	14:08:26
3	Sc RADIAL	51106.9	51106.9	103.90 %	103.90 %	14:07:20
3	Al 396.153Radial†	39.5	55.1	18.232 µg/L	18.232 ppb	14:07:20
3	Ca 317.933Radial†	126.5	-27.1	-4.4183 µg/L	-4.4183 ppb	14:07:41
3	Fe 238.204 Radial†	103.7	-2.2	-0.4540 µg/L	-0.4540 ppb	14:07:41
3	K 766.490 Radial†	201.5	45.8	38.407 µg/L	38.407 ppb	14:07:20
3	Mg 279.077 IEC†	17.6	6.9	13.525 µg/L	13.525 ppb	14:07:41
3	Na 589.592 Radial†	1102.1	138.0	22.048 µg/L	22.048 ppb	14:07:20
3	Sr 421.552†	176.0	97.3	0.2831 µg/L	0.2831 ppb	14:07:20
3	Sc 361.383	287157.7	287157.7	95.251 %	95.251 %	14:08:28
3	Y 371.029	204020.9	204020.9	95.395 %	95.395 %	14:08:28
3	Ag 328.068†	-134.9	71.2	2.1510 µg/L	2.1510 ppb	14:08:28
3	As 188.979†	-8.8	-0.3	-0.5508 µg/L	-0.5508 ppb	14:08:48
3	B 249.677†	78.9	10.6	1.4283 µg/L	1.4283 ppb	14:08:48
3	Ba 233.527†	-2.4	-5.5	-0.1291 µg/L	-0.1291 ppb	14:08:48
3	Be 313.107†	-104.6	3.8	0.0091 µg/L	0.0091 ppb	14:08:28
3	Cd 226.502†	-117.0	-4.8	-0.1781 µg/L	-0.1781 ppb	14:08:48
3	Co 228.616†	-173.8	-7.5	-0.8418 µg/L	-0.8418 ppb	14:08:48
3	Cr 267.716†	88.9	2.2	0.0762 µg/L	0.0762 ppb	14:08:48
3	Cu 324.752†	225.9	11.6	0.2715 µg/L	0.2715 ppb	14:08:28
3	Mn 257.610†	55.2	4.9	0.0494 µg/L	0.0494 ppb	14:08:48
3	Mo 202.031†	-29.4	-22.9	-3.5351 µg/L	-3.5351 ppb	14:08:48
3	Ni 231.604†	27.4	-33.1	-4.6223 µg/L	-4.6223 ppb	14:08:48
3	P 214.914†	302.6	53.4	144.22 µg/L	144.22 ppb	14:08:48
3	Pb 220.353†	223.9	29.3	15.311 µg/L	15.311 ppb	14:08:48
3	S 181.975 Axial†	69.4	6.9	40.606 µg/L	40.606 ppb	14:08:48
3	Sb 206.836†	95.1	7.3	11.308 µg/L	11.308 ppb	14:08:48
3	Se 196.026†	55.7	-0.7	-1.0976 µg/L	-1.0976 ppb	14:08:48
3	Si 251.611†	32.7	-5.1	-0.6206 µg/L	-0.6206 ppb	14:08:48
3	SiO2†	-56.0	-12.1	-3.3589 µg/L	-3.3589 ppb	14:08:48
3	Sn 189.927†	-1.7	2.2	1.3479 µg/L	1.3479 ppb	14:08:48
3	Ti 334.940†	290.9	-0.0	-0.0043 µg/L	-0.0043 ppb	14:08:28
3	Tl 190.801†	21.3	-2.3	-10.964 µg/L	-10.964 ppb	14:08:48
3	U 367.007†	-118.1	28.5	12.027 µg/L	12.027 ppb	14:08:28
3	V 292.402†	48.5	7.2	0.1803 µg/L	0.1803 ppb	14:08:48
3	Zn 213.857†	701.3	40.6	1.5978 µg/L	1.5978 ppb	14:08:48

Mean Data: 1205274084|2357704|1|

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc RADIAL	53549.5	108.86	%	7.196	108.86	%	7.196	6.61%
Sc 361.383	296093.0	98.215	%	2.5794	98.215	%	2.5794	2.63%
Y 371.029	210570.4	98.458	%	2.6660	98.458	%	2.6660	2.71%
Ag 328.068†	19.5	0.5717	µg/L	1.64753	0.5717	ppb	1.64753	288.19%
Al 396.153Radial†	40.5	13.450	µg/L	6.2454	13.450	ppb	6.2454	46.43%
As 188.979†	2.4	4.2007	µg/L	7.07539	4.2007	ppb	7.07539	168.44%

B 249.677†	6.6	0.8781 µg/L	1.49128	0.8781 ppb	1.49128	169.83%
Ba 233.527†	-13.0	-0.3060 µg/L	0.20043	-0.3060 ppb	0.20043	65.50%
Be 313.107†	-31.7	-0.0438 µg/L	0.08583	-0.0438 ppb	0.08583	196.04%
Ca 317.933Radial†	-36.8	-6.0021 µg/L	2.31144	-6.0021 ppb	2.31144	38.51%
Cd 226.502†	-5.2	-0.1917 µg/L	0.13276	-0.1917 ppb	0.13276	69.25%
Co 228.616†	-2.0	-0.2313 µg/L	0.59451	-0.2313 ppb	0.59451	257.06%
Cr 267.716†	4.8	0.1712 µg/L	0.11682	0.1712 ppb	0.11682	68.23%
Cu 324.752†	26.2	0.6116 µg/L	0.97742	0.6116 ppb	0.97742	159.82%
Fe 238.204 Radial†	-7.5	-1.4795 µg/L	0.99757	-1.4795 ppb	0.99757	67.43%
K 766.490 Radial†	15.4	12.924 µg/L	39.5128	12.924 ppb	39.5128	305.74%
Mg 279.077 IEC†	0.2	0.3142 µg/L	18.51758	0.3142 ppb	18.51758	>999.9%
Mn 257.610†	5.7	0.0570 µg/L	0.01033	0.0570 ppb	0.01033	18.11%
Mo 202.031†	-24.7	-3.8087 µg/L	0.93142	-3.8087 ppb	0.93142	24.46%
Na 589.592 Radial†	86.4	13.807 µg/L	15.5279	13.807 ppb	15.5279	112.46%
Ni 231.604†	-30.4	-4.2479 µg/L	0.32569	-4.2479 ppb	0.32569	7.67%
P 214.914†	40.7	110.06 µg/L	30.075	110.06 ppb	30.075	27.33%
Pb 220.353†	22.2	11.599 µg/L	3.2171	11.599 ppb	3.2171	27.73%
S 181.975 Axial†	5.8	33.617 µg/L	7.9415	33.617 ppb	7.9415	23.62%
Sb 206.836†	4.1	6.3297 µg/L	7.55350	6.3297 ppb	7.55350	119.33%
Se 196.026†	2.4	3.9411 µg/L	9.09657	3.9411 ppb	9.09657	230.81%
Si 251.611†	-8.3	-1.0449 µg/L	0.39462	-1.0449 ppb	0.39462	37.77%
SiO2†	-13.8	-3.8272 µg/L	0.42958	-3.8272 ppb	0.42958	11.22%
Sn 189.927†	1.2	0.7132 µg/L	0.56527	0.7132 ppb	0.56527	79.26%
Sr 421.552†	-17.0	-0.0494 µg/L	0.29646	-0.0494 ppb	0.29646	599.79%
Ti 334.940†	-35.7	-0.2464 µg/L	0.48734	-0.2464 ppb	0.48734	197.81%
Tl 190.801†	-2.0	-9.5103 µg/L	7.97549	-9.5103 ppb	7.97549	83.86%
U 367.007†	60.3	25.478 µg/L	11.6666	25.478 ppb	11.6666	45.79%
V 292.402†	7.4	0.1983 µg/L	0.15997	0.1983 ppb	0.15997	80.66%
Zn 213.857†	15.6	0.6286 µg/L	0.96041	0.6286 ppb	0.96041	152.79%

Batch ID:
Sequence No.: 2 **Autosampler Location: 150**
Sample ID: 1205274085|2357704|1| **Date Collected: 12/19/2022 14:09:41**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample): 49

Replicate Data: 1205274085|2357704|1|

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	61416.6	61416.6	124.86	%	124.86	%	14:10:18
1	Al 396.153Radial†	20317.5	16289.8	5320.4	µg/L	5320.4	ppb	14:10:16
1	Ca 317.933Radial†	39473.1	31466.0	5135.0	µg/L	5135.0	ppb	14:10:18
1	Fe 238.204 Radial†	33689.9	26880.9	5267.2	µg/L	5267.2	ppb	14:10:18
1	K 766.490 Radial†	8221.6	6436.8	5394.4	µg/L	5394.4	ppb	14:10:16
1	Mg 279.077 IEC†	3579.9	2857.1	5623.9	µg/L	5623.9	ppb	14:10:18
1	Na 589.592 Radial†	43120.4	33613.3	5370.9	µg/L	5370.9	ppb	14:10:16
1	Sr 421.552†	225980.1	180920.1	525.94	µg/L	525.94	ppb	14:10:16
1	Sc 361.383	329603.2	329603.2	109.33	%	109.33	%	14:10:30
1	Y 371.029	232556.3	232556.3	108.74	%	108.74	%	14:10:30
1	Ag 328.068†	3409.3	3331.2	101.20	µg/L	101.20	ppb	14:10:30
1	As 188.979†	316.6	298.5	528.07	µg/L	528.07	ppb	14:10:50
1	B 249.677†	4068.8	3649.4	516.75	µg/L	516.75	ppb	14:10:30
1	Ba 233.527†	23468.9	21463.1	505.71	µg/L	505.71	ppb	14:10:30
1	Be 313.107†	349067.9	319392.1	503.21	µg/L	503.21	ppb	14:10:30
1	Cd 226.502†	15108.7	13937.3	505.05	µg/L	505.05	ppb	14:10:30
1	Co 228.616†	4841.3	4603.2	517.36	µg/L	517.36	ppb	14:10:50
1	Cr 267.716†	14083.6	12790.5	512.41	µg/L	512.41	ppb	14:10:30
1	Cu 324.752†	24189.4	21899.5	512.52	µg/L	512.52	ppb	14:10:30
1	Mn 257.610†	55800.9	50985.9	508.77	µg/L	508.77	ppb	14:10:30
1	Mo 202.031†	3608.3	3308.2	510.19	µg/L	510.19	ppb	14:10:50
1	Ni 231.604†	4088.6	3677.8	513.09	µg/L	513.09	ppb	14:10:50
1	P 214.914†	515.7	207.3	528.66	µg/L	528.66	ppb	14:10:50
1	Pb 220.353†	1301.4	984.5	515.94	µg/L	515.94	ppb	14:10:50
1	S 181.975 Axial†	1024.6	871.3	5093.0	µg/L	5093.0	ppb	14:10:50
1	Sb 206.836†	490.6	356.1	550.37	µg/L	550.37	ppb	14:10:50
1	Se 196.026†	374.7	283.6	476.14	µg/L	476.14	ppb	14:10:50
1	Si 251.611†	39781.9	36347.5	4784.4	µg/L	4784.4	ppb	14:10:30
1	SiO2†	38908.6	35634.8	10190	µg/L	10190	ppb	14:10:30
1	Sn 189.927†	943.3	866.7	531.51	µg/L	531.51	ppb	14:10:50
1	Ti 334.940†	83652.9	76208.6	505.99	µg/L	505.99	ppb	14:10:30
1	Tl 190.801†	128.7	93.1	472.91	µg/L	472.91	ppb	14:10:50
1	U 367.007†	1079.3	1139.7	460.88	µg/L	460.88	ppb	14:10:30
1	V 292.402†	18849.9	17197.4	515.32	µg/L	515.32	ppb	14:10:30
1	Zn 213.857†	14866.2	12901.9	493.14	µg/L	493.14	ppb	14:10:30
2	Sc RADIAL	55737.9	55737.9	113.31	%	113.31	%	14:10:22
2	Al 396.153Radial†	18165.8	16048.8	5240.7	µg/L	5240.7	ppb	14:10:20
2	Ca 317.933Radial†	35580.6	31251.7	5100.1	µg/L	5100.1	ppb	14:10:22
2	Fe 238.204 Radial†	30431.9	26754.8	5242.9	µg/L	5242.9	ppb	14:10:22
2	K 766.490 Radial†	7326.1	6317.3	5294.3	µg/L	5294.3	ppb	14:10:20
2	Mg 279.077 IEC†	3183.6	2799.5	5510.5	µg/L	5510.5	ppb	14:10:22
2	Na 589.592 Radial†	38616.9	33157.5	5298.1	µg/L	5298.1	ppb	14:10:20
2	Sr 421.552†	203749.7	179741.3	522.51	µg/L	522.51	ppb	14:10:20
2	Sc 361.383	315704.8	315704.8	104.72	%	104.72	%	14:10:52
2	Y 371.029	222738.5	222738.5	104.15	%	104.15	%	14:10:52
2	Ag 328.068†	3271.5	3336.9	101.35	µg/L	101.35	ppb	14:10:52
2	As 188.979†	299.2	294.7	521.37	µg/L	521.37	ppb	14:11:12
2	B 249.677†	3935.8	3686.3	521.58	µg/L	521.58	ppb	14:10:52
2	Ba 233.527†	22486.0	21469.5	505.85	µg/L	505.85	ppb	14:10:52
2	Be 313.107†	332987.0	318091.7	501.17	µg/L	501.17	ppb	14:10:52
2	Cd 226.502†	14340.2	13811.8	500.51	µg/L	500.51	ppb	14:10:52
2	Co 228.616†	4762.5	4722.9	530.84	µg/L	530.84	ppb	14:11:12
2	Cr 267.716†	13437.8	12740.9	510.40	µg/L	510.40	ppb	14:10:52
2	Cu 324.752†	23143.6	21875.0	511.95	µg/L	511.95	ppb	14:10:52
2	Mn 257.610†	53040.6	50596.9	504.89	µg/L	504.89	ppb	14:10:52
2	Mo 202.031†	3550.9	3398.8	524.15	µg/L	524.15	ppb	14:11:12
2	Ni 231.604†	4023.1	3779.9	527.34	µg/L	527.34	ppb	14:11:12

2	P 214.914†	505.1	218.0	557.38 µg/L	557.38 ppb	14:11:12
2	Pb 220.353†	1296.0	1031.8	540.70 µg/L	540.70 ppb	14:11:12
2	S 181.975 Axial†	1003.5	892.4	5216.6 µg/L	5216.6 ppb	14:11:12
2	Sb 206.836†	474.6	360.6	557.49 µg/L	557.49 ppb	14:11:12
2	Se 196.026†	370.2	294.3	494.13 µg/L	494.13 ppb	14:11:12
2	Si 251.611†	37933.9	36184.7	4762.7 µg/L	4762.7 ppb	14:10:52
2	SiO2†	37055.2	35431.7	10132 µg/L	10132 ppb	14:10:52
2	Sn 189.927†	932.7	894.6	548.51 µg/L	548.51 ppb	14:11:12
2	Ti 334.940†	80116.2	76199.7	505.93 µg/L	505.93 ppb	14:10:52
2	Tl 190.801†	136.9	106.1	535.77 µg/L	535.77 ppb	14:11:12
2	U 367.007†	1088.9	1192.4	483.20 µg/L	483.20 ppb	14:10:52
2	V 292.402†	17934.6	17082.4	512.12 µg/L	512.12 ppb	14:10:52
2	Zn 213.857†	14219.7	12883.2	492.33 µg/L	492.33 ppb	14:10:52
3	Sc RADIAL	54818.0	54818.0	111.44 %	111.44 %	14:10:26
3	Al 396.153Radial†	17310.9	15550.7	5076.7 µg/L	5076.7 ppb	14:10:24
3	Ca 317.933Radial†	34346.9	30671.6	5005.4 µg/L	5005.4 ppb	14:10:26
3	Fe 238.204 Radial†	29356.5	26240.4	5142.6 µg/L	5142.6 ppb	14:10:26
3	K 766.490 Radial†	6986.8	6121.3	5130.0 µg/L	5130.0 ppb	14:10:24
3	Mg 279.077 IEC†	3066.4	2741.5	5396.3 µg/L	5396.3 ppb	14:10:26
3	Na 589.592 Radial†	36952.6	32235.9	5150.8 µg/L	5150.8 ppb	14:10:24
3	Sr 421.552†	193482.7	173545.7	504.50 µg/L	504.50 ppb	14:10:24
3	Sc 361.383	312542.1	312542.1	103.67 %	103.67 %	14:11:14
3	Y 371.029	220582.0	220582.0	103.14 %	103.14 %	14:11:14
3	Ag 328.068†	3231.9	3330.2	101.14 µg/L	101.14 ppb	14:11:14
3	As 188.979†	305.9	304.0	537.80 µg/L	537.80 ppb	14:11:34
3	B 249.677†	3974.7	3761.8	531.29 µg/L	531.29 ppb	14:11:14
3	Ba 233.527†	22044.7	21261.1	500.96 µg/L	500.96 ppb	14:11:14
3	Be 313.107†	328965.3	317430.0	500.13 µg/L	500.13 ppb	14:11:14
3	Cd 226.502†	14202.4	13817.5	500.73 µg/L	500.73 ppb	14:11:14
3	Co 228.616†	4809.2	4813.9	541.10 µg/L	541.10 ppb	14:11:34
3	Cr 267.716†	13216.0	12656.9	507.03 µg/L	507.03 ppb	14:11:14
3	Cu 324.752†	22862.1	21827.1	510.83 µg/L	510.83 ppb	14:11:14
3	Mn 257.610†	52538.1	50624.8	505.17 µg/L	505.17 ppb	14:11:14
3	Mo 202.031†	3602.9	3483.2	537.16 µg/L	537.16 ppb	14:11:34
3	Ni 231.604†	4068.0	3862.1	538.81 µg/L	538.81 ppb	14:11:34
3	P 214.914†	511.9	229.4	588.12 µg/L	588.12 ppb	14:11:34
3	Pb 220.353†	1304.4	1052.4	551.53 µg/L	551.53 ppb	14:11:34
3	S 181.975 Axial†	1023.9	921.8	5388.6 µg/L	5388.6 ppb	14:11:34
3	Sb 206.836†	479.7	370.1	572.57 µg/L	572.57 ppb	14:11:34
3	Se 196.026†	377.1	304.6	511.31 µg/L	511.31 ppb	14:11:34
3	Si 251.611†	37508.8	36141.2	4756.8 µg/L	4756.8 ppb	14:11:14
3	SiO2†	36635.3	35384.7	10118 µg/L	10118 ppb	14:11:14
3	Sn 189.927†	935.7	906.5	555.77 µg/L	555.77 ppb	14:11:34
3	Ti 334.940†	79025.3	75921.6	504.08 µg/L	504.08 ppb	14:11:14
3	Tl 190.801†	133.2	103.9	524.95 µg/L	524.95 ppb	14:11:34
3	U 367.007†	1098.4	1212.0	491.88 µg/L	491.88 ppb	14:11:14
3	V 292.402†	17835.9	17160.5	514.57 µg/L	514.57 ppb	14:11:14
3	Zn 213.857†	14052.4	12859.2	491.35 µg/L	491.35 ppb	14:11:14

Mean Data: 1205274085|2357704|1|

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc RADIAL	57324.2	116.54	%	7.265	116.54	%	7.265	6.23%
Sc 361.383	319283.4	105.91	%	3.011	105.91	%	3.011	2.84%
Y 371.029	225292.3	105.34	%	2.984	105.34	%	2.984	2.83%
Ag 328.068†	3332.8	101.23	µg/L	0.109	101.23	ppb	0.109	0.11%
Al 396.153Radial†	15963.1	5212.6	µg/L	124.28	5212.6	ppb	124.28	2.38%
As 188.979†	299.1	529.08	µg/L	8.265	529.08	ppb	8.265	1.56%
B 249.677†	3699.2	523.21	µg/L	7.406	523.21	ppb	7.406	1.42%
Ba 233.527†	21397.9	504.17	µg/L	2.787	504.17	ppb	2.787	0.55%
Be 313.107†	318304.6	501.50	µg/L	1.566	501.50	ppb	1.566	0.31%
Ca 317.933Radial†	31129.8	5080.1	µg/L	67.07	5080.1	ppb	67.07	1.32%
Cd 226.502†	13855.5	502.10	µg/L	2.558	502.10	ppb	2.558	0.51%
Co 228.616†	4713.4	529.77	µg/L	11.904	529.77	ppb	11.904	2.25%
Cr 267.716†	12729.4	509.95	µg/L	2.719	509.95	ppb	2.719	0.53%
Cu 324.752†	21867.2	511.77	µg/L	0.859	511.77	ppb	0.859	0.17%
Fe 238.204 Radial†	26625.3	5217.6	µg/L	66.01	5217.6	ppb	66.01	1.27%
K 766.490 Radial†	6291.8	5272.9	µg/L	133.46	5272.9	ppb	133.46	2.53%
Mg 279.077 IEC†	2799.3	5510.2	µg/L	113.82	5510.2	ppb	113.82	2.07%
Mn 257.610†	50735.8	506.28	µg/L	2.165	506.28	ppb	2.165	0.43%

Mo 202.031†	3396.7	523.83 µg/L	13.486	523.83 ppb	13.486	2.57%
Na 589.592 Radial†	33002.2	5273.3 µg/L	112.12	5273.3 ppb	112.12	2.13%
Ni 231.604†	3773.3	526.41 µg/L	12.885	526.41 ppb	12.885	2.45%
P 214.914†	218.2	558.05 µg/L	29.733	558.05 ppb	29.733	5.33%
Pb 220.353†	1022.9	536.05 µg/L	18.241	536.05 ppb	18.241	3.40%
S 181.975 Axial†	895.1	5232.7 µg/L	148.46	5232.7 ppb	148.46	2.84%
Sb 206.836†	362.3	560.15 µg/L	11.335	560.15 ppb	11.335	2.02%
Se 196.026†	294.2	493.86 µg/L	17.586	493.86 ppb	17.586	3.56%
Si 251.611†	36224.5	4768.0 µg/L	14.51	4768.0 ppb	14.51	0.30%
SiO2†	35483.7	10147 µg/L	38.43	10147 ppb	38.43	0.38%
Sn 189.927†	889.3	545.26 µg/L	12.451	545.26 ppb	12.451	2.28%
Sr 421.552†	178069.0	517.65 µg/L	11.517	517.65 ppb	11.517	2.22%
Ti 334.940†	76110.0	505.33 µg/L	1.088	505.33 ppb	1.088	0.22%
Tl 190.801†	101.0	511.21 µg/L	33.606	511.21 ppb	33.606	6.57%
U 367.007†	1181.4	478.65 µg/L	15.993	478.65 ppb	15.993	3.34%
V 292.402†	17146.8	514.00 µg/L	1.675	514.00 ppb	1.675	0.33%
Zn 213.857†	12881.4	492.27 µg/L	0.895	492.27 ppb	0.895	0.18%

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Batch ID:
Sequence No.: 3 **Autosampler Location: 151**
Sample ID: 604449001|2357704|1| **Date Collected: 12/19/2022 14:12:27**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample): 49

Replicate Data: 604449001|2357704|1|

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	48861.7	48861.7	99.333	%	99.333	%	14:13:02
1	Al 396.153Radial†	30.6	47.9	4.9177	µg/L	4.9177	ppb	14:13:02
1	Ca 317.933Radial†	774306.4	779357.0	127190	µg/L	127190	ppb	14:13:02
1	Fe 238.204 Radial†	255.3	155.0	30.124	µg/L	30.124	ppb	14:13:22
1	K 766.490 Radial†	1454716.0	1464336.4	1227000	µg/L	1227000	ppb	14:13:02
1	Mg 279.077 IEC†	45304.2	45598.3	89732	µg/L	89732	ppb	14:13:02
1	Na 589.592 Radial†	Saturated3	Saturated3					14:13:22
Saturated in preshot (code 3)								
1	Sr 421.552†	376894.6	379353.5	1100.7	µg/L	1100.7	ppb	14:13:02
1	Sc 361.383	189379.6	189379.6	62.818	%	62.818	%	14:14:11
1	Y 371.029	133297.7	133297.7	62.327	%	62.327	%	14:14:11
1	Ag 328.068†	-202.8	-110.0	-2.5358	µg/L	-2.5358	ppb	14:14:31
1	As 188.979†	13.5	30.4	54.284	µg/L	54.284	ppb	14:14:31
1	B 249.677†	17697.6	28100.8	3792.1	µg/L	3792.1	ppb	14:14:11
1	Ba 233.527†	6046.6	9622.6	224.60	µg/L	224.60	ppb	14:14:31
1	Be 313.107†	-49.9	34.2	0.0488	µg/L	0.0488	ppb	14:14:31
1	Cd 226.502†	-108.7	-55.1	-1.9861	µg/L	-1.9861	ppb	14:14:31
1	Co 228.616†	-144.9	-55.6	-6.4406	µg/L	-6.4406	ppb	14:14:31
1	Cr 267.716†	201.8	230.1	9.2406	µg/L	9.2406	ppb	14:14:31
1	Cu 324.752†	213.6	114.6	2.6775	µg/L	2.6775	ppb	14:14:31
1	Mn 257.610†	622.4	937.9	9.3599	µg/L	9.3599	ppb	14:14:31
1	Mo 202.031†	942.4	1508.1	232.49	µg/L	232.49	ppb	14:14:31
1	Ni 231.604†	163.9	199.1	27.202	µg/L	27.202	ppb	14:14:31
1	P 214.914†	4568.1	7007.6	18943	µg/L	18943	ppb	14:14:31
1	Pb 220.353†	217.1	139.8	73.048	µg/L	73.048	ppb	14:14:31
1	S 181.975 Axial†	202388.2	322117.4	1883900	µg/L	1883900	ppb	14:14:11
1	Sb 206.836†	92.1	54.0	86.431	µg/L	86.431	ppb	14:14:31
1	Se 196.026†	71.3	54.4	91.049	µg/L	91.049	ppb	14:14:31
1	Si 251.611†	241281.9	384059.1	50623	µg/L	50623	ppb	14:14:11
1	SiO2†	235989.1	375719.5	107590	µg/L	107590	ppb	14:14:11
1	Sn 189.927†	-0.0	3.9	-7.5266	µg/L	-7.5266	ppb	14:14:31
1	Ti 334.940†	127.0	-103.2	-0.1648	µg/L	-0.1648	ppb	14:14:31
1	Tl 190.801†	23.7	13.1	65.211	µg/L	65.211	ppb	14:14:31
1	U 367.007†	-111.1	-24.3	-10.368	µg/L	-10.368	ppb	14:14:11
1	V 292.402†	870.7	1342.3	42.432	µg/L	42.432	ppb	14:14:31
1	Zn 213.857†	750.8	499.6	17.516	µg/L	17.516	ppb	14:14:31
2	Sc RADIAL	41945.2	41945.2	85.272	%	85.272	%	14:13:24
2	Al 396.153Radial†	-38.5	-28.1	-19.446	µg/L	-19.446	ppb	14:13:24
2	Ca 317.933Radial†	650503.2	762707.4	124470	µg/L	124470	ppb	14:13:24
2	Fe 238.204 Radial†	235.4	174.0	33.860	µg/L	33.860	ppb	14:13:44
2	K 766.490 Radial†	1259531.0	1476925.4	1237600	µg/L	1237600	ppb	14:13:24
2	Mg 279.077 IEC†	37886.8	44420.4	87414	µg/L	87414	ppb	14:13:24
2	Na 589.592 Radial†	Saturated3	Saturated3					14:13:44
Saturated in preshot (code 3)								
2	Sr 421.552†	324793.3	380818.6	1105.0	µg/L	1105.0	ppb	14:13:24
2	Sc 361.383	197271.5	197271.5	65.435	%	65.435	%	14:14:33
2	Y 371.029	138950.5	138950.5	64.970	%	64.970	%	14:14:33
2	Ag 328.068†	-189.8	-77.3	-1.6022	µg/L	-1.6022	ppb	14:14:53
2	As 188.979†	7.0	19.7	35.451	µg/L	35.451	ppb	14:14:53
2	B 249.677†	18419.2	28076.5	3788.8	µg/L	3788.8	ppb	14:14:33
2	Ba 233.527†	5866.3	8962.0	209.10	µg/L	209.10	ppb	14:14:53
2	Be 313.107†	-50.9	35.8	0.0657	µg/L	0.0657	ppb	14:14:53
2	Cd 226.502†	-106.3	-44.4	-1.6006	µg/L	-1.6006	ppb	14:14:53
2	Co 228.616†	-146.1	-48.3	-5.6196	µg/L	-5.6196	ppb	14:14:53
2	Cr 267.716†	216.2	239.3	9.5611	µg/L	9.5611	ppb	14:14:53
2	Cu 324.752†	237.0	136.6	3.1937	µg/L	3.1937	ppb	14:14:53
2	Mn 257.610†	597.3	859.8	8.5807	µg/L	8.5807	ppb	14:14:53

2	Mo 202.031†	929.3	1428.1	220.15 µg/L	220.15 ppb	14:14:53
2	Ni 231.604†	166.4	192.5	26.287 µg/L	26.287 ppb	14:14:53
2	P 214.914†	4396.1	6453.8	17446 µg/L	17446 ppb	14:14:53
2	Pb 220.353†	208.1	112.2	58.609 µg/L	58.609 ppb	14:14:53
2	S 181.975 Axial†	210459.6	321563.2	1880600 µg/L	1880600 ppb	14:14:33
2	Sb 206.836†	94.6	51.9	83.001 µg/L	83.001 ppb	14:14:53
2	Se 196.026†	73.7	53.5	89.511 µg/L	89.511 ppb	14:14:53
2	Si 251.611†	251252.8	383930.9	50607 µg/L	50607 ppb	14:14:33
2	SiO2†	245772.4	375641.6	107570 µg/L	107570 ppb	14:14:33
2	Sn 189.927†	-3.3	-1.0	-10.326 µg/L	-10.326 ppb	14:14:53
2	Ti 334.940†	146.8	-81.0	-0.0474 µg/L	-0.0474 ppb	14:14:53
2	Tl 190.801†	14.4	-2.6	-10.793 µg/L	-10.793 ppb	14:14:53
2	U 367.007†	-33.4	101.4	42.690 µg/L	42.690 ppb	14:14:33
2	V 292.402†	844.2	1246.3	39.507 µg/L	39.507 ppb	14:14:53
2	Zn 213.857†	750.6	451.4	15.692 µg/L	15.692 ppb	14:14:53
3	Sc RADIAL	43760.1	43760.1	88.962 %	88.962 %	14:13:47
3	Al 396.153Radial†	113.3	144.4	37.156 µg/L	37.156 ppb	14:13:47
3	Ca 317.933Radial†	674074.1	757564.5	123630 µg/L	123630 ppb	14:13:47
3	Fe 238.204 Radial†	242.0	170.0	33.072 µg/L	33.072 ppb	14:14:07
3	K 766.490 Radial†	1325520.4	1489843.2	1248400 µg/L	1248400 ppb	14:13:47
3	Mg 279.077 IEC†	39189.4	44041.9	86669 µg/L	86669 ppb	14:13:47
3	Na 589.592 Radial†	Saturated3	Saturated3			14:14:07
Saturated in preshot (code 3)						
3	Sr 421.552†	336795.8	378513.5	1098.3 µg/L	1098.3 ppb	14:13:47
3	Sc 361.383	191153.2	191153.2	63.406 %	63.406 %	14:14:55
3	Y 371.029	134296.3	134296.3	62.794 %	62.794 %	14:14:55
3	Ag 328.068†	-200.5	-103.4	-2.3660 µg/L	-2.3660 ppb	14:15:15
3	As 188.979†	9.5	23.9	42.920 µg/L	42.920 ppb	14:15:15
3	B 249.677†	17690.6	27828.4	3755.4 µg/L	3755.4 ppb	14:14:55
3	Ba 233.527†	5733.9	9040.1	210.95 µg/L	210.95 ppb	14:15:15
3	Be 313.107†	-62.9	14.4	0.0201 µg/L	0.0201 ppb	14:15:15
3	Cd 226.502†	-106.4	-49.8	-1.7944 µg/L	-1.7944 ppb	14:15:15
3	Co 228.616†	-142.7	-50.1	-5.8174 µg/L	-5.8174 ppb	14:15:15
3	Cr 267.716†	196.3	218.4	8.7623 µg/L	8.7623 ppb	14:15:15
3	Cu 324.752†	210.8	107.0	2.4999 µg/L	2.4999 ppb	14:15:15
3	Mn 257.610†	584.4	868.7	8.6694 µg/L	8.6694 ppb	14:15:15
3	Mo 202.031†	899.2	1426.1	219.85 µg/L	219.85 ppb	14:15:15
3	Ni 231.604†	163.5	195.9	26.784 µg/L	26.784 ppb	14:15:15
3	P 214.914†	4280.3	6486.3	17534 µg/L	17534 ppb	14:15:15
3	Pb 220.353†	212.0	128.5	67.123 µg/L	67.123 ppb	14:15:15
3	S 181.975 Axial†	199199.5	314099.1	1837000 µg/L	1837000 ppb	14:14:55
3	Sb 206.836†	83.7	39.4	63.484 µg/L	63.484 ppb	14:15:15
3	Se 196.026†	72.8	55.6	93.069 µg/L	93.069 ppb	14:15:15
3	Si 251.611†	240193.4	378778.6	49927 µg/L	49927 ppb	14:14:55
3	SiO2†	234976.6	370637.1	106140 µg/L	106140 ppb	14:14:55
3	Sn 189.927†	-1.7	1.2	-8.9007 µg/L	-8.9007 ppb	14:15:15
3	Ti 334.940†	123.1	-111.2	-0.2362 µg/L	-0.2362 ppb	14:15:15
3	Tl 190.801†	23.8	12.9	64.420 µg/L	64.420 ppb	14:15:15
3	U 367.007†	-97.2	-0.7	-0.4276 µg/L	-0.4276 ppb	14:14:55
3	V 292.402†	800.2	1218.3	38.631 µg/L	38.631 ppb	14:15:15
3	Zn 213.857†	748.1	484.2	16.967 µg/L	16.967 ppb	14:15:15

Mean Data: 604449001|2357704|1|

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc RADIAL	44855.7	91.189	%	7.2903	91.189	%	7.2903	7.99%
Sc 361.383	192601.4	63.886	%	1.3734	63.886	%	1.3734	2.15%
Y 371.029	135514.9	63.363	%	1.4107	63.363	%	1.4107	2.23%
Ag 328.068†	-96.9	-2.1680	µg/L	0.49734	-2.1680	ppb	0.49734	22.94%
Al 396.153Radial†	54.7	7.5424	µg/L	28.39207	7.5424	ppb	28.39207	376.43%
As 188.979†	24.7	44.218	µg/L	9.4836	44.218	ppb	9.4836	21.45%
B 249.677†	28001.9	3778.8	µg/L	20.35	3778.8	ppb	20.35	0.54%
Ba 233.527†	9208.2	214.89	µg/L	8.466	214.89	ppb	8.466	3.94%
Be 313.107†	28.1	0.0449	µg/L	0.02305	0.0449	ppb	0.02305	51.39%
Ca 317.933Radial†	766543.0	125090	µg/L	1858.97	125090	ppb	1858.97	1.49%
Cd 226.502†	-49.8	-1.7937	µg/L	0.19275	-1.7937	ppb	0.19275	10.75%
Co 228.616†	-51.3	-5.9592	µg/L	0.42849	-5.9592	ppb	0.42849	7.19%
Concentration less than lower limit for Co 228.616.								
Cr 267.716†	229.3	9.1880	µg/L	0.40199	9.1880	ppb	0.40199	4.38%
Cu 324.752†	119.4	2.7904	µg/L	0.36044	2.7904	ppb	0.36044	12.92%

Fe 238.204 Radial†	166.3	32.352 µg/L	1.9690	32.352 ppb	1.9690	6.09%
K 766.490 Radial†	1477035.0	1237600 µg/L	10686.45	1237600 ppb	10686.45	0.86%
Concentration greater than upper limit for K 766.490 Radial.						
Mg 279.077 IEC†	44686.8	87938 µg/L	1597.31	87938 ppb	1597.31	1.82%
Mn 257.610†	888.8	8.8700 µg/L	0.42658	8.8700 ppb	0.42658	4.81%
Mo 202.031†	1454.1	224.17 µg/L	7.212	224.17 ppb	7.212	3.22%
Na 589.592 Radial†	Saturated3					
Ni 231.604†	195.8	26.757 µg/L	0.4582	26.757 ppb	0.4582	1.71%
P 214.914†	6649.2	17974 µg/L	840.00	17974 ppb	840.00	4.67%
Concentration greater than upper limit for P 214.914.						
Pb 220.353†	126.8	66.260 µg/L	7.2581	66.260 ppb	7.2581	10.95%
S 181.975 Axial†	319259.9	1867200 µg/L	26188.96	1867200 ppb	26188.96	1.40%
Concentration greater than upper limit for S 181.975 Axial.						
Sb 206.836†	48.5	77.638 µg/L	12.3776	77.638 ppb	12.3776	15.94%
Se 196.026†	54.5	91.210 µg/L	1.7847	91.210 ppb	1.7847	1.96%
Si 251.611†	382256.2	50386 µg/L	396.97	50386 ppb	396.97	0.79%
Concentration greater than upper limit for Si 251.611.						
SiO2†	373999.4	107100 µg/L	833.74	107100 ppb	833.74	0.78%
Concentration greater than upper limit for SiO2.						
Sn 189.927†	1.3	-8.9179 µg/L	1.39998	-8.9179 ppb	1.39998	15.70%
Sr 421.552†	379561.8	1101.3 µg/L	3.39	1101.3 ppb	3.39	0.31%
Ti 334.940†	-98.5	-0.1495 µg/L	0.09533	-0.1495 ppb	0.09533	63.79%
Tl 190.801†	7.8	39.613 µg/L	43.6541	39.613 ppb	43.6541	110.20%
U 367.007†	25.5	10.632 µg/L	28.2052	10.632 ppb	28.2052	265.30%
V 292.402†	1268.9	40.190 µg/L	1.9905	40.190 ppb	1.9905	4.95%
Zn 213.857†	478.4	16.725 µg/L	0.9358	16.725 ppb	0.9358	5.60%

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Batch ID:
Sequence No.: 4 **Autosampler Location: 152**
Sample ID: 1205274086|2357704|1| **Date Collected: 12/19/2022 14:16:07**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample): 49

Replicate Data: 1205274086|2357704|1|

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	48559.3	48559.3	98.718	%	98.718	%	14:16:43
1	Al 396.153Radial†	60.8	78.7	15.542	µg/L	15.542	ppb	14:16:43
1	Ca 317.933Radial†	775475.2	785396.3	128170	µg/L	128170	ppb	14:16:43
1	Fe 238.204 Radial†	247.7	148.9	29.022	µg/L	29.022	ppb	14:17:03
1	K 766.490 Radial†	1541430.3	1561298.6	1308300	µg/L	1308300	ppb	14:16:43
1	Mg 279.077 IEC†	45320.2	45898.6	90323	µg/L	90323	ppb	14:16:43
1	Na 589.592 Radial†	Saturated3	Saturated3					14:17:03
	Saturated in preshot (code 3)							
1	Sr 421.552†	381512.5	386394.7	1121.1	µg/L	1121.1	ppb	14:16:43
1	Sc 361.383	203969.3	203969.3	67.657	%	67.657	%	14:17:51
1	Y 371.029	144106.7	144106.7	67.381	%	67.381	%	14:17:51
1	Ag 328.068†	-223.8	-117.9	-2.7809	µg/L	-2.7809	ppb	14:18:11
1	As 188.979†	9.0	22.2	39.820	µg/L	39.820	ppb	14:18:11
1	B 249.677†	19759.0	29132.5	3931.3	µg/L	3931.3	ppb	14:17:51
1	Ba 233.527†	6164.8	9108.9	212.50	µg/L	212.50	ppb	14:18:11
1	Be 313.107†	-76.7	0.3	-0.0021	µg/L	-0.0021	ppb	14:18:11
1	Cd 226.502†	-112.2	-47.9	-1.7254	µg/L	-1.7254	ppb	14:18:11
1	Co 228.616†	-135.7	-25.6	-3.0743	µg/L	-3.0743	ppb	14:18:11
1	Cr 267.716†	223.1	238.6	9.5680	µg/L	9.5680	ppb	14:18:11
1	Cu 324.752†	180.8	41.8	0.9770	µg/L	0.9770	ppb	14:18:11
1	Mn 257.610†	594.7	826.0	8.2432	µg/L	8.2432	ppb	14:18:11
1	Mo 202.031†	965.6	1435.0	221.23	µg/L	221.23	ppb	14:18:11
1	Ni 231.604†	167.3	185.4	25.287	µg/L	25.287	ppb	14:18:11
1	P 214.914†	4647.7	6605.1	17855	µg/L	17855	ppb	14:18:11
1	Pb 220.353†	210.0	104.5	54.568	µg/L	54.568	ppb	14:18:11
1	S 181.975 Axial†	227125.2	335634.3	1962900	µg/L	1962900	ppb	14:17:51
1	Sb 206.836†	95.0	47.9	76.689	µg/L	76.689	ppb	14:18:11
1	Se 196.026†	78.5	56.9	95.247	µg/L	95.247	ppb	14:18:11
1	Si 251.611†	268091.3	396210.4	52225	µg/L	52225	ppb	14:17:51
1	SiO2†	261990.4	387279.2	110910	µg/L	110910	ppb	14:17:51
1	Sn 189.927†	3.3	8.9	-4.5688	µg/L	-4.5688	ppb	14:18:11
1	Ti 334.940†	106.1	-148.6	-0.4668	µg/L	-0.4668	ppb	14:18:11
1	Tl 190.801†	18.3	2.4	13.438	µg/L	13.438	ppb	14:18:11
1	U 367.007†	-98.8	6.4	2.6086	µg/L	2.6086	ppb	14:17:51
1	V 292.402†	900.0	1286.4	40.662	µg/L	40.662	ppb	14:18:11
1	Zn 213.857†	743.3	402.9	13.787	µg/L	13.787	ppb	14:18:11
2	Sc RADIAL	43025.2	43025.2	87.468	%	87.468	%	14:17:05
2	Al 396.153Radial†	109.9	142.7	36.121	µg/L	36.121	ppb	14:17:05
2	Ca 317.933Radial†	674853.5	771397.8	125890	µg/L	125890	ppb	14:17:05
2	Fe 238.204 Radial†	234.0	165.5	32.201	µg/L	32.201	ppb	14:17:25
2	K 766.490 Radial†	1373806.7	1570498.1	1316000	µg/L	1316000	ppb	14:17:05
2	Mg 279.077 IEC†	39214.0	44822.5	88205	µg/L	88205	ppb	14:17:05
2	Na 589.592 Radial†	Saturated3	Saturated3					14:17:25
	Saturated in preshot (code 3)							
2	Sr 421.552†	339233.2	387766.6	1125.2	µg/L	1125.2	ppb	14:17:05
2	Sc 361.383	196141.7	196141.7	65.061	%	65.061	%	14:18:13
2	Y 371.029	138227.2	138227.2	64.632	%	64.632	%	14:18:13
2	Ag 328.068†	-251.0	-172.9	-4.4567	µg/L	-4.4567	ppb	14:18:33
2	As 188.979†	11.5	26.7	47.699	µg/L	47.699	ppb	14:18:33
2	B 249.677†	18639.3	28576.9	3856.4	µg/L	3856.4	ppb	14:18:13
2	Ba 233.527†	6132.4	9422.7	219.93	µg/L	219.93	ppb	14:18:33
2	Be 313.107†	-67.3	10.2	0.0120	µg/L	0.0120	ppb	14:18:33
2	Cd 226.502†	-114.2	-57.6	-2.0768	µg/L	-2.0768	ppb	14:18:33
2	Co 228.616†	-144.1	-46.4	-5.4004	µg/L	-5.4004	ppb	14:18:33
2	Cr 267.716†	204.3	222.9	8.9462	µg/L	8.9462	ppb	14:18:33
2	Cu 324.752†	215.9	106.4	2.4875	µg/L	2.4875	ppb	14:18:33
2	Mn 257.610†	603.3	874.4	8.7260	µg/L	8.7260	ppb	14:18:33

2	Mo 202.031†	966.4	1493.2	230.20 µg/L	230.20 ppb	14:18:33	
2	Ni 231.604†	167.5	195.5	26.716 µg/L	26.716 ppb	14:18:33	
2	P 214.914†	4610.0	6821.3	18439 µg/L	18439 ppb	14:18:33	
2	Pb 220.353†	196.5	96.2	50.240 µg/L	50.240 ppb	14:18:33	
2	S 181.975 Axial†	211693.0	325311.6	1902500 µg/L	1902500 ppb	14:18:13	
2	Sb 206.836†	89.7	45.3	72.732 µg/L	72.732 ppb	14:18:33	
2	Se 196.026†	66.5	43.1	72.054 µg/L	72.054 ppb	14:18:33	
2	Si 251.611†	254372.8	390938.0	51530 µg/L	51530 ppb	14:18:13	
2	SiO2†	248856.3	382545.1	109550 µg/L	109550 ppb	14:18:13	
2	Sn 189.927†	-3.5	-1.5	-10.724 µg/L	-10.724 ppb	14:18:33	
2	Ti 334.940†	117.7	-124.5	-0.3133 µg/L	-0.3133 ppb	14:18:33	
2	Tl 190.801†	14.4	-2.5	-10.010 µg/L	-10.010 ppb	14:18:33	
2	U 367.007†	-106.9	-11.9	-5.1359 µg/L	-5.1359 ppb	14:18:13	
2	V 292.402†	880.2	1309.2	41.433 µg/L	41.433 ppb	14:18:33	
2	Zn 213.857†	755.5	465.5	16.219 µg/L	16.219 ppb	14:18:33	
3	Sc RADIAL	43145.3	43145.3	87.712 %	87.712 %	14:17:27	
3	Al 396.153Radial†	85.9	115.0	27.289 µg/L	27.289 ppb	14:17:27	
3	Ca 317.933Radial†	681578.2	776916.0	126790 µg/L	126790 ppb	14:17:27	
3	Fe 238.204 Radial†	250.3	183.3	35.641 µg/L	35.641 ppb	14:17:47	
3	K 766.490 Radial†	1395614.9	1590987.5	1333100 µg/L	1333100 ppb	14:17:27	
3	Mg 279.077 IEC†	39637.1	45180.0	88908 µg/L	88908 ppb	14:17:27	
3	Na 589.592 Radial†	Saturated3	Saturated3			14:17:47	
Saturated in preshot (code 3)							
3	Sr 421.552†	343876.2	391980.0	1137.4 µg/L	1137.4 ppb	14:17:27	
3	Sc 361.383	198593.6	198593.6	65.874 %	65.874 %	14:18:35	
3	Y 371.029	139901.0	139901.0	65.414 %	65.414 %	14:18:35	
3	Ag 328.068†	-227.2	-132.1	-3.2284 µg/L	-3.2284 ppb	14:18:55	
3	As 188.979†	12.4	27.8	49.669 µg/L	49.669 ppb	14:18:55	
3	B 249.677†	19047.4	28842.8	3892.3 µg/L	3892.3 ppb	14:18:35	
3	Ba 233.527†	6040.9	9167.4	213.91 µg/L	213.91 ppb	14:18:55	
3	Be 313.107†	-45.6	44.4	0.0716 µg/L	0.0716 ppb	14:18:55	
3	Cd 226.502†	-117.3	-60.2	-2.1702 µg/L	-2.1702 ppb	14:18:55	
3	Co 228.616†	-153.6	-58.0	-6.7218 µg/L	-6.7218 ppb	14:18:55	
3	Cr 267.716†	208.4	225.1	9.0156 µg/L	9.0156 ppb	14:18:55	
3	Cu 324.752†	193.8	68.6	1.6034 µg/L	1.6034 ppb	14:18:55	
3	Mn 257.610†	587.0	838.1	8.3641 µg/L	8.3641 ppb	14:18:55	
3	Mo 202.031†	956.1	1459.3	224.97 µg/L	224.97 ppb	14:18:55	
3	Ni 231.604†	174.0	202.3	27.652 µg/L	27.652 ppb	14:18:55	
3	P 214.914†	4554.7	6649.9	17976 µg/L	17976 ppb	14:18:55	
3	Pb 220.353†	207.2	108.7	56.784 µg/L	56.784 ppb	14:18:55	
3	S 181.975 Axial†	216190.0	328121.1	1919000 µg/L	1919000 ppb	14:18:35	
3	Sb 206.836†	90.5	44.8	72.033 µg/L	72.033 ppb	14:18:55	
3	Se 196.026†	68.9	45.4	76.029 µg/L	76.029 ppb	14:18:55	
3	Si 251.611†	258055.6	391701.6	51631 µg/L	51631 ppb	14:18:35	
3	SiO2†	252286.7	383030.3	109690 µg/L	109690 ppb	14:18:35	
3	Sn 189.927†	-0.7	2.9	-8.0835 µg/L	-8.0835 ppb	14:18:55	
3	Ti 334.940†	123.2	-118.3	-0.2763 µg/L	-0.2763 ppb	14:18:55	
3	Tl 190.801†	23.0	10.3	51.604 µg/L	51.604 ppb	14:18:55	
3	U 367.007†	-74.0	40.2	16.840 µg/L	16.840 ppb	14:18:35	
3	V 292.402†	883.6	1297.6	41.051 µg/L	41.051 ppb	14:18:55	
3	Zn 213.857†	740.4	428.4	14.768 µg/L	14.768 ppb	14:18:55	

Mean Data: 1205274086|2357704|1|

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc RADIAL	44909.9	91.299	%	6.4261	91.299	%	6.4261	7.04%
Sc 361.383	199568.2	66.197	%	1.3280	66.197	%	1.3280	2.01%
Y 371.029	140745.0	65.809	%	1.4164	65.809	%	1.4164	2.15%
Ag 328.068†	-141.0	-3.4887	µg/L	0.86771	-3.4887	ppb	0.86771	24.87%
Al 396.153Radial†	112.2	26.317	µg/L	10.3237	26.317	ppb	10.3237	39.23%
As 188.979†	25.5	45.729	µg/L	5.2116	45.729	ppb	5.2116	11.40%
B 249.677†	28850.7	3893.3	µg/L	37.47	3893.3	ppb	37.47	0.96%
Ba 233.527†	9233.0	215.44	µg/L	3.947	215.44	ppb	3.947	1.83%
Be 313.107†	18.3	0.0272	µg/L	0.03909	0.0272	ppb	0.03909	143.80%
Ca 317.933Radial†	777903.4	126950	µg/L	1150.72	126950	ppb	1150.72	0.91%
Cd 226.502†	-55.2	-1.9908	µg/L	0.23454	-1.9908	ppb	0.23454	11.78%
Co 228.616†	-43.3	-5.0655	µg/L	1.84666	-5.0655	ppb	1.84666	36.46%
Concentration less than lower limit for Co 228.616.								
Cr 267.716†	228.9	9.1766	µg/L	0.34072	9.1766	ppb	0.34072	3.71%
Cu 324.752†	72.3	1.6893	µg/L	0.75890	1.6893	ppb	0.75890	44.92%

Fe 238.204 Radial†	165.9	32.288 µg/L	3.3106	32.288 ppb	3.3106	10.25%
K 766.490 Radial†	1574261.4	1319100 µg/L	12734.65	1319100 ppb	12734.65	0.97%
Concentration greater than upper limit for K 766.490 Radial.						
Mg 279.077 IEC†	45300.4	89145 µg/L	1078.54	89145 ppb	1078.54	1.21%
Mn 257.610†	846.2	8.4444 µg/L	0.25119	8.4444 ppb	0.25119	2.97%
Mo 202.031†	1462.5	225.47 µg/L	4.507	225.47 ppb	4.507	2.00%
Na 589.592 Radial†	Saturated3					
Ni 231.604†	194.4	26.552 µg/L	1.1911	26.552 ppb	1.1911	4.49%
P 214.914†	6692.1	18090 µg/L	308.35	18090 ppb	308.35	1.70%
Concentration greater than upper limit for P 214.914.						
Pb 220.353†	103.1	53.864 µg/L	3.3285	53.864 ppb	3.3285	6.18%
S 181.975 Axial†	329689.0	1928100 µg/L	31212.77	1928100 ppb	31212.77	1.62%
Concentration greater than upper limit for S 181.975 Axial.						
Sb 206.836†	46.0	73.818 µg/L	2.5108	73.818 ppb	2.5108	3.40%
Se 196.026†	48.5	81.110 µg/L	12.4032	81.110 ppb	12.4032	15.29%
Si 251.611†	392950.0	51795 µg/L	375.59	51795 ppb	375.59	0.73%
Concentration greater than upper limit for Si 251.611.						
SiO2†	384284.8	110050 µg/L	745.86	110050 ppb	745.86	0.68%
Concentration greater than upper limit for SiO2.						
Sn 189.927†	3.4	-7.7922 µg/L	3.08812	-7.7922 ppb	3.08812	39.63%
Sr 421.552†	388713.8	1127.9 µg/L	8.47	1127.9 ppb	8.47	0.75%
Ti 334.940†	-130.4	-0.3521 µg/L	0.10101	-0.3521 ppb	0.10101	28.69%
Tl 190.801†	3.4	18.344 µg/L	31.0983	18.344 ppb	31.0983	169.53%
U 367.007†	11.6	4.7708 µg/L	11.14623	4.7708 ppb	11.14623	233.63%
V 292.402†	1297.7	41.048 µg/L	0.3854	41.048 ppb	0.3854	0.94%
Zn 213.857†	432.3	14.925 µg/L	1.2236	14.925 ppb	1.2236	8.20%

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Batch ID:
Sequence No.: 5 **Autosampler Location: 153**
Sample ID: 1205274087|2357704|1| **Date Collected: 12/19/2022 14:19:48**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample): 49

Replicate Data: 1205274087|2357704|1|

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	50678.1	50678.1	103.03	%	103.03	%	14:20:25
1	Al 396.153Radial†	15745.0	15299.7	4985.6	µg/L	4985.6	ppb	14:20:25
1	Ca 317.933Radial†	852255.4	827078.2	134970	µg/L	134970	ppb	14:20:23
1	Fe 238.204 Radial†	25698.3	24841.6	4867.0	µg/L	4867.0	ppb	14:20:25
1	K 766.490 Radial†	1663564.6	1614562.5	1352900	µg/L	1352900	ppb	14:20:23
1	Mg 279.077 IEC†	49391.4	47930.8	94323	µg/L	94323	ppb	14:20:25
1	Na 589.592 Radial†	Saturated3	Saturated3					14:20:25
	Saturated in preshot (code 3)							
1	Sr 421.552†	583151.7	565954.2	1643.1	µg/L	1643.1	ppb	14:20:23
1	Sc 361.383	216009.5	216009.5	71.651	%	71.651	%	14:20:37
1	Y 371.029	152022.9	152022.9	71.082	%	71.082	%	14:20:37
1	Ag 328.068†	2720.3	4009.4	122.59	µg/L	122.59	ppb	14:20:57
1	As 188.979†	269.7	385.4	680.95	µg/L	680.95	ppb	14:20:57
1	B 249.677†	23584.1	32843.1	4454.5	µg/L	4454.5	ppb	14:20:37
1	Ba 233.527†	21851.8	30494.5	716.45	µg/L	716.45	ppb	14:20:37
1	Be 313.107†	222043.3	310009.5	488.49	µg/L	488.49	ppb	14:20:37
1	Cd 226.502†	9593.3	13506.9	489.47	µg/L	489.47	ppb	14:20:57
1	Co 228.616†	2775.6	4048.9	454.78	µg/L	454.78	ppb	14:20:57
1	Cr 267.716†	8773.0	12152.9	486.88	µg/L	486.88	ppb	14:20:57
1	Cu 324.752†	18447.9	25521.4	597.18	µg/L	597.18	ppb	14:20:37
1	Mn 257.610†	35483.1	49469.2	493.64	µg/L	493.64	ppb	14:20:37
1	Mo 202.031†	3363.8	4702.6	725.13	µg/L	725.13	ppb	14:20:57
1	Ni 231.604†	2547.5	3493.6	486.82	µg/L	486.82	ppb	14:20:57
1	P 214.914†	5046.2	6778.4	18289	µg/L	18289	ppb	14:20:57
1	Pb 220.353†	856.2	989.2	518.28	µg/L	518.28	ppb	14:20:57
1	S 181.975 Axial†	242969.7	339036.1	1982800	µg/L	1982800	ppb	14:20:37
1	Sb 206.836†	383.3	442.3	687.49	µg/L	687.49	ppb	14:20:57
1	Se 196.026†	209.9	233.8	392.49	µg/L	392.49	ppb	14:20:57
1	Si 251.611†	314285.8	438595.3	57806	µg/L	57806	ppb	14:20:37
1	SiO2†	307465.3	429162.3	122890	µg/L	122890	ppb	14:20:37
1	Sn 189.927†	594.8	834.2	501.36	µg/L	501.36	ppb	14:20:57
1	Ti 334.940†	55740.9	77489.7	515.05	µg/L	515.05	ppb	14:20:37
1	Tl 190.801†	79.8	86.8	445.14	µg/L	445.14	ppb	14:20:57
1	U 367.007†	665.9	1081.9	438.02	µg/L	438.02	ppb	14:20:37
1	V 292.402†	13647.5	19003.4	571.03	µg/L	571.03	ppb	14:20:37
1	Zn 213.857†	12155.4	16269.1	621.58	µg/L	621.58	ppb	14:20:57
2	Sc RADIAL	48898.2	48898.2	99.407	%	99.407	%	14:20:30
2	Al 396.153Radial†	15267.3	15375.4	5009.7	µg/L	5009.7	ppb	14:20:30
2	Ca 317.933Radial†	810889.5	815577.4	133100	µg/L	133100	ppb	14:20:27
2	Fe 238.204 Radial†	24755.8	24801.5	4859.4	µg/L	4859.4	ppb	14:20:30
2	K 766.490 Radial†	1589777.2	1599111.7	1339900	µg/L	1339900	ppb	14:20:27
2	Mg 279.077 IEC†	47616.7	47890.7	94244	µg/L	94244	ppb	14:20:30
2	Na 589.592 Radial†	Saturated3	Saturated3					14:20:30
	Saturated in preshot (code 3)							
2	Sr 421.552†	557262.7	560514.6	1627.3	µg/L	1627.3	ppb	14:20:27
2	Sc 361.383	202022.8	202022.8	67.011	%	67.011	%	14:20:59
2	Y 371.029	142173.1	142173.1	66.477	%	66.477	%	14:20:59
2	Ag 328.068†	2589.2	4076.7	124.67	µg/L	124.67	ppb	14:21:19
2	As 188.979†	258.0	393.9	696.13	µg/L	696.13	ppb	14:21:19
2	B 249.677†	21779.6	32429.1	4398.6	µg/L	4398.6	ppb	14:20:59
2	Ba 233.527†	20241.5	30203.0	709.60	µg/L	709.60	ppb	14:20:59
2	Be 313.107†	206631.7	308466.2	486.06	µg/L	486.06	ppb	14:20:59
2	Cd 226.502†	9090.2	13683.1	495.87	µg/L	495.87	ppb	14:21:19
2	Co 228.616†	2655.2	4137.4	464.75	µg/L	464.75	ppb	14:21:19
2	Cr 267.716†	8379.0	12412.7	497.36	µg/L	497.36	ppb	14:21:19
2	Cu 324.752†	17174.5	25403.6	594.43	µg/L	594.43	ppb	14:20:59
2	Mn 257.610†	33008.4	49204.8	491.00	µg/L	491.00	ppb	14:20:59

2	Mo 202.031†	3219.7	4812.6	742.09 µg/L	742.09 ppb	14:21:19
2	Ni 231.604†	2428.6	3562.3	496.42 µg/L	496.42 ppb	14:21:19
2	P 214.914†	4786.4	6878.4	18559 µg/L	18559 ppb	14:21:19
2	Pb 220.353†	820.5	1018.6	533.71 µg/L	533.71 ppb	14:21:19
2	S 181.975 Axial†	221563.2	330568.7	1933300 µg/L	1933300 ppb	14:20:59
2	Sb 206.836†	379.8	474.2	737.07 µg/L	737.07 ppb	14:21:19
2	Se 196.026†	194.0	230.4	386.90 µg/L	386.90 ppb	14:21:19
2	Si 251.611†	290709.4	433780.8	57171 µg/L	57171 ppb	14:20:59
2	SiO2†	284580.8	424721.3	121620 µg/L	121620 ppb	14:20:59
2	Sn 189.927†	570.9	855.9	514.83 µg/L	514.83 ppb	14:21:19
2	Ti 334.940†	52218.5	77619.4	515.93 µg/L	515.93 ppb	14:20:59
2	Tl 190.801†	72.4	83.4	429.01 µg/L	429.01 ppb	14:21:19
2	U 367.007†	520.0	928.6	373.31 µg/L	373.31 ppb	14:20:59
2	V 292.402†	12919.0	19234.9	578.03 µg/L	578.03 ppb	14:20:59
2	Zn 213.857†	11612.2	16633.1	635.60 µg/L	635.60 ppb	14:21:19
3	Sc RADIAL	48446.1	48446.1	98.488 %	98.488 %	14:20:34
3	Al 396.153Radial†	15055.7	15303.9	4984.9 µg/L	4984.9 ppb	14:20:34
3	Ca 317.933Radial†	808612.2	820877.4	133960 µg/L	133960 ppb	14:20:32
3	Fe 238.204 Radial†	24432.7	24705.7	4841.1 µg/L	4841.1 ppb	14:20:34
3	K 766.490 Radial†	1587344.6	1611566.0	1350400 µg/L	1350400 ppb	14:20:32
3	Mg 279.077 IEC†	47079.6	47792.3	94050 µg/L	94050 ppb	14:20:34
3	Na 589.592 Radial†	Saturated3	Saturated3			14:20:34
Saturated in preshot (code 3)						
3	Sr 421.552†	556878.4	565355.8	1641.4 µg/L	1641.4 ppb	14:20:32
3	Sc 361.383	200167.1	200167.1	66.396 %	66.396 %	14:21:22
3	Y 371.029	140752.3	140752.3	65.812 %	65.812 %	14:21:22
3	Ag 328.068†	2642.8	4193.2	128.19 µg/L	128.19 ppb	14:21:42
3	As 188.979†	254.8	392.8	694.28 µg/L	694.28 ppb	14:21:42
3	B 249.677†	21625.6	32498.4	4407.9 µg/L	4407.9 ppb	14:21:22
3	Ba 233.527†	20047.2	30190.5	709.30 µg/L	709.30 ppb	14:21:22
3	Be 313.107†	204712.7	308434.7	486.02 µg/L	486.02 ppb	14:21:22
3	Cd 226.502†	9340.1	14185.3	514.09 µg/L	514.09 ppb	14:21:42
3	Co 228.616†	2713.7	4262.2	478.80 µg/L	478.80 ppb	14:21:42
3	Cr 267.716†	8603.2	12866.3	515.54 µg/L	515.54 ppb	14:21:42
3	Cu 324.752†	17074.8	25491.2	596.48 µg/L	596.48 ppb	14:21:22
3	Mn 257.610†	32581.0	49017.8	489.14 µg/L	489.14 ppb	14:21:22
3	Mo 202.031†	3308.8	4991.3	769.65 µg/L	769.65 ppb	14:21:42
3	Ni 231.604†	2503.6	3708.9	516.87 µg/L	516.87 ppb	14:21:42
3	P 214.914†	4919.9	7145.6	19282 µg/L	19282 ppb	14:21:42
3	Pb 220.353†	830.8	1045.4	547.80 µg/L	547.80 ppb	14:21:42
3	S 181.975 Axial†	218941.0	329684.6	1928100 µg/L	1928100 ppb	14:21:22
3	Sb 206.836†	382.6	483.6	751.73 µg/L	751.73 ppb	14:21:42
3	Se 196.026†	197.4	238.2	399.90 µg/L	399.90 ppb	14:21:42
3	Si 251.611†	287678.2	433237.4	57099 µg/L	57099 ppb	14:21:22
3	SiO2†	281492.8	424007.5	121410 µg/L	121410 ppb	14:21:22
3	Sn 189.927†	580.5	878.3	528.39 µg/L	528.39 ppb	14:21:42
3	Ti 334.940†	51895.6	77855.4	517.48 µg/L	517.48 ppb	14:21:22
3	Tl 190.801†	76.8	91.0	465.38 µg/L	465.38 ppb	14:21:42
3	U 367.007†	560.1	996.1	401.89 µg/L	401.89 ppb	14:21:22
3	V 292.402†	12760.8	19175.5	576.70 µg/L	576.70 ppb	14:21:22
3	Zn 213.857†	11937.4	17283.5	660.57 µg/L	660.57 ppb	14:21:42

Mean Data: 1205274087|2357704|1|

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc RADIAL	49340.8	100.31	%	2.399	100.31	%	2.399	2.39%
Sc 361.383	206066.5	68.353	%	2.8728	68.353	%	2.8728	4.20%
Y 371.029	144982.8	67.790	%	2.8701	67.790	%	2.8701	4.23%
Ag 328.068†	4093.1	125.15	µg/L	2.830	125.15	ppb	2.830	2.26%
Al 396.153Radial†	15326.3	4993.4	µg/L	14.09	4993.4	ppb	14.09	0.28%
As 188.979†	390.7	690.45	µg/L	8.281	690.45	ppb	8.281	1.20%
B 249.677†	32590.2	4420.3	µg/L	29.95	4420.3	ppb	29.95	0.68%
Ba 233.527†	30296.0	711.79	µg/L	4.044	711.79	ppb	4.044	0.57%
Be 313.107†	308970.1	486.86	µg/L	1.418	486.86	ppb	1.418	0.29%
Ca 317.933Radial†	821177.7	134010	µg/L	939.39	134010	ppb	939.39	0.70%
Cd 226.502†	13791.8	499.81	µg/L	12.774	499.81	ppb	12.774	2.56%
Co 228.616†	4149.5	466.11	µg/L	12.071	466.11	ppb	12.071	2.59%
Cr 267.716†	12477.3	499.93	µg/L	14.505	499.93	ppb	14.505	2.90%
Cu 324.752†	25472.1	596.03	µg/L	1.430	596.03	ppb	1.430	0.24%
Fe 238.204 Radial†	24782.9	4855.8	µg/L	13.32	4855.8	ppb	13.32	0.27%

K 766.490 Radial†	1608413.4	1347700 µg/L	6865.69	1347700 ppb	6865.69	0.51%
Concentration greater than upper limit for K 766.490 Radial.						
Mg 279.077 IEC†	47871.2	94206 µg/L	140.26	94206 ppb	140.26	0.15%
Mn 257.610†	49230.6	491.26 µg/L	2.263	491.26 ppb	2.263	0.46%
Mo 202.031†	4835.5	745.62 µg/L	22.465	745.62 ppb	22.465	3.01%
Na 589.592 Radial†	Saturated3					
Ni 231.604†	3588.3	500.04 µg/L	15.351	500.04 ppb	15.351	3.07%
P 214.914†	6934.1	18710 µg/L	513.03	18710 ppb	513.03	2.74%
Concentration greater than upper limit for P 214.914.						
Pb 220.353†	1017.7	533.26 µg/L	14.764	533.26 ppb	14.764	2.77%
S 181.975 Axial†	333096.5	1948100 µg/L	30194.59	1948100 ppb	30194.59	1.55%
Concentration greater than upper limit for S 181.975 Axial.						
Sb 206.836†	466.7	725.43 µg/L	33.664	725.43 ppb	33.664	4.64%
Se 196.026†	234.1	393.10 µg/L	6.522	393.10 ppb	6.522	1.66%
Si 251.611†	435204.5	57359 µg/L	389.09	57359 ppb	389.09	0.68%
Concentration greater than upper limit for Si 251.611.						
SiO2†	425963.7	121970 µg/L	800.65	121970 ppb	800.65	0.66%
Concentration greater than upper limit for SiO2.						
Sn 189.927†	856.1	514.86 µg/L	13.511	514.86 ppb	13.511	2.62%
Sr 421.552†	563941.5	1637.3 µg/L	8.66	1637.3 ppb	8.66	0.53%
Ti 334.940†	77654.8	516.15 µg/L	1.231	516.15 ppb	1.231	0.24%
Tl 190.801†	87.1	446.51 µg/L	18.222	446.51 ppb	18.222	4.08%
U 367.007†	1002.2	404.40 µg/L	32.426	404.40 ppb	32.426	8.02%
V 292.402†	19137.9	575.25 µg/L	3.719	575.25 ppb	3.719	0.65%
Zn 213.857†	16728.6	639.25 µg/L	19.749	639.25 ppb	19.749	3.09%

Batch ID:
Sequence No.: 6 **Autosampler Location: 154**
Sample ID: 1205274088|2357704|5| **Date Collected: 12/19/2022 14:22:34**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample): 49

Replicate Data: 1205274088|2357704|5|

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	56385.1	56385.1	114.63	%	114.63	%	14:23:10
1	Al 396.153Radial†	-50.1	-26.6	-10.587	µg/L	-10.587	ppb	14:23:10
1	Ca 317.933Radial†	169606.8	147814.4	24122	µg/L	24122	ppb	14:23:10
1	Fe 238.204 Radial†	126.7	8.5	1.5483	µg/L	1.5483	ppb	14:23:30
1	K 766.490 Radial†	300117.9	261671.8	219260	µg/L	219260	ppb	14:23:10
1	Mg 279.077 IEC†	9501.8	8279.2	16292	µg/L	16292	ppb	14:23:30
1	Na 589.592 Radial†	Saturated3	Saturated3					14:23:30
	Saturated in preshot (code 3)							
1	Sr 421.552†	78274.2	68213.7	197.90	µg/L	197.90	ppb	14:23:10
1	Sc 361.383	253238.0	253238.0	84.000	%	84.000	%	14:24:17
1	Y 371.029	176236.4	176236.4	82.404	%	82.404	%	14:24:17
1	Ag 328.068†	-157.2	25.7	0.9020	µg/L	0.9020	ppb	14:24:17
1	As 188.979†	-5.1	2.9	5.2157	µg/L	5.2157	ppb	14:24:37
1	B 249.677†	4154.5	4873.8	657.70	µg/L	657.70	ppb	14:24:17
1	Ba 233.527†	1424.9	1693.3	39.513	µg/L	39.513	ppb	14:24:37
1	Be 313.107†	-98.3	-3.4	0.0050	µg/L	0.0050	ppb	14:24:17
1	Cd 226.502†	-113.3	-16.9	-0.6117	µg/L	-0.6117	ppb	14:24:37
1	Co 228.616†	-178.5	-37.5	-4.2540	µg/L	-4.2540	ppb	14:24:37
1	Cr 267.716†	119.2	50.8	2.0041	µg/L	2.0041	ppb	14:24:37
1	Cu 324.752†	248.0	69.7	1.6278	µg/L	1.6278	ppb	14:24:17
1	Mn 257.610†	197.7	182.4	1.8206	µg/L	1.8206	ppb	14:24:37
1	Mo 202.031†	210.1	258.0	39.770	µg/L	39.770	ppb	14:24:37
1	Ni 231.604†	58.7	8.1	1.0114	µg/L	1.0114	ppb	14:24:37
1	P 214.914†	1242.8	1215.1	3284.7	µg/L	3284.7	ppb	14:24:37
1	Pb 220.353†	221.3	57.7	30.159	µg/L	30.159	ppb	14:24:37
1	S 181.975 Axial†	43190.4	51351.4	300320	µg/L	300320	ppb	14:24:17
1	Sb 206.836†	99.0	25.3	39.760	µg/L	39.760	ppb	14:24:37
1	Se 196.026†	64.5	17.7	29.609	µg/L	29.609	ppb	14:24:37
1	Si 251.611†	49567.5	58969.7	7772.4	µg/L	7772.4	ppb	14:24:17
1	SiO2†	48439.3	57712.7	16526	µg/L	16526	ppb	14:24:17
1	Sn 189.927†	1.0	5.1	1.2330	µg/L	1.2330	ppb	14:24:37
1	Ti 334.940†	290.5	40.5	0.3545	µg/L	0.3545	ppb	14:24:17
1	Tl 190.801†	24.2	4.2	20.598	µg/L	20.598	ppb	14:24:37
1	U 367.007†	-56.3	85.5	36.084	µg/L	36.084	ppb	14:24:17
1	V 292.402†	232.6	233.1	7.4016	µg/L	7.4016	ppb	14:24:37
1	Zn 213.857†	728.0	171.0	6.2921	µg/L	6.2921	ppb	14:24:37
2	Sc RADIAL	51593.2	51593.2	104.89	%	104.89	%	14:23:32
2	Al 396.153Radial†	2.3	19.2	4.4545	µg/L	4.4545	ppb	14:23:32
2	Ca 317.933Radial†	152960.3	145686.0	23775	µg/L	23775	ppb	14:23:32
2	Fe 238.204 Radial†	124.5	16.7	3.1836	µg/L	3.1836	ppb	14:23:52
2	K 766.490 Radial†	274243.2	261319.9	218970	µg/L	218970	ppb	14:23:32
2	Mg 279.077 IEC†	9074.6	8641.7	17006	µg/L	17006	ppb	14:23:52
2	Na 589.592 Radial†	Saturated3	Saturated3					14:23:52
	Saturated in preshot (code 3)							
2	Sr 421.552†	71816.2	68398.7	198.44	µg/L	198.44	ppb	14:23:32
2	Sc 361.383	255507.9	255507.9	84.753	%	84.753	%	14:24:39
2	Y 371.029	177689.1	177689.1	83.083	%	83.083	%	14:24:39
2	Ag 328.068†	-317.6	-161.9	-4.7393	µg/L	-4.7393	ppb	14:24:39
2	As 188.979†	-1.3	7.4	13.150	µg/L	13.150	ppb	14:24:59
2	B 249.677†	4188.0	4869.3	657.10	µg/L	657.10	ppb	14:24:39
2	Ba 233.527†	1429.6	1683.8	39.275	µg/L	39.275	ppb	14:24:59
2	Be 313.107†	-47.1	58.1	0.0816	µg/L	0.0816	ppb	14:24:39
2	Cd 226.502†	-132.0	-37.8	-1.3708	µg/L	-1.3708	ppb	14:24:59
2	Co 228.616†	-168.6	-23.9	-2.7246	µg/L	-2.7246	ppb	14:24:59
2	Cr 267.716†	115.2	44.7	1.8181	µg/L	1.8181	ppb	14:24:59
2	Cu 324.752†	251.6	71.3	1.6670	µg/L	1.6670	ppb	14:24:39
2	Mn 257.610†	187.7	168.5	1.6815	µg/L	1.6815	ppb	14:24:59

2	Mo 202.031†	213.0	259.2	39.959 µg/L	39.959 ppb	14:24:59
2	Ni 231.604†	57.3	5.8	0.7002 µg/L	0.7002 ppb	14:24:59
2	P 214.914†	1227.2	1183.6	3199.6 µg/L	3199.6 ppb	14:24:59
2	Pb 220.353†	237.0	73.8	38.584 µg/L	38.584 ppb	14:24:59
2	S 181.975 Axial†	44246.7	52140.9	304940 µg/L	304940 ppb	14:24:39
2	Sb 206.836†	103.3	29.2	45.970 µg/L	45.970 ppb	14:24:59
2	Se 196.026†	66.8	19.6	32.865 µg/L	32.865 ppb	14:24:59
2	Si 251.611†	50396.4	59423.5	7832.1 µg/L	7832.1 ppb	14:24:39
2	SiO2†	49251.4	58158.6	16654 µg/L	16654 ppb	14:24:39
2	Sn 189.927†	-5.9	-3.1	-3.7154 µg/L	-3.7154 ppb	14:24:59
2	Ti 334.940†	165.8	-109.8	-0.6230 µg/L	-0.6230 ppb	14:24:39
2	Tl 190.801†	26.8	7.0	33.981 µg/L	33.981 ppb	14:24:59
2	U 367.007†	-184.2	-64.9	-27.393 µg/L	-27.393 ppb	14:24:39
2	V 292.402†	253.7	255.6	8.0011 µg/L	8.0011 ppb	14:24:59
2	Zn 213.857†	726.9	162.1	5.9511 µg/L	5.9511 ppb	14:24:59
3	Sc RADIAL	48355.1	48355.1	98.303 %	98.303 %	14:23:54
3	Al 396.153Radial†	98.4	117.2	36.716 µg/L	36.716 ppb	14:23:54
3	Ca 317.933Radial†	142896.1	145213.8	23698 µg/L	23698 ppb	14:23:54
3	Fe 238.204 Radial†	120.0	20.0	3.8736 µg/L	3.8736 ppb	14:24:14
3	K 766.490 Radial†	257049.9	261339.0	218980 µg/L	218980 ppb	14:23:54
3	Mg 279.077 IEC†	8816.3	8958.3	17629 µg/L	17629 ppb	14:24:14
3	Na 589.592 Radial†	Saturated3	Saturated3			14:24:14
Saturated in preshot (code 3)						
3	Sr 421.552†	67711.7	68808.5	199.64 µg/L	199.64 ppb	14:23:54
3	Sc 361.383	267039.8	267039.8	88.578 %	88.578 %	14:25:02
3	Y 371.029	185747.0	185747.0	86.851 %	86.851 %	14:25:02
3	Ag 328.068†	-153.5	39.6	1.3547 µg/L	1.3547 ppb	14:25:02
3	As 188.979†	-6.5	1.6	2.9926 µg/L	2.9926 ppb	14:25:22
3	B 249.677†	4438.2	4938.3	666.40 µg/L	666.40 ppb	14:25:02
3	Ba 233.527†	1453.0	1637.4	38.169 µg/L	38.169 ppb	14:25:22
3	Be 313.107†	-174.7	-83.6	-0.1338 µg/L	-0.1338 ppb	14:25:02
3	Cd 226.502†	-118.4	-15.7	-0.5681 µg/L	-0.5681 ppb	14:25:22
3	Co 228.616†	-166.2	-12.5	-1.4525 µg/L	-1.4525 ppb	14:25:22
3	Cr 267.716†	124.5	49.4	1.9914 µg/L	1.9914 ppb	14:25:22
3	Cu 324.752†	263.8	72.3	1.6907 µg/L	1.6907 ppb	14:25:02
3	Mn 257.610†	195.9	168.2	1.6788 µg/L	1.6788 ppb	14:25:22
3	Mo 202.031†	206.2	240.7	37.109 µg/L	37.109 ppb	14:25:22
3	Ni 231.604†	73.5	21.1	2.8311 µg/L	2.8311 ppb	14:25:22
3	P 214.914†	1239.2	1134.6	3067.2 µg/L	3067.2 ppb	14:25:22
3	Pb 220.353†	236.0	60.7	31.695 µg/L	31.695 ppb	14:25:22
3	S 181.975 Axial†	46547.2	52483.6	306940 µg/L	306940 ppb	14:25:02
3	Sb 206.836†	101.7	22.2	34.933 µg/L	34.933 ppb	14:25:22
3	Se 196.026†	71.6	21.7	36.269 µg/L	36.269 ppb	14:25:22
3	Si 251.611†	52919.9	59704.6	7869.1 µg/L	7869.1 ppb	14:25:02
3	SiO2†	51780.0	58503.8	16752 µg/L	16752 ppb	14:25:02
3	Sn 189.927†	-3.2	0.3	-1.6384 µg/L	-1.6384 ppb	14:25:22
3	Ti 334.940†	260.3	-11.6	0.0227 µg/L	0.0227 ppb	14:25:02
3	Tl 190.801†	24.7	3.3	16.323 µg/L	16.323 ppb	14:25:22
3	U 367.007†	-154.0	-21.4	-9.0426 µg/L	-9.0426 ppb	14:25:02
3	V 292.402†	244.8	232.6	7.3084 µg/L	7.3084 ppb	14:25:22
3	Zn 213.857†	749.6	150.6	5.4976 µg/L	5.4976 ppb	14:25:22

Mean Data: 1205274088|2357704|5|

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc RADIAL	52111.2	105.94	%	8.213	105.94	%	8.213	7.75%
Sc 361.383	258595.2	85.777	%	2.4548	85.777	%	2.4548	2.86%
Y 371.029	179890.8	84.113	%	2.3956	84.113	%	2.3956	2.85%
Ag 328.068†	-32.2	-0.8275	µg/L	3.39524	-0.8275	ppb	3.39524	410.28%
Al 396.153Radial†	36.6	10.194	µg/L	24.1682	10.194	ppb	24.1682	237.08%
As 188.979†	4.0	7.1194	µg/L	5.33961	7.1194	ppb	5.33961	75.00%
B 249.677†	4893.8	660.40	µg/L	5.205	660.40	ppb	5.205	0.79%
Ba 233.527†	1671.5	38.986	µg/L	0.7172	38.986	ppb	0.7172	1.84%
Be 313.107†	-9.6	-0.0157	µg/L	0.10921	-0.0157	ppb	0.10921	694.25%
Ca 317.933Radial†	146238.1	23865	µg/L	226.09	23865	ppb	226.09	0.95%
Cd 226.502†	-23.5	-0.8502	µg/L	0.45137	-0.8502	ppb	0.45137	53.09%
Co 228.616†	-24.6	-2.8104	µg/L	1.40276	-2.8104	ppb	1.40276	49.91%
Cr 267.716†	48.3	1.9379	µg/L	0.10395	1.9379	ppb	0.10395	5.36%
Cu 324.752†	71.1	1.6618	µg/L	0.03175	1.6618	ppb	0.03175	1.91%
Fe 238.204 Radial†	15.1	2.8685	µg/L	1.19426	2.8685	ppb	1.19426	41.63%

K 766.490 Radial†	261443.5	219070 µg/L	165.86	219070 ppb	165.86	0.08%
Concentration greater than upper limit for K 766.490 Radial.						
Mg 279.077 IEC†	8626.4	16976 µg/L	668.78	16976 ppb	668.78	3.94%
Mn 257.610†	173.0	1.7270 µg/L	0.08113	1.7270 ppb	0.08113	4.70%
Mo 202.031†	252.6	38.946 µg/L	1.5938	38.946 ppb	1.5938	4.09%
Na 589.592 Radial†	Saturated3					
Ni 231.604†	11.6	1.5142 µg/L	1.15102	1.5142 ppb	1.15102	76.01%
P 214.914†	1177.8	3183.8 µg/L	109.62	3183.8 ppb	109.62	3.44%
Pb 220.353†	64.1	33.479 µg/L	4.4868	33.479 ppb	4.4868	13.40%
S 181.975 Axial†	51992.0	304070 µg/L	3395.68	304070 ppb	3395.68	1.12%
Concentration greater than upper limit for S 181.975 Axial.						
Sb 206.836†	25.6	40.221 µg/L	5.5325	40.221 ppb	5.5325	13.76%
Se 196.026†	19.7	32.914 µg/L	3.3302	32.914 ppb	3.3302	10.12%
Si 251.611†	59366.0	7824.5 µg/L	48.81	7824.5 ppb	48.81	0.62%
SiO2†	58125.0	16644 µg/L	113.42	16644 ppb	113.42	0.68%
Sn 189.927†	0.8	-1.3736 µg/L	2.48484	-1.3736 ppb	2.48484	180.90%
Sr 421.552†	68473.6	198.66 µg/L	0.889	198.66 ppb	0.889	0.45%
Ti 334.940†	-26.9	-0.0819 µg/L	0.49706	-0.0819 ppb	0.49706	606.73%
Tl 190.801†	4.8	23.634 µg/L	9.2120	23.634 ppb	9.2120	38.98%
U 367.007†	-0.3	-0.1173 µg/L	32.66609	-0.1173 ppb	32.66609	>999.9%
V 292.402†	240.4	7.5704 µg/L	0.37593	7.5704 ppb	0.37593	4.97%
Zn 213.857†	161.3	5.9136 µg/L	0.39860	5.9136 ppb	0.39860	6.74%

Batch ID:
Sequence No.: 7 **Autosampler Location: 1**
Sample ID: CCV **Date Collected: 12/19/2022 14:26:15**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample): 49

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	59835.9	59835.9	121.64	%	121.64	%	14:26:54
1	Al 396.153Radial†	18960.3	15603.9	5096.0	µg/L	5096.0	ppb	14:26:52
1	Ca 317.933Radial†	36659.3	29987.9	4893.8	µg/L	4893.8	ppb	14:26:54
1	Fe 238.204 Radial†	32546.6	26653.8	5222.4	µg/L	5222.4	ppb	14:26:54
1	K 766.490 Radial†	9660.9	7794.0	6531.6	µg/L	6531.6	ppb	14:26:52
1	Mg 279.077 IEC†	3351.9	2745.5	5404.2	µg/L	5404.2	ppb	14:26:54
1	Na 589.592 Radial†	137115.9	111797.3	17864	µg/L	17864	ppb	14:26:52
1	Sr 421.552†	210434.6	172921.8	502.69	µg/L	502.69	ppb	14:26:52
1	Sc 361.383	305295.8	305295.8	101.27	%	101.27	%	14:27:06
1	Y 371.029	215575.6	215575.6	100.80	%	100.80	%	14:27:06
1	Ag 328.068†	16544.8	16550.5	502.14	µg/L	502.14	ppb	14:27:06
1	As 188.979†	272.6	278.1	492.25	µg/L	492.25	ppb	14:27:26
1	B 249.677†	3940.9	3819.4	539.49	µg/L	539.49	ppb	14:27:06
1	Ba 233.527†	21573.1	21300.1	501.88	µg/L	501.88	ppb	14:27:06
1	Be 313.107†	326041.6	322074.7	507.40	µg/L	507.40	ppb	14:27:06
1	Cd 226.502†	13996.4	13939.2	505.12	µg/L	505.12	ppb	14:27:06
1	Co 228.616†	4352.1	4472.7	502.68	µg/L	502.68	ppb	14:27:26
1	Cr 267.716†	12818.6	12567.0	503.42	µg/L	503.42	ppb	14:27:06
1	Cu 324.752†	22118.7	21616.4	505.89	µg/L	505.89	ppb	14:27:06
1	Mn 257.610†	50973.4	50282.5	501.75	µg/L	501.75	ppb	14:27:06
1	Mo 202.031†	3261.6	3228.6	497.92	µg/L	497.92	ppb	14:27:26
1	Ni 231.604†	3724.6	3616.1	504.48	µg/L	504.48	ppb	14:27:26
1	P 214.914†	1236.4	956.6	2554.1	µg/L	2554.1	ppb	14:27:26
1	Pb 220.353†	1197.3	976.5	511.70	µg/L	511.70	ppb	14:27:26
1	S 181.975 Axial†	429.7	358.4	2093.6	µg/L	2093.6	ppb	14:27:26
1	Sb 206.836†	411.4	313.7	484.26	µg/L	484.26	ppb	14:27:26
1	Se 196.026†	351.7	288.2	483.77	µg/L	483.77	ppb	14:27:26
1	Si 251.611†	20280.8	19987.5	2627.5	µg/L	2627.5	ppb	14:27:06
1	SiO2†	19785.1	19584.2	5592.9	µg/L	5592.9	ppb	14:27:06
1	Sn 189.927†	789.3	783.4	480.65	µg/L	480.65	ppb	14:27:26
1	Ti 334.940†	76154.0	74895.5	497.26	µg/L	497.26	ppb	14:27:06
1	Tl 190.801†	120.3	94.2	478.02	µg/L	478.02	ppb	14:27:26
1	U 367.007†	1065.9	1205.1	488.66	µg/L	488.66	ppb	14:27:06
1	V 292.402†	17384.3	17123.0	512.98	µg/L	512.98	ppb	14:27:06
1	Zn 213.857†	14140.3	13267.7	507.33	µg/L	507.33	ppb	14:27:06
2	Sc RADIAL	57201.0	57201.0	116.29	%	116.29	%	14:26:58
2	Al 396.153Radial†	17709.0	15245.9	4978.3	µg/L	4978.3	ppb	14:26:56
2	Ca 317.933Radial†	34953.3	29909.1	4881.0	µg/L	4881.0	ppb	14:26:58
2	Fe 238.204 Radial†	30964.4	26525.7	5197.5	µg/L	5197.5	ppb	14:26:58
2	K 766.490 Radial†	9136.5	7708.8	6460.2	µg/L	6460.2	ppb	14:26:56
2	Mg 279.077 IEC†	3112.2	2666.2	5248.2	µg/L	5248.2	ppb	14:26:58
2	Na 589.592 Radial†	130535.6	111330.9	17789	µg/L	17789	ppb	14:26:56
2	Sr 421.552†	197612.9	169864.4	493.80	µg/L	493.80	ppb	14:26:56
2	Sc 361.383	307270.5	307270.5	101.92	%	101.92	%	14:27:28
2	Y 371.029	216325.6	216325.6	101.15	%	101.15	%	14:27:28
2	Ag 328.068†	16513.5	16414.8	498.03	µg/L	498.03	ppb	14:27:28
2	As 188.979†	288.8	292.3	517.00	µg/L	517.00	ppb	14:27:48
2	B 249.677†	4005.3	3857.6	544.53	µg/L	544.53	ppb	14:27:28
2	Ba 233.527†	21841.4	21426.5	504.85	µg/L	504.85	ppb	14:27:28
2	Be 313.107†	328210.1	322133.1	507.49	µg/L	507.49	ppb	14:27:28
2	Cd 226.502†	14072.0	13924.6	504.59	µg/L	504.59	ppb	14:27:28
2	Co 228.616†	4423.8	4515.5	507.50	µg/L	507.50	ppb	14:27:48
2	Cr 267.716†	12801.5	12468.9	499.50	µg/L	499.50	ppb	14:27:28
2	Cu 324.752†	22247.1	21602.0	505.56	µg/L	505.56	ppb	14:27:28
2	Mn 257.610†	51400.1	50377.7	502.70	µg/L	502.70	ppb	14:27:28
2	Mo 202.031†	3317.0	3262.3	503.10	µg/L	503.10	ppb	14:27:48
2	Ni 231.604†	3801.4	3667.8	511.69	µg/L	511.69	ppb	14:27:48

2	P 214.914†	1257.2	969.2	2588.1 µg/L	2588.1 ppb	14:27:48
2	Pb 220.353†	1214.2	985.5	516.41 µg/L	516.41 ppb	14:27:48
2	S 181.975 Axial†	419.8	346.0	2021.0 µg/L	2021.0 ppb	14:27:48
2	Sb 206.836†	421.8	321.2	496.12 µg/L	496.12 ppb	14:27:48
2	Se 196.026†	373.4	307.2	515.65 µg/L	515.65 ppb	14:27:48
2	Si 251.611†	20421.2	19996.6	2628.6 µg/L	2628.6 ppb	14:27:28
2	SiO2†	19948.1	19618.5	5602.7 µg/L	5602.7 ppb	14:27:28
2	Sn 189.927†	797.3	786.3	482.38 µg/L	482.38 ppb	14:27:48
2	Ti 334.940†	76903.8	75147.8	498.94 µg/L	498.94 ppb	14:27:28
2	Tl 190.801†	128.0	100.9	510.51 µg/L	510.51 ppb	14:27:48
2	U 367.007†	1046.0	1178.7	477.62 µg/L	477.62 ppb	14:27:28
2	V 292.402†	17394.2	17022.3	510.04 µg/L	510.04 ppb	14:27:28
2	Zn 213.857†	14161.2	13198.5	504.62 µg/L	504.62 ppb	14:27:28
3	Sc RADIAL	53477.2	53477.2	108.72 %	108.72 %	14:27:03
3	Al 396.153Radial†	17092.6	15739.3	5141.2 µg/L	5141.2 ppb	14:27:01
3	Ca 317.933Radial†	32274.3	29537.9	4820.4 µg/L	4820.4 ppb	14:27:03
3	Fe 238.204 Radial†	28701.0	26297.9	5152.4 µg/L	5152.4 ppb	14:27:03
3	K 766.490 Radial†	8987.8	8119.2	6804.0 µg/L	6804.0 ppb	14:27:01
3	Mg 279.077 IEC†	2916.5	2672.6	5260.8 µg/L	5260.8 ppb	14:27:03
3	Na 589.592 Radial†	125990.2	114966.6	18370 µg/L	18370 ppb	14:27:01
3	Sr 421.552†	190216.3	174894.3	508.42 µg/L	508.42 ppb	14:27:01
3	Sc 361.383	323461.0	323461.0	107.29 %	107.29 %	14:27:51
3	Y 371.029	228032.2	228032.2	106.62 %	106.62 %	14:27:51
3	Ag 328.068†	17371.5	16403.6	497.69 µg/L	497.69 ppb	14:27:51
3	As 188.979†	286.9	276.4	489.14 µg/L	489.14 ppb	14:28:11
3	B 249.677†	4308.8	3943.8	555.97 µg/L	555.97 ppb	14:27:51
3	Ba 233.527†	22991.5	21425.7	504.84 µg/L	504.84 ppb	14:27:51
3	Be 313.107†	347605.5	324091.8	510.56 µg/L	510.56 ppb	14:27:51
3	Cd 226.502†	14983.6	14083.1	510.33 µg/L	510.33 ppb	14:27:51
3	Co 228.616†	4457.5	4329.6	486.57 µg/L	486.57 ppb	14:28:11
3	Cr 267.716†	13610.0	12593.7	504.52 µg/L	504.52 ppb	14:27:51
3	Cu 324.752†	23399.3	21583.3	505.11 µg/L	505.11 ppb	14:27:51
3	Mn 257.610†	54459.2	50704.5	505.97 µg/L	505.97 ppb	14:27:51
3	Mo 202.031†	3338.9	3119.9	481.15 µg/L	481.15 ppb	14:28:11
3	Ni 231.604†	3794.8	3475.0	484.79 µg/L	484.79 ppb	14:28:11
3	P 214.914†	1265.3	914.9	2441.7 µg/L	2441.7 ppb	14:28:11
3	Pb 220.353†	1217.4	928.8	486.73 µg/L	486.73 ppb	14:28:11
3	S 181.975 Axial†	409.6	315.9	1844.9 µg/L	1844.9 ppb	14:28:11
3	Sb 206.836†	422.6	301.3	464.75 µg/L	464.75 ppb	14:28:11
3	Se 196.026†	377.3	292.5	491.08 µg/L	491.08 ppb	14:28:11
3	Si 251.611†	21627.5	20118.0	2644.9 µg/L	2644.9 ppb	14:27:51
3	SiO2†	21112.7	19724.3	5633.6 µg/L	5633.6 ppb	14:27:51
3	Sn 189.927†	822.0	770.1	472.49 µg/L	472.49 ppb	14:28:11
3	Ti 334.940†	80859.7	75058.1	498.35 µg/L	498.35 ppb	14:27:51
3	Tl 190.801†	120.9	88.0	448.38 µg/L	448.38 ppb	14:28:11
3	U 367.007†	1066.9	1146.9	464.35 µg/L	464.35 ppb	14:27:51
3	V 292.402†	18351.0	17059.8	510.88 µg/L	510.88 ppb	14:27:51
3	Zn 213.857†	14860.0	13154.4	503.10 µg/L	503.10 ppb	14:27:51

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc RADIAL	56838.1	115.55	%	6.495	115.55	%	6.495	5.62%
Sc 361.383	312009.1	103.49	%	3.306	103.49	%	3.306	3.19%
Y 371.029	219977.8	102.86	%	3.266	102.86	%	3.266	3.18%
Ag 328.068†	16456.3	499.29	µg/L	2.474	499.29	ppb	2.474	0.50%
QC value within limits for Ag 328.068 Recovery = 99.86%								
Al 396.153Radial†	15529.7	5071.8	µg/L	84.09	5071.8	ppb	84.09	1.66%
QC value within limits for Al 396.153Radial Recovery = 101.44%								
As 188.979†	282.3	499.47	µg/L	15.269	499.47	ppb	15.269	3.06%
QC value within limits for As 188.979 Recovery = 99.89%								
B 249.677†	3873.6	546.66	µg/L	8.442	546.66	ppb	8.442	1.54%
QC value within limits for B 249.677 Recovery = 109.33%								
Ba 233.527†	21384.1	503.85	µg/L	1.712	503.85	ppb	1.712	0.34%
QC value within limits for Ba 233.527 Recovery = 100.77%								
Be 313.107†	322766.5	508.48	µg/L	1.800	508.48	ppb	1.800	0.35%
QC value within limits for Be 313.107 Recovery = 101.70%								
Ca 317.933Radial†	29811.7	4865.0	µg/L	39.22	4865.0	ppb	39.22	0.81%
QC value within limits for Ca 317.933Radial Recovery = 97.30%								
Cd 226.502†	13982.3	506.68	µg/L	3.174	506.68	ppb	3.174	0.63%

QC value within limits for Cd 226.502 Recovery = 101.34%

Co 228.616†	4439.2	498.92 µg/L	10.959	498.92 ppb	10.959	2.20%
QC value within limits for Co 228.616 Recovery = 99.78%							
Cr 267.716†	12543.2	502.48 µg/L	2.641	502.48 ppb	2.641	0.53%
QC value within limits for Cr 267.716 Recovery = 100.50%							
Cu 324.752†	21600.6	505.52 µg/L	0.393	505.52 ppb	0.393	0.08%
QC value within limits for Cu 324.752 Recovery = 101.10%							
Fe 238.204 Radial†	26492.5	5190.8 µg/L	35.47	5190.8 ppb	35.47	0.68%
QC value within limits for Fe 238.204 Radial Recovery = 103.82%							
K 766.490 Radial†	7874.0	6598.6 µg/L	181.45	6598.6 ppb	181.45	2.75%
QC value greater than the upper limit for K 766.490 Radial Recovery = 131.97%							
Mg 279.077 IEC†	2694.8	5304.4 µg/L	86.64	5304.4 ppb	86.64	1.63%
QC value within limits for Mg 279.077 IEC Recovery = 106.09%							
Mn 257.610†	50454.9	503.47 µg/L	2.210	503.47 ppb	2.210	0.44%
QC value within limits for Mn 257.610 Recovery = 100.69%							
Mo 202.031†	3203.6	494.06 µg/L	11.475	494.06 ppb	11.475	2.32%
QC value within limits for Mo 202.031 Recovery = 98.81%							
Na 589.592 Radial†	112698.3	18007 µg/L	316.09	18007 ppb	316.09	1.76%
QC value greater than the upper limit for Na 589.592 Radial Recovery = 180.07%							
Ni 231.604†	3586.3	500.32 µg/L	13.925	500.32 ppb	13.925	2.78%
QC value within limits for Ni 231.604 Recovery = 100.06%							
P 214.914†	946.9	2528.0 µg/L	76.60	2528.0 ppb	76.60	3.03%
QC value within limits for P 214.914 Recovery = 101.12%							
Pb 220.353†	963.6	504.95 µg/L	15.952	504.95 ppb	15.952	3.16%
QC value within limits for Pb 220.353 Recovery = 100.99%							
S 181.975 Axial†	340.1	1986.5 µg/L	127.89	1986.5 ppb	127.89	6.44%
QC value greater than the upper limit for S 181.975 Axial Recovery = 198.65%							
Sb 206.836†	312.1	481.71 µg/L	15.843	481.71 ppb	15.843	3.29%
QC value within limits for Sb 206.836 Recovery = 96.34%							
Se 196.026†	296.0	496.84 µg/L	16.701	496.84 ppb	16.701	3.36%
QC value within limits for Se 196.026 Recovery = 99.37%							
Si 251.611†	20034.0	2633.7 µg/L	9.77	2633.7 ppb	9.77	0.37%
QC value within limits for Si 251.611 Recovery = 105.35%							
SiO2†	19642.3	5609.7 µg/L	21.25	5609.7 ppb	21.25	0.38%
QC value within limits for SiO2 Recovery = 104.90%							
Sn 189.927†	779.9	478.51 µg/L	5.282	478.51 ppb	5.282	1.10%
QC value within limits for Sn 189.927 Recovery = 95.70%							
Sr 421.552†	172560.2	501.64 µg/L	7.369	501.64 ppb	7.369	1.47%
QC value within limits for Sr 421.552 Recovery = 100.33%							
Ti 334.940†	75033.8	498.19 µg/L	0.853	498.19 ppb	0.853	0.17%
QC value within limits for Ti 334.940 Recovery = 99.64%							
Tl 190.801†	94.4	478.97 µg/L	31.075	478.97 ppb	31.075	6.49%
QC value within limits for Tl 190.801 Recovery = 95.79%							
U 367.007†	1176.9	476.87 µg/L	12.172	476.87 ppb	12.172	2.55%
QC value within limits for U 367.007 Recovery = 95.37%							
V 292.402†	17068.4	511.30 µg/L	1.510	511.30 ppb	1.510	0.30%
QC value within limits for V 292.402 Recovery = 102.26%							
Zn 213.857†	13206.9	505.02 µg/L	2.145	505.02 ppb	2.145	0.42%
QC value within limits for Zn 213.857 Recovery = 101.00%							

QC Failed. Continue with analysis.

Batch ID:
Sequence No.: 8 **Autosampler Location: 6**
Sample ID: CCB **Date Collected: 12/19/2022 14:29:10**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample): 49

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	59706.8	59706.8	121.38	%	121.38	%	14:29:47
1	Al 396.153Radial†	-52.5	-26.1	-8.4857	µg/L	-8.4857	ppb	14:29:47
1	Ca 317.933Radial†	164.1	-13.7	-2.2282	µg/L	-2.2282	ppb	14:30:07
1	Fe 238.204 Radial†	100.4	-19.3	-3.7859	µg/L	-3.7859	ppb	14:30:07
1	K 766.490 Radial†	1468.0	1061.4	889.34	µg/L	889.34	ppb	14:29:47
1	Mg 279.077 IEC†	-3.6	-13.1	-25.702	µg/L	-25.702	ppb	14:30:07
1	Na 589.592 Radial†	40605.1	32530.0	5197.8	µg/L	5197.8	ppb	14:29:47
1	Sr 421.552†	195.8	89.3	0.2596	µg/L	0.2596	ppb	14:29:47
1	Sc 361.383	312644.7	312644.7	103.71	%	103.71	%	14:30:55
1	Y 371.029	222362.6	222362.6	103.97	%	103.97	%	14:30:55
1	Ag 328.068†	-226.2	-5.3	-0.1659	µg/L	-0.1659	ppb	14:30:55
1	As 188.979†	-11.5	-2.1	-3.7070	µg/L	-3.7070	ppb	14:31:15
1	B 249.677†	156.6	78.9	10.621	µg/L	10.621	ppb	14:31:15
1	Ba 233.527†	7.6	4.3	0.1027	µg/L	0.1027	ppb	14:31:15
1	Be 313.107†	-174.9	-55.1	-0.0842	µg/L	-0.0842	ppb	14:30:55
1	Cd 226.502†	-111.0	10.9	0.3948	µg/L	0.3948	ppb	14:31:15
1	Co 228.616†	-183.8	-2.1	-0.2411	µg/L	-0.2411	ppb	14:31:15
1	Cr 267.716†	119.7	24.2	0.9665	µg/L	0.9665	ppb	14:31:15
1	Cu 324.752†	316.6	79.8	1.8660	µg/L	1.8660	ppb	14:30:55
1	Mn 257.610†	67.1	11.8	0.1176	µg/L	0.1176	ppb	14:31:15
1	Mo 202.031†	-21.0	-12.3	-1.9017	µg/L	-1.9017	ppb	14:31:15
1	Ni 231.604†	27.7	-35.2	-4.9139	µg/L	-4.9139	ppb	14:31:15
1	P 214.914†	293.1	18.3	49.312	µg/L	49.312	ppb	14:31:15
1	Pb 220.353†	217.8	4.2	2.1784	µg/L	2.1784	ppb	14:31:15
1	S 181.975 Axial†	164.1	92.3	539.97	µg/L	539.97	ppb	14:31:15
1	Sb 206.836†	89.8	-6.0	-9.3721	µg/L	-9.3721	ppb	14:31:15
1	Se 196.026†	53.7	-7.4	-12.327	µg/L	-12.327	ppb	14:31:15
1	Si 251.611†	65.9	24.1	3.2085	µg/L	3.2085	ppb	14:31:15
1	SiO2†	-21.4	26.0	7.5272	µg/L	7.5272	ppb	14:31:15
1	Sn 189.927†	-7.3	-3.1	-1.9015	µg/L	-1.9015	ppb	14:31:15
1	Ti 334.940†	339.2	21.7	0.1417	µg/L	0.1417	ppb	14:30:55
1	Tl 190.801†	22.7	-2.7	-13.166	µg/L	-13.166	ppb	14:31:15
1	U 367.007†	-141.6	16.0	6.7568	µg/L	6.7568	ppb	14:30:55
1	V 292.402†	35.8	-9.3	-0.2874	µg/L	-0.2874	ppb	14:31:15
1	Zn 213.857†	722.9	1.5	0.0851	µg/L	0.0851	ppb	14:31:15
2	Sc RADIAL	49397.6	49397.6	100.42	%	100.42	%	14:30:09
2	Al 396.153Radial†	-120.5	-102.9	-33.658	µg/L	-33.658	ppb	14:30:09
2	Ca 317.933Radial†	183.0	33.3	5.4358	µg/L	5.4358	ppb	14:30:29
2	Fe 238.204 Radial†	91.0	-11.4	-2.2309	µg/L	-2.2309	ppb	14:30:29
2	K 766.490 Radial†	1463.0	1308.8	1096.7	µg/L	1096.7	ppb	14:30:09
2	Mg 279.077 IEC†	1.9	-8.2	-16.142	µg/L	-16.142	ppb	14:30:29
2	Na 589.592 Radial†	37347.9	36268.1	5795.1	µg/L	5795.1	ppb	14:30:09
2	Sr 421.552†	84.3	12.0	0.0347	µg/L	0.0347	ppb	14:30:09
2	Sc 361.383	299626.2	299626.2	99.387	%	99.387	%	14:31:17
2	Y 371.029	212652.9	212652.9	99.431	%	99.431	%	14:31:17
2	Ag 328.068†	-224.9	-13.5	-0.4201	µg/L	-0.4201	ppb	14:31:17
2	As 188.979†	-3.1	5.8	10.126	µg/L	10.126	ppb	14:31:37
2	B 249.677†	137.6	66.3	8.9252	µg/L	8.9252	ppb	14:31:37
2	Ba 233.527†	-0.2	-3.2	-0.0735	µg/L	-0.0735	ppb	14:31:37
2	Be 313.107†	-129.1	-16.3	-0.0217	µg/L	-0.0217	ppb	14:31:17
2	Cd 226.502†	-132.3	-15.2	-0.5520	µg/L	-0.5520	ppb	14:31:37
2	Co 228.616†	-174.3	-0.3	-0.0409	µg/L	-0.0409	ppb	14:31:37
2	Cr 267.716†	95.3	4.7	0.1773	µg/L	0.1773	ppb	14:31:37
2	Cu 324.752†	288.2	64.4	1.5067	µg/L	1.5067	ppb	14:31:17
2	Mn 257.610†	75.3	22.8	0.2280	µg/L	0.2280	ppb	14:31:37
2	Mo 202.031†	-21.2	-13.4	-2.0665	µg/L	-2.0665	ppb	14:31:37
2	Ni 231.604†	43.5	-18.1	-2.5268	µg/L	-2.5268	ppb	14:31:37

2	P 214.914†	302.1	39.6	106.97 µg/L	106.97 ppb	14:31:37
2	Pb 220.353†	240.7	36.4	19.013 µg/L	19.013 ppb	14:31:37
2	S 181.975 Axial†	159.9	95.0	555.39 µg/L	555.39 ppb	14:31:37
2	Sb 206.836†	98.0	6.0	9.3250 µg/L	9.3250 ppb	14:31:37
2	Se 196.026†	61.6	2.8	4.7106 µg/L	4.7106 ppb	14:31:37
2	Si 251.611†	71.2	32.2	4.2812 µg/L	4.2812 ppb	14:31:37
2	SiO2†	-20.3	26.2	7.5793 µg/L	7.5793 ppb	14:31:37
2	Sn 189.927†	-8.6	-4.7	-2.8720 µg/L	-2.8720 ppb	14:31:37
2	Ti 334.940†	323.1	19.7	0.1264 µg/L	0.1264 ppb	14:31:17
2	Tl 190.801†	24.1	-0.4	-1.8831 µg/L	-1.8831 ppb	14:31:37
2	U 367.007†	-120.0	31.8	13.416 µg/L	13.416 ppb	14:31:17
2	V 292.402†	54.4	10.9	0.3109 µg/L	0.3109 ppb	14:31:37
2	Zn 213.857†	709.2	17.9	0.7063 µg/L	0.7063 ppb	14:31:37
3	Sc RADIAL	49380.5	49380.5	100.39 %	100.39 %	14:30:31
3	Al 396.153Radial†	215.0	231.2	75.996 µg/L	75.996 ppb	14:30:31
3	Ca 317.933Radial†	176.1	26.5	4.3264 µg/L	4.3264 ppb	14:30:51
3	Fe 238.204 Radial†	98.6	-3.8	-0.7660 µg/L	-0.7660 ppb	14:30:51
3	K 766.490 Radial†	1513.2	1359.3	1139.0 µg/L	1139.0 ppb	14:30:31
3	Mg 279.077 IEC†	18.7	8.6	16.855 µg/L	16.855 ppb	14:30:51
3	Na 589.592 Radial†	36496.8	35433.1	5661.7 µg/L	5661.7 ppb	14:30:31
3	Sr 421.552†	38.1	-34.1	-0.0991 µg/L	-0.0991 ppb	14:30:31
3	Sc 361.383	291152.2	291152.2	96.576 %	96.576 %	14:31:39
3	Y 371.029	206690.0	206690.0	96.643 %	96.643 %	14:31:39
3	Ag 328.068†	-224.0	-19.1	-0.5809 µg/L	-0.5809 ppb	14:31:39
3	As 188.979†	-5.3	3.4	5.9879 µg/L	5.9879 ppb	14:31:59
3	B 249.677†	128.2	60.5	8.1612 µg/L	8.1612 ppb	14:31:59
3	Ba 233.527†	-4.2	-7.4	-0.1731 µg/L	-0.1731 ppb	14:31:59
3	Be 313.107†	-30.9	81.6	0.1279 µg/L	0.1279 ppb	14:31:39
3	Cd 226.502†	-124.9	-11.4	-0.4155 µg/L	-0.4155 ppb	14:31:59
3	Co 228.616†	-177.2	-8.4	-0.9451 µg/L	-0.9451 ppb	14:31:59
3	Cr 267.716†	87.1	-1.0	-0.0420 µg/L	-0.0420 ppb	14:31:59
3	Cu 324.752†	283.1	67.6	1.5814 µg/L	1.5814 ppb	14:31:39
3	Mn 257.610†	59.9	9.1	0.0907 µg/L	0.0907 ppb	14:31:59
3	Mo 202.031†	-27.1	-20.2	-3.1112 µg/L	-3.1112 ppb	14:31:59
3	Ni 231.604†	35.1	-25.6	-3.5673 µg/L	-3.5673 ppb	14:31:59
3	P 214.914†	285.8	31.6	85.390 µg/L	85.390 ppb	14:31:59
3	Pb 220.353†	228.4	30.7	16.042 µg/L	16.042 ppb	14:31:59
3	S 181.975 Axial†	151.6	91.1	532.71 µg/L	532.71 ppb	14:31:59
3	Sb 206.836†	102.4	13.5	20.966 µg/L	20.966 ppb	14:31:59
3	Se 196.026†	66.2	9.4	15.819 µg/L	15.819 ppb	14:31:59
3	Si 251.611†	53.8	16.3	2.1965 µg/L	2.1965 ppb	14:31:59
3	SiO2†	-30.4	15.1	4.4249 µg/L	4.4249 ppb	14:31:59
3	Sn 189.927†	-10.3	-6.7	-4.0908 µg/L	-4.0908 ppb	14:31:59
3	Ti 334.940†	281.9	-13.5	-0.0898 µg/L	-0.0898 ppb	14:31:39
3	Tl 190.801†	18.0	-6.0	-29.155 µg/L	-29.155 ppb	14:31:59
3	U 367.007†	-146.0	1.3	0.5636 µg/L	0.5636 ppb	14:31:39
3	V 292.402†	45.0	2.8	0.0455 µg/L	0.0455 ppb	14:31:59
3	Zn 213.857†	712.6	42.3	1.6519 µg/L	1.6519 ppb	14:31:59

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc RADIAL	52828.3	107.40	%	12.110	107.40	%	12.110	11.28%
Sc 361.383	301141.0	99.889	%	3.5910	99.889	%	3.5910	3.60%
Y 371.029	213901.9	100.02	%	3.699	100.02	%	3.699	3.70%
Ag 328.068†	-12.6	-0.3890	µg/L	0.20924	-0.3890	ppb	0.20924	53.79%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	34.1	11.284	µg/L	57.4381	11.284	ppb	57.4381	509.01%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.4	4.1357	µg/L	7.10014	4.1357	ppb	7.10014	171.68%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	68.6	9.2359	µg/L	1.25914	9.2359	ppb	1.25914	13.63%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-2.1	-0.0479	µg/L	0.13963	-0.0479	ppb	0.13963	291.23%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	3.4	0.0073	µg/L	0.10902	0.0073	ppb	0.10902	>999.9%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	15.4	2.5113	µg/L	4.14186	2.5113	ppb	4.14186	164.93%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-5.2	-0.1909	µg/L	0.51178	-0.1909	ppb	0.51178	268.08%

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   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -3.6     -0.4090 µg/L       0.47491     -0.4090 ppb        0.47491 116.10%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               9.3      0.3672 µg/L       0.53040      0.3672 ppb        0.53040 144.43%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              70.6      1.6514 µg/L       0.18960      1.6514 ppb        0.18960  11.48%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†      -11.5     -2.2609 µg/L       1.51016     -2.2609 ppb        1.51016  66.79%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†      1243.2      1041.7 µg/L        133.60      1041.7 ppb         133.60  12.83%
   QC value greater than the upper limit for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -4.2     -8.3300 µg/L      22.32824     -8.3300 ppb       22.32824 268.05%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              14.6      0.1454 µg/L       0.07277      0.1454 ppb        0.07277  50.04%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -15.3     -2.3598 µg/L       0.65594     -2.3598 ppb        0.65594  27.80%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†     34743.7      5551.5 µg/L        313.50      5551.5 ppb         313.50   5.65%
   QC value greater than the upper limit for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -26.3     -3.6693 µg/L       1.19680     -3.6693 ppb        1.19680  32.62%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               29.8      80.558 µg/L       29.1320      80.558 ppb        29.1320  36.16%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              23.7      12.411 µg/L        8.9852      12.411 ppb         8.9852  72.40%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         92.8      542.69 µg/L        11.583      542.69 ppb         11.583   2.13%
   QC value greater than the upper limit for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               4.5      6.9730 µg/L      15.30523      6.9730 ppb       15.30523 219.49%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               1.6      2.7342 µg/L      14.17661      2.7342 ppb       14.17661 518.49%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              24.2      3.2287 µg/L       1.04246      3.2287 ppb        1.04246  32.29%
   QC value within limits for Si 251.611  Recovery = Not calculated
SiO2†                    22.5      6.5105 µg/L       1.80633      6.5105 ppb        1.80633  27.74%
   QC value within limits for SiO2  Recovery = Not calculated
Sn 189.927†              -4.8     -2.9548 µg/L       1.09698     -2.9548 ppb        1.09698  37.13%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              22.4      0.0651 µg/L       0.18124      0.0651 ppb        0.18124 278.57%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               9.3      0.0594 µg/L       0.12947      0.0594 ppb        0.12947 217.88%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -3.0     -14.735 µg/L       13.7034     -14.735 ppb        13.7034  93.00%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 367.007†               16.4      6.9121 µg/L       6.42751      6.9121 ppb        6.42751  92.99%
   QC value within limits for U 367.007  Recovery = Not calculated
V 292.402†                1.5      0.0230 µg/L       0.29978      0.0230 ppb        0.29978 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              20.6      0.8144 µg/L       0.78901      0.8144 ppb        0.78901  96.88%
   QC value within limits for Zn 213.857  Recovery = Not calculated
QC Failed.  Continue with analysis.
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Batch ID:
Sequence No.: 9 **Autosampler Location: 155**
Sample ID: 604449005|2357704|1| **Date Collected: 12/19/2022 14:32:54**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample): 49

Replicate Data: 604449005|2357704|1|

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	47242.4	47242.4	96.041	%	96.041	%	14:33:31
1	Al 396.153Radial†	93.9	114.9	21.516	µg/L	21.516	ppb	14:33:31
1	Ca 317.933Radial†	776461.7	808320.8	131910	µg/L	131910	ppb	14:33:31
1	Fe 238.204 Radial†	115.7	18.4	3.4416	µg/L	3.4416	ppb	14:33:51
1	K 766.490 Radial†	1619920.6	1686550.2	1413200	µg/L	1413200	ppb	14:33:31
1	Mg 279.077 IEC†	46780.8	48699.1	95834	µg/L	95834	ppb	14:33:31
1	Na 589.592 Radial†	Saturated3	Saturated3					14:33:51
	Saturated in preshot (code 3)							
1	Sr 421.552†	370401.7	385598.7	1118.8	µg/L	1118.8	ppb	14:33:31
1	Sc 361.383	201618.2	201618.2	66.877	%	66.877	%	14:34:39
1	Y 371.029	142247.4	142247.4	66.511	%	66.511	%	14:34:39
1	Ag 328.068†	-219.7	-115.7	-2.6913	µg/L	-2.6913	ppb	14:34:59
1	As 188.979†	12.4	27.5	49.658	µg/L	49.658	ppb	14:34:59
1	B 249.677†	17776.4	26508.4	3577.5	µg/L	3577.5	ppb	14:34:39
1	Ba 233.527†	6886.6	10294.4	240.29	µg/L	240.29	ppb	14:34:59
1	Be 313.107†	-17.6	87.2	0.1371	µg/L	0.1371	ppb	14:34:59
1	Cd 226.502†	-110.4	-47.1	-1.6948	µg/L	-1.6948	ppb	14:34:59
1	Co 228.616†	-150.1	-49.4	-5.7015	µg/L	-5.7015	ppb	14:34:59
1	Cr 267.716†	187.4	189.1	7.5783	µg/L	7.5783	ppb	14:34:59
1	Cu 324.752†	307.1	233.6	5.4611	µg/L	5.4611	ppb	14:34:59
1	Mn 257.610†	202.6	249.9	2.4942	µg/L	2.4942	ppb	14:34:59
1	Mo 202.031†	1504.2	2257.1	347.97	µg/L	347.97	ppb	14:34:59
1	Ni 231.604†	172.1	195.4	26.651	µg/L	26.651	ppb	14:34:59
1	P 214.914†	4720.5	6794.2	18366	µg/L	18366	ppb	14:34:59
1	Pb 220.353†	199.8	93.0	48.833	µg/L	48.833	ppb	14:34:59
1	S 181.975 Axial†	235009.2	351337.7	2054800	µg/L	2054800	ppb	14:34:39
1	Sb 206.836†	81.0	28.6	47.894	µg/L	47.894	ppb	14:34:59
1	Se 196.026†	63.1	35.3	58.984	µg/L	58.984	ppb	14:34:59
1	Si 251.611†	283343.8	423637.8	55839	µg/L	55839	ppb	14:34:39
1	SiO2†	277805.1	415441.9	118970	µg/L	118970	ppb	14:34:39
1	Sn 189.927†	-1.3	2.0	-8.9631	µg/L	-8.9631	ppb	14:34:59
1	Ti 334.940†	121.5	-123.7	-0.2883	µg/L	-0.2883	ppb	14:34:59
1	Tl 190.801†	23.5	10.5	53.003	µg/L	53.003	ppb	14:34:59
1	U 367.007†	-85.6	24.5	10.339	µg/L	10.339	ppb	14:34:39
1	V 292.402†	1177.4	1716.8	54.900	µg/L	54.900	ppb	14:34:59
1	Zn 213.857†	783.5	475.9	16.542	µg/L	16.542	ppb	14:34:59
2	Sc RADIAL	41350.3	41350.3	84.063	%	84.063	%	14:33:53
2	Al 396.153Radial†	-28.1	-16.4	-21.537	µg/L	-21.537	ppb	14:33:53
2	Ca 317.933Radial†	665463.7	791478.3	129160	µg/L	129160	ppb	14:33:53
2	Fe 238.204 Radial†	117.1	37.3	7.1997	µg/L	7.1997	ppb	14:34:13
2	K 766.490 Radial†	1418347.6	1687100.3	1413700	µg/L	1413700	ppb	14:33:53
2	Mg 279.077 IEC†	39974.7	47543.3	93559	µg/L	93559	ppb	14:33:53
2	Na 589.592 Radial†	Saturated3	Saturated3					14:34:13
	Saturated in preshot (code 3)							
2	Sr 421.552†	324903.6	386429.2	1121.2	µg/L	1121.2	ppb	14:33:53
2	Sc 361.383	204410.3	204410.3	67.803	%	67.803	%	14:35:01
2	Y 371.029	144147.4	144147.4	67.400	%	67.400	%	14:35:01
2	Ag 328.068†	-221.8	-114.3	-2.6546	µg/L	-2.6546	ppb	14:35:21
2	As 188.979†	7.9	20.7	37.678	µg/L	37.678	ppb	14:35:21
2	B 249.677†	18178.9	26739.0	3608.6	µg/L	3608.6	ppb	14:35:01
2	Ba 233.527†	6999.6	10320.4	240.95	µg/L	240.95	ppb	14:35:21
2	Be 313.107†	-22.6	80.2	0.1232	µg/L	0.1232	ppb	14:35:21
2	Cd 226.502†	-96.4	-24.2	-0.8649	µg/L	-0.8649	ppb	14:35:21
2	Co 228.616†	-138.7	-29.5	-3.4467	µg/L	-3.4467	ppb	14:35:21
2	Cr 267.716†	170.5	160.2	6.4302	µg/L	6.4302	ppb	14:35:21
2	Cu 324.752†	306.3	226.2	5.2886	µg/L	5.2886	ppb	14:35:21
2	Mn 257.610†	203.5	247.2	2.4670	µg/L	2.4670	ppb	14:35:21

2	Mo 202.031†	1524.8	2256.7	347.90 µg/L	347.90 ppb	14:35:21
2	Ni 231.604†	172.8	193.0	26.329 µg/L	26.329 ppb	14:35:21
2	P 214.914†	4795.3	6808.0	18403 µg/L	18403 ppb	14:35:21
2	Pb 220.353†	208.2	101.3	53.179 µg/L	53.179 ppb	14:35:21
2	S 181.975 Axial†	240439.6	354546.7	2073500 µg/L	2073500 ppb	14:35:01
2	Sb 206.836†	92.6	44.0	71.927 µg/L	71.927 ppb	14:35:21
2	Se 196.026†	68.9	42.4	70.974 µg/L	70.974 ppb	14:35:21
2	Si 251.611†	290042.5	427730.1	56379 µg/L	56379 ppb	14:35:01
2	SiO2†	284401.3	419496.2	120130 µg/L	120130 ppb	14:35:01
2	Sn 189.927†	-2.6	0.1	-9.9044 µg/L	-9.9044 ppb	14:35:21
2	Ti 334.940†	126.3	-119.1	-0.2650 µg/L	-0.2650 ppb	14:35:21
2	Tl 190.801†	11.9	-7.1	-32.226 µg/L	-32.226 ppb	14:35:21
2	U 367.007†	-104.7	-1.9	-0.8220 µg/L	-0.8220 ppb	14:35:01
2	V 292.402†	1199.3	1725.1	55.128 µg/L	55.128 ppb	14:35:21
2	Zn 213.857†	776.9	450.2	15.585 µg/L	15.585 ppb	14:35:21
3	Sc RADIAL	44396.3	44396.3	90.255 %	90.255 %	14:34:16
3	Al 396.153Radial†	113.7	143.1	30.704 µg/L	30.704 ppb	14:34:16
3	Ca 317.933Radial†	727599.0	806009.9	131530 µg/L	131530 ppb	14:34:16
3	Fe 238.204 Radial†	121.1	32.2	6.1762 µg/L	6.1762 ppb	14:34:36
3	K 766.490 Radial†	1550072.5	1717287.7	1439000 µg/L	1439000 ppb	14:34:16
3	Mg 279.077 IEC†	43687.9	48394.8	95235 µg/L	95235 ppb	14:34:16
3	Na 589.592 Radial†	Saturated3	Saturated3			14:34:36
Saturated in preshot (code 3)						
3	Sr 421.552†	354859.2	393101.7	1140.6 µg/L	1140.6 ppb	14:34:16
3	Sc 361.383	207265.6	207265.6	68.751 %	68.751 %	14:35:23
3	Y 371.029	146200.7	146200.7	68.360 %	68.360 %	14:35:23
3	Ag 328.068†	-230.6	-122.6	-2.8951 µg/L	-2.8951 ppb	14:35:43
3	As 188.979†	13.0	27.8	50.281 µg/L	50.281 ppb	14:35:43
3	B 249.677†	18362.2	26636.3	3594.7 µg/L	3594.7 ppb	14:35:23
3	Ba 233.527†	7063.8	10271.5	239.76 µg/L	239.76 ppb	14:35:43
3	Be 313.107†	-55.7	32.5	0.0488 µg/L	0.0488 ppb	14:35:43
3	Cd 226.502†	-114.4	-48.4	-1.7439 µg/L	-1.7439 ppb	14:35:43
3	Co 228.616†	-144.9	-35.7	-4.1563 µg/L	-4.1563 ppb	14:35:43
3	Cr 267.716†	171.0	157.6	6.3230 µg/L	6.3230 ppb	14:35:43
3	Cu 324.752†	317.8	236.8	5.5362 µg/L	5.5362 ppb	14:35:43
3	Mn 257.610†	201.2	239.7	2.3926 µg/L	2.3926 ppb	14:35:43
3	Mo 202.031†	1552.2	2265.7	349.28 µg/L	349.28 ppb	14:35:43
3	Ni 231.604†	164.4	177.2	24.115 µg/L	24.115 ppb	14:35:43
3	P 214.914†	4863.6	6809.9	18409 µg/L	18409 ppb	14:35:43
3	Pb 220.353†	193.2	75.3	39.566 µg/L	39.566 ppb	14:35:43
3	S 181.975 Axial†	242206.2	352231.1	2060000 µg/L	2060000 ppb	14:35:23
3	Sb 206.836†	95.2	45.8	74.820 µg/L	74.820 ppb	14:35:43
3	Se 196.026†	82.2	60.4	101.06 µg/L	101.06 ppb	14:35:43
3	Si 251.611†	291072.8	423335.7	55799 µg/L	55799 ppb	14:35:23
3	SiO2†	285340.8	415084.4	118870 µg/L	118870 ppb	14:35:23
3	Sn 189.927†	-5.9	-4.6	-13.005 µg/L	-13.005 ppb	14:35:43
3	Ti 334.940†	136.8	-106.4	-0.1710 µg/L	-0.1710 ppb	14:35:43
3	Tl 190.801†	20.9	5.7	29.961 µg/L	29.961 ppb	14:35:43
3	U 367.007†	-105.0	-0.2	-0.1130 µg/L	-0.1130 ppb	14:35:23
3	V 292.402†	1217.4	1726.9	55.199 µg/L	55.199 ppb	14:35:43
3	Zn 213.857†	800.2	468.3	16.271 µg/L	16.271 ppb	14:35:43

Mean Data: 604449005|2357704|1|

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc RADIAL	44329.7	90.120	%	5.9902	90.120	%	5.9902	6.65%
Sc 361.383	204431.4	67.810	%	0.9367	67.810	%	0.9367	1.38%
Y 371.029	144198.5	67.424	%	0.9245	67.424	%	0.9245	1.37%
Ag 328.068†	-117.5	-2.7470	µg/L	0.12956	-2.7470	ppb	0.12956	4.72%
Al 396.153Radial†	80.5	10.228	µg/L	27.8900	10.228	ppb	27.8900	272.69%
As 188.979†	25.3	45.872	µg/L	7.1031	45.872	ppb	7.1031	15.48%
B 249.677†	26627.9	3593.6	µg/L	15.59	3593.6	ppb	15.59	0.43%
Ba 233.527†	10295.4	240.33	µg/L	0.594	240.33	ppb	0.594	0.25%
Be 313.107†	66.7	0.1030	µg/L	0.04746	0.1030	ppb	0.04746	46.07%
Ca 317.933Radial†	801936.3	130870	µg/L	1490.00	130870	ppb	1490.00	1.14%
Cd 226.502†	-39.9	-1.4345	µg/L	0.49393	-1.4345	ppb	0.49393	34.43%
Co 228.616†	-38.2	-4.4348	µg/L	1.15292	-4.4348	ppb	1.15292	26.00%
Cr 267.716†	169.0	6.7772	µg/L	0.69590	6.7772	ppb	0.69590	10.27%
Cu 324.752†	232.2	5.4286	µg/L	0.12699	5.4286	ppb	0.12699	2.34%
Fe 238.204 Radial†	29.3	5.6058	µg/L	1.94291	5.6058	ppb	1.94291	34.66%

K 766.490 Radial†	1696979.4	1421900 µg/L	14738.71	1421900 ppb	14738.71	1.04%
Concentration greater than upper limit for K 766.490 Radial.						
Mg 279.077 IEC†	48212.4	94876 µg/L	1178.98	94876 ppb	1178.98	1.24%
Mn 257.610†	245.6	2.4513 µg/L	0.05260	2.4513 ppb	0.05260	2.15%
Mo 202.031†	2259.8	348.38 µg/L	0.780	348.38 ppb	0.780	0.22%
Na 589.592 Radial†	Saturated3					
Ni 231.604†	188.6	25.698 µg/L	1.3805	25.698 ppb	1.3805	5.37%
P 214.914†	6804.0	18393 µg/L	23.17	18393 ppb	23.17	0.13%
Concentration greater than upper limit for P 214.914.						
Pb 220.353†	89.8	47.193 µg/L	6.9531	47.193 ppb	6.9531	14.73%
S 181.975 Axial†	352705.2	2062800 µg/L	9686.72	2062800 ppb	9686.72	0.47%
Concentration greater than upper limit for S 181.975 Axial.						
Sb 206.836†	39.4	64.880 µg/L	14.7817	64.880 ppb	14.7817	22.78%
Se 196.026†	46.0	77.006 µg/L	21.6773	77.006 ppb	21.6773	28.15%
Si 251.611†	424901.2	56006 µg/L	323.81	56006 ppb	323.81	0.58%
Concentration greater than upper limit for Si 251.611.						
SiO2†	416674.2	119320 µg/L	702.38	119320 ppb	702.38	0.59%
Concentration greater than upper limit for SiO2.						
Sn 189.927†	-0.8	-10.624 µg/L	2.1150	-10.624 ppb	2.1150	19.91%
Concentration less than lower limit for Sn 189.927.						
Sr 421.552†	388376.6	1126.9 µg/L	11.95	1126.9 ppb	11.95	1.06%
Ti 334.940†	-116.4	-0.2414 µg/L	0.06214	-0.2414 ppb	0.06214	25.74%
Tl 190.801†	3.0	16.913 µg/L	44.0875	16.913 ppb	44.0875	260.68%
U 367.007†	7.5	3.1348 µg/L	6.24933	3.1348 ppb	6.24933	199.36%
V 292.402†	1722.9	55.076 µg/L	0.1564	55.076 ppb	0.1564	0.28%
Zn 213.857†	464.8	16.133 µg/L	0.4931	16.133 ppb	0.4931	3.06%

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Batch ID:
Sequence No.: 10 **Autosampler Location: 156**
Sample ID: 604449009|2357704|1| **Date Collected: 12/19/2022 14:36:36**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample): 49

Replicate Data: 604449009|2357704|1|

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	42053.0	42053.0	85.491	%	85.491	%	14:37:13
1	Al 396.153Radial†	72.7	102.1	16.635	µg/L	16.635	ppb	14:37:13
1	Ca 317.933Radial†	254589.8	297647.5	48574	µg/L	48574	ppb	14:37:13
1	Fe 238.204 Radial†	254.3	195.4	37.989	µg/L	37.989	ppb	14:37:33
1	K 766.490 Radial†	3536394.5	4136411.0	3466000	µg/L	3466000	ppb	14:37:11
1	Mg 279.077 IEC†	49152.3	57483.9	113120	µg/L	113120	ppb	14:37:13
1	Na 589.592 Radial†	Saturated3	Saturated3					14:37:33
	Saturated in preshot (code 3)							
1	Sr 421.552†	525767.6	614924.1	1787.0	µg/L	1787.0	ppb	14:37:11
1	Sc 361.383	160232.6	160232.6	53.150	%	53.150	%	14:38:25
1	Y 371.029	116007.4	116007.4	54.242	%	54.242	%	14:38:25
1	Ag 328.068†	-156.2	-81.0	-2.1152	µg/L	-2.1152	ppb	14:38:45
1	As 188.979†	16.3	39.6	70.990	µg/L	70.990	ppb	14:38:45
1	B 249.677†	25072.0	47100.3	6355.9	µg/L	6355.9	ppb	14:38:25
1	Ba 233.527†	5319.7	10005.8	233.09	µg/L	233.09	ppb	14:38:45
1	Be 313.107†	-4.0	106.1	0.1563	µg/L	0.1563	ppb	14:38:25
1	Cd 226.502†	-108.4	-85.9	-3.0883	µg/L	-3.0883	ppb	14:38:45
1	Co 228.616†	-128.4	-66.5	-7.6997	µg/L	-7.6997	ppb	14:38:45
1	Cr 267.716†	133.0	159.0	6.4117	µg/L	6.4117	ppb	14:38:45
1	Cu 324.752†	89.1	-57.8	-1.3533	µg/L	-1.3533	ppb	14:38:45
1	Mn 257.610†	760.1	1377.1	13.743	µg/L	13.743	ppb	14:38:45
1	Mo 202.031†	1247.4	2354.9	363.04	µg/L	363.04	ppb	14:38:45
1	Ni 231.604†	256.6	420.8	58.017	µg/L	58.017	ppb	14:38:45
1	P 214.914†	4175.7	7592.2	20524	µg/L	20524	ppb	14:38:45
1	Pb 220.353†	164.8	104.3	54.661	µg/L	54.661	ppb	14:38:45
1	S 181.975 Axial†	416015.6	782659.9	4577400	µg/L	4577400	ppb	14:38:25
1	Sb 206.836†	79.9	57.8	93.654	µg/L	93.654	ppb	14:38:45
1	Se 196.026†	53.0	40.6	67.892	µg/L	67.892	ppb	14:38:45
1	Si 251.611†	29609.5	55670.4	7318.7	µg/L	7318.7	ppb	14:38:25
1	SiO2†	29020.3	54647.9	15606	µg/L	15606	ppb	14:38:25
1	Sn 189.927†	-6.4	-8.1	-6.5469	µg/L	-6.5469	ppb	14:38:45
1	Ti 334.940†	161.8	-1.0	0.2035	µg/L	0.2035	ppb	14:38:25
1	Tl 190.801†	22.4	17.4	86.955	µg/L	86.955	ppb	14:38:45
1	U 367.007†	-130.0	-92.1	-39.024	µg/L	-39.024	ppb	14:38:25
1	V 292.402†	522.9	940.1	32.147	µg/L	32.147	ppb	14:38:45
1	Zn 213.857†	634.1	497.5	18.218	µg/L	18.218	ppb	14:38:45
2	Sc RADIAL	39567.4	39567.4	80.438	%	80.438	%	14:37:37
2	Al 396.153Radial†	27.4	51.2	-0.4786	µg/L	-0.4786	ppb	14:37:37
2	Ca 317.933Radial†	241181.2	299685.6	48907	µg/L	48907	ppb	14:37:37
2	Fe 238.204 Radial†	223.6	175.9	34.180	µg/L	34.180	ppb	14:37:57
2	K 766.490 Radial†	3208529.5	3988669.3	3342200	µg/L	3342200	ppb	14:37:35
2	Mg 279.077 IEC†	46504.2	57803.5	113750	µg/L	113750	ppb	14:37:37
2	Na 589.592 Radial†	Saturated3	Saturated3					14:37:57
	Saturated in preshot (code 3)							
2	Sr 421.552†	480745.7	597587.0	1736.6	µg/L	1736.6	ppb	14:37:35
2	Sc 361.383	153263.3	153263.3	50.838	%	50.838	%	14:38:47
2	Y 371.029	110963.1	110963.1	51.884	%	51.884	%	14:38:47
2	Ag 328.068†	-153.8	-89.6	-2.4278	µg/L	-2.4278	ppb	14:39:07
2	As 188.979†	17.5	43.3	77.436	µg/L	77.436	ppb	14:39:07
2	B 249.677†	23454.3	46063.5	6216.1	µg/L	6216.1	ppb	14:38:47
2	Ba 233.527†	5196.4	10218.5	238.08	µg/L	238.08	ppb	14:39:07
2	Be 313.107†	-104.5	-92.0	-0.1353	µg/L	-0.1353	ppb	14:38:47
2	Cd 226.502†	-103.5	-85.6	-3.0728	µg/L	-3.0728	ppb	14:39:07
2	Co 228.616†	-121.6	-64.2	-7.4379	µg/L	-7.4379	ppb	14:39:07
2	Cr 267.716†	132.0	168.5	6.7323	µg/L	6.7323	ppb	14:39:07
2	Cu 324.752†	63.5	-100.6	-2.3534	µg/L	-2.3534	ppb	14:39:07
2	Mn 257.610†	731.3	1385.5	13.827	µg/L	13.827	ppb	14:39:07

2	Mo 202.031†	1221.9	2411.4	371.74 µg/L	371.74 ppb	14:39:07	
2	Ni 231.604†	263.7	456.9	63.036 µg/L	63.036 ppb	14:39:07	
2	P 214.914†	4058.5	7718.8	20866 µg/L	20866 ppb	14:39:07	
2	Pb 220.353†	163.3	115.3	60.444 µg/L	60.444 ppb	14:39:07	
2	S 181.975 Axial†	388864.7	764846.2	4473200 µg/L	4473200 ppb	14:38:47	
2	Sb 206.836†	82.9	70.6	113.59 µg/L	113.59 ppb	14:39:07	
2	Se 196.026†	59.7	58.3	97.570 µg/L	97.570 ppb	14:39:07	
2	Si 251.611†	27812.2	54668.3	7186.3 µg/L	7186.3 ppb	14:38:47	
2	SiO2†	27292.4	53731.9	15343 µg/L	15343 ppb	14:38:47	
2	Sn 189.927†	-7.0	-9.8	-7.6363 µg/L	-7.6363 ppb	14:39:07	
2	Ti 334.940†	203.5	94.9	0.8188 µg/L	0.8188 ppb	14:38:47	
2	Tl 190.801†	18.1	11.1	56.236 µg/L	56.236 ppb	14:39:07	
2	U 367.007†	-44.8	64.5	27.085 µg/L	27.085 ppb	14:38:47	
2	V 292.402†	510.0	959.4	32.888 µg/L	32.888 ppb	14:39:07	
2	Zn 213.857†	633.0	549.4	20.192 µg/L	20.192 ppb	14:39:07	
3	Sc RADIAL	40940.9	40940.9	83.230 %	83.230 %	14:38:02	
3	Al 396.153Radial†	53.9	81.8	9.3527 µg/L	9.3527 ppb	14:38:02	
3	Ca 317.933Radial†	244652.0	293796.6	47945 µg/L	47945 ppb	14:38:02	
3	Fe 238.204 Radial†	238.8	184.9	35.943 µg/L	35.943 ppb	14:38:22	
3	K 766.490 Radial†	3395485.3	4079473.4	3418300 µg/L	3418300 ppb	14:38:00	
3	Mg 279.077 IEC†	47046.8	56515.9	111220 µg/L	111220 ppb	14:38:02	
3	Na 589.592 Radial†	Saturated3	Saturated3			14:38:22	
Saturated in preshot (code 3)							
3	Sr 421.552†	507850.0	610101.6	1773.0 µg/L	1773.0 ppb	14:38:00	
3	Sc 361.383	155080.2	155080.2	51.441 %	51.441 %	14:39:09	
3	Y 371.029	112025.1	112025.1	52.380 %	52.380 %	14:39:09	
3	Ag 328.068†	-160.1	-98.4	-2.7121 µg/L	-2.7121 ppb	14:39:29	
3	As 188.979†	17.9	43.7	78.182 µg/L	78.182 ppb	14:39:29	
3	B 249.677†	23949.4	46485.2	6273.0 µg/L	6273.0 ppb	14:39:09	
3	Ba 233.527†	5328.2	10355.1	241.35 µg/L	241.35 ppb	14:39:29	
3	Be 313.107†	-76.5	-35.0	-0.0411 µg/L	-0.0411 ppb	14:39:09	
3	Cd 226.502†	-105.7	-87.5	-3.1437 µg/L	-3.1437 ppb	14:39:29	
3	Co 228.616†	-121.2	-60.5	-7.0071 µg/L	-7.0071 ppb	14:39:29	
3	Cr 267.716†	146.1	192.8	7.6905 µg/L	7.6905 ppb	14:39:29	
3	Cu 324.752†	97.3	-36.4	-0.8518 µg/L	-0.8518 ppb	14:39:29	
3	Mn 257.610†	760.6	1425.7	14.228 µg/L	14.228 ppb	14:39:29	
3	Mo 202.031†	1251.6	2440.9	376.30 µg/L	376.30 ppb	14:39:29	
3	Ni 231.604†	260.0	443.6	61.187 µg/L	61.187 ppb	14:39:29	
3	P 214.914†	4167.2	7836.7	21184 µg/L	21184 ppb	14:39:29	
3	Pb 220.353†	150.6	87.0	45.678 µg/L	45.678 ppb	14:39:29	
3	S 181.975 Axial†	396440.2	770611.2	4506900 µg/L	4506900 ppb	14:39:09	
3	Sb 206.836†	78.7	60.5	97.903 µg/L	97.903 ppb	14:39:29	
3	Se 196.026†	59.9	57.3	95.918 µg/L	95.918 ppb	14:39:29	
3	Si 251.611†	28477.8	55321.2	7272.7 µg/L	7272.7 ppb	14:39:09	
3	SiO2†	27892.7	54269.8	15498 µg/L	15498 ppb	14:39:09	
3	Sn 189.927†	-9.7	-14.9	-10.714 µg/L	-10.714 ppb	14:39:29	
3	Ti 334.940†	206.1	95.2	0.8104 µg/L	0.8104 ppb	14:39:09	
3	Tl 190.801†	12.9	0.5	4.9113 µg/L	4.9113 ppb	14:39:29	
3	U 367.007†	-23.6	106.6	44.881 µg/L	44.881 ppb	14:39:09	
3	V 292.402†	516.6	960.4	32.998 µg/L	32.998 ppb	14:39:29	
3	Zn 213.857†	636.6	542.0	19.923 µg/L	19.923 ppb	14:39:29	

Mean Data: 604449009|2357704|1|

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc RADIAL	40853.8	83.053	%	2.5312	83.053	%	2.5312	3.05%
Sc 361.383	156192.0	51.809	%	1.1992	51.809	%	1.1992	2.31%
Y 371.029	112998.6	52.835	%	1.2434	52.835	%	1.2434	2.35%
Ag 328.068†	-89.7	-2.4184	µg/L	0.29854	-2.4184	ppb	0.29854	12.34%
Al 396.153Radial†	78.4	8.5029	µg/L	8.58818	8.5029	ppb	8.58818	101.00%
As 188.979†	42.2	75.536	µg/L	3.9542	75.536	ppb	3.9542	5.23%
B 249.677†	46549.7	6281.7	µg/L	70.35	6281.7	ppb	70.35	1.12%
Ba 233.527†	10193.1	237.51	µg/L	4.159	237.51	ppb	4.159	1.75%
Be 313.107†	-7.0	-0.0067	µg/L	0.14881	-0.0067	ppb	0.14881	>999.9%
Ca 317.933Radial†	297043.3	48475	µg/L	488.05	48475	ppb	488.05	1.01%
Cd 226.502†	-86.3	-3.1016	µg/L	0.03727	-3.1016	ppb	0.03727	1.20%
Co 228.616†	-63.7	-7.3815	µg/L	0.34973	-7.3815	ppb	0.34973	4.74%
Concentration less than lower limit for Co 228.616.								
Cr 267.716†	173.4	6.9449	µg/L	0.66533	6.9449	ppb	0.66533	9.58%
Cu 324.752†	-64.9	-1.5195	µg/L	0.76449	-1.5195	ppb	0.76449	50.31%

Fe 238.204 Radial†	185.4	36.037 µg/L	1.9063	36.037 ppb	1.9063	5.29%
K 766.490 Radial†	4068184.6	3408800 µg/L	62437.37	3408800 ppb	62437.37	1.83%
Concentration greater than upper limit for K 766.490 Radial.						
Mg 279.077 IEC†	57267.8	112700 µg/L	1319.35	112700 ppb	1319.35	1.17%
Mn 257.610†	1396.1	13.933 µg/L	0.2594	13.933 ppb	0.2594	1.86%
Mo 202.031†	2402.4	370.36 µg/L	6.735	370.36 ppb	6.735	1.82%
Na 589.592 Radial†	Saturated3					
Ni 231.604†	440.5	60.747 µg/L	2.5383	60.747 ppb	2.5383	4.18%
P 214.914†	7715.9	20858 µg/L	330.46	20858 ppb	330.46	1.58%
Concentration greater than upper limit for P 214.914.						
Pb 220.353†	102.2	53.594 µg/L	7.4402	53.594 ppb	7.4402	13.88%
S 181.975 Axial†	772705.8	4519100 µg/L	53160.88	4519100 ppb	53160.88	1.18%
Concentration greater than upper limit for S 181.975 Axial.						
Sb 206.836†	63.0	101.72 µg/L	10.502	101.72 ppb	10.502	10.32%
Se 196.026†	52.1	87.127 µg/L	16.6781	87.127 ppb	16.6781	19.14%
Si 251.611†	55220.0	7259.2 µg/L	67.20	7259.2 ppb	67.20	0.93%
SiO2†	54216.5	15482 µg/L	132.13	15482 ppb	132.13	0.85%
Sn 189.927†	-10.9	-8.2991 µg/L	2.16122	-8.2991 ppb	2.16122	26.04%
Sr 421.552†	607537.6	1765.6 µg/L	26.02	1765.6 ppb	26.02	1.47%
Ti 334.940†	63.0	0.6109 µg/L	0.35281	0.6109 ppb	0.35281	57.75%
Tl 190.801†	9.7	49.367 µg/L	41.4506	49.367 ppb	41.4506	83.96%
U 367.007†	26.3	10.981 µg/L	44.2098	10.981 ppb	44.2098	402.61%
V 292.402†	953.3	32.677 µg/L	0.4627	32.677 ppb	0.4627	1.42%
Zn 213.857†	529.6	19.444 µg/L	1.0706	19.444 ppb	1.0706	5.51%

Batch ID:
Sequence No.: 11 **Autosampler Location: 157**
Sample ID: 604449013|2357704|1| **Date Collected: 12/19/2022 14:40:22**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample): 49

Replicate Data: 604449013|2357704|1|

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	50182.7	50182.7	102.02	%	102.02	%	14:40:57
1	Al 396.153Radial†	51.4	67.4	8.3640	µg/L	8.3640	ppb	14:41:17
1	Ca 317.933Radial†	892179.0	874379.0	142690	µg/L	142690	ppb	14:40:57
1	Fe 238.204 Radial†	90.7	-13.2	-2.6944	µg/L	-2.6944	ppb	14:41:17
1	K 766.490 Radial†	1830718.2	1794350.6	1503500	µg/L	1503500	ppb	14:40:57
1	Mg 279.077 IEC†	38039.2	37276.6	73356	µg/L	73356	ppb	14:40:57
1	Na 589.592 Radial†	Saturated3	Saturated3					14:41:17
	Saturated in preshot (code 3)							
1	Sr 421.552†	345412.8	338507.0	981.65	µg/L	981.65	ppb	14:40:57
1	Sc 361.383	210257.9	210257.9	69.743	%	69.743	%	14:42:07
1	Y 371.029	148065.0	148065.0	69.232	%	69.232	%	14:42:07
1	Ag 328.068†	-210.5	-89.0	-1.8062	µg/L	-1.8062	ppb	14:42:27
1	As 188.979†	7.4	19.5	35.430	µg/L	35.430	ppb	14:42:27
1	B 249.677†	15082.0	21553.0	2908.7	µg/L	2908.7	ppb	14:42:07
1	Ba 233.527†	5314.0	7616.4	177.73	µg/L	177.73	ppb	14:42:27
1	Be 313.107†	-42.8	52.3	0.0766	µg/L	0.0766	ppb	14:42:27
1	Cd 226.502†	-136.0	-77.0	-2.7796	µg/L	-2.7796	ppb	14:42:27
1	Co 228.616†	-148.8	-38.2	-4.3957	µg/L	-4.3957	ppb	14:42:27
1	Cr 267.716†	159.8	138.0	5.5465	µg/L	5.5465	ppb	14:42:27
1	Cu 324.752†	192.3	50.2	1.1729	µg/L	1.1729	ppb	14:42:27
1	Mn 257.610†	48.2	16.1	0.1612	µg/L	0.1612	ppb	14:42:27
1	Mo 202.031†	1334.1	1920.7	296.10	µg/L	296.10	ppb	14:42:27
1	Ni 231.604†	166.5	176.8	24.209	µg/L	24.209	ppb	14:42:27
1	P 214.914†	3377.7	4578.7	12377	µg/L	12377	ppb	14:42:27
1	Pb 220.353†	197.1	76.8	40.392	µg/L	40.392	ppb	14:42:27
1	S 181.975 Axial†	231335.7	331631.0	1939500	µg/L	1939500	ppb	14:42:07
1	Sb 206.836†	84.9	29.1	48.323	µg/L	48.323	ppb	14:42:27
1	Se 196.026†	76.9	51.1	85.514	µg/L	85.514	ppb	14:42:27
1	Si 251.611†	166007.3	237987.5	31364	µg/L	31364	ppb	14:42:07
1	SiO2†	162766.5	233426.8	66836	µg/L	66836	ppb	14:42:07
1	Sn 189.927†	5.7	12.1	-4.4776	µg/L	-4.4776	ppb	14:42:27
1	Ti 334.940†	108.7	-149.5	-0.4083	µg/L	-0.4083	ppb	14:42:27
1	Tl 190.801†	19.9	4.0	20.656	µg/L	20.656	ppb	14:42:27
1	U 367.007†	-121.3	-21.3	-8.9990	µg/L	-8.9990	ppb	14:42:07
1	V 292.402†	970.9	1348.3	43.377	µg/L	43.377	ppb	14:42:27
1	Zn 213.857†	714.4	328.8	10.754	µg/L	10.754	ppb	14:42:27
2	Sc RADIAL	45636.3	45636.3	92.776	%	92.776	%	14:41:20
2	Al 396.153Radial†	86.0	109.8	21.440	µg/L	21.440	ppb	14:41:40
2	Ca 317.933Radial†	803435.4	865847.9	141300	µg/L	141300	ppb	14:41:20
2	Fe 238.204 Radial†	86.7	-8.6	-1.8168	µg/L	-1.8168	ppb	14:41:40
2	K 766.490 Radial†	1687011.0	1818226.0	1523500	µg/L	1523500	ppb	14:41:20
2	Mg 279.077 IEC†	34277.0	36936.0	72685	µg/L	72685	ppb	14:41:20
2	Na 589.592 Radial†	Saturated3	Saturated3					14:41:40
	Saturated in preshot (code 3)							
2	Sr 421.552†	315383.5	339869.5	985.63	µg/L	985.63	ppb	14:41:20
2	Sc 361.383	203353.0	203353.0	67.453	%	67.453	%	14:42:29
2	Y 371.029	143404.7	143404.7	67.053	%	67.053	%	14:42:29
2	Ag 328.068†	-198.7	-81.8	-1.5917	µg/L	-1.5917	ppb	14:42:49
2	As 188.979†	-2.6	5.0	10.168	µg/L	10.168	ppb	14:42:49
2	B 249.677†	14512.8	21443.3	2894.0	µg/L	2894.0	ppb	14:42:29
2	Ba 233.527†	5422.1	8035.3	187.60	µg/L	187.60	ppb	14:42:49
2	Be 313.107†	-53.0	35.0	0.0482	µg/L	0.0482	ppb	14:42:49
2	Cd 226.502†	-115.9	-53.9	-1.9393	µg/L	-1.9393	ppb	14:42:49
2	Co 228.616†	-148.8	-45.6	-5.2024	µg/L	-5.2024	ppb	14:42:49
2	Cr 267.716†	151.5	133.5	5.3684	µg/L	5.3684	ppb	14:42:49
2	Cu 324.752†	202.1	74.2	1.7323	µg/L	1.7323	ppb	14:42:49
2	Mn 257.610†	56.2	30.3	0.3024	µg/L	0.3024	ppb	14:42:49

2	Mo 202.031†	1367.5	2035.3	313.76 µg/L	313.76 ppb	14:42:49
2	Ni 231.604†	173.3	195.0	26.748 µg/L	26.748 ppb	14:42:49
2	P 214.914†	3452.6	4854.2	13122 µg/L	13122 ppb	14:42:49
2	Pb 220.353†	197.5	86.9	45.743 µg/L	45.743 ppb	14:42:49
2	S 181.975 Axial†	223340.3	331040.6	1936100 µg/L	1936100 ppb	14:42:29
2	Sb 206.836†	86.7	35.9	59.070 µg/L	59.070 ppb	14:42:49
2	Se 196.026†	67.8	41.4	69.341 µg/L	69.341 ppb	14:42:49
2	Si 251.611†	160795.3	238342.8	31411 µg/L	31411 ppb	14:42:29
2	SiO2†	157541.9	233605.7	66887 µg/L	66887 ppb	14:42:29
2	Sn 189.927†	3.2	8.7	-6.4176 µg/L	-6.4176 ppb	14:42:49
2	Ti 334.940†	103.6	-151.8	-0.4275 µg/L	-0.4275 ppb	14:42:49
2	Tl 190.801†	25.0	12.4	61.574 µg/L	61.574 ppb	14:42:49
2	U 367.007†	-123.9	-31.1	-13.133 µg/L	-13.133 ppb	14:42:29
2	V 292.402†	995.2	1431.6	46.043 µg/L	46.043 ppb	14:42:49
2	Zn 213.857†	715.6	365.2	12.161 µg/L	12.161 ppb	14:42:49
3	Sc RADIAL	45075.7	45075.7	91.636 %	91.636 %	14:41:42
3	Al 396.153Radial†	30.4	50.2	2.4704 µg/L	2.4704 ppb	14:42:02
3	Ca 317.933Radial†	798416.1	871139.8	142160 µg/L	142160 ppb	14:41:42
3	Fe 238.204 Radial†	96.7	3.5	0.5443 µg/L	0.5443 ppb	14:42:02
3	K 766.490 Radial†	1674141.8	1826794.9	1530700 µg/L	1530700 ppb	14:41:42
3	Mg 279.077 IEC†	34045.3	37142.6	73092 µg/L	73092 ppb	14:41:42
3	Na 589.592 Radial†	Saturated3	Saturated3			14:42:02
Saturated in preshot (code 3)						
3	Sr 421.552†	314335.1	342952.8	994.58 µg/L	994.58 ppb	14:41:42
3	Sc 361.383	207032.5	207032.5	68.673 %	68.673 %	14:42:51
3	Y 371.029	145952.1	145952.1	68.244 %	68.244 %	14:42:51
3	Ag 328.068†	-233.1	-126.7	-2.9600 µg/L	-2.9600 ppb	14:43:11
3	As 188.979†	4.4	15.4	28.189 µg/L	28.189 ppb	14:43:11
3	B 249.677†	14801.6	21481.5	2899.1 µg/L	2899.1 ppb	14:42:51
3	Ba 233.527†	5283.2	7690.2	179.47 µg/L	179.47 ppb	14:43:11
3	Be 313.107†	-45.4	47.5	0.0720 µg/L	0.0720 ppb	14:43:11
3	Cd 226.502†	-127.5	-67.7	-2.4408 µg/L	-2.4408 ppb	14:43:11
3	Co 228.616†	-150.6	-44.2	-5.0616 µg/L	-5.0616 ppb	14:43:11
3	Cr 267.716†	180.2	171.2	6.8675 µg/L	6.8675 ppb	14:43:11
3	Cu 324.752†	189.4	50.4	1.1756 µg/L	1.1756 ppb	14:43:11
3	Mn 257.610†	50.1	20.0	0.1993 µg/L	0.1993 ppb	14:43:11
3	Mo 202.031†	1337.2	1955.1	301.40 µg/L	301.40 ppb	14:43:11
3	Ni 231.604†	167.6	182.2	24.962 µg/L	24.962 ppb	14:43:11
3	P 214.914†	3357.9	4625.3	12503 µg/L	12503 ppb	14:43:11
3	Pb 220.353†	193.1	75.4	39.664 µg/L	39.664 ppb	14:43:11
3	S 181.975 Axial†	227415.0	331089.4	1936300 µg/L	1936300 ppb	14:42:51
3	Sb 206.836†	90.6	39.4	64.283 µg/L	64.283 ppb	14:43:11
3	Se 196.026†	70.0	42.7	71.522 µg/L	71.522 ppb	14:43:11
3	Si 251.611†	163331.2	237798.8	31340 µg/L	31340 ppb	14:42:51
3	SiO2†	160041.5	233094.5	66741 µg/L	66741 ppb	14:42:51
3	Sn 189.927†	7.1	14.3	-3.0888 µg/L	-3.0888 ppb	14:43:11
3	Ti 334.940†	108.2	-147.8	-0.4037 µg/L	-0.4037 ppb	14:43:11
3	Tl 190.801†	20.2	4.7	24.469 µg/L	24.469 ppb	14:43:11
3	U 367.007†	-101.3	5.1	2.1326 µg/L	2.1326 ppb	14:42:51
3	V 292.402†	976.2	1377.8	44.327 µg/L	44.327 ppb	14:43:11
3	Zn 213.857†	716.6	347.8	11.493 µg/L	11.493 ppb	14:43:11

Mean Data: 604449013|2357704|1|

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc RADIAL	46964.9	95.477	%	5.6937	95.477	%	5.6937	5.96%
Sc 361.383	206881.1	68.623	%	1.1460	68.623	%	1.1460	1.67%
Y 371.029	145807.3	68.176	%	1.0911	68.176	%	1.0911	1.60%
Ag 328.068†	-99.1	-2.1193	µg/L	0.73593	-2.1193	ppb	0.73593	34.73%
Al 396.153Radial†	75.8	10.758	µg/L	9.7090	10.758	ppb	9.7090	90.25%
As 188.979†	13.3	24.596	µg/L	13.0088	24.596	ppb	13.0088	52.89%
B 249.677†	21492.6	2900.6	µg/L	7.48	2900.6	ppb	7.48	0.26%
Ba 233.527†	7780.6	181.60	µg/L	5.270	181.60	ppb	5.270	2.90%
Be 313.107†	44.9	0.0656	µg/L	0.01520	0.0656	ppb	0.01520	23.17%
Ca 317.933Radial†	870455.6	142050	µg/L	702.79	142050	ppb	702.79	0.49%
Cd 226.502†	-66.2	-2.3866	µg/L	0.42278	-2.3866	ppb	0.42278	17.71%
Co 228.616†	-42.7	-4.8865	µg/L	0.43090	-4.8865	ppb	0.43090	8.82%
Cr 267.716†	147.5	5.9275	µg/L	0.81899	5.9275	ppb	0.81899	13.82%
Cu 324.752†	58.3	1.3602	µg/L	0.32222	1.3602	ppb	0.32222	23.69%
Fe 238.204 Radial†	-6.1	-1.3223	µg/L	1.67500	-1.3223	ppb	1.67500	126.67%

K 766.490 Radial†	1813123.8	1519300 µg/L	14088.01	1519300 ppb	14088.01	0.93%
Concentration greater than upper limit for K 766.490 Radial.							
Mg 279.077 IEC†	37118.4	73044 µg/L	337.64	73044 ppb	337.64	0.46%
Mn 257.610†	22.1	0.2210 µg/L	0.07305	0.2210 ppb	0.07305	33.06%
Mo 202.031†	1970.4	303.75 µg/L	9.064	303.75 ppb	9.064	2.98%
Na 589.592 Radial†	Saturated3					
Ni 231.604†	184.7	25.306 µg/L	1.3045	25.306 ppb	1.3045	5.15%
P 214.914†	4686.1	12668 µg/L	398.63	12668 ppb	398.63	3.15%
Concentration greater than upper limit for P 214.914.							
Pb 220.353†	79.7	41.933 µg/L	3.3195	41.933 ppb	3.3195	7.92%
S 181.975 Axial†	331253.7	1937300 µg/L	1916.57	1937300 ppb	1916.57	0.10%
Concentration greater than upper limit for S 181.975 Axial.							
Sb 206.836†	34.8	57.225 µg/L	8.1386	57.225 ppb	8.1386	14.22%
Se 196.026†	45.1	75.459 µg/L	8.7762	75.459 ppb	8.7762	11.63%
Si 251.611†	238043.0	31372 µg/L	36.36	31372 ppb	36.36	0.12%
SiO2†	233375.7	66821 µg/L	74.21	66821 ppb	74.21	0.11%
Sn 189.927†	11.7	-4.6613 µg/L	1.67198	-4.6613 ppb	1.67198	35.87%
Sr 421.552†	340443.1	987.29 µg/L	6.625	987.29 ppb	6.625	0.67%
Ti 334.940†	-149.7	-0.4132 µg/L	0.01265	-0.4132 ppb	0.01265	3.06%
Tl 190.801†	7.0	35.566 µg/L	22.6038	35.566 ppb	22.6038	63.55%
U 367.007†	-15.8	-6.6666 µg/L	7.89570	-6.6666 ppb	7.89570	118.44%
V 292.402†	1385.9	44.582 µg/L	1.3514	44.582 ppb	1.3514	3.03%
Zn 213.857†	347.3	11.469 µg/L	0.7038	11.469 ppb	0.7038	6.14%

Batch ID:
Sequence No.: 12 **Autosampler Location: 158**
Sample ID: 604449017|2357704|1| **Date Collected: 12/19/2022 14:44:09**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample): 49

Replicate Data: 604449017|2357704|1|

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	53438.0	53438.0	108.64	%	108.64	%	14:44:45
1	Al 396.153Radial†	34.7	49.0	8.7935	µg/L	8.7935	ppb	14:44:45
1	Ca 317.933Radial†	712916.1	656092.8	107070	µg/L	107070	ppb	14:44:45
1	Fe 238.204 Radial†	103.3	-7.0	-1.5066	µg/L	-1.5066	ppb	14:45:05
1	K 766.490 Radial†	1125487.7	1035867.2	867980	µg/L	867980	ppb	14:44:45
1	Mg 279.077 IEC†	56810.0	52283.7	102890	µg/L	102890	ppb	14:44:45
1	Na 589.592 Radial†	Saturated3	Saturated3					14:45:05
Saturated in preshot (code 3)								
1	Sr 421.552†	490164.9	451126.4	1309.7	µg/L	1309.7	ppb	14:44:45
1	Sc 361.383	220368.1	220368.1	73.097	%	73.097	%	14:45:53
1	Y 371.029	153957.8	153957.8	71.987	%	71.987	%	14:45:53
1	Ag 328.068†	-224.5	-94.3	-2.2185	µg/L	-2.2185	ppb	14:46:13
1	As 188.979†	6.5	17.9	31.961	µg/L	31.961	ppb	14:46:13
1	B 249.677†	14492.8	19754.8	2665.7	µg/L	2665.7	ppb	14:45:53
1	Ba 233.527†	5753.2	7867.7	183.00	µg/L	183.00	ppb	14:46:13
1	Be 313.107†	-49.8	45.5	0.0742	µg/L	0.0742	ppb	14:46:13
1	Cd 226.502†	-120.7	-47.2	-1.7013	µg/L	-1.7013	ppb	14:46:13
1	Co 228.616†	-162.3	-47.0	-5.5879	µg/L	-5.5879	ppb	14:46:13
1	Cr 267.716†	166.7	136.9	5.4742	µg/L	5.4742	ppb	14:46:13
1	Cu 324.752†	149.2	-21.4	-0.5021	µg/L	-0.5021	ppb	14:46:13
1	Mn 257.610†	204.2	226.4	2.2594	µg/L	2.2594	ppb	14:46:13
1	Mo 202.031†	737.5	1016.8	156.76	µg/L	156.76	ppb	14:46:13
1	Ni 231.604†	134.6	122.3	16.393	µg/L	16.393	ppb	14:46:13
1	P 214.914†	2924.8	3736.9	10103	µg/L	10103	ppb	14:46:13
1	Pb 220.353†	209.5	80.8	41.901	µg/L	41.901	ppb	14:46:13
1	S 181.975 Axial†	121761.6	166510.2	973800	µg/L	973800	ppb	14:45:53
1	Sb 206.836†	92.9	34.5	55.244	µg/L	55.244	ppb	14:46:13
1	Se 196.026†	58.4	20.8	34.793	µg/L	34.793	ppb	14:46:13
1	Si 251.611†	202658.6	277207.9	36533	µg/L	36533	ppb	14:45:53
1	SiO2†	198541.8	271662.1	77783	µg/L	77783	ppb	14:45:53
1	Sn 189.927†	-5.8	-3.9	-9.9962	µg/L	-9.9962	ppb	14:46:13
1	Ti 334.940†	133.8	-122.3	-0.3839	µg/L	-0.3839	ppb	14:46:13
1	Tl 190.801†	28.5	14.4	71.155	µg/L	71.155	ppb	14:46:13
1	U 367.007†	-75.5	49.2	20.762	µg/L	20.762	ppb	14:45:53
1	V 292.402†	466.0	593.7	19.461	µg/L	19.461	ppb	14:46:13
1	Zn 213.857†	745.0	323.6	11.051	µg/L	11.051	ppb	14:46:13
2	Sc RADIAL	47713.5	47713.5	96.999	%	96.999	%	14:45:07
2	Al 396.153Radial†	98.2	118.3	31.431	µg/L	31.431	ppb	14:45:07
2	Ca 317.933Radial†	619241.3	638253.0	104160	µg/L	104160	ppb	14:45:07
2	Fe 238.204 Radial†	102.5	3.7	0.6005	µg/L	0.6005	ppb	14:45:27
2	K 766.490 Radial†	998198.3	1028936.4	862170	µg/L	862170	ppb	14:45:07
2	Mg 279.077 IEC†	49011.4	50517.8	99413	µg/L	99413	ppb	14:45:07
2	Na 589.592 Radial†	Saturated3	Saturated3					14:45:27
Saturated in preshot (code 3)								
2	Sr 421.552†	435089.6	448480.1	1302.1	µg/L	1302.1	ppb	14:45:07
2	Sc 361.383	220839.5	220839.5	73.253	%	73.253	%	14:46:15
2	Y 371.029	154427.6	154427.6	72.207	%	72.207	%	14:46:15
2	Ag 328.068†	-209.2	-72.7	-1.5454	µg/L	-1.5454	ppb	14:46:35
2	As 188.979†	4.8	15.5	27.911	µg/L	27.911	ppb	14:46:35
2	B 249.677†	14618.1	19883.5	2683.1	µg/L	2683.1	ppb	14:46:15
2	Ba 233.527†	5791.6	7903.3	183.91	µg/L	183.91	ppb	14:46:35
2	Be 313.107†	-61.6	29.5	0.0367	µg/L	0.0367	ppb	14:46:35
2	Cd 226.502†	-128.3	-57.2	-2.0614	µg/L	-2.0614	ppb	14:46:35
2	Co 228.616†	-156.3	-38.3	-4.5920	µg/L	-4.5920	ppb	14:46:35
2	Cr 267.716†	162.6	130.9	5.2738	µg/L	5.2738	ppb	14:46:35
2	Cu 324.752†	122.4	-58.4	-1.3683	µg/L	-1.3683	ppb	14:46:35
2	Mn 257.610†	188.9	204.9	2.0451	µg/L	2.0451	ppb	14:46:35

2	Mo 202.031†	748.7	1029.9	158.78 µg/L	158.78 ppb	14:46:35
2	Ni 231.604†	153.9	148.2	20.036 µg/L	20.036 ppb	14:46:35
2	P 214.914†	2940.8	3750.2	10139 µg/L	10139 ppb	14:46:35
2	Pb 220.353†	202.5	70.6	36.612 µg/L	36.612 ppb	14:46:35
2	S 181.975 Axial†	121183.6	165365.6	967110 µg/L	967110 ppb	14:46:15
2	Sb 206.836†	93.5	35.0	56.064 µg/L	56.064 ppb	14:46:35
2	Se 196.026†	67.7	33.2	55.625 µg/L	55.625 ppb	14:46:35
2	Si 251.611†	204099.5	278583.2	36715 µg/L	36715 ppb	14:46:15
2	SiO2†	199889.2	272921.6	78145 µg/L	78145 ppb	14:46:15
2	Sn 189.927†	1.5	6.0	-3.7541 µg/L	-3.7541 ppb	14:46:35
2	Ti 334.940†	119.9	-141.6	-0.5081 µg/L	-0.5081 ppb	14:46:35
2	Tl 190.801†	17.8	-0.3	0.2042 µg/L	0.2042 ppb	14:46:35
2	U 367.007†	-154.9	-59.0	-24.894 µg/L	-24.894 ppb	14:46:15
2	V 292.402†	477.1	607.5	19.845 µg/L	19.845 ppb	14:46:35
2	Zn 213.857†	732.2	303.9	10.304 µg/L	10.304 ppb	14:46:35
3	Sc RADIAL	45524.8	45524.8	92.549 %	92.549 %	14:45:30
3	Al 396.153Radial†	54.5	76.0	17.428 µg/L	17.428 ppb	14:45:30
3	Ca 317.933Radial†	592854.9	640434.1	104510 µg/L	104510 ppb	14:45:30
3	Fe 238.204 Radial†	91.4	-3.3	-0.7498 µg/L	-0.7498 ppb	14:45:50
3	K 766.490 Radial†	962587.9	1039933.4	871390 µg/L	871390 ppb	14:45:30
3	Mg 279.077 IEC†	46906.2	50672.3	99717 µg/L	99717 ppb	14:45:30
3	Na 589.592 Radial†	Saturated3	Saturated3			14:45:50
Saturated in preshot (code 3)						
3	Sr 421.552†	420072.6	453818.7	1317.6 µg/L	1317.6 ppb	14:45:30
3	Sc 361.383	216694.4	216694.4	71.878 %	71.878 %	14:46:37
3	Y 371.029	151265.7	151265.7	70.728 %	70.728 %	14:46:37
3	Ag 328.068†	-190.8	-52.6	-0.9748 µg/L	-0.9748 ppb	14:46:58
3	As 188.979†	5.4	16.4	29.461 µg/L	29.461 ppb	14:46:58
3	B 249.677†	14205.5	19691.2	2657.2 µg/L	2657.2 ppb	14:46:37
3	Ba 233.527†	5745.6	7990.5	185.95 µg/L	185.95 ppb	14:46:58
3	Be 313.107†	-71.4	14.2	0.0277 µg/L	0.0277 ppb	14:46:58
3	Cd 226.502†	-119.7	-48.6	-1.7520 µg/L	-1.7520 ppb	14:46:58
3	Co 228.616†	-152.9	-37.7	-4.5291 µg/L	-4.5291 ppb	14:46:58
3	Cr 267.716†	151.1	119.1	4.7529 µg/L	4.7529 ppb	14:46:58
3	Cu 324.752†	125.6	-50.7	-1.1885 µg/L	-1.1885 ppb	14:46:58
3	Mn 257.610†	181.2	199.2	1.9879 µg/L	1.9879 ppb	14:46:58
3	Mo 202.031†	746.6	1046.6	161.34 µg/L	161.34 ppb	14:46:58
3	Ni 231.604†	139.8	132.6	17.855 µg/L	17.855 ppb	14:46:58
3	P 214.914†	2940.1	3826.0	10344 µg/L	10344 ppb	14:46:58
3	Pb 220.353†	221.2	101.9	52.969 µg/L	52.969 ppb	14:46:58
3	S 181.975 Axial†	119092.9	165621.4	968600 µg/L	968600 ppb	14:46:37
3	Sb 206.836†	93.6	37.6	60.146 µg/L	60.146 ppb	14:46:58
3	Se 196.026†	76.4	47.2	79.016 µg/L	79.016 ppb	14:46:58
3	Si 251.611†	200149.3	278417.0	36693 µg/L	36693 ppb	14:46:37
3	SiO2†	195918.7	272617.4	78058 µg/L	78058 ppb	14:46:37
3	Sn 189.927†	-0.9	2.7	-5.8150 µg/L	-5.8150 ppb	14:46:58
3	Ti 334.940†	140.9	-109.3	-0.3105 µg/L	-0.3105 ppb	14:46:58
3	Tl 190.801†	19.1	2.0	11.201 µg/L	11.201 ppb	14:46:58
3	U 367.007†	-60.3	68.7	28.990 µg/L	28.990 ppb	14:46:37
3	V 292.402†	461.2	597.9	19.647 µg/L	19.647 ppb	14:46:58
3	Zn 213.857†	751.7	350.2	12.103 µg/L	12.103 ppb	14:46:58

Mean Data: 604449017|2357704|1|

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc RADIAL	48892.1	99.395	%	8.3068	99.395	%	8.3068	8.36%
Sc 361.383	219300.7	72.743	%	0.7527	72.743	%	0.7527	1.03%
Y 371.029	153217.0	71.641	%	0.7978	71.641	%	0.7978	1.11%
Ag 328.068†	-73.2	-1.5796	µg/L	0.62256	-1.5796	ppb	0.62256	39.41%
Al 396.153Radial†	81.1	19.218	µg/L	11.4243	19.218	ppb	11.4243	59.45%
As 188.979†	16.6	29.778	µg/L	2.0438	29.778	ppb	2.0438	6.86%
B 249.677†	19776.5	2668.7	µg/L	13.23	2668.7	ppb	13.23	0.50%
Ba 233.527†	7920.5	184.29	µg/L	1.515	184.29	ppb	1.515	0.82%
Be 313.107†	29.7	0.0462	µg/L	0.02468	0.0462	ppb	0.02468	53.41%
Ca 317.933Radial†	644926.6	105250	µg/L	1588.11	105250	ppb	1588.11	1.51%
Cd 226.502†	-51.0	-1.8382	µg/L	0.19493	-1.8382	ppb	0.19493	10.60%
Co 228.616†	-41.0	-4.9030	µg/L	0.59398	-4.9030	ppb	0.59398	12.11%
Cr 267.716†	128.9	5.1670	µg/L	0.37234	5.1670	ppb	0.37234	7.21%
Cu 324.752†	-43.5	-1.0197	µg/L	0.45712	-1.0197	ppb	0.45712	44.83%
Fe 238.204 Radial†	-2.2	-0.5520	µg/L	1.06739	-0.5520	ppb	1.06739	193.37%

K 766.490 Radial†	1034912.4	867180 µg/L	4659.13	867180 ppb	4659.13	0.54%
Concentration greater than upper limit for K 766.490 Radial.						
Mg 279.077 IEC†	51157.9	100670 µg/L	1924.55	100670 ppb	1924.55	1.91%
Mn 257.610†	210.2	2.0975 µg/L	0.14313	2.0975 ppb	0.14313	6.82%
Mo 202.031†	1031.1	158.96 µg/L	2.297	158.96 ppb	2.297	1.45%
Na 589.592 Radial†	Saturated3					
Ni 231.604†	134.4	18.094 µg/L	1.8333	18.094 ppb	1.8333	10.13%
P 214.914†	3771.1	10196 µg/L	129.91	10196 ppb	129.91	1.27%
Concentration greater than upper limit for P 214.914.						
Pb 220.353†	84.4	43.827 µg/L	8.3472	43.827 ppb	8.3472	19.05%
S 181.975 Axial†	165832.4	969840 µg/L	3513.30	969840 ppb	3513.30	0.36%
Concentration greater than upper limit for S 181.975 Axial.						
Sb 206.836†	35.7	57.151 µg/L	2.6254	57.151 ppb	2.6254	4.59%
Se 196.026†	33.7	56.478 µg/L	22.1235	56.478 ppb	22.1235	39.17%
Si 251.611†	278069.4	36647 µg/L	99.24	36647 ppb	99.24	0.27%
SiO2†	272400.4	77996 µg/L	188.88	77996 ppb	188.88	0.24%
Sn 189.927†	1.6	-6.5218 µg/L	3.18051	-6.5218 ppb	3.18051	48.77%
Sr 421.552†	451141.7	1309.8 µg/L	7.76	1309.8 ppb	7.76	0.59%
Ti 334.940†	-124.4	-0.4008 µg/L	0.09986	-0.4008 ppb	0.09986	24.91%
Tl 190.801†	5.4	27.520 µg/L	38.1872	27.520 ppb	38.1872	138.76%
U 367.007†	19.6	8.2860 µg/L	29.02790	8.2860 ppb	29.02790	350.33%
V 292.402†	599.7	19.651 µg/L	0.1920	19.651 ppb	0.1920	0.98%
Zn 213.857†	325.9	11.153 µg/L	0.9037	11.153 ppb	0.9037	8.10%

Batch ID:
Sequence No.: 13 **Autosampler Location: 103**
Sample ID: ICSA **Date Collected: 12/19/2022 14:47:53**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample): 49

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	58687.2	58687.2	119.31	%	119.31	%	14:48:33
1	Al 396.153Radial†	1942264.0	1627964.9	534080	µg/L	534080	ppb	14:48:31
1	Ca 317.933Radial†	3660300.6	3067806.1	500640	µg/L	500640	ppb	14:48:31
1	Fe 238.204 Radial†	1225200.8	1026824.7	200670	µg/L	200670	ppb	14:48:31
1	K 766.490 Radial†	7206.7	5892.4	4998.6	µg/L	4998.6	ppb	14:48:33
1	Mg 279.077 IEC†	296596.4	248588.2	489250	µg/L	489250	ppb	14:48:33
1	Na 589.592 Radial†	176522.5	147033.2	23494	µg/L	23494	ppb	14:48:33
1	Sr 421.552†	3570.2	2920.4	-0.5308	µg/L	-0.5308	ppb	14:48:33
1	Sc 361.383	294725.1	294725.1	97.761	%	97.761	%	14:48:45
1	Y 371.029	207716.1	207716.1	97.123	%	97.123	%	14:48:45
1	Ag 328.068†	-564.9	-365.0	0.6186	µg/L	0.6186	ppb	14:49:06
1	As 188.979†	-4.4	4.4	13.656	µg/L	13.656	ppb	14:49:06
1	B 249.677†	-6225.9	-6440.6	89.383	µg/L	89.383	ppb	14:48:45
1	Ba 233.527†	522.3	531.3	-1.0513	µg/L	-1.0513	ppb	14:49:06
1	Be 313.107†	-152.5	-42.4	0.1204	µg/L	0.1204	ppb	14:48:45
1	Cd 226.502†	475.7	604.6	-1.9223	µg/L	-1.9223	ppb	14:49:06
1	Co 228.616†	-91.4	81.5	1.4093	µg/L	1.4093	ppb	14:49:06
1	Cr 267.716†	447.2	366.3	-0.4624	µg/L	-0.4624	ppb	14:49:06
1	Cu 324.752†	-90.7	-318.2	0.3731	µg/L	0.3731	ppb	14:49:06
1	Mn 257.610†	244.1	196.7	-0.8348	µg/L	-0.8348	ppb	14:48:45
1	Mo 202.031†	-49.3	-42.6	0.6319	µg/L	0.6319	ppb	14:49:06
1	Ni 231.604†	86.2	26.3	-4.0614	µg/L	-4.0614	ppb	14:49:06
1	P 214.914†	307.5	50.2	90.393	µg/L	90.393	ppb	14:49:06
1	Pb 220.353†	207.3	6.3	5.7362	µg/L	5.7362	ppb	14:49:06
1	S 181.975 Axial†	539.6	486.1	2562.4	µg/L	2562.4	ppb	14:49:06
1	Sb 206.836†	89.8	-0.7	-0.5553	µg/L	-0.5553	ppb	14:49:06
1	Se 196.026†	15.7	-43.0	-0.5402	µg/L	-0.5402	ppb	14:49:06
1	Si 251.611†	896.9	878.0	38.694	µg/L	38.694	ppb	14:49:06
1	SiO2†	949.5	1017.9	103.86	µg/L	103.86	ppb	14:49:06
1	Sn 189.927†	-53.4	-50.6	-9.5168	µg/L	-9.5168	ppb	14:49:06
1	Ti 334.940†	-48.9	-355.4	-0.5774	µg/L	-0.5774	ppb	14:48:45
1	Tl 190.801†	15.9	-8.4	-8.8703	µg/L	-8.8703	ppb	14:49:06
1	U 367.007†	1563.5	1751.8	-33.656	µg/L	-33.656	ppb	14:48:45
1	V 292.402†	-437.1	-490.9	0.9604	µg/L	0.9604	ppb	14:49:06
1	Zn 213.857†	1459.9	797.7	-10.260	µg/L	-10.260	ppb	14:49:06
2	Sc RADIAL	55772.6	55772.6	113.38	%	113.38	%	14:48:37
2	Al 396.153Radial†	1767621.4	1559007.1	511460	µg/L	511460	ppb	14:48:35
2	Ca 317.933Radial†	3286067.9	2898066.2	472940	µg/L	472940	ppb	14:48:35
2	Fe 238.204 Radial†	1103260.7	972941.4	190140	µg/L	190140	ppb	14:48:35
2	K 766.490 Radial†	7014.0	6038.1	5117.0	µg/L	5117.0	ppb	14:48:37
2	Mg 279.077 IEC†	276251.9	243635.9	479500	µg/L	479500	ppb	14:48:37
2	Na 589.592 Radial†	188103.2	164978.7	26361	µg/L	26361	ppb	14:48:37
2	Sr 421.552†	3363.2	2894.3	-0.1077	µg/L	-0.1077	ppb	14:48:37
2	Sc 361.383	288134.7	288134.7	95.575	%	95.575	%	14:49:08
2	Y 371.029	203333.6	203333.6	95.074	%	95.074	%	14:49:08
2	Ag 328.068†	-560.6	-373.7	-0.3125	µg/L	-0.3125	ppb	14:49:28
2	As 188.979†	-15.2	-6.9	-6.5191	µg/L	-6.5191	ppb	14:49:28
2	B 249.677†	-6109.9	-6464.9	35.808	µg/L	35.808	ppb	14:49:08
2	Ba 233.527†	512.4	533.1	-0.6330	µg/L	-0.6330	ppb	14:49:28
2	Be 313.107†	-140.4	-33.2	0.1432	µg/L	0.1432	ppb	14:49:08
2	Cd 226.502†	465.3	604.8	-0.6614	µg/L	-0.6614	ppb	14:49:28
2	Co 228.616†	-100.1	70.3	0.4763	µg/L	0.4763	ppb	14:49:28
2	Cr 267.716†	440.5	369.8	0.4232	µg/L	0.4232	ppb	14:49:28
2	Cu 324.752†	-116.5	-347.4	-0.7187	µg/L	-0.7187	ppb	14:49:28
2	Mn 257.610†	233.9	191.8	-0.7370	µg/L	-0.7370	ppb	14:49:08
2	Mo 202.031†	-68.7	-64.0	-3.0461	µg/L	-3.0461	ppb	14:49:28
2	Ni 231.604†	80.0	21.8	-4.3960	µg/L	-4.3960	ppb	14:49:28

2	P 214.914†	300.1	49.6	93.673 µg/L	93.673 ppb	14:49:28
2	Pb 220.353†	195.5	-1.3	1.6736 µg/L	1.6736 ppb	14:49:28
2	S 181.975 Axial†	588.9	550.2	2950.5 µg/L	2950.5 ppb	14:49:28
2	Sb 206.836†	110.1	22.6	35.663 µg/L	35.663 ppb	14:49:28
2	Se 196.026†	18.7	-39.6	1.5292 µg/L	1.5292 ppb	14:49:28
2	Si 251.611†	864.7	865.4	38.793 µg/L	38.793 ppb	14:49:28
2	SiO2†	921.2	1010.5	106.28 µg/L	106.28 ppb	14:49:28
2	Sn 189.927†	-48.2	-46.5	-7.5575 µg/L	-7.5575 ppb	14:49:28
2	Ti 334.940†	123.0	-176.7	0.4908 µg/L	0.4908 ppb	14:49:08
2	Tl 190.801†	17.4	-6.4	-0.5502 µg/L	-0.5502 ppb	14:49:28
2	U 367.007†	1567.7	1792.8	24.207 µg/L	24.207 ppb	14:49:08
2	V 292.402†	-416.2	-479.3	0.5087 µg/L	0.5087 ppb	14:49:28
2	Zn 213.857†	1457.0	828.8	-6.8806 µg/L	-6.8806 ppb	14:49:28
3	Sc RADIAL	54724.6	54724.6	111.25 %	111.25 %	14:48:42
3	Al 396.153Radial†	1733945.8	1558595.4	511320 µg/L	511320 ppb	14:48:39
3	Ca 317.933Radial†	3218590.5	2892920.5	472100 µg/L	472100 ppb	14:48:39
3	Fe 238.204 Radial†	1080726.6	971322.2	189820 µg/L	189820 ppb	14:48:39
3	K 766.490 Radial†	6698.1	5872.6	4978.1 µg/L	4978.1 ppb	14:48:42
3	Mg 279.077 IEC†	274390.3	246629.0	485390 µg/L	485390 ppb	14:48:42
3	Na 589.592 Radial†	159371.4	142330.2	22742 µg/L	22742 ppb	14:48:42
3	Sr 421.552†	3176.2	2782.9	-0.4162 µg/L	-0.4162 ppb	14:48:42
3	Sc 361.383	290848.6	290848.6	96.475 %	96.475 %	14:49:30
3	Y 371.029	205129.4	205129.4	95.914 %	95.914 %	14:49:30
3	Ag 328.068†	-565.3	-373.1	-0.2648 µg/L	-0.2648 ppb	14:49:50
3	As 188.979†	1.0	10.0	23.127 µg/L	23.127 ppb	14:49:50
3	B 249.677†	-6172.5	-6470.2	33.586 µg/L	33.586 ppb	14:49:30
3	Ba 233.527†	521.6	537.7	-0.6448 µg/L	-0.6448 ppb	14:49:50
3	Be 313.107†	13.6	127.7	0.3772 µg/L	0.3772 ppb	14:49:30
3	Cd 226.502†	442.2	576.3	-1.6581 µg/L	-1.6581 ppb	14:49:50
3	Co 228.616†	-96.6	75.0	0.9846 µg/L	0.9846 ppb	14:49:50
3	Cr 267.716†	441.3	366.3	0.3593 µg/L	0.3593 ppb	14:49:50
3	Cu 324.752†	-116.8	-346.6	-0.7119 µg/L	-0.7119 ppb	14:49:50
3	Mn 257.610†	256.0	212.4	-0.5269 µg/L	-0.5269 ppb	14:49:30
3	Mo 202.031†	-60.9	-55.2	-1.7057 µg/L	-1.7057 ppb	14:49:50
3	Ni 231.604†	83.2	24.4	-4.0554 µg/L	-4.0554 ppb	14:49:50
3	P 214.914†	292.1	38.4	63.777 µg/L	63.777 ppb	14:49:50
3	Pb 220.353†	205.8	7.5	6.2647 µg/L	6.2647 ppb	14:49:50
3	S 181.975 Axial†	619.4	576.1	3101.2 µg/L	3101.2 ppb	14:49:50
3	Sb 206.836†	94.7	5.5	9.1320 µg/L	9.1320 ppb	14:49:50
3	Se 196.026†	10.1	-48.7	-13.845 µg/L	-13.845 ppb	14:49:50
3	Si 251.611†	857.3	849.3	35.797 µg/L	35.797 ppb	14:49:50
3	SiO2†	907.3	987.1	97.589 µg/L	97.589 ppb	14:49:50
3	Sn 189.927†	-50.2	-48.1	-8.3805 µg/L	-8.3805 ppb	14:49:50
3	Ti 334.940†	-4.9	-310.5	-0.3806 µg/L	-0.3806 ppb	14:49:30
3	Tl 190.801†	23.7	-0.0	30.370 µg/L	30.370 ppb	14:49:50
3	U 367.007†	1445.4	1650.7	-34.523 µg/L	-34.523 ppb	14:49:30
3	V 292.402†	-391.8	-449.9	1.3076 µg/L	1.3076 ppb	14:49:50
3	Zn 213.857†	1460.8	818.6	-7.2138 µg/L	-7.2138 ppb	14:49:50

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc RADIAL	56394.8	114.65	%	4.174	114.65	%	4.174	3.64%
Sc 361.383	291236.1	96.604	%	1.0987	96.604	%	1.0987	1.14%
Y 371.029	205393.0	96.037	%	1.0301	96.037	%	1.0301	1.07%
Ag 328.068†	-370.6	0.0138	µg/L	0.52435	0.0138	ppb	0.52435	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1581855.8	518950	µg/L	13100.29	518950	ppb	13100.29	2.52%
QC value within limits for Al 396.153Radial Recovery = 103.79%								
As 188.979†	2.5	10.088	µg/L	15.1418	10.088	ppb	15.1418	150.09%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-6458.5	52.926	µg/L	31.5926	52.926	ppb	31.5926	59.69%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	534.0	-0.7764	µg/L	0.23817	-0.7764	ppb	0.23817	30.68%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	17.4	0.2136	µg/L	0.14215	0.2136	ppb	0.14215	66.55%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2952930.9	481900	µg/L	16240.62	481900	ppb	16240.62	3.37%
QC value within limits for Ca 317.933Radial Recovery = 96.38%								
Cd 226.502†	595.2	-1.4140	µg/L	0.66497	-1.4140	ppb	0.66497	47.03%

```
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              75.6      0.9567 µg/L       0.46711      0.9567 ppb        0.46711  48.82%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             367.4      0.1067 µg/L       0.49388      0.1067 ppb        0.49388 462.94%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -337.4     -0.3525 µg/L       0.62840     -0.3525 ppb        0.62840 178.25%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†    990362.8      193540 µg/L       6173.02      193540 ppb        6173.02   3.19%
   QC value within limits for Fe 238.204 Radial  Recovery = 96.77%
K 766.490 Radial†       5934.4      5031.2 µg/L         74.97      5031.2 ppb          74.97   1.49%
   QC value greater than the upper limit for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†       246284.4      484710 µg/L       4909.34      484710 ppb        4909.34   1.01%
   QC value within limits for Mg 279.077 IEC  Recovery = 96.94%
Mn 257.610†             200.3     -0.6996 µg/L       0.15734     -0.6996 ppb        0.15734  22.49%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -53.9     -1.3733 µg/L       1.86138     -1.3733 ppb        1.86138 135.54%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†    151447.4       24199 µg/L       1909.76       24199 ppb        1909.76   7.89%
   QC value greater than the upper limit for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              24.1     -4.1709 µg/L       0.19496     -4.1709 ppb        0.19496   4.67%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               46.1      82.614 µg/L       16.3957      82.614 ppb        16.3957  19.85%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               4.2      4.5581 µg/L       2.51205      4.5581 ppb        2.51205  55.11%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         537.5      2871.4 µg/L        277.96      2871.4 ppb         277.96   9.68%
   QC value greater than the upper limit for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               9.1      14.747 µg/L       18.7508      14.747 ppb        18.7508 127.15%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†             -43.8     -4.2854 µg/L       8.34338     -4.2854 ppb        8.34338 194.69%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             864.2      37.761 µg/L        1.7020      37.761 ppb         1.7020   4.51%
   QC value within limits for Si 251.611  Recovery = Not calculated
SiO2†                  1005.2      102.58 µg/L         4.486      102.58 ppb          4.486   4.37%
   QC value within limits for SiO2  Recovery = Not calculated
Sn 189.927†             -48.4     -8.4849 µg/L       0.98383     -8.4849 ppb        0.98383  11.59%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             2865.9     -0.3516 µg/L       0.21884     -0.3516 ppb        0.21884  62.25%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             -280.8     -0.1558 µg/L       0.56849     -0.1558 ppb        0.56849 364.94%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -4.9      6.9832 µg/L      20.67653      6.9832 ppb       20.67653 296.09%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 367.007†              1731.8     -14.658 µg/L       33.6603     -14.658 ppb        33.6603 229.65%
   QC value within limits for U 367.007  Recovery = Not calculated
V 292.402†              -473.4      0.9256 µg/L       0.40056      0.9256 ppb        0.40056  43.28%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              815.0     -8.1181 µg/L       1.86222     -8.1181 ppb        1.86222  22.94%
   QC value within limits for Zn 213.857  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Batch ID:
Sequence No.: 14 **Autosampler Location: 104**
Sample ID: ICSAB **Date Collected: 12/19/2022 14:50:50**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample): 49

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	57413.0	57413.0	116.72	%	116.72	%	14:51:28
1	Al 396.153Radial†	1809200.8	1550088.6	508510	µg/L	508510	ppb	14:51:26
1	Ca 317.933Radial†	3411548.0	2922767.9	476970	µg/L	476970	ppb	14:51:26
1	Fe 238.204 Radial†	1140435.5	976990.5	190940	µg/L	190940	ppb	14:51:26
1	K 766.490 Radial†	10984.0	9262.7	7819.4	µg/L	7819.4	ppb	14:51:28
1	Mg 279.077 IEC†	286295.1	245279.3	482730	µg/L	482730	ppb	14:51:28
1	Na 589.592 Radial†	122333.4	103889.0	16600	µg/L	16600	ppb	14:51:28
1	Sr 421.552†	198881.0	170323.5	486.63	µg/L	486.63	ppb	14:51:28
1	Sc 361.383	302431.5	302431.5	100.32	%	100.32	%	14:51:40
1	Y 371.029	213413.3	213413.3	99.787	%	99.787	%	14:51:40
1	Ag 328.068†	7695.0	7883.5	250.16	µg/L	250.16	ppb	14:52:00
1	As 188.979†	263.0	271.1	485.14	µg/L	485.14	ppb	14:52:00
1	B 249.677†	-2584.6	-2648.5	554.06	µg/L	554.06	ppb	14:52:00
1	Ba 233.527†	20617.7	20549.5	471.12	µg/L	471.12	ppb	14:52:00
1	Be 313.107†	158806.2	158417.5	250.64	µg/L	250.64	ppb	14:51:40
1	Cd 226.502†	12704.2	12782.0	441.04	µg/L	441.04	ppb	14:52:00
1	Co 228.616†	3704.5	3867.9	427.27	µg/L	427.27	ppb	14:52:00
1	Cr 267.716†	12227.1	12097.3	470.59	µg/L	470.59	ppb	14:52:00
1	Cu 324.752†	20814.8	20523.5	487.54	µg/L	487.54	ppb	14:52:00
1	Mn 257.610†	47867.8	47663.4	473.02	µg/L	473.02	ppb	14:51:40
1	Mo 202.031†	3073.2	3071.4	480.34	µg/L	480.34	ppb	14:52:00
1	Ni 231.604†	3089.5	3017.9	413.67	µg/L	413.67	ppb	14:52:00
1	P 214.914†	1181.4	913.3	2400.9	µg/L	2400.9	ppb	14:52:00
1	Pb 220.353†	1046.4	837.2	441.18	µg/L	441.18	ppb	14:52:00
1	S 181.975 Axial†	1106.9	1037.5	5800.7	µg/L	5800.7	ppb	14:52:00
1	Sb 206.836†	447.3	353.3	546.97	µg/L	546.97	ppb	14:52:00
1	Se 196.026†	1343.4	1280.0	2210.5	µg/L	2210.5	ppb	14:52:00
1	Si 251.611†	38677.6	38515.9	4995.8	µg/L	4995.8	ppb	14:51:40
1	SiO2†	37888.0	37814.9	10634	µg/L	10634	ppb	14:51:40
1	Sn 189.927†	711.4	713.1	457.39	µg/L	457.39	ppb	14:52:00
1	Ti 334.940†	76508.1	75960.7	506.05	µg/L	506.05	ppb	14:51:40
1	Tl 190.801†	100.4	75.5	417.43	µg/L	417.43	ppb	14:52:00
1	U 367.007†	2560.7	2705.1	406.28	µg/L	406.28	ppb	14:52:00
1	V 292.402†	16173.3	16078.4	496.08	µg/L	496.08	ppb	14:52:00
1	Zn 213.857†	13336.5	12598.7	444.01	µg/L	444.01	ppb	14:52:00
2	Sc RADIAL	55247.1	55247.1	112.31	%	112.31	%	14:51:32
2	Al 396.153Radial†	1724408.3	1535361.0	503680	µg/L	503680	ppb	14:51:30
2	Ca 317.933Radial†	3228904.2	2874737.7	469140	µg/L	469140	ppb	14:51:30
2	Fe 238.204 Radial†	1080685.2	962096.6	188030	µg/L	188030	ppb	14:51:30
2	K 766.490 Radial†	10771.8	9442.7	7969.2	µg/L	7969.2	ppb	14:51:32
2	Mg 279.077 IEC†	271759.5	241953.6	476190	µg/L	476190	ppb	14:51:32
2	Na 589.592 Radial†	117004.3	103253.2	16498	µg/L	16498	ppb	14:51:32
2	Sr 421.552†	190772.3	169784.0	485.20	µg/L	485.20	ppb	14:51:32
2	Sc 361.383	284320.6	284320.6	94.310	%	94.310	%	14:52:02
2	Y 371.029	200862.1	200862.1	93.918	%	93.918	%	14:52:02
2	Ag 328.068†	7614.8	8287.1	262.18	µg/L	262.18	ppb	14:52:22
2	As 188.979†	254.3	278.5	498.43	µg/L	498.43	ppb	14:52:22
2	B 249.677†	-2536.9	-2762.1	524.80	µg/L	524.80	ppb	14:52:22
2	Ba 233.527†	20550.7	21787.6	500.49	µg/L	500.49	ppb	14:52:22
2	Be 313.107†	148553.5	157629.9	249.42	µg/L	249.42	ppb	14:52:02
2	Cd 226.502†	12682.8	13565.9	469.82	µg/L	469.82	ppb	14:52:22
2	Co 228.616†	3685.0	4082.4	451.55	µg/L	451.55	ppb	14:52:22
2	Cr 267.716†	12172.2	12815.4	499.57	µg/L	499.57	ppb	14:52:22
2	Cu 324.752†	20762.3	21789.5	517.04	µg/L	517.04	ppb	14:52:22
2	Mn 257.610†	44730.3	47376.1	470.20	µg/L	470.20	ppb	14:52:02
2	Mo 202.031†	3037.3	3228.5	504.45	µg/L	504.45	ppb	14:52:22
2	Ni 231.604†	3070.6	3194.0	438.35	µg/L	438.35	ppb	14:52:22

2	P 214.914†	1187.5	994.8	2621.3 µg/L	2621.3 ppb	14:52:22
2	Pb 220.353†	1045.5	902.8	475.55 µg/L	475.55 ppb	14:52:22
2	S 181.975 Axial†	1123.3	1125.2	6318.2 µg/L	6318.2 ppb	14:52:22
2	Sb 206.836†	427.1	360.3	557.58 µg/L	557.58 ppb	14:52:22
2	Se 196.026†	1337.1	1358.6	2341.1 µg/L	2341.1 ppb	14:52:22
2	Si 251.611†	36236.7	38383.6	4979.1 µg/L	4979.1 ppb	14:52:02
2	SiO2†	35532.9	37723.4	10610 µg/L	10610 ppb	14:52:02
2	Sn 189.927†	697.6	743.7	475.81 µg/L	475.81 ppb	14:52:22
2	Ti 334.940†	71853.8	75883.7	505.48 µg/L	505.48 ppb	14:52:02
2	Tl 190.801†	105.8	87.6	476.26 µg/L	476.26 ppb	14:52:22
2	U 367.007†	2542.5	2848.4	478.02 µg/L	478.02 ppb	14:52:22
2	V 292.402†	16125.2	17054.4	525.08 µg/L	525.08 ppb	14:52:22
2	Zn 213.857†	13282.7	13388.5	474.88 µg/L	474.88 ppb	14:52:22
3	Sc RADIAL	53804.4	53804.4	109.38 %	109.38 %	14:51:37
3	Al 396.153Radial†	1689773.0	1544866.6	506790 µg/L	506790 ppb	14:51:35
3	Ca 317.933Radial†	3152919.5	2882360.3	470380 µg/L	470380 ppb	14:51:35
3	Fe 238.204 Radial†	1055531.5	964901.7	188580 µg/L	188580 ppb	14:51:35
3	K 766.490 Radial†	10473.3	9427.0	7956.2 µg/L	7956.2 ppb	14:51:37
3	Mg 279.077 IEC†	265624.8	242833.3	477920 µg/L	477920 ppb	14:51:37
3	Na 589.592 Radial†	113914.8	103222.2	16493 µg/L	16493 ppb	14:51:37
3	Sr 421.552†	187605.3	171443.3	490.00 µg/L	490.00 ppb	14:51:37
3	Sc 361.383	276927.9	276927.9	91.858 %	91.858 %	14:52:24
3	Y 371.029	195861.8	195861.8	91.580 %	91.580 %	14:52:24
3	Ag 328.068†	7431.0	8302.5	262.68 µg/L	262.68 ppb	14:52:45
3	As 188.979†	253.7	285.1	509.97 µg/L	509.97 ppb	14:52:45
3	B 249.677†	-2493.5	-2786.6	524.14 µg/L	524.14 ppb	14:52:45
3	Ba 233.527†	19910.2	21672.1	497.72 µg/L	497.72 ppb	14:52:45
3	Be 313.107†	144214.2	157111.0	248.60 µg/L	248.60 ppb	14:52:24
3	Cd 226.502†	12279.3	13485.7	466.85 µg/L	466.85 ppb	14:52:45
3	Co 228.616†	3556.8	4047.1	447.56 µg/L	447.56 ppb	14:52:45
3	Cr 267.716†	11814.0	12770.0	497.71 µg/L	497.71 ppb	14:52:45
3	Cu 324.752†	20207.4	21773.1	516.68 µg/L	516.68 ppb	14:52:45
3	Mn 257.610†	43592.6	47403.7	470.46 µg/L	470.46 ppb	14:52:24
3	Mo 202.031†	2972.2	3243.6	506.80 µg/L	506.80 ppb	14:52:45
3	Ni 231.604†	2979.2	3181.4	436.57 µg/L	436.57 ppb	14:52:45
3	P 214.914†	1169.2	1008.5	2658.7 µg/L	2658.7 ppb	14:52:45
3	Pb 220.353†	1014.9	899.1	473.67 µg/L	473.67 ppb	14:52:45
3	S 181.975 Axial†	1092.3	1123.2	6305.8 µg/L	6305.8 ppb	14:52:45
3	Sb 206.836†	415.0	359.2	555.90 µg/L	555.90 ppb	14:52:45
3	Se 196.026†	1301.9	1358.1	2340.5 µg/L	2340.5 ppb	14:52:45
3	Si 251.611†	35221.2	38303.8	4968.2 µg/L	4968.2 ppb	14:52:24
3	SiO2†	34500.9	37605.7	10575 µg/L	10575 ppb	14:52:24
3	Sn 189.927†	678.1	742.2	474.99 µg/L	474.99 ppb	14:52:45
3	Ti 334.940†	69859.8	75746.8	504.58 µg/L	504.58 ppb	14:52:24
3	Tl 190.801†	93.5	77.1	425.78 µg/L	425.78 ppb	14:52:45
3	U 367.007†	2473.2	2845.0	474.44 µg/L	474.44 ppb	14:52:45
3	V 292.402†	15709.4	17058.1	525.25 µg/L	525.25 ppb	14:52:45
3	Zn 213.857†	12886.9	13333.6	472.66 µg/L	472.66 ppb	14:52:45

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc RADIAL	55488.2	112.80	%	3.693	112.80	%	3.693	3.27%
Sc 361.383	287893.3	95.495	%	4.3525	95.495	%	4.3525	4.56%
Y 371.029	203379.0	95.095	%	4.2280	95.095	%	4.2280	4.45%
Ag 328.068†	8157.7	258.34	µg/L	7.092	258.34	ppb	7.092	2.75%
QC value within limits for Ag 328.068 Recovery = 103.34%								
Al 396.153Radial†	1543438.7	506330	µg/L	2450.13	506330	ppb	2450.13	0.48%
QC value within limits for Al 396.153Radial Recovery = 101.27%								
As 188.979†	278.2	497.85	µg/L	12.422	497.85	ppb	12.422	2.50%
QC value within limits for As 188.979 Recovery = 99.57%								
B 249.677†	-2732.4	534.33	µg/L	17.087	534.33	ppb	17.087	3.20%
QC value within limits for B 249.677 Recovery = 106.87%								
Ba 233.527†	21336.4	489.78	µg/L	16.217	489.78	ppb	16.217	3.31%
QC value within limits for Ba 233.527 Recovery = 97.96%								
Be 313.107†	157719.5	249.55	µg/L	1.027	249.55	ppb	1.027	0.41%
QC value within limits for Be 313.107 Recovery = 99.82%								
Ca 317.933Radial†	2893288.6	472160	µg/L	4212.45	472160	ppb	4212.45	0.89%
QC value within limits for Ca 317.933Radial Recovery = 94.43%								
Cd 226.502†	13277.9	459.24	µg/L	15.830	459.24	ppb	15.830	3.45%

QC value within limits for Cd 226.502 Recovery = 91.85%

Co 228.616†	3999.1	442.13 µg/L	13.020	442.13 ppb	13.020	2.94%
QC value within limits for Co 228.616 Recovery = 88.43%							
Cr 267.716†	12560.9	489.29 µg/L	16.220	489.29 ppb	16.220	3.32%
QC value within limits for Cr 267.716 Recovery = 97.86%							
Cu 324.752†	21362.0	507.09 µg/L	16.929	507.09 ppb	16.929	3.34%
QC value within limits for Cu 324.752 Recovery = 101.42%							
Fe 238.204 Radial†	967996.3	189180 µg/L	1546.35	189180 ppb	1546.35	0.82%
QC value within limits for Fe 238.204 Radial Recovery = 94.59%							
K 766.490 Radial†	9377.5	7915.0 µg/L	83.01	7915.0 ppb	83.01	1.05%
QC value greater than the upper limit for K 766.490 Radial Recovery = 158.30%							
Mg 279.077 IEC†	243355.4	478950 µg/L	3391.54	478950 ppb	3391.54	0.71%
QC value within limits for Mg 279.077 IEC Recovery = 95.79%							
Mn 257.610†	47481.1	471.23 µg/L	1.560	471.23 ppb	1.560	0.33%
QC value within limits for Mn 257.610 Recovery = 94.25%							
Mo 202.031†	3181.1	497.19 µg/L	14.646	497.19 ppb	14.646	2.95%
QC value within limits for Mo 202.031 Recovery = 99.44%							
Na 589.592 Radial†	103454.8	16531 µg/L	60.14	16531 ppb	60.14	0.36%
QC value greater than the upper limit for Na 589.592 Radial Recovery = 330.61%							
Ni 231.604†	3131.1	429.53 µg/L	13.762	429.53 ppb	13.762	3.20%
QC value within limits for Ni 231.604 Recovery = 85.91%							
P 214.914†	972.2	2560.3 µg/L	139.33	2560.3 ppb	139.33	5.44%
QC value within limits for P 214.914 Recovery = 102.41%							
Pb 220.353†	879.7	463.47 µg/L	19.327	463.47 ppb	19.327	4.17%
QC value within limits for Pb 220.353 Recovery = 92.69%							
S 181.975 Axial†	1095.3	6141.6 µg/L	295.23	6141.6 ppb	295.23	4.81%
QC value greater than the upper limit for S 181.975 Axial Recovery = 245.66%							
Sb 206.836†	357.6	553.48 µg/L	5.703	553.48 ppb	5.703	1.03%
QC value within limits for Sb 206.836 Recovery = 110.70%							
Se 196.026†	1332.2	2297.3 µg/L	75.22	2297.3 ppb	75.22	3.27%
QC value within limits for Se 196.026 Recovery = 91.89%							
Si 251.611†	38401.1	4981.0 µg/L	13.89	4981.0 ppb	13.89	0.28%
QC value within limits for Si 251.611 Recovery = 99.62%							
SiO2†	37714.7	10606 µg/L	29.55	10606 ppb	29.55	0.28%
QC value within limits for SiO2 Recovery = 99.17%							
Sn 189.927†	733.0	469.39 µg/L	10.403	469.39 ppb	10.403	2.22%
QC value within limits for Sn 189.927 Recovery = 93.88%							
Sr 421.552†	170516.9	487.27 µg/L	2.466	487.27 ppb	2.466	0.51%
QC value within limits for Sr 421.552 Recovery = 97.45%							
Ti 334.940†	75863.7	505.37 µg/L	0.745	505.37 ppb	0.745	0.15%
QC value within limits for Ti 334.940 Recovery = 101.07%							
Tl 190.801†	80.1	439.82 µg/L	31.831	439.82 ppb	31.831	7.24%
QC value within limits for Tl 190.801 Recovery = 87.96%							
U 367.007†	2799.5	452.91 µg/L	40.423	452.91 ppb	40.423	8.93%
QC value within limits for U 367.007 Recovery = 90.58%							
V 292.402†	16730.3	515.47 µg/L	16.796	515.47 ppb	16.796	3.26%
QC value within limits for V 292.402 Recovery = 103.09%							
Zn 213.857†	13107.0	463.85 µg/L	17.220	463.85 ppb	17.220	3.71%
QC value within limits for Zn 213.857 Recovery = 92.77%							

QC Failed. Continue with analysis.

Batch ID:
Sequence No.: 15 **Autosampler Location: 1**
Sample ID: CCV **Date Collected: 12/19/2022 14:53:39**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample): 49

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	59734.5	59734.5	121.44	%	121.44	%	14:54:18
1	Al 396.153Radial†	18491.9	15244.7	4979.6	µg/L	4979.6	ppb	14:54:18
1	Ca 317.933Radial†	36666.9	30045.4	4903.2	µg/L	4903.2	ppb	14:54:18
1	Fe 238.204 Radial†	32586.5	26732.1	5236.9	µg/L	5236.9	ppb	14:54:18
1	K 766.490 Radial†	9871.4	7980.8	6688.1	µg/L	6688.1	ppb	14:54:16
1	Mg 279.077 IEC†	3373.3	2767.7	5448.0	µg/L	5448.0	ppb	14:54:18
1	Na 589.592 Radial†	129668.7	105856.1	16914	µg/L	16914	ppb	14:54:16
1	Sr 421.552†	219707.8	180851.7	525.74	µg/L	525.74	ppb	14:54:16
1	Sc 361.383	333304.1	333304.1	110.56	%	110.56	%	14:54:30
1	Y 371.029	234900.1	234900.1	109.83	%	109.83	%	14:54:30
1	Ag 328.068†	17965.2	16462.4	499.50	µg/L	499.50	ppb	14:54:30
1	As 188.979†	281.2	263.3	466.12	µg/L	466.12	ppb	14:54:50
1	B 249.677†	4340.2	3853.6	544.21	µg/L	544.21	ppb	14:54:30
1	Ba 233.527†	23756.6	21484.9	506.23	µg/L	506.23	ppb	14:54:30
1	Be 313.107†	357842.1	323783.2	510.07	µg/L	510.07	ppb	14:54:30
1	Cd 226.502†	15527.0	14162.2	513.19	µg/L	513.19	ppb	14:54:30
1	Co 228.616†	4458.3	4207.7	472.84	µg/L	472.84	ppb	14:54:50
1	Cr 267.716†	13994.8	12567.2	503.46	µg/L	503.46	ppb	14:54:30
1	Cu 324.752†	24036.5	21515.6	503.53	µg/L	503.53	ppb	14:54:30
1	Mn 257.610†	55978.1	50579.4	504.72	µg/L	504.72	ppb	14:54:30
1	Mo 202.031†	3329.5	3019.5	465.67	µg/L	465.67	ppb	14:54:50
1	Ni 231.604†	3826.0	3398.8	474.15	µg/L	474.15	ppb	14:54:50
1	P 214.914†	1280.4	893.7	2384.6	µg/L	2384.6	ppb	14:54:50
1	Pb 220.353†	1226.8	903.9	473.62	µg/L	473.62	ppb	14:54:50
1	S 181.975 Axial†	807.6	664.6	3884.1	µg/L	3884.1	ppb	14:54:50
1	Sb 206.836†	426.2	292.9	451.51	µg/L	451.51	ppb	14:54:50
1	Se 196.026†	372.5	277.8	466.39	µg/L	466.39	ppb	14:54:50
1	Si 251.611†	22237.7	20074.6	2639.4	µg/L	2639.4	ppb	14:54:30
1	SiO2†	21677.9	19654.4	5614.0	µg/L	5614.0	ppb	14:54:30
1	Sn 189.927†	821.4	746.9	458.39	µg/L	458.39	ppb	14:54:50
1	Ti 334.940†	83087.0	74847.1	496.96	µg/L	496.96	ppb	14:54:30
1	Tl 190.801†	119.5	83.4	426.20	µg/L	426.20	ppb	14:54:50
1	U 367.007†	1059.7	1111.0	448.89	µg/L	448.89	ppb	14:54:30
1	V 292.402†	18895.5	17047.2	510.31	µg/L	510.31	ppb	14:54:30
1	Zn 213.857†	15355.0	13193.1	504.65	µg/L	504.65	ppb	14:54:30
2	Sc RADIAL	55130.4	55130.4	112.08	%	112.08	%	14:54:22
2	Al 396.153Radial†	16962.4	15151.7	4947.2	µg/L	4947.2	ppb	14:54:22
2	Ca 317.933Radial†	33101.9	29386.1	4795.6	µg/L	4795.6	ppb	14:54:22
2	Fe 238.204 Radial†	29350.7	26085.9	5111.7	µg/L	5111.7	ppb	14:54:22
2	K 766.490 Radial†	8965.3	7851.2	6579.5	µg/L	6579.5	ppb	14:54:20
2	Mg 279.077 IEC†	2964.8	2635.2	5187.2	µg/L	5187.2	ppb	14:54:22
2	Na 589.592 Radial†	119262.9	105489.0	16856	µg/L	16856	ppb	14:54:20
2	Sr 421.552†	195802.1	174631.4	507.66	µg/L	507.66	ppb	14:54:20
2	Sc 361.383	310361.2	310361.2	102.95	%	102.95	%	14:54:52
2	Y 371.029	218869.9	218869.9	102.34	%	102.34	%	14:54:52
2	Ag 328.068†	16876.3	16605.9	503.81	µg/L	503.81	ppb	14:54:52
2	As 188.979†	300.0	300.4	531.32	µg/L	531.32	ppb	14:55:12
2	B 249.677†	4020.9	3833.6	540.86	µg/L	540.86	ppb	14:54:52
2	Ba 233.527†	22141.0	21504.0	506.68	µg/L	506.68	ppb	14:54:52
2	Be 313.107†	332672.8	323261.2	509.26	µg/L	509.26	ppb	14:54:52
2	Cd 226.502†	14233.5	13943.9	505.31	µg/L	505.31	ppb	14:54:52
2	Co 228.616†	4529.0	4574.3	514.13	µg/L	514.13	ppb	14:55:12
2	Cr 267.716†	13048.7	12583.9	504.11	µg/L	504.11	ppb	14:54:52
2	Cu 324.752†	22486.1	21616.8	505.90	µg/L	505.90	ppb	14:54:52
2	Mn 257.610†	52248.0	50699.1	505.91	µg/L	505.91	ppb	14:54:52
2	Mo 202.031†	3381.6	3292.6	507.78	µg/L	507.78	ppb	14:55:12
2	Ni 231.604†	3891.1	3717.9	518.68	µg/L	518.68	ppb	14:55:12

2	P 214.914†	1305.4	1003.7	2681.3 µg/L	2681.3 ppb	14:55:12
2	Pb 220.353†	1242.4	1001.0	524.57 µg/L	524.57 ppb	14:55:12
2	S 181.975 Axial†	782.5	694.2	4057.9 µg/L	4057.9 ppb	14:55:12
2	Sb 206.836†	424.8	320.1	494.28 µg/L	494.28 ppb	14:55:12
2	Se 196.026†	381.1	311.1	522.13 µg/L	522.13 ppb	14:55:12
2	Si 251.611†	20691.6	20059.7	2636.9 µg/L	2636.9 ppb	14:54:52
2	SiO2†	20177.3	19646.2	5610.5 µg/L	5610.5 ppb	14:54:52
2	Sn 189.927†	834.3	814.3	499.49 µg/L	499.49 ppb	14:55:12
2	Ti 334.940†	77643.8	75115.3	498.72 µg/L	498.72 ppb	14:54:52
2	Tl 190.801†	117.8	89.8	456.79 µg/L	456.79 ppb	14:55:12
2	U 367.007†	1079.3	1200.9	487.29 µg/L	487.29 ppb	14:54:52
2	V 292.402†	17684.2	17134.1	513.41 µg/L	513.41 ppb	14:54:52
2	Zn 213.857†	14336.0	13229.9	505.80 µg/L	505.80 ppb	14:54:52
3	Sc RADIAL	54444.7	54444.7	110.68 %	110.68 %	14:54:26
3	Al 396.153Radial†	17050.5	15421.9	5036.2 µg/L	5036.2 ppb	14:54:26
3	Ca 317.933Radial†	33273.8	29913.5	4881.7 µg/L	4881.7 ppb	14:54:26
3	Fe 238.204 Radial†	29514.8	26564.1	5204.9 µg/L	5204.9 ppb	14:54:26
3	K 766.490 Radial†	8494.1	7526.2	6307.2 µg/L	6307.2 ppb	14:54:24
3	Mg 279.077 IEC†	2989.4	2690.8	5296.5 µg/L	5296.5 ppb	14:54:26
3	Na 589.592 Radial†	114592.2	102609.4	16395 µg/L	16395 ppb	14:54:24
3	Sr 421.552†	187699.3	169511.2	492.77 µg/L	492.77 ppb	14:54:24
3	Sc 361.383	308242.0	308242.0	102.24 %	102.24 %	14:55:14
3	Y 371.029	217382.6	217382.6	101.64 %	101.64 %	14:55:14
3	Ag 328.068†	16731.4	16577.0	502.94 µg/L	502.94 ppb	14:55:14
3	As 188.979†	281.3	284.0	502.64 µg/L	502.64 ppb	14:55:34
3	B 249.677†	4014.4	3854.2	544.10 µg/L	544.10 ppb	14:55:14
3	Ba 233.527†	22032.0	21545.3	507.65 µg/L	507.65 ppb	14:55:14
3	Be 313.107†	331255.8	324097.0	510.58 µg/L	510.58 ppb	14:55:14
3	Cd 226.502†	14289.0	14093.3	510.71 µg/L	510.71 ppb	14:55:14
3	Co 228.616†	4405.6	4483.9	503.95 µg/L	503.95 ppb	14:55:34
3	Cr 267.716†	13045.8	12668.2	507.49 µg/L	507.49 ppb	14:55:14
3	Cu 324.752†	22505.4	21785.8	509.86 µg/L	509.86 ppb	14:55:14
3	Mn 257.610†	51954.6	50761.0	506.53 µg/L	506.53 ppb	14:55:14
3	Mo 202.031†	3299.7	3235.2	498.92 µg/L	498.92 ppb	14:55:34
3	Ni 231.604†	3782.3	3637.4	507.45 µg/L	507.45 ppb	14:55:34
3	P 214.914†	1259.6	967.6	2583.6 µg/L	2583.6 ppb	14:55:34
3	Pb 220.353†	1218.9	986.3	516.84 µg/L	516.84 ppb	14:55:34
3	S 181.975 Axial†	729.8	647.9	3786.6 µg/L	3786.6 ppb	14:55:34
3	Sb 206.836†	433.3	331.2	511.50 µg/L	511.50 ppb	14:55:34
3	Se 196.026†	362.8	295.7	496.39 µg/L	496.39 ppb	14:55:34
3	Si 251.611†	20724.3	20229.9	2659.4 µg/L	2659.4 ppb	14:55:14
3	SiO2†	20210.3	19813.3	5658.5 µg/L	5658.5 ppb	14:55:14
3	Sn 189.927†	801.7	788.1	483.50 µg/L	483.50 ppb	14:55:34
3	Ti 334.940†	77253.7	75252.2	499.63 µg/L	499.63 ppb	14:55:14
3	Tl 190.801†	123.6	96.3	488.14 µg/L	488.14 ppb	14:55:34
3	U 367.007†	1067.7	1196.8	485.22 µg/L	485.22 ppb	14:55:14
3	V 292.402†	17535.9	17107.2	512.53 µg/L	512.53 ppb	14:55:14
3	Zn 213.857†	14265.8	13257.0	506.90 µg/L	506.90 ppb	14:55:14

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc RADIAL	56436.5	114.73	%	5.848	114.73	%	5.848	5.10%
Sc 361.383	317302.4	105.25	%	4.610	105.25	%	4.610	4.38%
Y 371.029	223717.5	104.60	%	4.542	104.60	%	4.542	4.34%
Ag 328.068†	16548.4	502.08	µg/L	2.282	502.08	ppb	2.282	0.45%
QC value within limits for Ag 328.068 Recovery = 100.42%								
Al 396.153Radial†	15272.8	4987.7	µg/L	45.07	4987.7	ppb	45.07	0.90%
QC value within limits for Al 396.153Radial Recovery = 99.75%								
As 188.979†	282.6	500.02	µg/L	32.678	500.02	ppb	32.678	6.54%
QC value within limits for As 188.979 Recovery = 100.00%								
B 249.677†	3847.1	543.06	µg/L	1.901	543.06	ppb	1.901	0.35%
QC value within limits for B 249.677 Recovery = 108.61%								
Ba 233.527†	21511.4	506.85	µg/L	0.727	506.85	ppb	0.727	0.14%
QC value within limits for Ba 233.527 Recovery = 101.37%								
Be 313.107†	323713.8	509.97	µg/L	0.663	509.97	ppb	0.663	0.13%
QC value within limits for Be 313.107 Recovery = 101.99%								
Ca 317.933Radial†	29781.7	4860.2	µg/L	56.93	4860.2	ppb	56.93	1.17%
QC value within limits for Ca 317.933Radial Recovery = 97.20%								
Cd 226.502†	14066.5	509.73	µg/L	4.028	509.73	ppb	4.028	0.79%

QC value within limits for Cd 226.502 Recovery = 101.95%

Co 228.616†	4422.0	496.97 µg/L	21.511	496.97 ppb	21.511	4.33%
QC value within limits for Co 228.616 Recovery = 99.39%							
Cr 267.716†	12606.4	505.02 µg/L	2.162	505.02 ppb	2.162	0.43%
QC value within limits for Cr 267.716 Recovery = 101.00%							
Cu 324.752†	21639.4	506.43 µg/L	3.197	506.43 ppb	3.197	0.63%
QC value within limits for Cu 324.752 Recovery = 101.29%							
Fe 238.204 Radial†	26460.7	5184.5 µg/L	65.03	5184.5 ppb	65.03	1.25%
QC value within limits for Fe 238.204 Radial Recovery = 103.69%							
K 766.490 Radial†	7786.1	6524.9 µg/L	196.25	6524.9 ppb	196.25	3.01%
QC value greater than the upper limit for K 766.490 Radial Recovery = 130.50%							
Mg 279.077 IEC†	2697.9	5310.6 µg/L	130.92	5310.6 ppb	130.92	2.47%
QC value within limits for Mg 279.077 IEC Recovery = 106.21%							
Mn 257.610†	50679.8	505.72 µg/L	0.921	505.72 ppb	0.921	0.18%
QC value within limits for Mn 257.610 Recovery = 101.14%							
Mo 202.031†	3182.4	490.79 µg/L	22.201	490.79 ppb	22.201	4.52%
QC value within limits for Mo 202.031 Recovery = 98.16%							
Na 589.592 Radial†	104651.5	16722 µg/L	284.10	16722 ppb	284.10	1.70%
QC value greater than the upper limit for Na 589.592 Radial Recovery = 167.22%							
Ni 231.604†	3584.7	500.10 µg/L	23.161	500.10 ppb	23.161	4.63%
QC value within limits for Ni 231.604 Recovery = 100.02%							
P 214.914†	955.0	2549.8 µg/L	151.25	2549.8 ppb	151.25	5.93%
QC value within limits for P 214.914 Recovery = 101.99%							
Pb 220.353†	963.7	505.01 µg/L	27.456	505.01 ppb	27.456	5.44%
QC value within limits for Pb 220.353 Recovery = 101.00%							
S 181.975 Axial†	668.9	3909.6 µg/L	137.44	3909.6 ppb	137.44	3.52%
QC value greater than the upper limit for S 181.975 Axial Recovery = 390.96%							
Sb 206.836†	314.7	485.76 µg/L	30.888	485.76 ppb	30.888	6.36%
QC value within limits for Sb 206.836 Recovery = 97.15%							
Se 196.026†	294.9	494.97 µg/L	27.895	494.97 ppb	27.895	5.64%
QC value within limits for Se 196.026 Recovery = 98.99%							
Si 251.611†	20121.4	2645.2 µg/L	12.36	2645.2 ppb	12.36	0.47%
QC value within limits for Si 251.611 Recovery = 105.81%							
SiO2†	19704.6	5627.7 µg/L	26.80	5627.7 ppb	26.80	0.48%
QC value within limits for SiO2 Recovery = 105.24%							
Sn 189.927†	783.1	480.46 µg/L	20.720	480.46 ppb	20.720	4.31%
QC value within limits for Sn 189.927 Recovery = 96.09%							
Sr 421.552†	174998.1	508.72 µg/L	16.512	508.72 ppb	16.512	3.25%
QC value within limits for Sr 421.552 Recovery = 101.74%							
Ti 334.940†	75071.6	498.44 µg/L	1.361	498.44 ppb	1.361	0.27%
QC value within limits for Ti 334.940 Recovery = 99.69%							
Tl 190.801†	89.8	457.05 µg/L	30.970	457.05 ppb	30.970	6.78%
QC value within limits for Tl 190.801 Recovery = 91.41%							
U 367.007†	1169.6	473.80 µg/L	21.600	473.80 ppb	21.600	4.56%
QC value within limits for U 367.007 Recovery = 94.76%							
V 292.402†	17096.2	512.08 µg/L	1.600	512.08 ppb	1.600	0.31%
QC value within limits for V 292.402 Recovery = 102.42%							
Zn 213.857†	13226.6	505.78 µg/L	1.124	505.78 ppb	1.124	0.22%
QC value within limits for Zn 213.857 Recovery = 101.16%							

QC Failed. Continue with analysis.

Batch ID:
Sequence No.: 16 **Autosampler Location: 6**
Sample ID: CCB **Date Collected: 12/19/2022 14:56:29**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
Wash Time (before sample): 49

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	54624.9	54624.9	111.05	%	111.05	%	14:57:06
1	Al 396.153Radial†	75.4	85.0	28.120	µg/L	28.120	ppb	14:57:06
1	Ca 317.933Radial†	152.2	-11.8	-1.9306	µg/L	-1.9306	ppb	14:57:26
1	Fe 238.204 Radial†	101.7	-10.5	-2.0600	µg/L	-2.0600	ppb	14:57:26
1	K 766.490 Radial†	1681.8	1366.3	1144.9	µg/L	1144.9	ppb	14:57:06
1	Mg 279.077 IEC†	-6.6	-16.0	-31.514	µg/L	-31.514	ppb	14:57:26
1	Na 589.592 Radial†	43246.0	38020.4	6075.1	µg/L	6075.1	ppb	14:57:06
1	Sr 421.552†	115.7	32.1	0.0935	µg/L	0.0935	ppb	14:57:06
1	Sc 361.383	288494.1	288494.1	95.694	%	95.694	%	14:58:14
1	Y 371.029	205180.4	205180.4	95.937	%	95.937	%	14:58:14
1	Ag 328.068†	-217.1	-14.0	-0.4570	µg/L	-0.4570	ppb	14:58:14
1	As 188.979†	-4.4	4.3	7.5361	µg/L	7.5361	ppb	14:58:34
1	B 249.677†	127.9	61.5	8.2722	µg/L	8.2722	ppb	14:58:34
1	Ba 233.527†	-1.3	-4.3	-0.1004	µg/L	-0.1004	ppb	14:58:34
1	Be 313.107†	-62.6	48.2	0.0869	µg/L	0.0869	ppb	14:58:14
1	Cd 226.502†	-126.9	-14.7	-0.5349	µg/L	-0.5349	ppb	14:58:34
1	Co 228.616†	-170.4	-3.0	-0.3483	µg/L	-0.3483	ppb	14:58:34
1	Cr 267.716†	108.3	22.0	0.8500	µg/L	0.8500	ppb	14:58:34
1	Cu 324.752†	222.9	7.4	0.1728	µg/L	0.1728	ppb	14:58:14
1	Mn 257.610†	44.3	-6.6	-0.0661	µg/L	-0.0661	ppb	14:58:34
1	Mo 202.031†	-39.6	-33.5	-5.1619	µg/L	-5.1619	ppb	14:58:34
1	Ni 231.604†	22.0	-38.9	-5.4325	µg/L	-5.4325	ppb	14:58:34
1	P 214.914†	313.2	62.9	170.05	µg/L	170.05	ppb	14:58:34
1	Pb 220.353†	238.4	43.3	22.619	µg/L	22.619	ppb	14:58:34
1	S 181.975 Axial†	312.9	261.1	1527.1	µg/L	1527.1	ppb	14:58:34
1	Sb 206.836†	101.0	12.9	20.067	µg/L	20.067	ppb	14:58:34
1	Se 196.026†	66.4	10.3	17.184	µg/L	17.184	ppb	14:58:34
1	Si 251.611†	76.9	41.0	5.4832	µg/L	5.4832	ppb	14:58:34
1	SiO2†	-18.1	27.8	8.1167	µg/L	8.1167	ppb	14:58:34
1	Sn 189.927†	-2.9	0.9	0.5719	µg/L	0.5719	ppb	14:58:34
1	Ti 334.940†	330.9	40.4	0.2544	µg/L	0.2544	ppb	14:58:14
1	Tl 190.801†	16.0	-7.9	-38.262	µg/L	-38.262	ppb	14:58:34
1	U 367.007†	-57.4	92.5	39.067	µg/L	39.067	ppb	14:58:14
1	V 292.402†	44.0	2.2	0.0441	µg/L	0.0441	ppb	14:58:34
1	Zn 213.857†	704.3	40.3	1.5924	µg/L	1.5924	ppb	14:58:34
2	Sc RADIAL	48050.5	48050.5	97.684	%	97.684	%	14:57:28
2	Al 396.153Radial†	-27.6	-11.2	-3.4913	µg/L	-3.4913	ppb	14:57:28
2	Ca 317.933Radial†	153.7	8.5	1.3837	µg/L	1.3837	ppb	14:57:48
2	Fe 238.204 Radial†	99.7	0.0	-0.0006	µg/L	-0.0006	ppb	14:57:48
2	K 766.490 Radial†	1888.3	1785.0	1495.7	µg/L	1495.7	ppb	14:57:28
2	Mg 279.077 IEC†	15.2	5.4	10.650	µg/L	10.650	ppb	14:57:48
2	Na 589.592 Radial†	40246.7	40278.3	6435.9	µg/L	6435.9	ppb	14:57:28
2	Sr 421.552†	6.4	-65.4	-0.1903	µg/L	-0.1903	ppb	14:57:28
2	Sc 361.383	283466.4	283466.4	94.027	%	94.027	%	14:58:37
2	Y 371.029	201501.9	201501.9	94.217	%	94.217	%	14:58:37
2	Ag 328.068†	-108.2	97.8	2.9579	µg/L	2.9579	ppb	14:58:37
2	As 188.979†	-10.5	-2.2	-3.9531	µg/L	-3.9531	ppb	14:58:57
2	B 249.677†	119.9	55.4	7.4628	µg/L	7.4628	ppb	14:58:57
2	Ba 233.527†	-22.4	-26.9	-0.6313	µg/L	-0.6313	ppb	14:58:57
2	Be 313.107†	-28.8	83.0	0.1319	µg/L	0.1319	ppb	14:58:37
2	Cd 226.502†	-130.9	-21.2	-0.7709	µg/L	-0.7709	ppb	14:58:57
2	Co 228.616†	-165.8	-1.2	-0.1428	µg/L	-0.1428	ppb	14:58:57
2	Cr 267.716†	108.3	24.0	0.9557	µg/L	0.9557	ppb	14:58:57
2	Cu 324.752†	203.7	-8.8	-0.2065	µg/L	-0.2065	ppb	14:58:37
2	Mn 257.610†	52.2	2.6	0.0259	µg/L	0.0259	ppb	14:58:57
2	Mo 202.031†	-32.3	-26.5	-4.0865	µg/L	-4.0865	ppb	14:58:57
2	Ni 231.604†	37.7	-21.8	-3.0471	µg/L	-3.0471	ppb	14:58:57

2	P 214.914†	304.2	59.1	159.87 µg/L	159.87 ppb	14:58:57
2	Pb 220.353†	217.5	25.5	13.322 µg/L	13.322 ppb	14:58:57
2	S 181.975 Axial†	314.7	268.8	1571.9 µg/L	1571.9 ppb	14:58:57
2	Sb 206.836†	94.1	7.5	11.596 µg/L	11.596 ppb	14:58:57
2	Se 196.026†	52.6	-3.2	-5.2888 µg/L	-5.2888 ppb	14:58:57
2	Si 251.611†	80.0	45.7	6.0763 µg/L	6.0763 ppb	14:58:57
2	SiO2†	-8.4	37.8	10.937 µg/L	10.937 ppb	14:58:57
2	Sn 189.927†	-7.1	-3.6	-2.2250 µg/L	-2.2250 ppb	14:58:57
2	Ti 334.940†	242.5	-47.5	-0.3192 µg/L	-0.3192 ppb	14:58:37
2	Tl 190.801†	30.7	8.0	38.765 µg/L	38.765 ppb	14:58:57
2	U 367.007†	-121.6	23.2	9.7792 µg/L	9.7792 ppb	14:58:37
2	V 292.402†	58.5	18.5	0.5069 µg/L	0.5069 ppb	14:58:57
2	Zn 213.857†	698.5	47.2	1.8437 µg/L	1.8437 ppb	14:58:57
3	Sc RADIAL	48027.1	48027.1	97.636 %	97.636 %	14:57:51
3	Al 396.153Radial†	-37.5	-21.4	-6.8211 µg/L	-6.8211 ppb	14:57:51
3	Ca 317.933Radial†	162.2	17.3	2.8240 µg/L	2.8240 ppb	14:58:11
3	Fe 238.204 Radial†	108.7	9.3	1.7546 µg/L	1.7546 ppb	14:58:11
3	K 766.490 Radial†	1850.4	1747.2	1464.0 µg/L	1464.0 ppb	14:57:51
3	Mg 279.077 IEC†	17.4	7.7	15.250 µg/L	15.250 ppb	14:58:11
3	Na 589.592 Radial†	40758.6	40822.6	6522.8 µg/L	6522.8 ppb	14:57:51
3	Sr 421.552†	53.5	-17.3	-0.0503 µg/L	-0.0503 ppb	14:57:51
3	Sc 361.383	285723.8	285723.8	94.775 %	94.775 %	14:58:59
3	Y 371.029	203021.8	203021.8	94.928 %	94.928 %	14:58:59
3	Ag 328.068†	-307.1	-111.2	-3.3827 µg/L	-3.3827 ppb	14:58:59
3	As 188.979†	-7.5	1.0	1.7924 µg/L	1.7924 ppb	14:59:19
3	B 249.677†	117.6	51.9	7.0148 µg/L	7.0148 ppb	14:59:19
3	Ba 233.527†	-1.3	-4.4	-0.1026 µg/L	-0.1026 ppb	14:59:19
3	Be 313.107†	-196.5	-93.8	-0.1445 µg/L	-0.1445 ppb	14:58:59
3	Cd 226.502†	-132.8	-22.2	-0.8061 µg/L	-0.8061 ppb	14:59:19
3	Co 228.616†	-183.2	-18.2	-2.0547 µg/L	-2.0547 ppb	14:59:19
3	Cr 267.716†	96.2	10.4	0.4057 µg/L	0.4057 ppb	14:59:19
3	Cu 324.752†	265.7	54.9	1.2824 µg/L	1.2824 ppb	14:58:59
3	Mn 257.610†	52.9	2.8	0.0283 µg/L	0.0283 ppb	14:59:19
3	Mo 202.031†	-32.7	-26.6	-4.1043 µg/L	-4.1043 ppb	14:59:19
3	Ni 231.604†	25.2	-35.3	-4.9310 µg/L	-4.9310 ppb	14:59:19
3	P 214.914†	302.0	54.3	146.61 µg/L	146.61 ppb	14:59:19
3	Pb 220.353†	222.3	28.8	15.030 µg/L	15.030 ppb	14:59:19
3	S 181.975 Axial†	289.4	239.5	1400.7 µg/L	1400.7 ppb	14:59:19
3	Sb 206.836†	96.0	8.7	13.488 µg/L	13.488 ppb	14:59:19
3	Se 196.026†	60.6	4.9	8.1280 µg/L	8.1280 ppb	14:59:19
3	Si 251.611†	52.4	15.9	2.1487 µg/L	2.1487 ppb	14:59:19
3	SiO2†	-37.6	7.0	2.1299 µg/L	2.1299 ppb	14:59:19
3	Sn 189.927†	-7.9	-4.4	-2.6859 µg/L	-2.6859 ppb	14:59:19
3	Ti 334.940†	268.5	-22.1	-0.1513 µg/L	-0.1513 ppb	14:58:59
3	Tl 190.801†	27.3	4.2	20.128 µg/L	20.128 ppb	14:59:19
3	U 367.007†	-117.4	28.7	12.099 µg/L	12.099 ppb	14:58:59
3	V 292.402†	52.5	11.6	0.3056 µg/L	0.3056 ppb	14:59:19
3	Zn 213.857†	691.3	33.8	1.3351 µg/L	1.3351 ppb	14:59:19

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc RADIAL	50234.2	102.12	%	7.730	102.12	%	7.730	7.57%
Sc 361.383	285894.8	94.832	%	0.8353	94.832	%	0.8353	0.88%
Y 371.029	203234.7	95.028	%	0.8643	95.028	%	0.8643	0.91%
Ag 328.068†	-9.2	-0.2939	µg/L	3.17346	-0.2939	ppb	3.17346	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	17.5	5.9359	µg/L	19.28402	5.9359	ppb	19.28402	324.87%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.0	1.7918	µg/L	5.74457	1.7918	ppb	5.74457	320.60%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	56.3	7.5833	µg/L	0.63729	7.5833	ppb	0.63729	8.40%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-11.9	-0.2781	µg/L	0.30588	-0.2781	ppb	0.30588	110.00%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	12.5	0.0248	µg/L	0.14830	0.0248	ppb	0.14830	599.15%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	4.7	0.7590	µg/L	2.43809	0.7590	ppb	2.43809	321.21%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-19.3	-0.7040	µg/L	0.14747	-0.7040	ppb	0.14747	20.95%

```
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -7.5     -0.8486 µg/L       1.04954     -0.8486 ppb        1.04954 123.68%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              18.8      0.7371 µg/L       0.29186      0.7371 ppb        0.29186  39.59%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              17.8      0.4162 µg/L       0.77372      0.4162 ppb        0.77372 185.88%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -0.4     -0.1020 µg/L       1.90934     -0.1020 ppb        1.90934 >999.9%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       1632.8      1368.2 µg/L        194.02      1368.2 ppb         194.02  14.18%
   QC value greater than the upper limit for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -1.0     -1.8713 µg/L      25.77455     -1.8713 ppb       25.77455 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              -0.4     -0.0039 µg/L       0.05384     -0.0039 ppb        0.05384 >999.9%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -28.9     -4.4509 µg/L       0.61580     -4.4509 ppb        0.61580  13.84%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†     39707.1      6344.6 µg/L        237.42      6344.6 ppb         237.42   3.74%
   QC value greater than the upper limit for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -32.0     -4.4702 µg/L       1.25772     -4.4702 ppb        1.25772  28.14%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               58.8      158.84 µg/L        11.755      158.84 ppb         11.755   7.40%
   QC value greater than the upper limit for P 214.914  Recovery = Not calculated
Pb 220.353†              32.5      16.990 µg/L        4.9488      16.990 ppb         4.9488  29.13%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†        256.5      1499.9 µg/L         88.82      1499.9 ppb          88.82   5.92%
   QC value greater than the upper limit for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               9.7      15.050 µg/L        4.4462      15.050 ppb         4.4462  29.54%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               4.0      6.6743 µg/L      11.30652      6.6743 ppb       11.30652 169.40%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              34.2      4.5694 µg/L       2.11725      4.5694 ppb        2.11725  46.34%
   QC value within limits for Si 251.611  Recovery = Not calculated
SiO2†                    24.2      7.0611 µg/L       4.49733      7.0611 ppb        4.49733  63.69%
   QC value within limits for SiO2  Recovery = Not calculated
Sn 189.927†              -2.4     -1.4463 µg/L       1.76299     -1.4463 ppb        1.76299 121.90%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             -16.9     -0.0490 µg/L       0.14188     -0.0490 ppb        0.14188 289.44%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              -9.7     -0.0720 µg/L       0.29491     -0.0720 ppb        0.29491 409.48%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               1.4      6.8772 µg/L      40.18704      6.8772 ppb       40.18704 584.35%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 367.007†               48.1      20.315 µg/L       16.2813      20.315 ppb        16.2813  80.14%
   QC value within limits for U 367.007  Recovery = Not calculated
V 292.402†               10.8      0.2855 µg/L       0.23207      0.2855 ppb        0.23207  81.28%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              40.5      1.5904 µg/L       0.25427      1.5904 ppb        0.25427  15.99%
   QC value within limits for Zn 213.857  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

ICPMS #12 Daily Performance

Sample ID: Sample
Sample Date/Time: Monday, December 19, 2022 12:44:21
Sample Description:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\Daily 2.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\default1\Sample.752
Mass Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\default2.tun
Dual Detector Mode: Pulse
Acquisition Date/Time&Time Zone: Monday, December 19, 2022 12:44:21 Eastern Standard Time
Number of Replicates: 5
Analyst: BAJ

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	47172.4	47172.426	868.844	1.8
	Mg	24.0	201233.5	201233.540	1046.536	0.5
	Co	58.9	143590.8	143590.769	3226.147	2.2
	Rh	102.9	102486.5	102486.521	1506.376	1.5
	In	114.9	269682.2	269682.196	3838.806	1.4
	Pb	208.0	162442.7	162442.653	2394.959	1.5
⌈>	Ba	137.9	276020.9	276020.851	3755.505	1.4
⌊	Ba++	69.0	5647.5	0.020	0.000	1.6
⌈>	Ce	139.9	328687.2	328687.209	4624.399	1.4
⌊	CeO	155.9	5960.4	0.018	0.001	2.8
	Bkgd	220.0	0.3	0.250	0.354	141.4

Current Conditions

C Val	Description
1.00	Standard - Nebulizer Gas Flow STD/KED [NEB]
1.20	Standard - Auxiliary Gas Flow
18.00	Standard - Plasma Gas Flow
-12.00	Standard - Deflector Voltage
1600.00	Standard - ICP RF Power
-1525.00	Standard - Analog Stage Voltage
950.00	Standard - Pulse Stage Voltage
0.00	Standard - Quadrupole Rod Offset STD [QRO]
-16.00	Standard - Cell Rod Offset STD [CRO]
8.00	Standard - Discriminator Threshold
-12.00	Standard - Cell Entrance/Exit Voltage STD
-12.50	Helium KED - KED Mode QRO
-16.00	Helium KED - KED Mode CRO
-9.00	Helium KED - KED Mode Cell Entrance Voltage
-31.00	Helium KED - KED Mode Cell Exit Voltage
475.00	Helium KED - KED Mode Axial Field Voltage
0.00	Helium KED - KED RPa
0.25	Helium KED - KED RPq
3.00	Helium KED - Cell Gas A

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9.012	41	-17.0	6911.7
Mg	23.985	41	-15.5	23513.3
In	114.904	41	-11.0	26664.9
Ce	139.905	41	-10.0	31803.4
Pb	207.977	41	-7.0	16609.7
U	238.050	41	-6.5	28807.0

ICPMS #12 Instrument Tuning Report

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res DAC	Meas. Pk. Width
Be	9.0	9.0	1630	2062	0.714
Mg	24.0	24.0	4617	2063	0.721
Mg	25.0	25.0	4810	2064	0.691
Mg	26.0	26.0	5023	2066	0.688
Co	58.9	58.9	11591	2065	0.699
Rh	102.9	102.9	20380	2067	0.732
In	114.9	114.9	22781	2069	0.729
Ce	139.9	139.9	27772	2070	0.741
Pb	206.0	206.0	40978	2070	0.755
Pb	207.0	207.0	41193	2076	0.752
Pb	208.0	208.0	41373	2067	0.770
U	238.1	238.0	47388	2072	0.762

ICPMS #12 - Summary Report

Sample ID: Cal Blank
Sample Date/Time: Tuesday, December 20, 2022 01:35:16
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221219\Cal Blank.092
Analyst: BAJ

Concentration Results

Summary

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7		ug/L		8.000	
|	Be	9		ug/L		2.333	
|	B	11		ug/L		764.354	
|	Na	23		ug/L		10898.700	
|	Mg	24		ug/L		400.674	
|	Al	27		ug/L		1044.038	
|	P	31		ug/L		379.338	
|	K	39		ug/L		12369.354	
|	Ca	44		ug/L		127.334	
|	>Sc	45		ug/L		528153.067	
|	Ti	47		ug/L		4.667	
|	V	51		ug/L		4499.376	
|	Cr	52		ug/L		363.338	
|	Cr	53		ug/L		1700.768	
|	Mn	55		ug/L		58.667	
|	Fe	57		ug/L		115.334	
|	Co	59		ug/L		14.000	
|	Ni	60		ug/L		56.667	
|	Cu	63		ug/L		98.667	
⌊	Cu	65		ug/L		49.333	
⌈	Zn	66		ug/L		167.334	
|	Zn	67		ug/L		28.667	
|	Zn	68		ug/L		138.667	
|	>Ge	74		ug/L		211094.195	
|	As	75		ug/L		210.224	
|	Se	77		ug/L		78.000	
|	Se	78		ug/L		65.260	
|	Se	82		ug/L		16.000	
⌊	Kr	83		ug/L		6.800	
⌈	Sr	88		ug/L		56.667	
|	Zr	90		ug/L		161.334	
|	Mo	98		ug/L		74.612	
|	Ag	107		ug/L		32.667	
|	Cd	111		ug/L		12.667	
|	Cd	114		ug/L		18.904	
|	>In	115		ug/L		283386.596	
|	Sn	120		ug/L		466.564	
|	Sb	121		ug/L		127.334	
⌊	Sb	123		ug/L		98.909	
⌈	Ba	135		ug/L		31.333	
|	Ba	137		ug/L		36.667	
|	>Lu	175		ug/L		932478.703	
|	Tl	205		ug/L		256.002	
|	Pb	208		ug/L		297.335	
|	Th	232		ug/L		6144.655	
⌊	U	238		ug/L		122.334	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	0.9999
Be	9	Linear Thru Zero	0.9999
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	44	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9996
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	44					
| >	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
| >	Ge	74					
|	As	75					
|	Se	77					
|	Se	78					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
| >	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
| >	Lu	175					
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #12 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Tuesday, December 20, 2022 01:38:36
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221219\Standard 1.093
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**10.000**	**ug/L**	5.103	7635.378	0.014
Be	9	**10.000**	**ug/L**	1.752	3100.337	0.006
B	11	**20.000**	**ug/L**	2.475	4820.814	0.007
Na	23	**1000.000**	**ug/L**	3.045	1455420.451	2.643
Mg	24	**1000.000**	**ug/L**	2.374	640379.052	1.172
Al	27	**1000.000**	**ug/L**	5.410	357849.425	0.653
P	31	**1000.000**	**ug/L**	1.517	25411.921	0.046
K	39	**1000.000**	**ug/L**	2.887	414291.854	0.735
Ca	44	**1000.000**	**ug/L**	3.315	18552.721	0.034
>Sc	45		**ug/L**		546245.011	546245.011
Ti	47	**10.000**	**ug/L**	8.283	805.356	0.001
V	51	**10.000**	**ug/L**	1.209	27431.652	0.042
Cr	52	**10.000**	**ug/L**	1.021	27531.173	0.050
Cr	53		**ug/L**		5254.300	0.006
Mn	55	**10.000**	**ug/L**	1.100	14665.524	0.027
Fe	57	**1000.000**	**ug/L**	1.486	51633.826	0.094
Co	59	**10.000**	**ug/L**	4.246	41062.375	0.075
Ni	60	**10.000**	**ug/L**	1.930	11573.354	0.021
Cu	63		**ug/L**		30884.707	0.056
Cu	65	**10.000**	**ug/L**	3.091	14003.530	0.026
Zn	66	**10.000**	**ug/L**	1.499	4434.021	0.020
Zn	67		**ug/L**		734.686	0.003
Zn	68		**ug/L**		3171.685	0.014
>Ge	74		**ug/L**		214897.991	214897.991
As	75	**10.000**	**ug/L**	2.436	2097.043	0.009
Se	77		**ug/L**		160.001	0.000
Se	78	**10.000**	**ug/L**	1.320	327.914	0.001
Se	82		**ug/L**		153.334	0.001
Kr	83		**ug/L**		7.333	0.000
Sr	88	**10.000**	**ug/L**	2.100	18429.891	0.066
Zr	90	**10.000**	**ug/L**	2.176	21816.646	0.078
Mo	98	**10.000**	**ug/L**	3.609	14819.194	0.053
Ag	107	**10.000**	**ug/L**	2.671	39094.151	0.140
Cd	111	**10.000**	**ug/L**	5.041	6003.262	0.021
Cd	114		**ug/L**		16638.238	0.060
>In	115		**ug/L**		279385.421	279385.421
Sn	120	**10.000**	**ug/L**	1.767	27531.741	0.097
Sb	121	**10.000**	**ug/L**	4.600	17629.544	0.063
Sb	123		**ug/L**		14191.959	0.050
Ba	135		**ug/L**		5659.121	0.006
Ba	137	**10.000**	**ug/L**	4.172	10390.452	0.011
>Lu	175		**ug/L**		950105.092	950105.092
Tl	205	**10.000**	**ug/L**	0.105	177187.826	0.186
Pb	208	**10.000**	**ug/L**	2.030	233356.313	0.245
Th	232	**10.000**	**ug/L**	1.423	236911.186	0.243
U	238	**10.000**	**ug/L**	0.919	273010.062	0.287

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	44	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	44					
| >	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
| >	Ge	74					
|	As	75					
|	Se	77					
|	Se	78					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
| >	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
| >	Lu	175					
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #12 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Tuesday, December 20, 2022 01:41:56
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221219\Standard 2.094
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**99.895**	**ug/L**	1.457	67055.072	0.126
Be	9	**99.960**	**ug/L**	1.917	28959.323	0.054
B	11	**199.939**	**ug/L**	4.323	38776.243	0.072
Na	23	**10006.279**	**ug/L**	0.835	15011785.429	28.223
Mg	24	**10002.632**	**ug/L**	2.264	6397572.142	12.037
Al	27	**9996.382**	**ug/L**	1.377	3348978.609	6.300
P	31	**10000.378**	**ug/L**	5.547	244621.892	0.460
K	39	**10005.530**	**ug/L**	6.137	4151847.885	7.786
Ca	44	**9991.186**	**ug/L**	4.256	164570.886	0.310
>Sc	45		**ug/L**		531467.070	531467.070
Ti	47	**100.029**	**ug/L**	2.587	8026.922	0.015
V	51	**99.966**	**ug/L**	0.852	218777.478	0.403
Cr	52	**99.995**	**ug/L**	2.490	263285.480	0.495
Cr	53		**ug/L**		32607.861	0.058
Mn	55	**100.000**	**ug/L**	2.161	142166.646	0.267
Fe	57	**9993.255**	**ug/L**	2.680	469210.344	0.883
Co	59	**100.000**	**ug/L**	5.646	398871.139	0.751
Ni	60	**99.961**	**ug/L**	2.637	107839.851	0.203
Cu	63		**ug/L**		290532.170	0.546
Cu	65	**99.960**	**ug/L**	2.772	130498.773	0.246
Zn	66	**99.771**	**ug/L**	2.459	33290.751	0.161
Zn	67		**ug/L**		5507.728	0.027
Zn	68		**ug/L**		25033.257	0.121
>Ge	74		**ug/L**		205628.398	205628.398
As	75	**100.032**	**ug/L**	0.406	18823.060	0.091
Se	77		**ug/L**		832.024	0.004
Se	78	**100.013**	**ug/L**	1.200	2599.985	0.012
Se	82		**ug/L**		1436.072	0.007
Kr	83		**ug/L**		8.267	0.000
Sr	88	**99.943**	**ug/L**	1.717	173052.590	0.622
Zr	90	**100.004**	**ug/L**	2.424	216793.932	0.779
Mo	98	**100.005**	**ug/L**	2.620	147560.957	0.530
Ag	107	**99.945**	**ug/L**	1.915	368370.086	1.324
Cd	111	**99.952**	**ug/L**	1.017	56934.593	0.205
Cd	114		**ug/L**		159404.241	0.573
>In	115		**ug/L**		278249.626	278249.626
Sn	120	**99.997**	**ug/L**	5.788	269141.108	0.966
Sb	121	**99.975**	**ug/L**	1.032	170164.255	0.611
Sb	123		**ug/L**		143782.869	0.517
Ba	135		**ug/L**		56458.690	0.059
Ba	137	**99.947**	**ug/L**	2.585	98479.074	0.103
>Lu	175		**ug/L**		951696.640	951696.640
Tl	205	**99.979**	**ug/L**	0.310	1736121.054	1.824
Pb	208	**99.945**	**ug/L**	1.124	2211317.516	2.323
Th	232	**100.101**	**ug/L**	0.848	2579540.988	2.704
U	238	**100.051**	**ug/L**	0.762	2882011.437	3.028

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	0.9999
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	44	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9997
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	44					
| >	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
| >	Ge	74					
|	As	75					
|	Se	77					
|	Se	78					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
| >	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
| >	Lu	175					
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #12 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Tuesday, December 20, 2022 01:45:17
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221219\QC Std 1.095
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**49.608**	**ug/L**	3.111	33731.796	0.063
Be	9	**51.976**	**ug/L**	1.641	15259.148	0.028
B	11	**105.006**	**ug/L**	1.788	21010.444	0.038
Na	23	**5103.532**	**ug/L**	3.074	7759376.418	14.395
Mg	24	**5096.715**	**ug/L**	1.190	3302275.454	6.133
Al	27	**4938.310**	**ug/L**	2.318	1676840.545	3.112
P	31	**5144.439**	**ug/L**	1.552	127715.060	0.237
K	39	**4883.750**	**ug/L**	6.511	2058716.988	3.801
Ca	44	**5100.515**	**ug/L**	3.097	85201.431	0.158
>Sc	45		**ug/L**		538380.175	538380.175
Ti	47	**50.522**	**ug/L**	7.298	4111.261	0.008
V	51	**50.428**	**ug/L**	6.034	114032.692	0.203
Cr	52	**49.708**	**ug/L**	3.363	132820.548	0.246
Cr	53		**ug/L**		17739.014	0.030
Mn	55	**50.232**	**ug/L**	3.853	72403.964	0.134
Fe	57	**5188.694**	**ug/L**	0.858	246932.259	0.458
Co	59	**51.841**	**ug/L**	1.374	209599.860	0.389
Ni	60	**53.024**	**ug/L**	1.706	57969.410	0.108
Cu	63		**ug/L**		145876.510	0.271
Cu	65	**53.251**	**ug/L**	2.702	70469.491	0.131
Zn	66	**49.663**	**ug/L**	1.372	17048.170	0.080
Zn	67		**ug/L**		2827.613	0.013
Zn	68		**ug/L**		12512.146	0.059
>Ge	74		**ug/L**		210461.419	210461.419
As	75	**49.693**	**ug/L**	1.676	9675.053	0.045
Se	77		**ug/L**		450.674	0.002
Se	78	**50.832**	**ug/L**	2.112	1384.672	0.006
Se	82		**ug/L**		732.685	0.003
Kr	83		**ug/L**		10.800	0.000
Sr	88	**50.989**	**ug/L**	3.171	89595.664	0.317
Zr	90	**51.055**	**ug/L**	1.778	112360.201	0.398
Mo	98	**52.009**	**ug/L**	1.719	77891.608	0.276
Ag	107	**50.893**	**ug/L**	0.481	190297.174	0.674
Cd	111	**50.156**	**ug/L**	3.614	28978.713	0.103
Cd	114		**ug/L**		81902.682	0.290
>In	115		**ug/L**		282185.491	282185.491
Sn	120	**51.983**	**ug/L**	3.109	142213.904	0.502
Sb	121	**51.056**	**ug/L**	2.547	88212.337	0.312
Sb	123		**ug/L**		72154.353	0.255
Ba	135		**ug/L**		28925.939	0.030
Ba	137	**52.217**	**ug/L**	2.805	51450.546	0.054
>Lu	175		**ug/L**		951295.736	951295.736
Tl	205	**50.789**	**ug/L**	1.040	881665.566	0.927
Pb	208	**51.529**	**ug/L**	1.470	1139728.769	1.198
Th	232	**48.366**	**ug/L**	2.080	1249019.669	1.306
U	238	**47.427**	**ug/L**	2.903	1365548.330	1.435

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	0.9999
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	44	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9997
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Li	7	99.216				
	Be	9	103.953				
	B	11	105.006				
	Na	23	102.071				
	Mg	24	101.934				
	Al	27	97.788				
	P	31	102.889				
	K	39	97.675				
	Ca	44	102.010				
>	Sc	45		101.94			
	Ti	47	101.044				
	V	51	100.856				
	Cr	52	99.416				
	Cr	53					
	Mn	55	100.464				
	Fe	57	103.774				
	Co	59	103.681				
	Ni	60	106.049				
	Cu	63					
	Cu	65	106.502				
	Zn	66	99.327				
	Zn	67					
	Zn	68					
>	Ge	74		99.70			
	As	75	99.386				
	Se	77					
	Se	78	101.664				
	Se	82					
	Kr	83					
	Sr	88	101.979				
	Zr	90	102.110				
	Mo	98	104.019				
	Ag	107	101.785				
	Cd	111	100.313				
	Cd	114					
>	In	115		99.58			
	Sn	120	103.967				
	Sb	121	102.113				
	Sb	123					
	Ba	135					
	Ba	137	104.435				
>	Lu	175		102.02			
	Tl	205	101.577				
	Pb	208	103.059				
	Th	232	96.732				
	U	238	94.853				

QC Out of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #12 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Tuesday, December 20, 2022 01:48:38
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221219\QC Std 2.096
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**0.011**	**ug/L**	71.989	14.667	0.000
Be	9	**0.005**	**ug/L**	146.275	3.667	0.000
B	11	**3.008**	**ug/L**	6.468	1282.391	0.001
Na	23	**-1.586**	**ug/L**	12.564	8213.696	-0.004
Mg	24	**-0.169**	**ug/L**	6.264	282.003	-0.000
Al	27	**0.105**	**ug/L**	84.215	1038.038	0.000
P	31	**0.645**	**ug/L**	230.629	380.005	0.000
K	39	**1.260**	**ug/L**	49.677	12400.048	0.001
Ca	44	**-0.030**	**ug/L**	5354.605	122.001	-0.000
>Sc	45		**ug/L**		508163.143	508163.143
Ti	47	**0.054**	**ug/L**	28.216	8.667	0.000
V	51	**0.347**	**ug/L**	40.776	5038.890	0.001
Cr	52	**0.004**	**ug/L**	68.549	360.671	0.000
Cr	53		**ug/L**		1822.783	0.000
Mn	55	**0.011**	**ug/L**	31.487	71.334	0.000
Fe	57	**0.959**	**ug/L**	40.573	154.001	0.000
Co	59	**0.002**	**ug/L**	102.489	21.333	0.000
Ni	60	**-0.004**	**ug/L**	210.607	50.667	-0.000
Cu	63		**ug/L**		86.667	-0.000
Cu	65	**0.004**	**ug/L**	204.088	52.000	0.000
Zn	66	**-0.008**	**ug/L**	1048.987	164.668	-0.000
Zn	67		**ug/L**		30.667	0.000
Zn	68		**ug/L**		115.334	-0.000
>Ge	74		**ug/L**		210712.502	210712.502
As	75	**-0.101**	**ug/L**	28.840	190.668	-0.000
Se	77		**ug/L**		79.334	0.000
Se	78	**-0.163**	**ug/L**	152.267	60.843	-0.000
Se	82		**ug/L**		16.000	-0.000
Kr	83		**ug/L**		7.333	0.000
Sr	88	**0.006**	**ug/L**	34.404	64.000	0.000
Zr	90	**0.053**	**ug/L**	12.442	267.336	0.000
Mo	98	**-0.007**	**ug/L**	123.772	61.644	-0.000
Ag	107	**-0.002**	**ug/L**	152.171	24.000	-0.000
Cd	111	**0.002**	**ug/L**	527.462	13.333	0.000
Cd	114		**ug/L**		14.604	-0.000
>In	115		**ug/L**		272449.318	272449.318
Sn	120	**0.058**	**ug/L**	18.492	599.936	0.001
Sb	121	**0.066**	**ug/L**	29.712	233.335	0.000
Sb	123		**ug/L**		151.912	0.000
Ba	135		**ug/L**		20.667	-0.000
Ba	137	**0.006**	**ug/L**	215.631	41.333	0.000
>Lu	175		**ug/L**		901879.117	901879.117
Tl	205	**0.015**	**ug/L**	35.649	491.342	0.000
Pb	208	**0.002**	**ug/L**	65.975	334.002	0.000
Th	232	**0.237**	**ug/L**	16.791	11725.502	0.006
U	238	**0.009**	**ug/L**	29.347	367.338	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	0.9999
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	44	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9997
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	44					
>	Sc	45		96.22			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
>	Ge	74		99.82			
|	As	75					
|	Se	77					
|	Se	78					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115		96.14			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
>	Lu	175		96.72			
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #12 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Tuesday, December 20, 2022 01:51:59
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221219\QC Std 3.097
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**11.132**	**ug/L**	4.949	7209.155	0.014
Be	9	**0.554**	**ug/L**	4.921	157.001	0.000
B	11	**18.386**	**ug/L**	5.886	4110.925	0.007
Na	23	**263.239**	**ug/L**	3.444	390883.246	0.742
Mg	24	**30.648**	**ug/L**	6.632	19275.021	0.037
Al	27	**58.061**	**ug/L**	3.131	19758.329	0.037
P	31	**53.633**	**ug/L**	6.572	1630.760	0.002
K	39	**304.124**	**ug/L**	1.274	133254.075	0.237
Ca	44	**247.942**	**ug/L**	4.570	4059.244	0.008
>Sc	45		**ug/L**		512314.041	512314.041
Ti	47	**10.274**	**ug/L**	4.259	798.689	0.002
V	51	**22.094**	**ug/L**	3.227	50012.113	0.089
Cr	52	**10.592**	**ug/L**	6.718	27195.919	0.052
Cr	53		**ug/L**		5034.887	0.007
Mn	55	**5.355**	**ug/L**	1.955	7395.248	0.014
Fe	57	**115.490**	**ug/L**	3.145	5338.331	0.010
Co	59	**1.085**	**ug/L**	4.509	4188.614	0.008
Ni	60	**2.165**	**ug/L**	4.251	2304.853	0.004
Cu	63		**ug/L**		6420.111	0.012
Cu	65	**2.294**	**ug/L**	2.843	2934.301	0.006
Zn	66	**20.897**	**ug/L**	1.296	7125.777	0.034
Zn	67		**ug/L**		1130.711	0.005
Zn	68		**ug/L**		4982.870	0.024
>Ge	74		**ug/L**		206327.617	206327.617
As	75	**5.025**	**ug/L**	5.399	1143.379	0.005
Se	77		**ug/L**		117.334	0.000
Se	78	**5.124**	**ug/L**	9.301	194.036	0.001
Se	82		**ug/L**		98.000	0.000
Kr	83		**ug/L**		7.600	0.000
Sr	88	**10.261**	**ug/L**	2.891	17630.876	0.064
Zr	90	**10.075**	**ug/L**	1.559	21760.566	0.078
Mo	98	**1.030**	**ug/L**	4.332	1575.292	0.005
Ag	107	**1.096**	**ug/L**	2.449	4028.568	0.015
Cd	111	**1.062**	**ug/L**	10.321	610.680	0.002
Cd	114		**ug/L**		1568.184	0.006
>In	115		**ug/L**		275322.259	275322.259
Sn	120	**5.372**	**ug/L**	0.740	14747.523	0.052
Sb	121	**3.159**	**ug/L**	2.012	5441.036	0.019
Sb	123		**ug/L**		4369.163	0.016
Ba	135		**ug/L**		2336.858	0.003
Ba	137	**4.376**	**ug/L**	0.765	4151.270	0.005
>Lu	175		**ug/L**		908752.787	908752.787
Tl	205	**2.096**	**ug/L**	2.027	34990.807	0.038
Pb	208	**2.206**	**ug/L**	1.592	46888.340	0.051
Th	232	**2.053**	**ug/L**	3.193	56371.061	0.055
U	238	**0.228**	**ug/L**	2.502	6395.432	0.007

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	0.9999
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	44	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9997
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈	Li	7	111.319				
|	Be	9	110.794				
|	B	11	122.573				
|	Na	23	105.295				
|	Mg	24	102.160				
|	Al	27	116.122				
|	P	31	107.267				
|	K	39	101.375				
|	Ca	44	123.971				
| >	Sc	45		97.00			
|	Ti	47	102.738				
|	V	51	110.470				
|	Cr	52	105.924				
|	Cr	53					
|	Mn	55	107.105				
|	Fe	57	115.490				
|	Co	59	108.547				
|	Ni	60	108.262				
|	Cu	63					
⌊	Cu	65	114.704				
⌈	Zn	66	104.485				
|	Zn	67					
|	Zn	68					
| >	Ge	74		97.74			
|	As	75	100.501				
|	Se	77					
|	Se	78	102.476				
|	Se	82					
⌊	Kr	83					
⌈	Sr	88	102.610				
|	Zr	90	100.746				
|	Mo	98	102.958				
|	Ag	107	109.559				
|	Cd	111	106.239				
|	Cd	114					
| >	In	115		97.15			
|	Sn	120	107.446				
|	Sb	121	105.298				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	109.399				
| >	Lu	175		97.46			
|	Tl	205	104.784				
|	Pb	208	110.301				
|	Th	232	102.629				
⌊	U	238	114.110				

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #12 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Tuesday, December 20, 2022 01:55:19
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221219\QC Std 4.098
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**0.180**	**ug/L**	6.354	105.334	0.000
Be	9	**0.009**	**ug/L**	221.242	4.000	0.000
B	11	**4.579**	**ug/L**	5.014	1341.063	0.002
Na	23	**103445.224**	**ug/L**	1.846	126786004.454	291.770
Mg	24	**96751.581**	**ug/L**	2.331	50588708.245	116.427
Al	27	**104025.855**	**ug/L**	1.690	28485304.947	65.558
P	31	**94753.454**	**ug/L**	0.286	1893126.383	4.356
K	39	**104541.977**	**ug/L**	2.294	35352965.328	81.356
Ca	44	**102869.479**	**ug/L**	1.660	1385159.276	3.187
>Sc	45		**ug/L**		434496.915	434496.915
Ti	47	**2099.729**	**ug/L**	1.112	137693.955	0.317
V	51	**-0.312**	**ug/L**	28.162	3156.350	-0.001
Cr	52	**1.735**	**ug/L**	3.772	4029.902	0.009
Cr	53		**ug/L**		1744.107	0.001
Mn	55	**6.170**	**ug/L**	1.762	7218.491	0.016
Fe	57	**112639.404**	**ug/L**	1.936	4323853.434	9.952
Co	59	**0.924**	**ug/L**	1.039	3026.321	0.007
Ni	60	**1.194**	**ug/L**	2.091	1098.709	0.002
Cu	63		**ug/L**		2664.249	0.006
Cu	65	**1.188**	**ug/L**	0.928	1308.727	0.003
Zn	66	**3.392**	**ug/L**	5.450	1022.703	0.005
Zn	67		**ug/L**		146.001	0.001
Zn	68		**ug/L**		736.686	0.004
>Ge	74		**ug/L**		163038.168	163038.168
As	75	**0.421**	**ug/L**	15.507	224.446	0.000
Se	77		**ug/L**		66.000	0.000
Se	78	**0.156**	**ug/L**	160.599	53.587	0.000
Se	82		**ug/L**		19.333	0.000
Kr	83		**ug/L**		9.200	0.000
Sr	88	**1.844**	**ug/L**	5.905	2777.604	0.011
Zr	90	**0.340**	**ug/L**	24.296	767.355	0.003
Mo	98	**2362.999**	**ug/L**	2.275	2981644.934	12.530
Ag	107	**0.023**	**ug/L**	13.735	101.334	0.000
Cd	111	**0.687**	**ug/L**	9.672	345.338	0.001
Cd	114		**ug/L**		696.487	0.003
>In	115		**ug/L**		237990.776	237990.776
Sn	120	**0.090**	**ug/L**	23.931	599.236	0.001
Sb	121	**0.095**	**ug/L**	28.932	244.669	0.001
Sb	123		**ug/L**		236.911	0.001
Ba	135		**ug/L**		973.367	0.001
Ba	137	**2.134**	**ug/L**	6.305	1799.447	0.002
>Lu	175		**ug/L**		800820.116	800820.116
Tl	205	**0.008**	**ug/L**	42.183	333.337	0.000
Pb	208	**0.472**	**ug/L**	2.415	9043.128	0.011
Th	232	**0.295**	**ug/L**	23.578	11652.800	0.008
U	238	**0.023**	**ug/L**	3.888	660.349	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	0.9999
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	44	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9997
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11	222.275				
	Na	23	103.445				
	Mg	24	96.752				
	Al	27	104.026				
	P	31	94.753				
	K	39	104.542				
	Ca	44	102.869				
>	Sc	45		82.27			
	Ti	47	104.986				
	V	51					
	Cr	52					
	Cr	53					
	Mn	55	106.007				
	Fe	57	112.639				
	Co	59	102.662				
	Ni	60	99.480				
	Cu	63					
	Cu	65	115.360				
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		77.23			
	As	75					
	Se	77					
	Se	78					
	Se	82					
	Kr	83					
	Sr	88	111.761				
	Zr	90					
	Mo	98	118.150				
	Ag	107					
	Cd	111	107.299				
	Cd	114					
>	In	115		83.98			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137	112.291				
>	Lu	175		85.88			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #12 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Tuesday, December 20, 2022 01:58:40
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221219\QC Std 5.099
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**22.312**	**ug/L**	2.244	11743.494	0.028
Be	9	**19.154**	**ug/L**	0.943	4351.663	0.010
B	11	**22.518**	**ug/L**	2.292	3958.882	0.008
Na	23	**99837.746**	**ug/L**	0.868	117307579.146	281.595
Mg	24	**96799.915**	**ug/L**	1.399	48520440.632	116.485
Al	27	**100661.326**	**ug/L**	5.113	26423234.574	63.438
P	31	**96064.309**	**ug/L**	1.296	1839996.621	4.417
K	39	**98838.257**	**ug/L**	2.916	32044198.500	76.917
Ca	44	**100547.127**	**ug/L**	1.927	1297829.627	3.115
>Sc	45		**ug/L**		416547.038	416547.038
Ti	47	**2072.299**	**ug/L**	1.972	130256.531	0.313
V	51	**20.238**	**ug/L**	3.782	37545.316	0.082
Cr	52	**21.405**	**ug/L**	2.033	44414.978	0.106
Cr	53		**ug/L**		6402.770	0.012
Mn	55	**25.793**	**ug/L**	2.386	28775.623	0.069
Fe	57	**111508.608**	**ug/L**	0.975	4103682.195	9.852
Co	59	**20.558**	**ug/L**	1.995	64311.111	0.154
Ni	60	**20.300**	**ug/L**	1.578	17199.016	0.041
Cu	63		**ug/L**		43865.925	0.105
Cu	65	**19.721**	**ug/L**	1.557	20215.630	0.048
Zn	66	**20.221**	**ug/L**	1.679	5424.363	0.033
Zn	67		**ug/L**		875.360	0.005
Zn	68		**ug/L**		4010.563	0.024
>Ge	74		**ug/L**		162175.010	162175.010
As	75	**19.777**	**ug/L**	2.981	3064.329	0.018
Se	77		**ug/L**		176.668	0.001
Se	78	**19.417**	**ug/L**	1.354	438.498	0.002
Se	82		**ug/L**		208.668	0.001
Kr	83		**ug/L**		10.133	0.000
Sr	88	**22.538**	**ug/L**	1.206	33236.622	0.140
Zr	90	**20.076**	**ug/L**	1.563	37139.554	0.156
Mo	98	**2255.369**	**ug/L**	1.562	2830312.656	11.959
Ag	107	**18.242**	**ug/L**	1.497	57223.058	0.242
Cd	111	**19.835**	**ug/L**	2.871	9619.239	0.041
Cd	114		**ug/L**		25293.374	0.107
>In	115		**ug/L**		236666.280	236666.280
Sn	120	**20.365**	**ug/L**	3.179	46969.011	0.197
Sb	121	**20.162**	**ug/L**	2.191	29277.980	0.123
Sb	123		**ug/L**		23938.127	0.101
Ba	135		**ug/L**		11137.008	0.014
Ba	137	**23.320**	**ug/L**	4.355	19489.299	0.024
>Lu	175		**ug/L**		806289.662	806289.662
Tl	205	**19.424**	**ug/L**	1.308	285925.168	0.354
Pb	208	**20.041**	**ug/L**	1.515	375857.760	0.466
Th	232	**20.213**	**ug/L**	2.113	445510.126	0.546
U	238	**20.198**	**ug/L**	0.628	492980.150	0.611

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	0.9999
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	44	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9997
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈	Li	7	111.559				
|	Be	9	95.771				
|	B	11	102.074				
|	Na	23	99.838				
|	Mg	24	96.800				
|	Al	27	100.661				
|	P	31	96.064				
|	K	39	98.838				
|	Ca	44	100.547				
| >	Sc	45		78.87			
|	Ti	47	103.615				
|	V	51	101.190				
|	Cr	52	107.024				
|	Cr	53					
|	Mn	55	99.894				
|	Fe	57	111.509				
|	Co	59	98.362				
|	Ni	60	95.757				
|	Cu	63					
⌊	Cu	65	93.776				
⌈	Zn	66	101.105				
|	Zn	67					
|	Zn	68					
| >	Ge	74		76.83			
|	As	75	98.883				
|	Se	77					
|	Se	78	97.084				
|	Se	82					
⌊	Kr	83					
⌈	Sr	88	104.100				
|	Zr	90	100.382				
|	Mo	98	112.768				
|	Ag	107	91.210				
|	Cd	111	96.099				
|	Cd	114					
| >	In	115		83.51			
|	Sn	120	101.823				
|	Sb	121	100.811				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	106.484				
| >	Lu	175		86.47			
|	Tl	205	97.118				
|	Pb	208	100.204				
|	Th	232	101.066				
⌊	U	238	100.988				

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #12 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 20, 2022 02:02:01
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221219\QC Std 6.100
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**53.631**	**ug/L**	8.709	33816.806	0.068
Be	9	**51.994**	**ug/L**	1.657	14158.680	0.028
B	11	**99.081**	**ug/L**	0.511	18431.550	0.035
Na	23	**5326.910**	**ug/L**	5.239	7512566.650	15.025
Mg	24	**5110.627**	**ug/L**	2.640	3071635.006	6.150
Al	27	**5062.071**	**ug/L**	0.657	1594290.616	3.190
P	31	**5141.939**	**ug/L**	1.639	118424.198	0.236
K	39	**4782.085**	**ug/L**	3.585	1870074.546	3.721
Ca	44	**5365.588**	**ug/L**	1.942	83144.607	0.166
>Sc	45		**ug/L**		499458.175	499458.175
Ti	47	**53.567**	**ug/L**	6.386	4040.573	0.008
V	51	**52.195**	**ug/L**	0.314	109386.546	0.210
Cr	52	**51.047**	**ug/L**	2.689	126497.740	0.253
Cr	53		**ug/L**		16578.281	0.030
Mn	55	**54.630**	**ug/L**	0.509	73027.524	0.146
Fe	57	**5459.792**	**ug/L**	1.840	241007.411	0.482
Co	59	**53.502**	**ug/L**	2.625	200661.107	0.402
Ni	60	**54.232**	**ug/L**	2.882	54993.682	0.110
Cu	63		**ug/L**		149134.530	0.298
Cu	65	**55.047**	**ug/L**	0.825	67575.466	0.135
Zn	66	**49.588**	**ug/L**	0.872	16752.485	0.080
Zn	67		**ug/L**		2854.952	0.014
Zn	68		**ug/L**		12047.081	0.058
>Ge	74		**ug/L**		207140.014	207140.014
As	75	**49.034**	**ug/L**	1.915	9399.536	0.044
Se	77		**ug/L**		452.007	0.002
Se	78	**49.785**	**ug/L**	0.762	1335.968	0.006
Se	82		**ug/L**		716.018	0.003
Kr	83		**ug/L**		7.467	0.000
Sr	88	**50.909**	**ug/L**	4.465	88649.238	0.317
Zr	90	**52.007**	**ug/L**	3.601	113439.681	0.405
Mo	98	**52.706**	**ug/L**	1.940	78234.456	0.279
Ag	107	**50.930**	**ug/L**	3.644	188736.999	0.675
Cd	111	**52.479**	**ug/L**	2.900	30054.934	0.107
Cd	114		**ug/L**		81640.649	0.292
>In	115		**ug/L**		279671.700	279671.700
Sn	120	**50.629**	**ug/L**	1.933	137306.796	0.489
Sb	121	**52.837**	**ug/L**	1.661	90463.571	0.323
Sb	123		**ug/L**		72296.404	0.258
Ba	135		**ug/L**		28597.275	0.030
Ba	137	**51.386**	**ug/L**	2.450	51166.823	0.053
>Lu	175		**ug/L**		961604.820	961604.820
Tl	205	**49.157**	**ug/L**	2.108	862415.896	0.897
Pb	208	**50.926**	**ug/L**	1.056	1138540.564	1.184
Th	232	**48.139**	**ug/L**	2.108	1256405.741	1.300
U	238	**47.320**	**ug/L**	1.986	1376961.146	1.432

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	0.9999
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	44	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9997
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈	Li	7	107.262				
|	Be	9	103.987				
|	B	11	99.081				
|	Na	23	106.538				
|	Mg	24	102.213				
|	Al	27	100.239				
|	P	31	102.839				
|	K	39	95.642				
|	Ca	44	107.312				
| >	Sc	45		94.57			
|	Ti	47	107.133				
|	V	51	104.391				
|	Cr	52	102.094				
|	Cr	53					
|	Mn	55	109.261				
|	Fe	57	109.196				
|	Co	59	107.003				
|	Ni	60	108.463				
|	Cu	63					
⌊	Cu	65	110.094				
⌈	Zn	66	99.175				
|	Zn	67					
|	Zn	68					
| >	Ge	74		98.13			
|	As	75	98.067				
|	Se	77					
|	Se	78	99.570				
|	Se	82					
⌊	Kr	83					
⌈	Sr	88	101.817				
|	Zr	90	104.014				
|	Mo	98	105.412				
|	Ag	107	101.860				
|	Cd	111	104.959				
|	Cd	114					
| >	In	115		98.69			
|	Sn	120	101.258				
|	Sb	121	105.673				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	102.773				
| >	Lu	175		103.12			
|	Tl	205	98.314				
|	Pb	208	101.852				
|	Th	232	96.277				
⌊	U	238	94.640				

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Cu	65	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS #12 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 20, 2022 02:05:22
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221219\QC Std 7.101
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**0.025**	**ug/L**	95.938	23.333	0.000
Be	9	**0.011**	**ug/L**	132.430	5.333	0.000
B	11	**1.614**	**ug/L**	20.492	1028.370	0.001
Na	23	**8.157**	**ug/L**	187.502	21995.673	0.023
Mg	24	**9.798**	**ug/L**	158.455	6299.426	0.012
Al	27	**9.420**	**ug/L**	158.609	3981.737	0.006
P	31	**9.870**	**ug/L**	106.964	593.347	0.000
K	39	**9.999**	**ug/L**	161.151	15799.609	0.008
Ca	44	**7.506**	**ug/L**	205.709	238.670	0.000
>Sc	45		**ug/L**		508009.329	508009.329
Ti	47	**0.343**	**ug/L**	45.673	30.667	0.000
V	51	**0.084**	**ug/L**	48.074	4499.375	0.000
Cr	52	**0.033**	**ug/L**	41.385	432.673	0.000
Cr	53		**ug/L**		1656.763	0.000
Mn	55	**0.014**	**ug/L**	84.467	74.667	0.000
Fe	57	**13.125**	**ug/L**	112.384	694.693	0.001
Co	59	**0.005**	**ug/L**	151.164	32.000	0.000
Ni	60	**0.007**	**ug/L**	355.219	62.000	0.000
Cu	63		**ug/L**		106.667	0.000
Cu	65	**-0.001**	**ug/L**	1838.608	46.667	-0.000
Zn	66	**0.020**	**ug/L**	136.178	170.001	0.000
Zn	67		**ug/L**		29.333	0.000
Zn	68		**ug/L**		125.334	-0.000
>Ge	74		**ug/L**		206165.984	206165.984
As	75	**-0.141**	**ug/L**	57.128	178.890	-0.000
Se	77		**ug/L**		58.000	-0.000
Se	78	**-0.097**	**ug/L**	50.588	61.252	-0.000
Se	82		**ug/L**		17.333	0.000
Kr	83		**ug/L**		7.067	0.000
Sr	88	**0.010**	**ug/L**	94.016	72.667	0.000
Zr	90	**0.034**	**ug/L**	59.130	232.002	0.000
Mo	98	**0.341**	**ug/L**	111.557	582.777	0.002
Ag	107	**0.006**	**ug/L**	260.411	54.667	0.000
Cd	111	**0.001**	**ug/L**	712.520	13.333	0.000
Cd	114		**ug/L**		23.154	0.000
>In	115		**ug/L**		278467.658	278467.658
Sn	120	**0.035**	**ug/L**	54.167	551.917	0.000
Sb	121	**0.056**	**ug/L**	36.663	220.668	0.000
Sb	123		**ug/L**		194.412	0.000
Ba	135		**ug/L**		33.333	0.000
Ba	137	**0.016**	**ug/L**	144.116	51.333	0.000
>Lu	175		**ug/L**		924721.652	924721.652
Tl	205	**0.021**	**ug/L**	74.511	599.347	0.000
Pb	208	**0.006**	**ug/L**	216.337	417.336	0.000
Th	232	**0.061**	**ug/L**	18.613	7612.029	0.002
U	238	**0.010**	**ug/L**	109.323	401.674	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	0.9999
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	44	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9997
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	44					
| >	Sc	45		96.19			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
| >	Ge	74		97.67			
|	As	75					
|	Se	77					
|	Se	78					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
| >	In	115		98.26			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
| >	Lu	175		99.17			
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #12 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Tuesday, December 20, 2022 02:08:43
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221219\QC Std 10.102
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**1033.504**	**ug/L**	0.488	591088.297	1.305
Be	9	**955.519**	**ug/L**	1.945	235909.416	0.521
B	11	**0.588**	**ug/L**	7.187	750.686	0.000
Na	23	**51264.681**	**ug/L**	2.671	65489810.850	144.593
Mg	24	**47541.963**	**ug/L**	3.358	25908058.584	57.210
Al	27	**50229.369**	**ug/L**	0.360	14337561.584	31.655
P	31	**24308.943**	**ug/L**	0.924	506491.769	1.118
K	39	**47953.129**	**ug/L**	4.882	16909217.356	37.318
Ca	44	**52086.408**	**ug/L**	2.807	730969.813	1.614
>Sc	45		**ug/L**		452895.938	452895.938
Ti	47	**10.428**	**ug/L**	2.757	716.685	0.002
V	51	**1013.797**	**ug/L**	1.905	1855493.144	4.088
Cr	52	**1053.673**	**ug/L**	1.161	2361792.881	5.214
Cr	53		**ug/L**		259024.739	0.569
Mn	55	**994.020**	**ug/L**	1.307	1203952.758	2.658
Fe	57	**54294.975**	**ug/L**	0.441	2172578.224	4.797
Co	59	**1045.838**	**ug/L**	2.294	3556655.971	7.854
Ni	60	**967.963**	**ug/L**	1.334	889421.719	1.964
Cu	63		**ug/L**		2462178.672	5.437
Cu	65	**969.073**	**ug/L**	0.499	1078017.798	2.380
Zn	66	**2253.840**	**ug/L**	1.765	645952.539	3.640
Zn	67		**ug/L**		101616.127	0.573
Zn	68		**ug/L**		459113.175	2.587
>Ge	74		**ug/L**		177448.712	177448.712
As	75	**991.205**	**ug/L**	2.058	159356.591	0.897
Se	77		**ug/L**		3097.669	0.017
Se	78	**487.755**	**ug/L**	1.112	10729.048	0.060
Se	82		**ug/L**		5575.755	0.031
Kr	83		**ug/L**		10.267	0.000
Sr	88	**972.889**	**ug/L**	2.874	1606257.711	6.054
Zr	90	**495.820**	**ug/L**	1.617	1024826.664	3.862
Mo	98	**1016.346**	**ug/L**	1.690	1430049.674	5.389
Ag	107	**224.195**	**ug/L**	1.341	788152.616	2.970
Cd	111	**917.549**	**ug/L**	3.431	498426.815	1.878
Cd	114		**ug/L**		1348683.531	5.083
>In	115		**ug/L**		265356.194	265356.194
Sn	120	**1017.199**	**ug/L**	0.766	2609102.982	9.831
Sb	121	**237.615**	**ug/L**	3.188	385551.237	1.453
Sb	123		**ug/L**		317400.377	1.196
Ba	135		**ug/L**		525556.339	0.605
Ba	137	**1012.205**	**ug/L**	2.841	909893.450	1.048
>Lu	175		**ug/L**		868699.770	868699.770
Tl	205	**498.658**	**ug/L**	1.148	7902772.405	9.097
Pb	208	**4999.224**	**ug/L**	1.016	100945796.659	116.209
Th	232	**2589.294**	**ug/L**	1.482	60757599.202	69.940
U	238	**5101.750**	**ug/L**	0.436	134131006.385	154.409

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	0.9999
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	44	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9997
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈	Li	7	103.350				
|	Be	9	95.552				
|	B	11					
|	Na	23	102.529				
|	Mg	24	95.084				
|	Al	27	100.459				
|	P	31	97.236				
|	K	39	95.906				
|	Ca	44	104.173				
>	Sc	45		85.75			
|	Ti	47					
|	V	51	101.380				
|	Cr	52	105.367				
|	Cr	53					
|	Mn	55	99.402				
|	Fe	57	108.590				
|	Co	59	104.584				
|	Ni	60	96.796				
|	Cu	63					
⌊	Cu	65	96.907				
⌈	Zn	66	90.154				
|	Zn	67					
|	Zn	68					
>	Ge	74		84.06			
|	As	75	99.120				
|	Se	77					
|	Se	78	97.551				
|	Se	82					
⌊	Kr	83					
⌈	Sr	88	97.289				
|	Zr	90	99.164				
|	Mo	98	101.635				
|	Ag	107	89.678				
|	Cd	111	91.755				
|	Cd	114					
>	In	115		93.64			
|	Sn	120	101.720				
|	Sb	121	95.046				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	101.220				
>	Lu	175		93.16			
|	Tl	205	99.732				
|	Pb	208	99.984				
|	Th	232	103.572				
⌊	U	238	102.035				

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	Ag	107	LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS #12 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Tuesday, December 20, 2022 02:12:04
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221219\QC Std 11.103
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**51.690**	**ug/L**	2.687	34035.847	0.065
Be	9	**50.913**	**ug/L**	2.846	14472.999	0.028
B	11	**99.571**	**ug/L**	1.733	19329.737	0.036
Na	23	**5112.515**	**ug/L**	1.549	7528266.610	14.420
Mg	24	**5054.227**	**ug/L**	2.251	3170961.157	6.082
Al	27	**5020.383**	**ug/L**	2.574	1650423.862	3.164
P	31	**5053.699**	**ug/L**	2.256	121504.738	0.232
K	39	**4961.671**	**ug/L**	6.383	2025056.915	3.861
Ca	44	**5180.234**	**ug/L**	4.003	83800.001	0.161
>Sc	45		**ug/L**		521314.492	521314.492
Ti	47	**50.926**	**ug/L**	3.478	4011.230	0.008
V	51	**51.074**	**ug/L**	0.680	111815.231	0.206
Cr	52	**50.976**	**ug/L**	3.333	131873.712	0.252
Cr	53		**ug/L**		16996.790	0.029
Mn	55	**52.274**	**ug/L**	4.602	72943.370	0.140
Fe	57	**5265.385**	**ug/L**	4.558	242614.736	0.465
Co	59	**51.672**	**ug/L**	2.015	202314.305	0.388
Ni	60	**54.032**	**ug/L**	1.139	57196.949	0.110
Cu	63		**ug/L**		147753.927	0.283
Cu	65	**53.916**	**ug/L**	0.794	69083.976	0.132
Zn	66	**48.509**	**ug/L**	5.914	16602.323	0.078
Zn	67		**ug/L**		2808.276	0.013
Zn	68		**ug/L**		12498.136	0.059
>Ge	74		**ug/L**		209894.879	209894.879
As	75	**48.558**	**ug/L**	3.645	9432.003	0.044
Se	77		**ug/L**		456.007	0.002
Se	78	**50.797**	**ug/L**	3.014	1379.690	0.006
Se	82		**ug/L**		682.683	0.003
Kr	83		**ug/L**		8.000	0.000
Sr	88	**48.722**	**ug/L**	1.658	86698.291	0.303
Zr	90	**53.093**	**ug/L**	1.834	118395.776	0.414
Mo	98	**51.950**	**ug/L**	2.803	78786.158	0.275
Ag	107	**51.926**	**ug/L**	2.872	196605.088	0.688
Cd	111	**50.467**	**ug/L**	2.746	29537.856	0.103
Cd	114		**ug/L**		82651.074	0.289
>In	115		**ug/L**		285853.487	285853.487
Sn	120	**50.727**	**ug/L**	3.125	140590.751	0.490
Sb	121	**50.320**	**ug/L**	1.736	88049.884	0.308
Sb	123		**ug/L**		72478.210	0.253
Ba	135		**ug/L**		28723.516	0.030
Ba	137	**51.739**	**ug/L**	5.679	51432.579	0.054
>Lu	175		**ug/L**		960033.672	960033.672
Tl	205	**49.922**	**ug/L**	2.622	874536.136	0.911
Pb	208	**51.416**	**ug/L**	1.136	1147668.968	1.195
Th	232	**53.073**	**ug/L**	5.802	1382289.643	1.434
U	238	**47.416**	**ug/L**	1.611	1377779.556	1.435

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	0.9999
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	44	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9997
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈	Li	7	103.380				
|	Be	9	101.826				
|	B	11	99.571				
|	Na	23	102.250				
|	Mg	24	101.085				
|	Al	27	99.414				
|	P	31	101.074				
|	K	39	99.233				
|	Ca	44	103.605				
| >	Sc	45		98.71			
|	Ti	47	101.852				
|	V	51	102.147				
|	Cr	52	101.952				
|	Cr	53					
|	Mn	55	104.548				
|	Fe	57	105.308				
|	Co	59	103.344				
|	Ni	60	108.065				
|	Cu	63					
⌊	Cu	65	107.832				
⌈	Zn	66	97.018				
|	Zn	67					
|	Zn	68					
| >	Ge	74		99.43			
|	As	75	97.117				
|	Se	77					
|	Se	78	101.595				
|	Se	82					
⌊	Kr	83					
⌈	Sr	88	97.445				
|	Zr	90	106.187				
|	Mo	98	103.901				
|	Ag	107	103.852				
|	Cd	111	100.935				
|	Cd	114					
| >	In	115		100.87			
|	Sn	120	101.454				
|	Sb	121	100.641				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	103.477				
| >	Lu	175		102.96			
|	Tl	205	99.844				
|	Pb	208	102.832				
|	Th	232	106.146				
⌊	U	238	94.832				

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #12 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Tuesday, December 20, 2022 02:15:25
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221219\QC Std 12.104
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**0.068**	**ug/L**	13.106	51.333	0.000
Be	9	**-0.001**	**ug/L**	919.768	2.000	-0.000
B	11	**1.282**	**ug/L**	20.526	969.033	0.000
Na	23	**-1.374**	**ug/L**	16.235	8509.868	-0.004
Mg	24	**0.102**	**ug/L**	50.157	447.340	0.000
Al	27	**0.180**	**ug/L**	66.791	1061.373	0.000
P	31	**-1.429**	**ug/L**	119.419	332.004	-0.000
K	39	**1.294**	**ug/L**	71.946	12405.385	0.001
Ca	44	**-1.088**	**ug/L**	235.832	105.334	-0.000
>Sc	45		**ug/L**		508048.649	508048.649
Ti	47	**0.107**	**ug/L**	37.842	12.667	0.000
V	51	**-0.095**	**ug/L**	66.178	4133.932	-0.000
Cr	52	**0.037**	**ug/L**	32.290	442.007	0.000
Cr	53		**ug/L**		1518.748	-0.000
Mn	55	**0.008**	**ug/L**	75.996	66.667	0.000
Fe	57	**3.694**	**ug/L**	3.509	276.669	0.000
Co	59	**0.005**	**ug/L**	64.474	33.333	0.000
Ni	60	**-0.001**	**ug/L**	768.175	54.000	-0.000
Cu	63		**ug/L**		110.667	0.000
Cu	65	**0.010**	**ug/L**	96.610	59.333	0.000
Zn	66	**0.013**	**ug/L**	219.440	168.668	0.000
Zn	67		**ug/L**		34.000	0.000
Zn	68		**ug/L**		133.334	-0.000
>Ge	74		**ug/L**		207309.808	207309.808
As	75	**-0.165**	**ug/L**	38.225	175.557	-0.000
Se	77		**ug/L**		70.000	-0.000
Se	78	**-0.055**	**ug/L**	88.545	62.686	-0.000
Se	82		**ug/L**		12.667	-0.000
Kr	83		**ug/L**		8.133	0.000
Sr	88	**0.007**	**ug/L**	24.165	67.333	0.000
Zr	90	**0.081**	**ug/L**	11.498	330.004	0.001
Mo	98	**0.055**	**ug/L**	31.484	153.124	0.000
Ag	107	**0.001**	**ug/L**	486.330	34.000	0.000
Cd	111	**-0.006**	**ug/L**	66.337	8.667	-0.000
Cd	114		**ug/L**		22.623	0.000
>In	115		**ug/L**		275992.692	275992.692
Sn	120	**0.279**	**ug/L**	9.121	1197.290	0.003
Sb	121	**0.142**	**ug/L**	17.650	364.005	0.001
Sb	123		**ug/L**		288.413	0.001
Ba	135		**ug/L**		25.333	-0.000
Ba	137	**0.012**	**ug/L**	165.229	46.667	0.000
>Lu	175		**ug/L**		907625.676	907625.676
Tl	205	**0.022**	**ug/L**	29.144	606.680	0.000
Pb	208	**0.035**	**ug/L**	5.088	1038.016	0.001
Th	232	**0.692**	**ug/L**	1.850	22953.097	0.019
U	238	**0.092**	**ug/L**	13.225	2656.583	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	0.9999
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	44	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9997
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	44					
| >	Sc	45		96.19			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
| >	Ge	74		98.21			
|	As	75					
|	Se	77					
|	Se	78					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
| >	In	115		97.39			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
| >	Lu	175		97.33			
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #12 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, December 20, 2022 02:38:48
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221219\QC Std 8.111
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**54.881**	**ug/L**	4.709	35071.688	0.069
Be	9	**55.781**	**ug/L**	0.970	15395.625	0.030
B	11	**133.000**	**ug/L**	2.561	24831.250	0.048
Na	23	**5085.118**	**ug/L**	2.498	7271685.503	14.343
Mg	24	**5264.845**	**ug/L**	4.570	3206119.066	6.335
Al	27	**5046.182**	**ug/L**	1.294	1610670.365	3.180
P	31	**5152.442**	**ug/L**	6.709	120182.154	0.237
K	39	**4806.962**	**ug/L**	2.971	1905001.023	3.741
Ca	44	**4928.236**	**ug/L**	3.960	77420.147	0.153
>Sc	45		**ug/L**		506235.903	506235.903
Ti	47	**50.393**	**ug/L**	4.876	3854.521	0.008
V	51	**50.573**	**ug/L**	2.726	107532.611	0.204
Cr	52	**50.840**	**ug/L**	1.297	127694.205	0.252
Cr	53		**ug/L**		16524.888	0.029
Mn	55	**51.033**	**ug/L**	2.564	69126.179	0.136
Fe	57	**5314.021**	**ug/L**	3.106	237691.965	0.469
Co	59	**51.930**	**ug/L**	1.556	197397.121	0.390
Ni	60	**52.253**	**ug/L**	1.823	53717.527	0.106
Cu	63		**ug/L**		142517.063	0.281
Cu	65	**54.921**	**ug/L**	1.140	68338.466	0.135
Zn	66	**49.978**	**ug/L**	2.450	16478.834	0.081
Zn	67		**ug/L**		2617.573	0.013
Zn	68		**ug/L**		12291.957	0.060
>Ge	74		**ug/L**		202224.513	202224.513
As	75	**49.132**	**ug/L**	3.335	9191.401	0.044
Se	77		**ug/L**		431.340	0.002
Se	78	**50.812**	**ug/L**	1.032	1329.758	0.006
Se	82		**ug/L**		695.350	0.003
Kr	83		**ug/L**		5.600	-0.000
Sr	88	**48.030**	**ug/L**	2.413	83724.689	0.299
Zr	90	**52.149**	**ug/L**	3.251	113853.375	0.406
Mo	98	**51.152**	**ug/L**	1.065	76020.996	0.271
Ag	107	**48.934**	**ug/L**	2.544	181519.491	0.648
Cd	111	**52.183**	**ug/L**	1.669	29915.959	0.107
Cd	114		**ug/L**		79093.424	0.282
>In	115		**ug/L**		279992.122	279992.122
Sn	120	**50.345**	**ug/L**	3.748	136667.601	0.487
Sb	121	**49.923**	**ug/L**	1.198	85587.701	0.305
Sb	123		**ug/L**		70577.753	0.252
Ba	135		**ug/L**		27968.696	0.029
Ba	137	**51.528**	**ug/L**	2.814	50896.515	0.053
>Lu	175		**ug/L**		953954.607	953954.607
Tl	205	**49.180**	**ug/L**	2.530	855954.827	0.897
Pb	208	**50.906**	**ug/L**	1.421	1129014.119	1.183
Th	232	**48.070**	**ug/L**	4.237	1244412.802	1.298
U	238	**47.403**	**ug/L**	2.089	1368481.322	1.435

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	0.9999
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	44	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9997
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Li	7	109.762				
	Be	9	111.561				
	B	11	133.000				
	Na	23	101.702				
	Mg	24	105.297				
	Al	27	99.924				
	P	31	103.049				
	K	39	96.139				
	Ca	44	98.565				
>	Sc	45		95.85			
	Ti	47	100.786				
	V	51	101.146				
	Cr	52	101.680				
	Cr	53					
	Mn	55	102.066				
	Fe	57	106.280				
	Co	59	103.859				
	Ni	60	104.506				
	Cu	63					
	Cu	65	109.842				
	Zn	66	99.956				
	Zn	67					
	Zn	68					
>	Ge	74		95.80			
	As	75	98.264				
	Se	77					
	Se	78	101.623				
	Se	82					
	Kr	83					
	Sr	88	96.059				
	Zr	90	104.299				
	Mo	98	102.303				
	Ag	107	97.868				
	Cd	111	104.367				
	Cd	114					
>	In	115		98.80			
	Sn	120	100.691				
	Sb	121	99.847				
	Sb	123					
	Ba	135					
	Ba	137	103.057				
>	Lu	175		102.30			
	Tl	205	98.361				
	Pb	208	101.811				
	Th	232	96.139				
	U	238	94.805				

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Be	9	
QC Std 8	B	11	

QC Action

QC Action Line: Continue

ICPMS #12 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, December 20, 2022 02:42:08
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221219\QC Std 9.112
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**0.034**	**ug/L**	5.404	28.667	0.000
Be	9	**0.008**	**ug/L**	55.263	4.333	0.000
B	11	**24.567**	**ug/L**	4.055	5058.897	0.009
Na	23	**-1.861**	**ug/L**	15.493	7597.354	-0.005
Mg	24	**-0.091**	**ug/L**	34.660	320.670	-0.000
Al	27	**-1.969**	**ug/L**	3.463	364.005	-0.001
P	31	**-1.491**	**ug/L**	64.810	320.670	-0.000
K	39	**0.161**	**ug/L**	905.034	11625.397	0.000
Ca	44	**-1.949**	**ug/L**	28.365	89.334	-0.000
>Sc	45		**ug/L**		494150.171	494150.171
Ti	47	**0.031**	**ug/L**	131.180	6.667	0.000
V	51	**-0.371**	**ug/L**	14.106	3468.421	-0.001
Cr	52	**-0.048**	**ug/L**	14.407	223.335	-0.000
Cr	53		**ug/L**		1232.053	-0.001
Mn	55	**0.001**	**ug/L**	2305.204	55.333	0.000
Fe	57	**0.380**	**ug/L**	60.514	124.667	0.000
Co	59	**0.003**	**ug/L**	53.320	24.667	0.000
Ni	60	**-0.018**	**ug/L**	21.129	35.333	-0.000
Cu	63		**ug/L**		85.334	-0.000
Cu	65	**0.005**	**ug/L**	56.700	52.000	0.000
Zn	66	**-0.060**	**ug/L**	79.963	142.667	-0.000
Zn	67		**ug/L**		27.333	-0.000
Zn	68		**ug/L**		94.000	-0.000
>Ge	74		**ug/L**		204931.109	204931.109
As	75	**-0.207**	**ug/L**	15.511	165.779	-0.000
Se	77		**ug/L**		67.333	-0.000
Se	78	**-0.242**	**ug/L**	45.887	57.264	-0.000
Se	82		**ug/L**		12.000	-0.000
Kr	83		**ug/L**		6.667	0.000
Sr	88	**0.003**	**ug/L**	122.469	60.667	0.000
Zr	90	**0.025**	**ug/L**	45.490	209.335	0.000
Mo	98	**0.004**	**ug/L**	406.846	78.237	0.000
Ag	107	**-0.003**	**ug/L**	34.262	22.000	-0.000
Cd	111	**0.004**	**ug/L**	265.803	14.667	0.000
Cd	114		**ug/L**		18.215	-0.000
>In	115		**ug/L**		274868.166	274868.166
Sn	120	**0.056**	**ug/L**	52.594	601.894	0.001
Sb	121	**0.083**	**ug/L**	24.342	262.002	0.001
Sb	123		**ug/L**		234.160	0.001
Ba	135		**ug/L**		26.667	-0.000
Ba	137	**0.014**	**ug/L**	130.590	50.000	0.000
>Lu	175		**ug/L**		929576.162	929576.162
Tl	205	**0.014**	**ug/L**	41.814	484.008	0.000
Pb	208	**0.006**	**ug/L**	12.995	426.003	0.000
Th	232	**0.171**	**ug/L**	22.658	10411.811	0.005
U	238	**0.010**	**ug/L**	19.633	410.673	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	0.9999
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	44	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9997
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	44					
>	Sc	45		93.56			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
>	Ge	74		97.08			
|	As	75					
|	Se	77					
|	Se	78					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115		96.99			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
>	Lu	175		99.69			
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 9	B	11	

QC Action

QC Action Line: Continue

ICPMS #12 - Summary Report

Sample ID: 1205274079
Sample Date/Time: Tuesday, December 20, 2022 02:45:30
Sample Type: Sample
Sample Description: QC A 2008 MB
Number of Replicates: 3
Batch ID: 2357703|1|baj
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221219\1205274079.113
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**0.042**	**ug/L**	19.533	34.667	0.000
Be	9	**0.003**	**ug/L**	234.047	3.000	0.000
B	11	**19.941**	**ug/L**	2.170	4392.676	0.007
Na	23	**3.231**	**ug/L**	3.858	15219.437	0.009
Mg	24	**0.515**	**ug/L**	5.601	705.351	0.001
Al	27	**2.989**	**ug/L**	7.407	1976.137	0.002
P	31	**-2.332**	**ug/L**	6.684	312.670	-0.000
K	39	**0.968**	**ug/L**	100.227	12366.019	0.001
Ca	44	**3.347**	**ug/L**	41.518	176.668	0.000
>Sc	45		**ug/L**		511668.295	511668.295
Ti	47	**0.044**	**ug/L**	152.544	8.000	0.000
V	51	**-0.357**	**ug/L**	28.383	3620.459	-0.001
Cr	52	**0.011**	**ug/L**	76.596	378.672	0.000
Cr	53		**ug/L**		1296.059	-0.001
Mn	55	**0.046**	**ug/L**	16.246	119.334	0.000
Fe	57	**1.052**	**ug/L**	17.461	159.334	0.000
Co	59	**0.005**	**ug/L**	56.839	32.667	0.000
Ni	60	**0.018**	**ug/L**	9.259	73.334	0.000
Cu	63		**ug/L**		184.001	0.000
Cu	65	**0.020**	**ug/L**	15.230	73.334	0.000
Zn	66	**1.972**	**ug/L**	15.249	812.023	0.003
Zn	67		**ug/L**		116.000	0.000
Zn	68		**ug/L**		582.012	0.002
>Ge	74		**ug/L**		204366.387	204366.387
As	75	**-0.171**	**ug/L**	48.786	172.001	-0.000
Se	77		**ug/L**		76.000	0.000
Se	78	**-0.092**	**ug/L**	279.616	60.823	-0.000
Se	82		**ug/L**		10.667	-0.000
Kr	83		**ug/L**		8.000	0.000
Sr	88	**0.005**	**ug/L**	73.914	66.667	0.000
Zr	90	**0.005**	**ug/L**	55.252	174.668	0.000
Mo	98	**-0.016**	**ug/L**	51.169	51.571	-0.000
Ag	107	**-0.000**	**ug/L**	2432.319	32.667	-0.000
Cd	111	**-0.003**	**ug/L**	433.655	11.333	-0.000
Cd	114		**ug/L**		19.367	0.000
>In	115		**ug/L**		286345.675	286345.675
Sn	120	**0.060**	**ug/L**	18.575	636.579	0.001
Sb	121	**0.035**	**ug/L**	27.439	190.668	0.000
Sb	123		**ug/L**		176.994	0.000
Ba	135		**ug/L**		41.333	0.000
Ba	137	**0.040**	**ug/L**	31.638	76.000	0.000
>Lu	175		**ug/L**		945998.009	945998.009
Tl	205	**0.002**	**ug/L**	28.290	292.003	0.000
Pb	208	**0.008**	**ug/L**	37.374	468.670	0.000
Th	232	**0.026**	**ug/L**	16.220	6901.000	0.001
U	238	**0.006**	**ug/L**	9.000	291.670	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	0.9999
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	44	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9997
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	44					
>	Sc	45		96.88			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
>	Ge	74		96.81			
|	As	75					
|	Se	77					
|	Se	78					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115		101.04			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
>	Lu	175		101.45			
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #12 - Summary Report

Sample ID: 1205274080
Sample Date/Time: Tuesday, December 20, 2022 02:48:50
Sample Type: Sample
Sample Description: QC A 2008 LCS
Number of Replicates: 3
Batch ID: 2357703|1|baj
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221219\1205274080.114
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**58.512**	**ug/L**	4.219	37738.466	0.074
Be	9	**61.682**	**ug/L**	1.342	17180.993	0.034
B	11	**133.120**	**ug/L**	3.290	25065.972	0.048
Na	23	**2247.706**	**ug/L**	4.604	3247336.483	6.340
Mg	24	**2206.864**	**ug/L**	5.260	1356061.548	2.656
Al	27	**2186.645**	**ug/L**	4.051	704616.763	1.378
P	31	**2219.971**	**ug/L**	1.846	52511.041	0.102
K	39	**2061.574**	**ug/L**	7.545	830690.581	1.604
Ca	44	**2371.535**	**ug/L**	3.807	37642.198	0.073
>Sc	45		**ug/L**		510968.416	510968.416
Ti	47	**52.929**	**ug/L**	7.919	4079.917	0.008
V	51	**55.704**	**ug/L**	4.747	119043.442	0.225
Cr	52	**55.077**	**ug/L**	3.040	139555.126	0.273
Cr	53		**ug/L**		17881.852	0.032
Mn	55	**56.711**	**ug/L**	2.531	77517.749	0.152
Fe	57	**2335.388**	**ug/L**	6.899	105414.664	0.206
Co	59	**58.169**	**ug/L**	3.452	223092.676	0.437
Ni	60	**57.028**	**ug/L**	2.723	59143.532	0.116
Cu	63		**ug/L**		159244.532	0.312
Cu	65	**59.538**	**ug/L**	2.013	74763.246	0.146
Zn	66	**53.797**	**ug/L**	2.818	18095.454	0.087
Zn	67		**ug/L**		3003.649	0.014
Zn	68		**ug/L**		13376.929	0.064
>Ge	74		**ug/L**		206475.837	206475.837
As	75	**54.498**	**ug/L**	2.787	10387.108	0.049
Se	77		**ug/L**		476.008	0.002
Se	78	**54.372**	**ug/L**	5.849	1447.737	0.007
Se	82		**ug/L**		781.355	0.004
Kr	83		**ug/L**		6.667	0.000
Sr	88	**53.844**	**ug/L**	4.021	95778.786	0.335
Zr	90	**54.874**	**ug/L**	3.326	122271.781	0.427
Mo	98	**54.908**	**ug/L**	4.936	83248.866	0.291
Ag	107	**56.410**	**ug/L**	4.686	213526.107	0.747
Cd	111	**54.908**	**ug/L**	1.833	32131.430	0.112
Cd	114		**ug/L**		89640.403	0.314
>In	115		**ug/L**		285835.173	285835.173
Sn	120	**55.310**	**ug/L**	3.098	153214.660	0.535
Sb	121	**55.164**	**ug/L**	5.530	96462.219	0.337
Sb	123		**ug/L**		79432.052	0.278
Ba	135		**ug/L**		29497.092	0.031
Ba	137	**56.130**	**ug/L**	7.220	55335.810	0.058
>Lu	175		**ug/L**		952917.310	952917.310
Tl	205	**54.188**	**ug/L**	3.528	941772.764	0.989
Pb	208	**55.934**	**ug/L**	4.561	1238399.710	1.300
Th	232	**49.597**	**ug/L**	6.561	1281583.539	1.340
U	238	**51.733**	**ug/L**	3.527	1491320.467	1.566

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	0.9999
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	44	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9997
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	44					
>	Sc	45		96.75			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
>	Ge	74		97.81			
|	As	75					
|	Se	77					
|	Se	78					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115		100.86			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
>	Lu	175		102.19			
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #12 - Summary Report

Sample ID: 604449001
Sample Date/Time: Tuesday, December 20, 2022 02:52:10
Sample Type: Sample
Sample Description: TNSL 2008
Number of Replicates: 3
Batch ID: 2357703|25|baj
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221219\604449001.115
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**4875.859**	**ug/L**	2.638	2362565.075	6.157
Be	9	**0.014**	**ug/L**	155.646	4.667	0.000
B	11	**116.276**	**ug/L**	1.916	16519.884	0.042
Na	23	**S**	**ug/L**	S	S	S
Mg	24	**3303.472**	**ug/L**	1.160	1525356.877	3.975
Al	27	**-1.644**	**ug/L**	37.284	360.672	-0.001
P	31	**482.556**	**ug/L**	2.586	8786.702	0.022
K	39	**41363.446**	**ug/L**	1.518	12357420.536	32.189
Ca	44	**5463.639**	**ug/L**	0.537	65035.704	0.169
>Sc	45		**ug/L**		383645.864	383645.864
Ti	47	**0.357**	**ug/L**	26.550	24.000	0.000
V	51	**0.576**	**ug/L**	15.762	4159.940	0.002
Cr	52	**0.185**	**ug/L**	14.176	615.347	0.001
Cr	53		**ug/L**		728.685	-0.001
Mn	55	**0.389**	**ug/L**	12.134	442.007	0.001
Fe	57	**17.730**	**ug/L**	1.525	684.683	0.002
Co	59	**0.053**	**ug/L**	3.405	163.334	0.000
Ni	60	**1.122**	**ug/L**	7.445	914.696	0.002
Cu	63		**ug/L**		982.701	0.002
Cu	65	**0.294**	**ug/L**	2.705	312.670	0.001
Zn	66	**0.277**	**ug/L**	23.860	164.001	0.000
Zn	67		**ug/L**		52.000	0.000
Zn	68		**ug/L**		175.334	0.001
>Ge	74		**ug/L**		132320.359	132320.359
As	75	**1.382**	**ug/L**	13.738	297.114	0.001
Se	77		**ug/L**		61.333	0.000
Se	78	**1.227**	**ug/L**	16.710	60.939	0.000
Se	82		**ug/L**		111.334	0.001
Kr	83		**ug/L**		17.333	0.000
Sr	88	**47.612**	**ug/L**	0.309	60154.384	0.296
Zr	90	**0.288**	**ug/L**	27.221	570.678	0.002
Mo	98	**10.069**	**ug/L**	1.695	10886.019	0.053
Ag	107	**0.004**	**ug/L**	249.448	34.000	0.000
Cd	111	**-0.003**	**ug/L**	191.315	8.000	-0.000
Cd	114		**ug/L**		28.103	0.000
>In	115		**ug/L**		202909.215	202909.215
Sn	120	**0.026**	**ug/L**	44.353	384.612	0.000
Sb	121	**0.553**	**ug/L**	3.740	776.688	0.003
Sb	123		**ug/L**		658.094	0.003
Ba	135		**ug/L**		3983.222	0.005
Ba	137	**8.848**	**ug/L**	0.943	6983.040	0.009
>Lu	175		**ug/L**		759262.754	759262.754
Tl	205	**0.014**	**ug/L**	59.836	410.006	0.000
Pb	208	**0.030**	**ug/L**	51.193	781.342	0.001
Th	232	**0.656**	**ug/L**	17.745	18471.414	0.018
U	238	**0.042**	**ug/L**	37.247	1074.377	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	0.9999
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	44	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9997
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	44					
| >	Sc	45		72.64			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
| >	Ge	74		62.68			
|	As	75					
|	Se	77					
|	Se	78					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
| >	In	115		71.60			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
| >	Lu	175		81.42			
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Li 7 Upper, S, EEE	Li	7	Sample is out of limits (over linear range)
Na 23 Upper, S, EE	Na	23	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS #12 - Summary Report

Sample ID: 1205274081
Sample Date/Time: Tuesday, December 20, 2022 02:55:30
Sample Type: Sample
Sample Description: QC A 2008 DUP
Number of Replicates: 3
Batch ID: 2357703|25|baj
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221219\1205274081.116
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**4460.113**	**ug/L**	2.625	2248045.362	5.632
Be	9	**-0.002**	**ug/L**	133.982	1.333	-0.000
B	11	**111.387**	**ug/L**	1.337	16487.844	0.040
Na	23	**S**	**ug/L**	S	S	S
Mg	24	**3205.565**	**ug/L**	1.959	1539951.174	3.857
Al	27	**0.182**	**ug/L**	158.965	834.691	0.000
P	31	**500.555**	**ug/L**	1.909	9472.474	0.023
K	39	**41136.276**	**ug/L**	2.594	12787223.472	32.013
Ca	44	**5643.856**	**ug/L**	4.263	69896.797	0.175
>Sc	45		**ug/L**		399143.917	399143.917
Ti	47	**0.251**	**ug/L**	27.613	18.667	0.000
V	51	**0.685**	**ug/L**	10.967	4502.710	0.003
Cr	52	**0.151**	**ug/L**	27.899	572.012	0.001
Cr	53		**ug/L**		797.356	-0.001
Mn	55	**0.314**	**ug/L**	7.210	380.005	0.001
Fe	57	**2.066**	**ug/L**	13.865	160.001	0.000
Co	59	**0.055**	**ug/L**	10.851	175.334	0.000
Ni	60	**1.134**	**ug/L**	13.126	960.699	0.002
Cu	63		**ug/L**		467.341	0.001
Cu	65	**0.112**	**ug/L**	19.384	147.334	0.000
Zn	66	**0.311**	**ug/L**	9.067	173.334	0.001
Zn	67		**ug/L**		56.000	0.000
Zn	68		**ug/L**		174.001	0.001
>Ge	74		**ug/L**		133943.686	133943.686
As	75	**1.497**	**ug/L**	1.879	314.892	0.001
Se	77		**ug/L**		71.334	0.000
Se	78	**1.099**	**ug/L**	22.621	59.581	0.000
Se	82		**ug/L**		133.334	0.001
Kr	83		**ug/L**		18.133	0.000
Sr	88	**48.831**	**ug/L**	0.577	61135.203	0.304
Zr	90	**0.136**	**ug/L**	19.548	327.337	0.001
Mo	98	**10.137**	**ug/L**	0.784	10861.563	0.054
Ag	107	**-0.002**	**ug/L**	39.566	17.333	-0.000
Cd	111	**0.012**	**ug/L**	0.910	14.000	0.000
Cd	114		**ug/L**		18.519	0.000
>In	115		**ug/L**		201074.538	201074.538
Sn	120	**-0.014**	**ug/L**	41.860	304.636	-0.000
Sb	121	**0.543**	**ug/L**	3.578	757.353	0.003
Sb	123		**ug/L**		649.013	0.003
Ba	135		**ug/L**		4013.231	0.005
Ba	137	**9.296**	**ug/L**	1.482	7174.468	0.010
>Lu	175		**ug/L**		742717.947	742717.947
Tl	205	**-0.003**	**ug/L**	57.710	162.668	-0.000
Pb	208	**0.007**	**ug/L**	35.767	355.335	0.000
Th	232	**0.225**	**ug/L**	13.975	9413.779	0.006
U	238	**0.026**	**ug/L**	5.350	671.016	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	0.9999
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	44	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9997
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	44					
| >	Sc	45		75.57			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
| >	Ge	74		63.45			
|	As	75					
|	Se	77					
|	Se	78					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
| >	In	115		70.95			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
| >	Lu	175		79.65			
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Li 7 Upper, S, EEE	Li	7	Sample is out of limits (over linear range)
Na 23 Upper, S, EE	Na	23	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS #12 - Summary Report

Sample ID: 1205274082
Sample Date/Time: Tuesday, December 20, 2022 02:58:51
Sample Type: Sample
Sample Description: QC A 2008 MS
Number of Replicates: 3
Batch ID: 2357703|25|baj
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221219\1205274082.117
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**4189.590**	**ug/L**	2.589	2281059.941	5.291
Be	9	**1.441**	**ug/L**	2.090	340.671	0.001
B	11	**110.420**	**ug/L**	2.512	17658.242	0.040
Na	23	**S**	**ug/L**	S	S	S
Mg	24	**3343.461**	**ug/L**	0.946	1734966.653	4.023
Al	27	**72.595**	**ug/L**	0.295	20576.809	0.046
P	31	**564.566**	**ug/L**	1.627	11501.296	0.026
K	39	**43329.109**	**ug/L**	0.343	14547837.421	33.719
Ca	44	**5843.821**	**ug/L**	2.509	78167.360	0.181
>Sc	45		**ug/L**		431143.822	431143.822
Ti	47	**2.657**	**ug/L**	5.388	176.668	0.000
V	51	**2.967**	**ug/L**	5.438	8830.063	0.012
Cr	52	**2.181**	**ug/L**	2.426	4950.191	0.011
Cr	53		**ug/L**		1348.731	-0.000
Mn	55	**2.207**	**ug/L**	5.024	2593.569	0.006
Fe	57	**78.225**	**ug/L**	1.868	3073.664	0.007
Co	59	**1.934**	**ug/L**	1.272	6274.044	0.015
Ni	60	**2.696**	**ug/L**	3.075	2404.202	0.005
Cu	63		**ug/L**		4333.991	0.010
Cu	65	**1.899**	**ug/L**	0.912	2051.481	0.005
Zn	66	**1.980**	**ug/L**	5.522	556.678	0.003
Zn	67		**ug/L**		120.667	0.001
Zn	68		**ug/L**		490.008	0.003
>Ge	74		**ug/L**		139520.694	139520.694
As	75	**3.687**	**ug/L**	3.829	604.679	0.003
Se	77		**ug/L**		83.334	0.000
Se	78	**2.107**	**ug/L**	11.574	79.379	0.000
Se	82		**ug/L**		144.667	0.001
Kr	83		**ug/L**		20.400	0.000
Sr	88	**53.996**	**ug/L**	0.867	68615.741	0.336
Zr	90	**2.634**	**ug/L**	0.702	4303.315	0.021
Mo	98	**12.717**	**ug/L**	2.606	13814.185	0.067
Ag	107	**1.748**	**ug/L**	4.659	4748.790	0.023
Cd	111	**1.709**	**ug/L**	4.667	722.685	0.003
Cd	114		**ug/L**		2141.452	0.010
>In	115		**ug/L**		204113.077	204113.077
Sn	120	**2.187**	**ug/L**	1.596	4650.647	0.021
Sb	121	**2.705**	**ug/L**	3.238	3466.421	0.017
Sb	123		**ug/L**		2860.529	0.014
Ba	135		**ug/L**		5431.033	0.007
Ba	137	**11.894**	**ug/L**	4.319	9272.344	0.012
>Lu	175		**ug/L**		751041.932	751041.932
Tl	205	**1.922**	**ug/L**	2.825	26531.285	0.035
Pb	208	**1.880**	**ug/L**	2.227	33057.118	0.044
Th	232	**1.732**	**ug/L**	2.861	40080.846	0.047
U	238	**2.020**	**ug/L**	2.521	45997.944	0.061

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	0.9999
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	44	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9997
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	44					
>	Sc	45		81.63			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
>	Ge	74		66.09			
|	As	75					
|	Se	77					
|	Se	78					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115		72.03			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
>	Lu	175		80.54			
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Li 7 Upper, S, EEE	Li	7	Sample is out of limits (over linear range)
Na 23 Upper, S, EE	Na	23	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS #12 - Summary Report

Sample ID: 1205274083
Sample Date/Time: Tuesday, December 20, 2022 03:02:11
Sample Type: Sample
Sample Description: QC A 2008 SDILT
Number of Replicates: 3
Batch ID: 2357703|125|baj
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221219\1205274083.118
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**756.624**	**ug/L**	3.159	508177.199	0.955
Be	9	**-0.004**	**ug/L**	54.846	1.333	-0.000
B	11	**30.431**	**ug/L**	3.304	6561.841	0.011
Na	23	**260922.235**	**ug/L**	1.294	391525675.057	735.938
Mg	24	**677.754**	**ug/L**	2.265	434219.705	0.816
Al	27	**-2.085**	**ug/L**	1.111	352.671	-0.001
P	31	**98.119**	**ug/L**	1.831	2781.604	0.005
K	39	**9034.127**	**ug/L**	1.966	3752671.086	7.030
Ca	44	**1161.398**	**ug/L**	2.349	19267.653	0.036
>Sc	45		**ug/L**		531962.787	531962.787
Ti	47	**0.083**	**ug/L**	16.544	11.333	0.000
V	51	**-0.335**	**ug/L**	6.721	3813.842	-0.001
Cr	52	**0.005**	**ug/L**	90.433	378.672	0.000
Cr	53		**ug/L**		1183.382	-0.001
Mn	55	**0.070**	**ug/L**	6.295	158.001	0.000
Fe	57	**0.038**	**ug/L**	225.301	118.000	0.000
Co	59	**0.009**	**ug/L**	37.560	48.667	0.000
Ni	60	**0.233**	**ug/L**	20.638	308.670	0.000
Cu	63		**ug/L**		206.668	0.000
Cu	65	**0.030**	**ug/L**	28.187	88.667	0.000
Zn	66	**0.145**	**ug/L**	48.716	198.668	0.000
Zn	67		**ug/L**		33.333	0.000
Zn	68		**ug/L**		144.001	0.000
>Ge	74		**ug/L**		193281.093	193281.093
As	75	**0.171**	**ug/L**	20.591	222.446	0.000
Se	77		**ug/L**		69.334	-0.000
Se	78	**0.493**	**ug/L**	50.509	71.490	0.000
Se	82		**ug/L**		52.667	0.000
Kr	83		**ug/L**		8.000	0.000
Sr	88	**9.834**	**ug/L**	2.233	15933.551	0.061
Zr	90	**0.002**	**ug/L**	102.686	152.001	0.000
Mo	98	**1.884**	**ug/L**	3.093	2660.860	0.010
Ag	107	**-0.002**	**ug/L**	48.243	21.333	-0.000
Cd	111	**-0.008**	**ug/L**	133.843	7.333	-0.000
Cd	114		**ug/L**		16.248	-0.000
>In	115		**ug/L**		259532.646	259532.646
Sn	120	**-0.008**	**ug/L**	125.373	407.246	-0.000
Sb	121	**0.111**	**ug/L**	6.261	293.336	0.001
Sb	123		**ug/L**		254.412	0.001
Ba	135		**ug/L**		1028.037	0.001
Ba	137	**1.915**	**ug/L**	3.719	1871.456	0.002
>Lu	175		**ug/L**		926136.818	926136.818
Tl	205	**-0.005**	**ug/L**	35.964	168.001	-0.000
Pb	208	**0.001**	**ug/L**	114.253	317.335	0.000
Th	232	**0.010**	**ug/L**	124.086	6364.086	0.000
U	238	**0.005**	**ug/L**	11.254	256.002	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	0.9999
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	44	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9997
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	44					
>	Sc	45		100.72			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		91.56			
	As	75					
	Se	77					
	Se	78					
	Se	82					
	Kr	83					
	Sr	88					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		91.58			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
>	Lu	175		99.32			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Na 23 Upper, S, EE	Na	23	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC action taken

ICPMS #12 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, December 20, 2022 03:05:32
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221219\QC Std 8.119
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**41.898**	**ug/L**	2.754	29764.985	0.053
Be	9	**41.925**	**ug/L**	4.323	12856.120	0.023
B	11	**93.223**	**ug/L**	1.526	19579.078	0.033
Na	23	**4823.882**	**ug/L**	2.686	7663598.915	13.606
Mg	24	**4606.984**	**ug/L**	8.142	3118341.020	5.544
Al	27	**4580.552**	**ug/L**	2.008	1624752.209	2.887
P	31	**4951.841**	**ug/L**	2.635	128472.832	0.228
K	39	**5095.029**	**ug/L**	0.881	2243496.927	3.965
Ca	44	**4998.178**	**ug/L**	2.437	87232.242	0.155
>Sc	45		**ug/L**		562475.949	562475.949
Ti	47	**51.857**	**ug/L**	2.895	4406.680	0.008
V	51	**48.993**	**ug/L**	2.198	115928.666	0.198
Cr	52	**49.187**	**ug/L**	1.552	137292.625	0.243
Cr	53		**ug/L**		17898.594	0.029
Mn	55	**48.519**	**ug/L**	2.815	73053.778	0.130
Fe	57	**5240.709**	**ug/L**	0.664	260566.496	0.463
Co	59	**48.110**	**ug/L**	1.090	203237.023	0.361
Ni	60	**49.964**	**ug/L**	2.220	57065.772	0.101
Cu	63		**ug/L**		150886.082	0.268
Cu	65	**51.287**	**ug/L**	1.719	70906.909	0.126
Zn	66	**50.003**	**ug/L**	2.550	17715.649	0.081
Zn	67		**ug/L**		2942.303	0.013
Zn	68		**ug/L**		13225.453	0.060
>Ge	74		**ug/L**		217255.608	217255.608
As	75	**49.039**	**ug/L**	1.112	9859.179	0.044
Se	77		**ug/L**		449.340	0.002
Se	78	**51.817**	**ug/L**	2.759	1455.414	0.006
Se	82		**ug/L**		708.684	0.003
Kr	83		**ug/L**		8.533	0.000
Sr	88	**49.277**	**ug/L**	2.577	88785.772	0.307
Zr	90	**50.624**	**ug/L**	1.676	114261.142	0.394
Mo	98	**50.389**	**ug/L**	2.940	77391.739	0.267
Ag	107	**49.234**	**ug/L**	1.381	188793.350	0.652
Cd	111	**50.861**	**ug/L**	0.577	30141.765	0.104
Cd	114		**ug/L**		79806.820	0.276
>In	115		**ug/L**		289414.405	289414.405
Sn	120	**50.227**	**ug/L**	1.782	140953.917	0.485
Sb	121	**49.192**	**ug/L**	0.871	87167.830	0.301
Sb	123		**ug/L**		72583.134	0.250
Ba	135		**ug/L**		29928.664	0.031
Ba	137	**53.028**	**ug/L**	1.470	52938.578	0.055
>Lu	175		**ug/L**		963971.646	963971.646
Tl	205	**49.768**	**ug/L**	1.394	875439.840	0.908
Pb	208	**51.015**	**ug/L**	1.129	1143433.898	1.186
Th	232	**45.869**	**ug/L**	2.535	1200754.186	1.239
U	238	**46.266**	**ug/L**	0.398	1349959.421	1.400

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	0.9999
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	44	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9997
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Li	7	83.796				
	Be	9	83.849				
	B	11	93.223				
	Na	23	96.478				
	Mg	24	92.140				
	Al	27	90.704				
	P	31	99.037				
	K	39	101.901				
	Ca	44	99.964				
>	Sc	45		106.50			
	Ti	47	103.714				
	V	51	97.986				
	Cr	52	98.375				
	Cr	53					
	Mn	55	97.038				
	Fe	57	104.814				
	Co	59	96.219				
	Ni	60	99.928				
	Cu	63					
	Cu	65	102.575				
	Zn	66	100.007				
	Zn	67					
	Zn	68					
>	Ge	74		102.92			
	As	75	98.077				
	Se	77					
	Se	78	103.635				
	Se	82					
	Kr	83					
	Sr	88	98.555				
	Zr	90	101.248				
	Mo	98	100.779				
	Ag	107	98.468				
	Cd	111	101.722				
	Cd	114					
>	In	115		102.13			
	Sn	120	100.453				
	Sb	121	98.384				
	Sb	123					
	Ba	135					
	Ba	137	106.056				
>	Lu	175		103.38			
	Tl	205	99.536				
	Pb	208	102.031				
	Th	232	91.739				
	U	238	92.533				

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Li	7	
QC Std 8	Be	9	

QC Action

QC Action Line: Continue

ICPMS #12 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Tuesday, December 20, 2022 03:08:52
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221219\QC Std 9.120
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**0.324**	**ug/L**	7.757	222.002	0.000
Be	9	**0.001**	**ug/L**	590.211	2.667	0.000
B	11	**7.928**	**ug/L**	5.943	2240.509	0.003
Na	23	**12.105**	**ug/L**	27.124	28612.424	0.034
Mg	24	**0.068**	**ug/L**	460.054	438.674	0.000
Al	27	**-1.799**	**ug/L**	19.322	440.007	-0.001
P	31	**1.861**	**ug/L**	141.761	420.673	0.000
K	39	**2.319**	**ug/L**	37.162	13190.755	0.002
Ca	44	**-1.897**	**ug/L**	33.253	95.334	-0.000
>Sc	45		**ug/L**		523041.445	523041.445
Ti	47	**0.051**	**ug/L**	75.257	8.667	0.000
V	51	**-0.329**	**ug/L**	23.599	3761.162	-0.001
Cr	52	**-0.039**	**ug/L**	14.358	259.336	-0.000
Cr	53		**ug/L**		1311.394	-0.001
Mn	55	**0.012**	**ug/L**	97.749	74.667	0.000
Fe	57	**0.787**	**ug/L**	58.262	150.667	0.000
Co	59	**0.001**	**ug/L**	186.154	18.667	0.000
Ni	60	**-0.014**	**ug/L**	113.332	40.667	-0.000
Cu	63		**ug/L**		96.667	-0.000
Cu	65	**-0.001**	**ug/L**	466.138	47.333	-0.000
Zn	66	**-0.063**	**ug/L**	96.830	149.334	-0.000
Zn	67		**ug/L**		28.000	-0.000
Zn	68		**ug/L**		130.001	-0.000
>Ge	74		**ug/L**		216148.657	216148.657
As	75	**-0.169**	**ug/L**	28.831	182.223	-0.000
Se	77		**ug/L**		72.000	-0.000
Se	78	**0.152**	**ug/L**	90.391	70.884	0.000
Se	82		**ug/L**		23.333	0.000
Kr	83		**ug/L**		6.000	-0.000
Sr	88	**0.000**	**ug/L**	3969.588	56.667	0.000
Zr	90	**0.100**	**ug/L**	17.010	379.338	0.001
Mo	98	**-0.013**	**ug/L**	55.922	54.310	-0.000
Ag	107	**-0.001**	**ug/L**	364.384	29.333	-0.000
Cd	111	**0.001**	**ug/L**	796.376	13.333	0.000
Cd	114		**ug/L**		14.573	-0.000
>In	115		**ug/L**		281900.913	281900.913
Sn	120	**0.063**	**ug/L**	22.956	635.895	0.001
Sb	121	**0.057**	**ug/L**	32.158	224.002	0.000
Sb	123		**ug/L**		209.493	0.000
Ba	135		**ug/L**		27.333	-0.000
Ba	137	**0.012**	**ug/L**	52.474	47.333	0.000
>Lu	175		**ug/L**		921862.365	921862.365
Tl	205	**0.015**	**ug/L**	46.883	497.342	0.000
Pb	208	**0.005**	**ug/L**	61.840	401.336	0.000
Th	232	**0.459**	**ug/L**	19.393	17515.525	0.012
U	238	**0.012**	**ug/L**	45.343	442.341	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	0.9999
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	44	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9997
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	44					
>	Sc	45		99.03			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
>	Ge	74		102.39			
|	As	75					
|	Se	77					
|	Se	78					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115		99.48			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
>	Lu	175		98.86			
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #12 - Summary Report

Sample ID: 604449005
Sample Date/Time: Tuesday, December 20, 2022 03:12:13
Sample Type: Sample
Sample Description: TNSL 2008
Number of Replicates: 3
Batch ID: 2357703|25|baj
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221219\604449005.121
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**4204.453**	**ug/L**	1.495	2255052.401	5.309
Be	9	**-0.001**	**ug/L**	524.318	1.667	-0.000
B	11	**92.630**	**ug/L**	0.638	14693.553	0.033
Na	23	**S**	**ug/L**	S	S	S
Mg	24	**3399.162**	**ug/L**	1.694	1737778.929	4.090
Al	27	**0.067**	**ug/L**	211.954	857.359	0.000
P	31	**469.490**	**ug/L**	4.724	9471.142	0.022
K	39	**45909.689**	**ug/L**	3.455	15187796.294	35.727
Ca	44	**5741.509**	**ug/L**	2.355	75651.142	0.178
>Sc	45		**ug/L**		424741.335	424741.335
Ti	47	**0.431**	**ug/L**	21.601	31.333	0.000
V	51	**1.416**	**ug/L**	7.225	6043.946	0.006
Cr	52	**0.109**	**ug/L**	31.167	521.343	0.001
Cr	53		**ug/L**		910.696	-0.001
Mn	55	**0.240**	**ug/L**	2.793	320.004	0.001
Fe	57	**38.373**	**ug/L**	7.361	1532.749	0.003
Co	59	**0.051**	**ug/L**	9.179	172.668	0.000
Ni	60	**1.020**	**ug/L**	4.287	924.030	0.002
Cu	63		**ug/L**		743.353	0.002
Cu	65	**0.226**	**ug/L**	8.507	275.336	0.001
Zn	66	**0.185**	**ug/L**	62.092	150.001	0.000
Zn	67		**ug/L**		57.333	0.000
Zn	68		**ug/L**		192.668	0.001
>Ge	74		**ug/L**		137404.338	137404.338
As	75	**1.487**	**ug/L**	1.929	321.781	0.001
Se	77		**ug/L**		66.667	0.000
Se	78	**1.485**	**ug/L**	12.641	67.626	0.000
Se	82		**ug/L**		154.001	0.001
Kr	83		**ug/L**		16.667	0.000
Sr	88	**49.704**	**ug/L**	1.292	63241.698	0.309
Zr	90	**0.071**	**ug/L**	13.767	230.002	0.001
Mo	98	**15.325**	**ug/L**	1.171	16659.208	0.081
Ag	107	**-0.002**	**ug/L**	125.520	18.000	-0.000
Cd	111	**0.010**	**ug/L**	181.977	13.333	0.000
Cd	114		**ug/L**		12.915	-0.000
>In	115		**ug/L**		204356.095	204356.095
Sn	120	**0.014**	**ug/L**	68.846	363.245	0.000
Sb	121	**0.448**	**ug/L**	7.145	651.348	0.003
Sb	123		**ug/L**		578.422	0.002
Ba	135		**ug/L**		4452.694	0.006
Ba	137	**10.600**	**ug/L**	5.882	8143.657	0.011
>Lu	175		**ug/L**		740090.560	740090.560
Tl	205	**-0.003**	**ug/L**	57.840	164.001	-0.000
Pb	208	**0.022**	**ug/L**	6.472	608.672	0.001
Th	232	**0.171**	**ug/L**	9.244	8288.405	0.005
U	238	**0.025**	**ug/L**	0.678	663.349	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	0.9999
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	44	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9997
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	44					
>	Sc	45		80.42			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
>	Ge	74		65.09			
|	As	75					
|	Se	77					
|	Se	78					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115		72.11			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
>	Lu	175		79.37			
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Li 7 Upper, S, EEE	Li	7	Sample is out of limits (over linear range)
Na 23 Upper, S, EE	Na	23	Sample is out of limits (over linear range)
K 39 Upper, S, EEE	K	39	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS #12 - Summary Report

Sample ID: 604449009
Sample Date/Time: Tuesday, December 20, 2022 03:15:34
Sample Type: Sample
Sample Description: TNSL 2008
Number of Replicates: 3
Batch ID: 2357703|25|baj
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221219\604449009.122
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**7613.922**	**ug/L**	1.587	3491177.198	9.615
Be	9	**-0.003**	**ug/L**	165.035	1.000	-0.000
B	11	**114.142**	**ug/L**	2.928	15356.921	0.041
Na	23	**S**	**ug/L**	S	S	S
Mg	24	**3909.443**	**ug/L**	1.718	1708391.644	4.704
Al	27	**-0.795**	**ug/L**	13.840	536.010	-0.001
P	31	**453.071**	**ug/L**	4.745	7824.145	0.021
K	39	**88974.918**	**ug/L**	2.787	25152139.916	69.241
Ca	44	**2196.700**	**ug/L**	1.290	24800.177	0.068
>Sc	45		**ug/L**		363095.183	363095.183
Ti	47	**0.525**	**ug/L**	38.096	32.000	0.000
V	51	**0.073**	**ug/L**	42.918	3199.692	0.000
Cr	52	**-0.003**	**ug/L**	636.233	244.669	-0.000
Cr	53		**ug/L**		580.679	-0.002
Mn	55	**0.532**	**ug/L**	8.732	556.678	0.001
Fe	57	**1.579**	**ug/L**	43.888	130.001	0.000
Co	59	**0.084**	**ug/L**	11.084	240.002	0.001
Ni	60	**4.974**	**ug/L**	2.979	3702.480	0.010
Cu	63		**ug/L**		1374.069	0.004
Cu	65	**0.049**	**ug/L**	21.609	77.334	0.000
Zn	66	**1.379**	**ug/L**	5.843	335.337	0.002
Zn	67		**ug/L**		86.667	0.001
Zn	68		**ug/L**		286.003	0.002
>Ge	74		**ug/L**		111037.546	111037.546
As	75	**2.402**	**ug/L**	2.371	352.004	0.002
Se	77		**ug/L**		56.000	0.000
Se	78	**2.815**	**ug/L**	4.292	72.874	0.000
Se	82		**ug/L**		231.335	0.002
Kr	83		**ug/L**		41.333	0.000
Sr	88	**69.127**	**ug/L**	1.155	74668.026	0.430
Zr	90	**0.066**	**ug/L**	23.153	187.335	0.001
Mo	98	**15.709**	**ug/L**	1.047	14497.904	0.083
Ag	107	**0.002**	**ug/L**	395.268	25.333	0.000
Cd	111	**0.016**	**ug/L**	43.229	13.333	0.000
Cd	114		**ug/L**		20.592	0.000
>In	115		**ug/L**		173497.609	173497.609
Sn	120	**-0.012**	**ug/L**	143.931	265.909	-0.000
Sb	121	**0.710**	**ug/L**	2.380	831.358	0.004
Sb	123		**ug/L**		671.759	0.004
Ba	135		**ug/L**		3806.507	0.006
Ba	137	**10.425**	**ug/L**	1.106	6809.623	0.011
>Lu	175		**ug/L**		628843.017	628843.017
Tl	205	**-0.006**	**ug/L**	24.864	106.667	-0.000
Pb	208	**0.012**	**ug/L**	4.296	380.669	0.000
Th	232	**0.070**	**ug/L**	31.866	5330.330	0.002
U	238	**0.022**	**ug/L**	4.987	497.009	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	0.9999
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	44	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9997
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	44					
| >	Sc	45		68.75			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
| >	Ge	74		52.60			
|	As	75					
|	Se	77					
|	Se	78					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
| >	In	115		61.22			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
| >	Lu	175		67.44			
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Li 7 Upper, S, EEE	Li	7	Sample is out of limits (over linear range)
Na 23 Upper, S, EE	Na	23	Sample is out of limits (over linear range)
K 39 Upper, S, EEE	K	39	Sample is out of limits (over linear range)
Ge 74 Int Std for sa	Ge	74	

QC Action

QC Action Line: Continue

ICPMS #12 - Summary Report

Sample ID: 604449013
Sample Date/Time: Tuesday, December 20, 2022 03:18:54
Sample Type: Sample
Sample Description: TNSL 2008
Number of Replicates: 3
Batch ID: 2357703|25|baj
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221219\604449013.123
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**3714.292**	**ug/L**	6.769	2100704.032	4.690
Be	9	**-0.007**	**ug/L**	35.081	0.333	-0.000
B	11	**73.276**	**ug/L**	1.279	12388.703	0.026
Na	23	**S**	**ug/L**	S	S	S
Mg	24	**2623.731**	**ug/L**	3.006	1414113.801	3.157
Al	27	**-1.148**	**ug/L**	13.919	561.344	-0.001
P	31	**324.254**	**ug/L**	6.278	6997.718	0.015
K	39	**48525.633**	**ug/L**	0.719	16918561.878	37.763
Ca	44	**6498.880**	**ug/L**	5.392	90274.272	0.201
>Sc	45		**ug/L**		447745.921	447745.921
Ti	47	**0.356**	**ug/L**	16.282	28.000	0.000
V	51	**0.820**	**ug/L**	18.202	5294.316	0.003
Cr	52	**0.126**	**ug/L**	9.056	588.012	0.001
Cr	53		**ug/L**		951.365	-0.001
Mn	55	**0.026**	**ug/L**	48.629	81.334	0.000
Fe	57	**0.190**	**ug/L**	130.492	105.334	0.000
Co	59	**0.040**	**ug/L**	11.910	146.667	0.000
Ni	60	**0.937**	**ug/L**	7.037	898.695	0.002
Cu	63		**ug/L**		1257.389	0.003
Cu	65	**0.095**	**ug/L**	10.475	146.001	0.000
Zn	66	**0.888**	**ug/L**	13.195	322.670	0.001
Zn	67		**ug/L**		77.334	0.000
Zn	68		**ug/L**		310.670	0.001
>Ge	74		**ug/L**		145079.802	145079.802
As	75	**1.359**	**ug/L**	1.891	322.893	0.001
Se	77		**ug/L**		74.667	0.000
Se	78	**1.599**	**ug/L**	9.553	73.459	0.000
Se	82		**ug/L**		144.667	0.001
Kr	83		**ug/L**		26.533	0.000
Sr	88	**43.500**	**ug/L**	4.403	56859.685	0.271
Zr	90	**0.040**	**ug/L**	26.027	184.668	0.000
Mo	98	**13.307**	**ug/L**	1.515	14869.535	0.071
Ag	107	**0.000**	**ug/L**	2190.210	24.667	0.000
Cd	111	**0.009**	**ug/L**	106.426	13.333	0.000
Cd	114		**ug/L**		15.320	0.000
>In	115		**ug/L**		209972.621	209972.621
Sn	120	**-0.011**	**ug/L**	124.687	323.252	-0.000
Sb	121	**0.292**	**ug/L**	9.576	469.341	0.002
Sb	123		**ug/L**		383.166	0.001
Ba	135		**ug/L**		3550.442	0.005
Ba	137	**7.871**	**ug/L**	3.399	6227.358	0.008
>Lu	175		**ug/L**		760966.465	760966.465
Tl	205	**-0.007**	**ug/L**	17.151	112.000	-0.000
Pb	208	**0.009**	**ug/L**	21.358	404.669	0.000
Th	232	**0.025**	**ug/L**	213.795	5531.099	0.001
U	238	**0.020**	**ug/L**	4.450	565.011	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	0.9999
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	44	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9997
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	44					
| >	Sc	45		84.78			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
| >	Ge	74		68.73			
|	As	75					
|	Se	77					
|	Se	78					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
| >	In	115		74.09			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
| >	Lu	175		81.61			
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Li 7 Upper, S, EEE	Li	7	Sample is out of limits (over linear range)
Na 23 Upper, S, EE	Na	23	Sample is out of limits (over linear range)
K 39 Upper, S, EEE	K	39	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS #12 - Summary Report

Sample ID: 604449017
Sample Date/Time: Tuesday, December 20, 2022 03:22:14
Sample Type: Sample
Sample Description: TNSL 2008
Number of Replicates: 3
Batch ID: 2357703|25|baj
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221219\604449017.124
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**2213.186**	**ug/L**	3.065	1435030.349	2.795
Be	9	**0.003**	**ug/L**	136.105	3.000	0.000
B	11	**74.510**	**ug/L**	3.457	14433.957	0.027
Na	23	**S**	**ug/L**	S	S	S
Mg	24	**3867.975**	**ug/L**	3.224	2390680.733	4.655
Al	27	**-0.245**	**ug/L**	29.572	936.031	-0.000
P	31	**296.598**	**ug/L**	3.029	7370.568	0.014
K	39	**28029.693**	**ug/L**	1.810	11214835.705	21.813
Ca	44	**4728.566**	**ug/L**	2.877	75350.220	0.147
>Sc	45		**ug/L**		513603.183	513603.183
Ti	47	**0.200**	**ug/L**	36.258	20.000	0.000
V	51	**0.131**	**ug/L**	35.852	4646.756	0.001
Cr	52	**0.603**	**ug/L**	5.264	1886.125	0.003
Cr	53		**ug/L**		1379.400	-0.001
Mn	55	**0.121**	**ug/L**	7.779	223.335	0.000
Fe	57	**10.694**	**ug/L**	2.772	597.346	0.001
Co	59	**0.022**	**ug/L**	11.446	100.000	0.000
Ni	60	**0.761**	**ug/L**	5.980	848.025	0.002
Cu	63		**ug/L**		754.687	0.001
Cu	65	**0.031**	**ug/L**	13.840	87.334	0.000
Zn	66	**0.292**	**ug/L**	53.949	212.002	0.000
Zn	67		**ug/L**		71.334	0.000
Zn	68		**ug/L**		248.669	0.001
>Ge	74		**ug/L**		167896.289	167896.289
As	75	**1.183**	**ug/L**	9.654	346.893	0.001
Se	77		**ug/L**		81.334	0.000
Se	78	**1.187**	**ug/L**	32.104	76.539	0.000
Se	82		**ug/L**		112.000	0.001
Kr	83		**ug/L**		17.333	0.000
Sr	88	**60.257**	**ug/L**	2.915	87464.974	0.375
Zr	90	**0.022**	**ug/L**	69.839	173.334	0.000
Mo	98	**7.183**	**ug/L**	3.072	8941.639	0.038
Ag	107	**-0.004**	**ug/L**	19.378	16.000	-0.000
Cd	111	**0.006**	**ug/L**	99.789	13.333	0.000
Cd	114		**ug/L**		12.775	-0.000
>In	115		**ug/L**		233218.211	233218.211
Sn	120	**-0.015**	**ug/L**	68.816	350.620	-0.000
Sb	121	**0.391**	**ug/L**	5.348	662.682	0.002
Sb	123		**ug/L**		538.840	0.002
Ba	135		**ug/L**		4053.909	0.005
Ba	137	**8.082**	**ug/L**	2.120	6979.705	0.008
>Lu	175		**ug/L**		830523.990	830523.990
Tl	205	**-0.007**	**ug/L**	4.765	117.334	-0.000
Pb	208	**0.002**	**ug/L**	5.562	295.335	0.000
Th	232	**0.002**	**ug/L**	1250.628	5514.404	0.000
U	238	**0.005**	**ug/L**	5.052	228.002	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	0.9999
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	44	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9997
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	44					
>	Sc	45		97.25			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
>	Ge	74		79.54			
|	As	75					
|	Se	77					
|	Se	78					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115		82.30			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
>	Lu	175		89.07			
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Li 7 Upper, S, EEE	Li	7	Sample is out of limits (over linear range)
Na 23 Upper, S, EE	Na	23	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS #12 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 20, 2022 03:25:36
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221219\QC Std 6.125
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**38.181**	**ug/L**	2.846	29559.243	0.048
Be	9	**38.291**	**ug/L**	5.819	12786.058	0.021
B	11	**84.172**	**ug/L**	1.795	19347.767	0.030
Na	23	**4802.631**	**ug/L**	4.548	8310931.908	13.546
Mg	24	**4702.370**	**ug/L**	1.329	3468244.440	5.659
Al	27	**4694.549**	**ug/L**	0.904	1814171.385	2.959
P	31	**4795.525**	**ug/L**	5.244	135484.025	0.220
K	39	**5112.340**	**ug/L**	3.176	2452243.860	3.978
Ca	44	**5469.283**	**ug/L**	5.192	103949.208	0.169
>Sc	45		**ug/L**		612871.347	612871.347
Ti	47	**52.355**	**ug/L**	1.596	4846.822	0.008
V	51	**49.760**	**ug/L**	4.174	128215.009	0.201
Cr	52	**49.430**	**ug/L**	2.945	150272.252	0.245
Cr	53		**ug/L**		18873.130	0.028
Mn	55	**50.393**	**ug/L**	1.447	82647.728	0.135
Fe	57	**5114.927**	**ug/L**	1.620	277023.593	0.452
Co	59	**49.486**	**ug/L**	3.131	227695.392	0.372
Ni	60	**49.380**	**ug/L**	2.400	61442.543	0.100
Cu	63		**ug/L**		162090.121	0.264
Cu	65	**51.913**	**ug/L**	2.426	78172.635	0.128
Zn	66	**49.109**	**ug/L**	5.855	18718.283	0.079
Zn	67		**ug/L**		3183.688	0.013
Zn	68		**ug/L**		14009.537	0.059
>Ge	74		**ug/L**		233682.199	233682.199
As	75	**48.817**	**ug/L**	0.411	10558.122	0.044
Se	77		**ug/L**		496.009	0.002
Se	78	**51.714**	**ug/L**	1.579	1562.702	0.006
Se	82		**ug/L**		735.352	0.003
Kr	83		**ug/L**		10.400	0.000
Sr	88	**52.843**	**ug/L**	1.502	101092.434	0.329
Zr	90	**50.283**	**ug/L**	1.353	120523.084	0.392
Mo	98	**51.179**	**ug/L**	1.422	83479.320	0.271
Ag	107	**48.749**	**ug/L**	1.663	198477.293	0.646
Cd	111	**48.350**	**ug/L**	1.090	30425.704	0.099
Cd	114		**ug/L**		85108.569	0.277
>In	115		**ug/L**		307294.423	307294.423
Sn	120	**50.472**	**ug/L**	0.829	150392.661	0.488
Sb	121	**49.695**	**ug/L**	2.304	93484.926	0.304
Sb	123		**ug/L**		77450.491	0.252
Ba	135		**ug/L**		31557.504	0.032
Ba	137	**53.840**	**ug/L**	3.455	55754.016	0.056
>Lu	175		**ug/L**		999828.958	999828.958
Tl	205	**49.159**	**ug/L**	1.506	896922.601	0.897
Pb	208	**50.235**	**ug/L**	0.074	1167856.122	1.168
Th	232	**46.068**	**ug/L**	3.037	1250814.339	1.244
U	238	**45.591**	**ug/L**	0.055	1379734.533	1.380

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	0.9999
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	44	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9997
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Li	7	76.363				
	Be	9	76.582				
	B	11	84.172				
	Na	23	96.053				
	Mg	24	94.047				
	Al	27	92.961				
	P	31	95.910				
	K	39	102.247				
	Ca	44	109.386				
>	Sc	45		116.04			
	Ti	47	104.709				
	V	51	99.521				
	Cr	52	98.861				
	Cr	53					
	Mn	55	100.787				
	Fe	57	102.299				
	Co	59	98.972				
	Ni	60	98.760				
	Cu	63					
	Cu	65	103.825				
	Zn	66	98.218				
	Zn	67					
	Zn	68					
>	Ge	74		110.70			
	As	75	97.634				
	Se	77					
	Se	78	103.429				
	Se	82					
	Kr	83					
	Sr	88	105.686				
	Zr	90	100.566				
	Mo	98	102.359				
	Ag	107	97.498				
	Cd	111	96.700				
	Cd	114					
>	In	115		108.44			
	Sn	120	100.944				
	Sb	121	99.390				
	Sb	123					
	Ba	135					
	Ba	137	107.680				
>	Lu	175		107.22			
	Tl	205	98.318				
	Pb	208	100.470				
	Th	232	92.136				
	U	238	91.181				

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Li	7	CCV is out of limits (+/- 10%)
QC Std 6	Be	9	CCV is out of limits (+/- 10%)
QC Std 6	B	11	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS #12 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 20, 2022 03:28:57
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221219\QC Std 7.126
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**0.473**	**ug/L**	3.237	357.338	0.001
Be	9	**-0.002**	**ug/L**	298.028	2.000	-0.000
B	11	**4.873**	**ug/L**	3.372	1861.121	0.002
Na	23	**52.317**	**ug/L**	3.372	98112.732	0.148
Mg	24	**-0.243**	**ug/L**	10.698	272.003	-0.000
Al	27	**-0.105**	**ug/L**	145.596	1114.043	-0.000
P	31	**-2.269**	**ug/L**	18.669	358.004	-0.000
K	39	**2.889**	**ug/L**	25.246	14971.845	0.002
Ca	44	**-0.185**	**ug/L**	422.694	137.334	-0.000
>Sc	45		**ug/L**		583237.509	583237.509
Ti	47	**-0.006**	**ug/L**	889.601	4.667	-0.000
V	51	**-0.339**	**ug/L**	5.719	4170.609	-0.001
Cr	52	**-0.010**	**ug/L**	159.994	372.672	-0.000
Cr	53		**ug/L**		1593.422	-0.000
Mn	55	**-0.006**	**ug/L**	87.054	56.000	-0.000
Fe	57	**0.351**	**ug/L**	137.736	145.334	0.000
Co	59	**-0.000**	**ug/L**	406.114	14.667	-0.000
Ni	60	**-0.008**	**ug/L**	102.750	52.667	-0.000
Cu	63		**ug/L**		172.668	0.000
Cu	65	**-0.004**	**ug/L**	233.974	48.667	-0.000
Zn	66	**0.070**	**ug/L**	69.558	206.001	0.000
Zn	67		**ug/L**		36.000	0.000
Zn	68		**ug/L**		118.000	-0.000
>Ge	74		**ug/L**		227612.680	227612.680
As	75	**0.008**	**ug/L**	458.196	228.224	0.000
Se	77		**ug/L**		105.334	0.000
Se	78	**0.224**	**ug/L**	78.258	76.629	0.000
Se	82		**ug/L**		24.000	0.000
Kr	83		**ug/L**		10.000	0.000
Sr	88	**0.009**	**ug/L**	28.939	74.667	0.000
Zr	90	**0.048**	**ug/L**	43.423	277.336	0.000
Mo	98	**-0.023**	**ug/L**	33.171	41.580	-0.000
Ag	107	**-0.000**	**ug/L**	273.494	32.000	-0.000
Cd	111	**0.000**	**ug/L**	3636.148	13.333	0.000
Cd	114		**ug/L**		19.598	-0.000
>In	115		**ug/L**		293667.797	293667.797
Sn	120	**0.046**	**ug/L**	40.509	613.894	0.000
Sb	121	**0.055**	**ug/L**	10.507	231.335	0.000
Sb	123		**ug/L**		212.827	0.000
Ba	135		**ug/L**		34.000	0.000
Ba	137	**0.007**	**ug/L**	123.787	44.000	0.000
>Lu	175		**ug/L**		952600.037	952600.037
Tl	205	**0.014**	**ug/L**	37.143	498.009	0.000
Pb	208	**0.003**	**ug/L**	111.439	366.002	0.000
Th	232	**0.197**	**ug/L**	29.343	11361.236	0.005
U	238	**0.005**	**ug/L**	34.379	281.670	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	0.9999
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	44	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	0.9997
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	44					
>	Sc	45		110.43			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		107.83			
	As	75					
	Se	77					
	Se	78					
	Se	82					
	Kr	83					
	Sr	88					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		103.63			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
>	Lu	175		102.16			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #12 Daily Performance

Sample ID: Sample
Sample Date/Time: Tuesday, December 20, 2022 08:30:12
Sample Description:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\Daily 2.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\default1\Sample.755
Mass Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\default2.tun
Dual Detector Mode: Pulse
Acquisition Date/Time&Time Zone: Tuesday, December 20, 2022 08:30:12 Eastern Standard Time
Number of Replicates: 5
Analyst: BAJ

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	33335.2	33335.159	642.217	1.9
	Mg	24.0	177717.9	177717.868	936.994	0.5
	Co	58.9	146908.1	146908.147	2261.618	1.5
	Rh	102.9	95168.9	95168.856	1459.347	1.5
	In	114.9	315854.5	315854.461	1337.278	0.4
	Pb	208.0	205694.7	205694.723	1300.128	0.6
⌈>	Ba	137.9	359281.5	359281.527	4763.929	1.3
⌊	Ba++	69.0	7203.2	0.020	0.000	0.8
⌈>	Ce	139.9	443424.3	443424.265	3920.954	0.9
⌊	CeO	155.9	11892.3	0.027	0.001	5.1
	Bkgd	220.0	0.1	0.100	0.137	136.9

Current Conditions

C Val	Description
1.00	Standard - Nebulizer Gas Flow STD/KED [NEB]
1.20	Standard - Auxiliary Gas Flow
18.00	Standard - Plasma Gas Flow
-12.00	Standard - Deflector Voltage
1600.00	Standard - ICP RF Power
-1525.00	Standard - Analog Stage Voltage
950.00	Standard - Pulse Stage Voltage
0.00	Standard - Quadrupole Rod Offset STD [QRO]
-16.00	Standard - Cell Rod Offset STD [CRO]
8.00	Standard - Discriminator Threshold
-12.00	Standard - Cell Entrance/Exit Voltage STD
-12.50	Helium KED - KED Mode QRO
-16.00	Helium KED - KED Mode CRO
-9.00	Helium KED - KED Mode Cell Entrance Voltage
-31.00	Helium KED - KED Mode Cell Exit Voltage
475.00	Helium KED - KED Mode Axial Field Voltage
0.00	Helium KED - KED RPa
0.25	Helium KED - KED RPq
3.00	Helium KED - Cell Gas A

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9.012	41	-17.0	6911.7
Mg	23.985	41	-15.5	23513.3
In	114.904	41	-11.0	26664.9
Ce	139.905	41	-10.0	31803.4
Pb	207.977	41	-7.0	16609.7
U	238.050	41	-6.5	28807.0

ICPMS #12 Instrument Tuning Report

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res DAC	Meas. Pk. Width
Be	9.0	9.0	1634	2062	0.723
Mg	24.0	24.0	4622	2063	0.746
Mg	25.0	25.0	4814	2064	0.723
Mg	26.0	26.0	5019	2066	0.708
Co	58.9	58.9	11597	2065	0.714
Rh	102.9	102.9	20377	2067	0.732
In	114.9	114.9	22779	2069	0.722
Ce	139.9	139.9	27778	2070	0.731
Pb	206.0	206.0	40978	2070	0.741
Pb	207.0	207.0	41191	2076	0.736
Pb	208.0	208.0	41371	2067	0.749
U	238.1	238.1	47396	2072	0.739

ICPMS #12 - Summary Report

Sample ID: Cal Blank
Sample Date/Time: Tuesday, December 20, 2022 10:37:46
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 1220.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\121215\Cal Blank.631
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9		ug/L		1.000	
> Sc	45		ug/L		872480.134	
Co	59		ug/L		13.000	
Cu	63		ug/L		69.667	
Cu	65		ug/L		34.667	
> Ge	74		ug/L		247563.729	
As	75		ug/L		225.113	
Se	77		ug/L		104.000	
Se	78		ug/L		66.295	
Se	82		ug/L		22.000	
Kr	83		ug/L		25.333	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Be	9					
>	Sc	45					
	Co	59					
	Cu	63					
	Cu	65					
>	Ge	74					
	As	75					
	Se	77					
	Se	78					
	Se	82					
	Kr	83					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #12 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Tuesday, December 20, 2022 10:40:00
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 1220.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\121215\Standard 1.632
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	**10.000**	**ug/L**	1.803	3239.034	0.004
>Sc	45		**ug/L**		886149.536	886149.536
Co	59	**10.000**	**ug/L**	1.530	53779.384	0.061
Cu	63		**ug/L**		35421.863	0.040
Cu	65	**10.000**	**ug/L**	1.145	16416.427	0.018
>Ge	74		**ug/L**		253857.138	253857.138
As	75	**10.000**	**ug/L**	2.559	2348.193	0.008
Se	77		**ug/L**		171.334	0.000
Se	78	**10.000**	**ug/L**	2.476	362.786	0.001
Se	82		**ug/L**		164.001	0.001
Kr	83		**ug/L**		40.000	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Be	9					
>	Sc	45					
	Co	59					
	Cu	63					
	Cu	65					
>	Ge	74					
	As	75					
	Se	77					
	Se	78					
	Se	82					
	Kr	83					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #12 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Tuesday, December 20, 2022 10:42:14
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 1220.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\121215\Standard 2.633
Analyst: BAJ

Concentration Results

Summary

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**99.938**	**ug/L**	7.037	30624.489	0.034
>	Sc	45		**ug/L**		891814.652	891814.652
	Co	59	**99.951**	**ug/L**	3.742	515087.340	0.578
	Cu	63		**ug/L**		334313.176	0.375
	Cu	65	**99.916**	**ug/L**	3.387	151962.075	0.170
>	Ge	74		**ug/L**		250536.045	250536.045
	As	75	**100.003**	**ug/L**	2.633	21173.903	0.084
	Se	77		**ug/L**		930.697	0.003
	Se	78	**99.979**	**ug/L**	1.606	2914.699	0.011
	Se	82		**ug/L**		1491.411	0.006
	Kr	83		**ug/L**		39.333	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Be	9					
>	Sc	45					
	Co	59					
	Cu	63					
	Cu	65					
>	Ge	74					
	As	75					
	Se	77					
	Se	78					
	Se	82					
	Kr	83					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #12 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Tuesday, December 20, 2022 10:44:28
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 1220.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\121215\QC Std 1.634
Analyst: BAJ

Concentration Results

Summary

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**49.922**	**ug/L**	5.477	15416.986	0.017
|	>Sc	45		**ug/L**		898237.713	898237.713
|	Co	59	**50.454**	**ug/L**	3.379	261918.974	0.292
|	Cu	63		**ug/L**		175942.830	0.196
⌊	Cu	65	**52.529**	**ug/L**	2.994	80490.118	0.090
⌈	>Ge	74		**ug/L**		252883.311	252883.311
|	As	75	**49.195**	**ug/L**	0.600	10634.179	0.041
|	Se	77		**ug/L**		510.676	0.002
|	Se	78	**50.946**	**ug/L**	2.735	1532.534	0.006
|	Se	82		**ug/L**		799.356	0.003
⌊	Kr	83		**ug/L**		33.333	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	

QC Calculated Values

	Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈		Be	9	99.844				
|	>	Sc	45		102.95			
|		Co	59	100.908				
|		Cu	63					
⌊		Cu	65	105.058				
⌈	>	Ge	74		102.15			
|		As	75	98.390				
|		Se	77					
|		Se	78	101.893				
|		Se	82					
⌊		Kr	83					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #12 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Tuesday, December 20, 2022 10:46:41
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 1220.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\121215\QC Std 2.635
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	**0.005**	**ug/L**	32.395	2.667	0.000
Sc	45		**ug/L**		880237.318	880237.318
Co	59	**0.000**	**ug/L**	216.281	14.333	0.000
Cu	63		**ug/L**		67.333	-0.000
Cu	65	**0.002**	**ug/L**	129.105	37.333	0.000
Ge	74		**ug/L**		254181.311	254181.311
As	75	**0.051**	**ug/L**	24.821	242.002	0.000
Se	77		**ug/L**		104.000	-0.000
Se	78	**0.133**	**ug/L**	204.644	71.930	0.000
Se	82		**ug/L**		16.000	-0.000
Kr	83		**ug/L**		37.333	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		100.89			
	Co	59					
	Cu	63					
	Cu	65					
>	Ge	74		102.67			
	As	75					
	Se	77					
	Se	78					
	Se	82					
	Kr	83					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #12 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Tuesday, December 20, 2022 10:48:55
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 1220.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\121215\QC Std 3.636
Analyst: BAJ

Concentration Results

Summary

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**0.555**	**ug/L**	12.551	169.334	0.000
|	>Sc	45		**ug/L**		883389.945	883389.945
|	Co	59	**1.034**	**ug/L**	3.091	5291.980	0.006
|	Cu	63		**ug/L**		7335.217	0.008
⌊	Cu	65	**2.231**	**ug/L**	3.146	3396.404	0.004
⌈	>Ge	74		**ug/L**		252846.207	252846.207
|	As	75	**4.937**	**ug/L**	5.146	1273.835	0.004
|	Se	77		**ug/L**		134.667	0.000
|	Se	78	**4.923**	**ug/L**	1.225	209.244	0.001
|	Se	82		**ug/L**		101.334	0.000
⌊	Kr	83		**ug/L**		38.000	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	

QC Calculated Values

	Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈		Be	9	110.967				
|	>	Sc	45		101.25			
|		Co	59	103.397				
|		Cu	63					
⌊		Cu	65	111.568				
⌈	>	Ge	74		102.13			
|		As	75	98.733				
|		Se	77					
|		Se	78	98.467				
|		Se	82					
⌊		Kr	83					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #12 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Tuesday, December 20, 2022 10:51:09
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 1220.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\121215\QC Std 4.637
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	**0.006**	**ug/L**	100.701	2.333	0.000
Sc	45		**ug/L**		704341.926	704341.926
Co	59	**0.903**	**ug/L**	0.618	3687.142	0.005
Cu	63		**ug/L**		2700.255	0.004
Cu	65	**1.047**	**ug/L**	3.009	1286.391	0.002
Ge	74		**ug/L**		194157.643	194157.643
As	75	**0.515**	**ug/L**	5.041	260.225	0.000
Se	77		**ug/L**		88.667	0.000
Se	78	**0.439**	**ug/L**	4.571	61.680	0.000
Se	82		**ug/L**		22.667	0.000
Kr	83		**ug/L**		58.667	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		80.73			
	Co	59	100.296				
	Cu	63					
	Cu	65	101.668				
>	Ge	74		78.43			
	As	75					
	Se	77					
	Se	78					
	Se	82					
	Kr	83					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #12 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Tuesday, December 20, 2022 10:53:22
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 1220.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\121215\QC Std 5.638
Analyst: BAJ

Concentration Results

Summary

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**18.026**	**ug/L**	3.254	4375.670	0.006
>	Sc	45		**ug/L**		705626.961	705626.961
	Co	59	**20.264**	**ug/L**	2.070	82672.862	0.117
	Cu	63		**ug/L**		50161.253	0.071
	Cu	65	**19.187**	**ug/L**	2.225	23120.028	0.033
>	Ge	74		**ug/L**		191779.043	191779.043
	As	75	**20.522**	**ug/L**	1.073	3465.754	0.017
	Se	77		**ug/L**		230.669	0.001
	Se	78	**19.576**	**ug/L**	5.358	478.157	0.002
	Se	82		**ug/L**		255.336	0.001
	Kr	83		**ug/L**		52.000	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Be	9	90.128				
>	Sc	45		80.88			
	Co	59	96.956				
	Cu	63					
	Cu	65	91.237				
>	Ge	74		77.47			
	As	75	102.608				
	Se	77					
	Se	78	97.878				
	Se	82					
	Kr	83					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #12 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 20, 2022 10:55:36
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 1220.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\121215\QC Std 6.639
Analyst: BAJ

Concentration Results

Summary

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**50.090**	**ug/L**	5.022	14555.755	0.017
>	Sc	45		**ug/L**		844584.578	844584.578
	Co	59	**52.773**	**ug/L**	2.109	257734.199	0.305
	Cu	63		**ug/L**		169955.481	0.201
	Cu	65	**54.542**	**ug/L**	0.863	78627.487	0.093
>	Ge	74		**ug/L**		246289.973	246289.973
	As	75	**49.466**	**ug/L**	0.883	10413.128	0.041
	Se	77		**ug/L**		500.009	0.002
	Se	78	**52.077**	**ug/L**	1.448	1524.298	0.006
	Se	82		**ug/L**		726.685	0.003
	Kr	83		**ug/L**		36.667	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Be	9	100.181				
>	Sc	45		96.80			
	Co	59	105.546				
	Cu	63					
	Cu	65	109.083				
>	Ge	74		99.49			
	As	75	98.931				
	Se	77					
	Se	78	104.154				
	Se	82					
	Kr	83					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #12 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 20, 2022 10:57:50
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 1220.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\121215\QC Std 7.640
Analyst: BAJ

Concentration Results

Summary

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.008**	**ug/L**	21.925	3.333	0.000
>	Sc	45		**ug/L**		843366.783	843366.783
	Co	59	**0.001**	**ug/L**	43.811	16.333	0.000
	Cu	63		**ug/L**		82.667	0.000
	Cu	65	**0.000**	**ug/L**	1456.785	34.000	0.000
>	Ge	74		**ug/L**		250551.796	250551.796
	As	75	**-0.041**	**ug/L**	254.776	219.113	-0.000
	Se	77		**ug/L**		85.334	-0.000
	Se	78	**-0.089**	**ug/L**	183.335	64.564	-0.000
	Se	82		**ug/L**		20.667	-0.000
	Kr	83		**ug/L**		34.000	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		96.66			
	Co	59					
	Cu	63					
	Cu	65					
>	Ge	74		101.21			
	As	75					
	Se	77					
	Se	78					
	Se	82					
	Kr	83					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #12 - Summary Report

Sample ID: 604449009
Sample Date/Time: Tuesday, December 20, 2022 11:10:47
Sample Type: Sample
Sample Description: TNSL 2008
Number of Replicates: 3
Batch ID: 2357703|50|baj
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 1220.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\121215\604449009.645
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	**0.006**	**ug/L**	80.558	2.000	0.000
Sc	45		**ug/L**		639395.220	639395.220
Co	59	**0.046**	**ug/L**	9.280	178.334	0.000
Cu	63		**ug/L**		937.364	0.001
Cu	65	**0.039**	**ug/L**	22.364	67.667	0.000
Ge	74		**ug/L**		156888.616	156888.616
As	75	**1.323**	**ug/L**	5.889	316.226	0.001
Se	77		**ug/L**		69.334	0.000
Se	78	**1.173**	**ug/L**	29.441	63.003	0.000
Se	82		**ug/L**		178.001	0.001
Kr	83		**ug/L**		124.667	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		73.28			
	Co	59					
	Cu	63					
	Cu	65					
>	Ge	74		63.37			
	As	75					
	Se	77					
	Se	78					
	Se	82					
	Kr	83					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #12 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, December 20, 2022 11:13:02
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 1220.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\121215\QC Std 6.646
Analyst: BAJ

Concentration Results

Summary

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**45.631**	**ug/L**	1.248	13851.713	0.016
| >	Sc	45		**ug/L**		882268.063	882268.063
|	Co	59	**50.448**	**ug/L**	4.884	257205.419	0.292
|	Cu	63		**ug/L**		175656.112	0.199
⌊	Cu	65	**52.063**	**ug/L**	1.950	78378.765	0.089
⌈ >	Ge	74		**ug/L**		254930.294	254930.294
|	As	75	**49.128**	**ug/L**	0.636	10705.788	0.041
|	Se	77		**ug/L**		488.675	0.001
|	Se	78	**50.900**	**ug/L**	1.526	1543.636	0.006
|	Se	82		**ug/L**		766.687	0.003
⌊	Kr	83		**ug/L**		45.333	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈	Be	9	91.262				
| >	Sc	45		101.12			
|	Co	59	100.897				
|	Cu	63					
⌊	Cu	65	104.125				
⌈ >	Ge	74		102.98			
|	As	75	98.256				
|	Se	77					
|	Se	78	101.799				
|	Se	82					
⌊	Kr	83					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #12 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, December 20, 2022 11:15:15
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 1220.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\121215\QC Std 7.647
Analyst: BAJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	**0.009**	**ug/L**	44.687	3.667	0.000
Sc	45		**ug/L**		876013.856	876013.856
Co	59	**0.000**	**ug/L**	8.007	15.333	0.000
Cu	63		**ug/L**		115.334	0.000
Cu	65	**0.001**	**ug/L**	504.301	36.667	0.000
Ge	74		**ug/L**		254219.040	254219.040
As	75	**0.002**	**ug/L**	454.107	231.557	0.000
Se	77		**ug/L**		103.334	-0.000
Se	78	**0.078**	**ug/L**	368.780	70.312	0.000
Se	82		**ug/L**		22.667	0.000
Kr	83		**ug/L**		46.667	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	78	Linear Thru Zero	1.0000
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		100.41			
	Co	59					
	Cu	63					
	Cu	65					
>	Ge	74		102.69			
	As	75					
	Se	77					
	Se	78					
	Se	82					
	Kr	83					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #14 Daily Performance

Sample ID: Sample
Sample Date/Time: Wednesday, December 21, 2022 08:45:19
Sample Description:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\Daily 2.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\Default\Sample.7445
Mass Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default1.tun
Dual Detector Mode: Pulse
Acquisition Date/Time&Time Zone: Wednesday, December 21, 2022 08:45:19 Eastern Standard Time
Number of Replicates: 5

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	44386.2	44386.151	333.330	0.8
	Mg	24.0	249271.2	249271.249	3280.065	1.3
	Co	58.9	160266.5	160266.530	508.448	0.3
	Rh	102.9	158201.8	158201.760	621.396	0.4
	In	114.9	275458.4	275458.374	2554.911	0.9
	Pb	208.0	218328.7	218328.742	1113.746	0.5
⌈>	Ba	137.9	288285.5	288285.483	2425.583	0.8
⌊	Ba++	69.0	8239.1	0.029	0.000	0.8
⌈>	Ce	139.9	370310.3	370310.262	2219.659	0.6
⌊	CeO	155.9	3765.2	0.010	0.000	2.2
	Bkgd	220.0	0.9	0.850	0.379	44.6

Current Conditions

C Val	Description
0.87	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-10.75	Deflector Voltage
1600.00	ICP RF Power
-1637.00	Analog Stage Voltage
1100.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-15.00	Cell Rod Offset STD [CRO]
10.00	Discriminator Threshold
-4.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.45	RPq
0.87	DRC Mode NEB
-8.50	DRC Mode QRO
-3.00	DRC Mode CRO
-13.00	DRC Mode Cell Entrance/Exit Voltage
0.00	Cell Gas A
375.00	Axial Field Voltage
-15.00	KED Mode CRO
-12.00	KED Mode QRO
-7.00	KED Mode Cell Entrance Voltage
-23.00	KED Mode Cell Exit Voltage
3.00	KED Cell Gas A
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9.012	41	-16.5	5036.9
Mg	23.985	41	-15.0	24531.0
In	114.904	41	-14.0	36644.9
Ce	139.905	41	-13.0	33294.8
Pb	207.977	41	-10.0	20034.0
U	238.050	41	-10.0	41269.5

ICPMS #14 Instrument Tuning Report

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res DAC	Meas. Pk. Width
Be	9.0	9.0	1625	2070	0.691
Mg	24.0	24.0	4603	2074	0.691
Mg	25.0	25.0	4793	2072	0.690
Mg	26.0	26.0	5001	2074	0.701
Co	58.9	58.9	11573	2077	0.692
Rh	102.9	102.9	20353	2084	0.669
In	114.9	114.9	22752	2086	0.671
Ce	139.9	139.9	27751	2090	0.646
Pb	206.0	206.0	40949	2097	0.689
Pb	207.0	207.0	41149	2098	0.686
Pb	208.0	208.0	41339	2096	0.684
U	238.1	238.0	47355	2100	0.682

ICPMS #14 - Summary Report

Sample ID: Cal Blank
Sample Date/Time: Wednesday, December 21, 2022 13:30:06
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 be co cu.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221221\Cal Blank.096
Analyst: SKJ

Concentration Results

Summary

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9		**ug/L**		5.000	
>	Sc	45		**ug/L**		608287.604	
	Co	59		**ug/L**		56.000	
	Ni	60		**ug/L**		292.003	
	Cu	63		**ug/L**		123.334	
	Cu	65		**ug/L**		57.333	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	
Ni	60	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Be	9					
>	Sc	45					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #14 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Wednesday, December 21, 2022 13:32:11
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 be co cu.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221221\Standard 1.097
Analyst: SKJ

Concentration Results

Summary

Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	**10.000**	**ug/L**	3.689	4040.572	0.006
> Sc	45		**ug/L**		636803.650	636803.650
Co	59	**10.000**	**ug/L**	0.907	43086.923	0.068
Ni	60	**10.000**	**ug/L**	2.203	12076.439	0.018
Cu	63		**ug/L**		31401.828	0.049
Cu	65	**10.000**	**ug/L**	2.486	15647.899	0.024

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Be	9					
>	Sc	45					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #14 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Wednesday, December 21, 2022 13:34:16
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 be co cu.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221221\Standard 2.098
Analyst: SKJ

Concentration Results

Summary

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**99.951**	**ug/L**	1.205	38923.658	0.060
>	Sc	45		**ug/L**		644242.735	644242.735
	Co	59	**99.956**	**ug/L**	0.573	416738.915	0.647
	Ni	60	**99.930**	**ug/L**	1.295	111515.298	0.173
	Cu	63		**ug/L**		297562.464	0.462
	Cu	65	**99.939**	**ug/L**	0.296	148622.170	0.231

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Be	9					
>	Sc	45					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #14 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Wednesday, December 21, 2022 13:36:22
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 be co cu.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221221\QC Std 1.099
Analyst: SKJ

Concentration Results

Summary

Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	**49.304**	**ug/L**	4.479	19825.101	0.030
Sc	45		**ug/L**		665157.999	665157.999
Co	59	**48.553**	**ug/L**	4.129	209024.175	0.314
Ni	60	**49.235**	**ug/L**	3.858	56879.813	0.085
Cu	63		**ug/L**		152525.497	0.229
Cu	65	**49.242**	**ug/L**	4.851	75642.783	0.114

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Be	9	98.609				
>	Sc	45		109.35			
	Co	59	97.106				
	Ni	60	98.470				
	Cu	63					
	Cu	65	98.483				

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #14 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Wednesday, December 21, 2022 13:38:27
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 be co cu.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221221\QC Std 2.100
Analyst: SKJ

Concentration Results

Summary

Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	**0.015**	**ug/L**	115.481	10.333	0.000
> Sc	45		**ug/L**		605513.795	605513.795
Co	59	**0.012**	**ug/L**	54.798	102.000	0.000
Ni	60	**0.003**	**ug/L**	61.014	294.003	0.000
Cu	63		**ug/L**		140.667	0.000
Cu	65	**0.008**	**ug/L**	199.235	68.000	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		99.54			
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #14 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Wednesday, December 21, 2022 13:40:32
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 be co cu.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221221\QC Std 3.101
Analyst: SKJ

Concentration Results

Summary

Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	**0.556**	**ug/L**	3.628	216.002	0.000
Sc	45		**ug/L**		627143.842	627143.842
Co	59	**1.053**	**ug/L**	1.633	4327.989	0.007
Ni	60	**2.156**	**ug/L**	1.562	2635.577	0.004
Cu	63		**ug/L**		6283.383	0.010
Cu	65	**2.181**	**ug/L**	3.205	3215.029	0.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Be	9	111.295				
>	Sc	45		103.10			
	Co	59	105.272				
	Ni	60	107.777				
	Cu	63					
	Cu	65	109.055				

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #14 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Wednesday, December 21, 2022 13:42:37
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 be co cu.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221221\QC Std 4.102
Analyst: SKJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	**0.002**	**ug/L**	210.773	5.000	0.000
> Sc	45		**ug/L**		545448.750	545448.750
Co	59	**0.915**	**ug/L**	0.987	3277.709	0.006
Ni	60	**1.168**	**ug/L**	9.152	1360.732	0.002
Cu	63		**ug/L**		2596.236	0.005
Cu	65	**1.064**	**ug/L**	5.420	1391.401	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		89.67			
	Co	59	101.622				
	Ni	60	97.329				
	Cu	63					
	Cu	65	103.340				

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #14 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Wednesday, December 21, 2022 13:44:42
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 be co cu.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221221\QC Std 5.103
Analyst: SKJ

Concentration Results

Summary

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**19.468**	**ug/L**	1.716	6432.115	0.012
| >	Sc	45		**ug/L**		546522.502	546522.502
|	Co	59	**20.901**	**ug/L**	0.656	73949.010	0.135
|	Ni	60	**20.860**	**ug/L**	0.414	19949.261	0.036
|	Cu	63		**ug/L**		51102.628	0.093
⌊	Cu	65	**20.164**	**ug/L**	0.791	25476.713	0.047

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000

QC Calculated Values

	Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈		Be	9	97.340				
| >		Sc	45		89.85			
|		Co	59	100.006				
|		Ni	60	98.395				
|		Cu	63					
⌊		Cu	65	95.880				

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #14 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, December 21, 2022 13:46:46
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 be co cu.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221221\QC Std 6.104
Analyst: SKJ

Concentration Results

Summary

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**51.973**	**ug/L**	1.224	20862.573	0.031
| >	Sc	45		**ug/L**		664007.003	664007.003
|	Co	59	**51.002**	**ug/L**	0.382	219173.373	0.330
|	Ni	60	**51.894**	**ug/L**	0.779	59818.386	0.090
|	Cu	63		**ug/L**		160573.281	0.242
⌊	Cu	65	**52.109**	**ug/L**	0.635	79888.244	0.120

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈	Be	9	103.945				
| >	Sc	45		109.16			
|	Co	59	102.004				
|	Ni	60	103.789				
|	Cu	63					
⌊	Cu	65	104.218				

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #14 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, December 21, 2022 13:48:52
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 be co cu.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221221\QC Std 7.105
Analyst: SKJ

Concentration Results

Summary

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.015**	**ug/L**	91.911	11.000	0.000
>	Sc	45		**ug/L**		633589.222	633589.222
	Co	59	**0.010**	**ug/L**	36.935	100.000	0.000
	Ni	60	**-0.031**	**ug/L**	69.031	270.003	-0.000
	Cu	63		**ug/L**		176.668	0.000
	Cu	65	**0.010**	**ug/L**	38.482	74.000	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		104.16			
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #14 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Wednesday, December 21, 2022 13:50:57
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 be co cu.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221221\QC Std 10.106
Analyst: SKJ

Concentration Results

Summary

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**972.810**	**ug/L**	0.831	354640.327	0.588
| >	Sc	45		**ug/L**		603308.825	603308.825
|	Co	59	**951.642**	**ug/L**	0.537	3714862.490	6.157
|	Ni	60	**968.974**	**ug/L**	0.809	1009902.666	1.673
|	Cu	63		**ug/L**		2636988.527	4.371
⌊	Cu	65	**946.789**	**ug/L**	0.372	1318066.252	2.185

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000

QC Calculated Values

	Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈		Be	9	97.281				
| >		Sc	45		99.18			
|		Co	59	95.164				
|		Ni	60	96.897				
|		Cu	63					
⌊		Cu	65	94.679				

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #14 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Wednesday, December 21, 2022 13:53:02
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 be co cu.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221221\QC Std 11.107
Analyst: SKJ

Concentration Results

Summary

Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	**57.210**	**ug/L**	2.966	22020.630	0.035
Sc	45		**ug/L**		637365.808	637365.808
Co	59	**55.598**	**ug/L**	4.440	229027.081	0.360
Ni	60	**55.753**	**ug/L**	3.727	61601.882	0.096
Cu	63		**ug/L**		167248.062	0.263
Cu	65	**56.154**	**ug/L**	3.956	82535.093	0.130

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Be	9	114.420				
>	Sc	45		104.78			
	Co	59	111.197				
	Ni	60	111.506				
	Cu	63					
	Cu	65	112.308				

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	Be	9	CCV is out of limits (+/- 10%)
QC Std 11	Co	59	CCV is out of limits (+/- 10%)
QC Std 11	Ni	60	CCV is out of limits (+/- 10%)
QC Std 11	Cu	65	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS #14 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Wednesday, December 21, 2022 13:55:07
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 be co cu.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221221\QC Std 12.108
Analyst: SKJ

Concentration Results

Summary

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.044**	**ug/L**	23.794	23.333	0.000
>	Sc	45		**ug/L**		666848.160	666848.160
	Co	59	**0.046**	**ug/L**	6.775	261.336	0.000
	Ni	60	**-0.035**	**ug/L**	77.514	279.336	-0.000
	Cu	63		**ug/L**		258.002	0.000
	Cu	65	**0.048**	**ug/L**	18.399	136.667	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		109.63			
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #14 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, December 21, 2022 14:09:46
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 be co cu.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221221\QC Std 6.115
Analyst: SKJ

Concentration Results

Summary

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**51.391**	**ug/L**	0.989	20642.577	0.031
| >	Sc	45		**ug/L**		664426.325	664426.325
|	Co	59	**51.095**	**ug/L**	0.605	219720.057	0.331
|	Ni	60	**50.990**	**ug/L**	1.073	58832.950	0.088
|	Cu	63		**ug/L**		160179.586	0.241
⌊	Cu	65	**51.430**	**ug/L**	0.631	78912.771	0.119

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000

QC Calculated Values

	Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈		Be	9	102.782				
| >		Sc	45		109.23			
|		Co	59	102.189				
|		Ni	60	101.980				
|		Cu	63					
⌊		Cu	65	102.861				

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #14 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, December 21, 2022 14:11:51
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 be co cu.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221221\QC Std 7.116
Analyst: SKJ

Concentration Results

Summary

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.004**	**ug/L**	210.082	7.000	0.000
>	Sc	45		**ug/L**		643782.446	643782.446
	Co	59	**-0.001**	**ug/L**	424.374	54.000	-0.000
	Ni	60	**-0.075**	**ug/L**	13.677	225.335	-0.000
	Cu	63		**ug/L**		119.334	-0.000
	Cu	65	**-0.004**	**ug/L**	216.984	54.000	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		105.84			
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #14 - Summary Report

Sample ID: 1205276604
Sample Date/Time: Wednesday, December 21, 2022 14:15:29
Sample Type: Sample
Sample Description: QC A 2008 MB
Number of Replicates: 3
Batch ID: 2359022|1|skj
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 be co cu.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221221\1205276604.117
Analyst: SKJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	**-0.002**	**ug/L**	213.434	4.333	-0.000
Sc	45		**ug/L**		636066.364	636066.364
Co	59	**0.013**	**ug/L**	77.301	111.334	0.000
Ni	60	**0.607**	**ug/L**	8.886	972.700	0.001
Cu	63		**ug/L**		448.674	0.001
Cu	65	**0.107**	**ug/L**	17.749	216.668	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		104.57			
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #14 - Summary Report

Sample ID: 1205276605
Sample Date/Time: Wednesday, December 21, 2022 14:17:33
Sample Type: Sample
Sample Description: QC A 2008 LCS
Number of Replicates: 3
Batch ID: 2359022|1|skj
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 be co cu.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221221\1205276605.118
Analyst: SKJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	**52.895**	**ug/L**	0.455	21402.360	0.032
> Sc	45		**ug/L**		669389.257	669389.257
Co	59	**53.242**	**ug/L**	0.284	230641.080	0.344
Ni	60	**54.361**	**ug/L**	1.343	63179.552	0.094
Cu	63		**ug/L**		169791.719	0.253
Cu	65	**54.949**	**ug/L**	1.315	84937.280	0.127

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		110.04			
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #14 - Summary Report

Sample ID: 604449001
Sample Date/Time: Wednesday, December 21, 2022 14:19:38
Sample Type: Sample
Sample Description: TNSL 2008
Number of Replicates: 3
Batch ID: 2359022|25|skj
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 be co cu.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221221\604449001.119
Analyst: SKJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	**0.003**	**ug/L**	170.074	4.667	0.000
Sc	45		**ug/L**		457758.726	457758.726
Co	59	**0.050**	**ug/L**	21.640	191.335	0.000
Ni	60	**1.004**	**ug/L**	1.753	1014.036	0.002
Cu	63		**ug/L**		765.354	0.001
Cu	65	**0.156**	**ug/L**	8.719	208.002	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		75.25			
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #14 - Summary Report

Sample ID: 1205276606
Sample Date/Time: Wednesday, December 21, 2022 14:21:43
Sample Type: Sample
Sample Description: QC A 2008 DUP
Number of Replicates: 3
Batch ID: 2359022|25|skj
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 be co cu.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221221\1205276606.120
Analyst: SKJ

Concentration Results

Summary

Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	**0.013**	**ug/L**	106.119	7.333	0.000
> Sc	45		**ug/L**		461893.373	461893.373
Co	59	**0.052**	**ug/L**	7.578	198.001	0.000
Ni	60	**1.120**	**ug/L**	8.482	1115.377	0.002
Cu	63		**ug/L**		689.350	0.001
Cu	65	**0.182**	**ug/L**	24.067	236.669	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		75.93			
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #14 - Summary Report

Sample ID: 1205276607
Sample Date/Time: Wednesday, December 21, 2022 14:23:48
Sample Type: Sample
Sample Description: QC A 2008 MS
Number of Replicates: 3
Batch ID: 2359022|25|skj
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 be co cu.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221221\1205276607.121
Analyst: SKJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	**1.725**	**ug/L**	3.113	497.342	0.001
> Sc	45		**ug/L**		473262.940	473262.940
Co	59	**1.852**	**ug/L**	1.070	5714.477	0.012
Ni	60	**2.704**	**ug/L**	2.335	2437.541	0.005
Cu	63		**ug/L**		4460.697	0.009
Cu	65	**1.861**	**ug/L**	2.436	2076.151	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		77.80			
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #14 - Summary Report

Sample ID: 1205276608
Sample Date/Time: Wednesday, December 21, 2022 14:25:53
Sample Type: Sample
Sample Description: QC A 2008 SDILT
Number of Replicates: 3
Batch ID: 2359022|125|skj
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 be co cu.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221221\1205276608.122
Analyst: SKJ

Concentration Results

Summary

Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	**0.005**	**ug/L**	103.513	7.000	0.000
> Sc	45		**ug/L**		632485.258	632485.258
Co	59	**0.009**	**ug/L**	16.234	96.667	0.000
Ni	60	**0.151**	**ug/L**	19.841	468.008	0.000
Cu	63		**ug/L**		1234.054	0.002
Cu	65	**0.373**	**ug/L**	3.659	604.679	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		103.98			
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #14 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, December 21, 2022 14:28:00
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 be co cu.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221221\QC Std 6.123
Analyst: SKJ

Concentration Results

Summary

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**51.067**	**ug/L**	0.739	20650.593	0.031
| >	Sc	45		**ug/L**		668887.617	668887.617
|	Co	59	**51.186**	**ug/L**	0.958	221565.124	0.331
|	Ni	60	**51.817**	**ug/L**	0.792	60181.919	0.089
|	Cu	63		**ug/L**		163144.515	0.244
⌊	Cu	65	**52.480**	**ug/L**	0.479	81056.770	0.121

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈	Be	9	102.134				
| >	Sc	45		109.96			
|	Co	59	102.372				
|	Ni	60	103.634				
|	Cu	63					
⌊	Cu	65	104.960				

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #14 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, December 21, 2022 14:30:05
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 be co cu.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221221\QC Std 7.124
Analyst: SKJ

Concentration Results

Summary

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.005**	**ug/L**	203.986	7.333	0.000
>	Sc	45		**ug/L**		665048.846	665048.846
	Co	59	**-0.002**	**ug/L**	165.176	54.000	-0.000
	Ni	60	**-0.077**	**ug/L**	36.403	231.335	-0.000
	Cu	63		**ug/L**		145.334	0.000
	Cu	65	**-0.001**	**ug/L**	629.036	60.667	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		109.33			
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #14 - Summary Report

Sample ID: 604449005
Sample Date/Time: Wednesday, December 21, 2022 14:32:12
Sample Type: Sample
Sample Description: TNSL 2008
Number of Replicates: 3
Batch ID: 2359022|25|skj
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 be co cu.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221221\604449005.125
Analyst: SKJ

Concentration Results

Summary

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**-0.004**	**ug/L**	230.178	2.667	-0.000
| >	Sc	45		**ug/L**		469265.439	469265.439
|	Co	59	**0.048**	**ug/L**	0.697	189.335	0.000
|	Ni	60	**0.897**	**ug/L**	18.018	949.365	0.002
|	Cu	63		**ug/L**		809.356	0.002
⌊	Cu	65	**0.220**	**ug/L**	6.399	282.003	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈	Be	9					
| >	Sc	45		77.15			
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #14 - Summary Report

Sample ID: 604449009
Sample Date/Time: Wednesday, December 21, 2022 14:34:17
Sample Type: Sample
Sample Description: TNSL 2008
Number of Replicates: 3
Batch ID: 2359022|25|skj
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 be co cu.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221221\604449009.126
Analyst: SKJ

Concentration Results

Summary

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	**0.003**	**ug/L**	239.020	4.000	0.000
Sc	45		**ug/L**		394945.676	394945.676
Co	59	**0.081**	**ug/L**	11.272	242.669	0.001
Ni	60	**1.938**	**ug/L**	4.973	1510.080	0.003
Cu	63		**ug/L**		4236.629	0.011
Cu	65	**0.302**	**ug/L**	13.735	312.003	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		64.93			
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #14 - Summary Report

Sample ID: 604449013
Sample Date/Time: Wednesday, December 21, 2022 14:36:22
Sample Type: Sample
Sample Description: TNSL 2008
Number of Replicates: 3
Batch ID: 2359022|25|skj
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 be co cu.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221221\604449013.127
Analyst: SKJ

Concentration Results

Summary

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**0.005**	**ug/L**	31.963	5.333	0.000
| >	Sc	45		**ug/L**		468378.682	468378.682
|	Co	59	**0.036**	**ug/L**	26.281	152.667	0.000
|	Ni	60	**0.886**	**ug/L**	0.857	941.364	0.002
|	Cu	63		**ug/L**		973.367	0.002
⌊	Cu	65	**0.244**	**ug/L**	6.437	308.003	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000

QC Calculated Values

	Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈		Be	9					
| >		Sc	45		77.00			
|		Co	59					
|		Ni	60					
|		Cu	63					
⌊		Cu	65					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #14 - Summary Report

Sample ID: 604449017
Sample Date/Time: Wednesday, December 21, 2022 14:38:27
Sample Type: Sample
Sample Description: TNSL 2008
Number of Replicates: 3
Batch ID: 2359022|25|skj
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 be co cu.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221221\604449017.128
Analyst: SKJ

Concentration Results

Summary

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**-0.006**	**ug/L**	54.600	2.333	-0.000
| >	Sc	45		**ug/L**		532960.900	532960.900
|	Co	59	**0.013**	**ug/L**	48.333	95.334	0.000
|	Ni	60	**0.718**	**ug/L**	14.754	916.696	0.001
|	Cu	63		**ug/L**		348.671	0.000
⌊	Cu	65	**0.055**	**ug/L**	14.785	117.334	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000

QC Calculated Values

	Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈		Be	9					
| >		Sc	45		87.62			
|		Co	59					
|		Ni	60					
|		Cu	63					
⌊		Cu	65					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #14 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, December 21, 2022 14:40:34
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 be co cu.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221221\QC Std 6.129
Analyst: SKJ

Concentration Results

Summary

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**50.868**	**ug/L**	0.868	20750.406	0.031
| >	Sc	45		**ug/L**		674751.166	674751.166
|	Co	59	**51.793**	**ug/L**	0.964	226173.631	0.335
|	Ni	60	**52.177**	**ug/L**	1.546	61122.571	0.090
|	Cu	63		**ug/L**		163454.864	0.242
⌊	Cu	65	**52.559**	**ug/L**	0.611	81887.497	0.121

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
⌈	Be	9	101.737				
| >	Sc	45		110.93			
|	Co	59	103.586				
|	Ni	60	104.353				
|	Cu	63					
⌊	Cu	65	105.118				

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

ICPMS #14 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, December 21, 2022 14:42:39
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8 be co cu.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\221221\QC Std 7.130
Analyst: SKJ

Concentration Results

Summary

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.006**	**ug/L**	50.293	7.667	0.000
>	Sc	45		**ug/L**		660331.593	660331.593
	Co	59	**-0.003**	**ug/L**	94.251	47.333	-0.000
	Ni	60	**-0.115**	**ug/L**	4.299	185.335	-0.000
	Cu	63		**ug/L**		148.001	0.000
	Cu	65	**0.008**	**ug/L**	101.986	74.000	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000

QC Calculated Values

Inte	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Reco	Dilution % D	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		108.56			
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC action taken

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Analysis Begun

Logged In Analyst: hg7 **Technique: AA FIMS-MHS**
Spectrometer: FIMS-100, P/N B050-9550 **Autosampler: S23**

Sample Information File: C:\Users\Public\PerkinElmer Syngistix\AA\Data\Sample Information\ 122022.SIFX
Batch ID:
Results Data Set: 122022W1
Results Library: C:\Users\Public\PerkinElmer Syngistix\AA\Data\Results\Results.mdb

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Method Loaded
Method Name: WATER **Method Last Saved: 11/28/2022 15:05:31**
Method Description: SW-846 7470A, EPA 245.1

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: Calib Blank **Date Collected: 12/20/2022 09:05:43**
Analyst: JP2 **Data Type: Original**

Replicate Data: Calib Blank **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0001	0.0010	0.0001	09:06:31	Yes
2		[0.00]	0.0001	0.0007	0.0001	09:07:01	Yes
Mean:		[0.00]	0.0001				
SD:		0.0000	0.0000				
%RSD:		0.00%	18.31%				

Auto-zero performed.

==========

Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S0.2 **Date Collected: 12/20/2022 09:07:18**
Analyst: JP2 **Data Type: Original**

Replicate Data: S0.2 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0016	0.0101	0.0017	09:08:07	Yes
2		[0.2]	0.0016	0.0100	0.0017	09:08:37	Yes
Mean:		[0.2]	0.0016				
SD:		0.000	0.0000				
%RSD:		0.00%	0.37%				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.00814 Intercept: 0.00000

==========

Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S0.5 **Date Collected: 12/20/2022 09:08:55**
Analyst: JP2 **Data Type: Original**

Replicate Data: S0.5 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0041	0.0243	0.0042	09:09:44	Yes
2		[0.5]	0.0042	0.0258	0.0043	09:10:14	Yes
Mean:		[0.5]	0.0041				
SD:		0.000	0.0001				
%RSD:		0.00%	2.35%				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999967 Slope: 0.00830 Intercept: -0.00001

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S2.0 **Date Collected: 12/20/2022 09:10:32**
Analyst: JP2 **Data Type: Original**

Replicate Data: S2.0 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.0]	0.0168	0.0983	0.0169	09:11:22	Yes
2		[2.0]	0.0168	0.0978	0.0169	09:11:52	Yes
Mean:		[2.0]	0.0168				
SD:		0.000	0.0000				
%RSD:		0.00%	0.13%				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999994 Slope: 0.00841 Intercept: -0.00003

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S5.0 **Date Collected: 12/20/2022 09:12:11**
Analyst: JP2 **Data Type: Original**

Replicate Data: S5.0 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0423	0.2455	0.0424	09:13:00	Yes
2		[5.0]	0.0421	0.2422	0.0423	09:13:31	Yes
Mean:		[5.0]	0.0422				
SD:		0.000	0.0001				
%RSD:		0.00%	0.18%				

Standard number 4 applied. [5.0]
Correlation Coef.: 0.999997 Slope: 0.00845 Intercept: -0.00005

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: S10.0 **Date Collected: 12/20/2022 09:13:50**
Analyst: JP2 **Data Type: Original**

Replicate Data: S10.0 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.0847	0.4879	0.0848	09:14:38	Yes
2		[10.0]	0.0847	0.4858	0.0849	09:15:08	Yes
Mean:		[10.0]	0.0847				
SD:		0.000	0.0001				
%RSD:		0.00%	0.06%				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999998 Slope: 0.00847 Intercept: -0.00008

Calibration data for Hg 253.7 **Equation: Linear, Calculated Intercept**

ID	Mean Signal (Abs)	Entered Conc. µg/L	Calculated Conc. µg/L	Standard Deviation	%RSD
Calib Blank	0.0000	0	0.010	0.00	18.31
S0.2	0.0016	0.2	0.202	0.00	0.37
S0.5	0.0041	0.5	0.499	0.00	2.35
S2.0	0.0168	2.0	1.992	0.00	0.13
S5.0	0.0422	5.0	4.991	0.00	0.18
S10.0	0.0847	10.0	10.006	0.00	0.06

Correlation Coef.: 0.999998 Slope: 0.00847 Intercept: -0.00008

Sequence No.: 7 **Autosampler Location: 9**
Sample ID: ICV **Date Collected: 12/20/2022 09:15:26**
Analyst: JP2 **Data Type: Original**

Replicate Data: ICV **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.024	5.024	0.0425	0.2430	0.0426	09:16:15	Yes
2	5.073	5.073	0.0429	0.2409	0.0430	09:16:45	Yes
Mean:	5.049	5.049	0.0427				
SD:	0.0350	0.0350	0.0003				
%RSD:	0.69%	0.69%	0.69%				

QC value within limits for Hg 253.7 Recovery = 100.97%
All analyte(s) passed QC.

==========

Sequence No.: 8 **Autosampler Location: 10**
Sample ID: ICB **Date Collected: 12/20/2022 09:17:04**
Analyst: JP2 **Data Type: Original**

Replicate Data: ICB **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.008	0.008	-0.0000	0.0003	0.0001	09:17:53	Yes
2	0.001	0.001	-0.0001	-0.0004	0.0000	09:18:24	Yes
Mean:	0.004	0.004	-0.0000				
SD:	0.0051	0.0051	0.0000				
%RSD:	123.46%	123.46%	85.92%				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 9 **Autosampler Location: 11**
Sample ID: CRDL **Date Collected: 12/20/2022 09:18:43**
Analyst: JP2 **Data Type: Original**

Replicate Data: CRDL **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.209	0.209	0.0017	0.0098	0.0018	09:19:32	Yes
2	0.203	0.203	0.0016	0.0091	0.0017	09:20:02	Yes
Mean:	0.206	0.206	0.0017				
SD:	0.0043	0.0043	0.0000				
%RSD:	2.07%	2.07%	2.18%				

QC value within limits for Hg 253.7 Recovery = 102.85%
All analyte(s) passed QC.

==========

Sequence No.: 10 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/20/2022 09:20:20**
Analyst: JP2 **Data Type: Original**

Replicate Data: CCV **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.236	5.236	0.0443	0.2477	0.0444	09:21:08	Yes
2	5.230	5.230	0.0442	0.2458	0.0443	09:21:39	Yes
Mean:	5.233	5.233	0.0443				
SD:	0.0049	0.0049	0.0000				
%RSD:	0.09%	0.09%	0.09%				

QC value within limits for Hg 253.7 Recovery = 104.66%
All analyte(s) passed QC.

Sequence No.: 11 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/20/2022 09:21:57**
Analyst: JP2 **Data Type: Original**

Replicate Data: CCB **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.001	-0.001	-0.0001	-0.0005	0.0000	09:22:45	Yes
2	0.001	0.001	-0.0001	-0.0001	0.0000	09:23:15	Yes
Mean:	-0.000	-0.000	-0.0001				
SD:	0.0011	0.0011	0.0000				
%RSD:	512.54%	512.54%	10.90%				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12 **Autosampler Location: 12**
Sample ID: 1205275052|2358207|1 **Date Collected: 12/20/2022 09:23:34**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275052|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.006	0.006	-0.0000	-0.0006	0.0001	09:24:22	Yes
2	0.004	0.004	-0.0000	-0.0003	0.0001	09:24:52	Yes
Mean:	0.005	0.005	-0.0000				
SD:	0.0014	0.0014	0.0000				
%RSD:	26.77%	26.77%	30.91%				

Sequence No.: 13 **Autosampler Location: 13**
Sample ID: 1205275053|2358207|1 **Date Collected: 12/20/2022 09:25:10**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275053|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.158	2.158	0.0182	0.1001	0.0183	09:25:58	Yes
2	2.168	2.168	0.0183	0.1006	0.0184	09:26:29	Yes
Mean:	2.163	2.163	0.0182				
SD:	0.0070	0.0070	0.0001				
%RSD:	0.32%	0.32%	0.32%				

Sequence No.: 14 **Autosampler Location: 14**
Sample ID: 604416001|2358207|1 **Date Collected: 12/20/2022 09:26:47**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604416001|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.308	0.308	0.0025	0.0168	0.0026	09:27:35	Yes
2	0.300	0.300	0.0025	0.0172	0.0026	09:28:06	Yes
Mean:	0.304	0.304	0.0025				
SD:	0.0061	0.0061	0.0001				
%RSD:	1.99%	1.99%	2.06%				

Sequence No.: 15 **Autosampler Location: 15**
Sample ID: 604416007|2358207|1 **Date Collected: 12/20/2022 09:28:24**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604416007|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.111	0.111	0.0009	0.0057	0.0010	09:29:12	Yes
2	0.105	0.105	0.0008	0.0056	0.0009	09:29:42	Yes
Mean:	0.108	0.108	0.0008				
SD:	0.0045	0.0045	0.0000				
%RSD:	4.19%	4.19%	4.62%				

==========

Sequence No.: 16 **Autosampler Location: 16**
Sample ID: 604449001|2358207|1 **Date Collected: 12/20/2022 09:30:01**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604449001|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.260	0.260	0.0021	0.0131	0.0022	09:30:49	Yes
2	0.261	0.261	0.0021	0.0135	0.0022	09:31:19	Yes
Mean:	0.260	0.260	0.0021				
SD:	0.0010	0.0010	0.0000				
%RSD:	0.38%	0.38%	0.40%				

==========

Sequence No.: 17 **Autosampler Location: 17**
Sample ID: 1205275054|2358207|1 **Date Collected: 12/20/2022 09:31:38**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275054|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.244	0.244	0.0020	0.0126	0.0021	09:32:26	Yes
2	0.243	0.243	0.0020	0.0125	0.0021	09:32:57	Yes
Mean:	0.244	0.244	0.0020				
SD:	0.0013	0.0013	0.0000				
%RSD:	0.51%	0.51%	0.54%				

==========

Sequence No.: 18 **Autosampler Location: 18**
Sample ID: 1205275055|2358207|1 **Date Collected: 12/20/2022 09:33:15**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275055|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.869	0.869	0.0073	0.0470	0.0074	09:34:04	Yes
2	0.860	0.860	0.0072	0.0465	0.0073	09:34:34	Yes
Mean:	0.864	0.864	0.0072				
SD:	0.0061	0.0061	0.0001				
%RSD:	0.71%	0.71%	0.72%				

==========

Sequence No.: 19 **Autosampler Location: 19**
Sample ID: 1205275056|2358207|5 **Date Collected: 12/20/2022 09:34:53**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275056|2358207|5 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.112	0.112	0.0009	0.0048	0.0010	09:35:42	Yes
2	0.117	0.117	0.0009	0.0053	0.0010	09:36:13	Yes
Mean:	0.114	0.114	0.0009				

SD:	0.0039	0.0039	0.0000
%RSD:	3.42%	3.42%	3.75%

==========

Sequence No.: 20 **Autosampler Location: 20**
Sample ID: 1205275066|2358207|1 **Date Collected: 12/20/2022 09:36:32**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275066|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.826	0.826	0.0069	0.0451	0.0070	09:37:21	Yes
2	0.840	0.840	0.0070	0.0446	0.0071	09:37:52	Yes
Mean:	0.833	0.833	0.0070				
SD:	0.0101	0.0101	0.0001				
%RSD:	1.21%	1.21%	1.23%				

==========

Sequence No.: 21 **Autosampler Location: 21**
Sample ID: 604449002|2358207|1 **Date Collected: 12/20/2022 09:38:11**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604449002|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.430	0.430	0.0036	0.0231	0.0037	09:39:00	Yes
2	0.420	0.420	0.0035	0.0222	0.0036	09:39:30	Yes
Mean:	0.425	0.425	0.0035				
SD:	0.0071	0.0071	0.0001				
%RSD:	1.68%	1.68%	1.72%				

==========

Sequence No.: 22 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/20/2022 09:39:49**
Analyst: JP2 **Data Type: Original**

Replicate Data: CCV **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	6.101	6.101	0.0516	0.2557	0.0517	09:40:37	Yes
2	5.211	5.211	0.0441	0.1998	0.0442	09:41:08	Yes
Mean:	5.656	5.656	0.0478				
SD:	0.6299	0.6299	0.0053				
%RSD:	11.14%	11.14%	11.16%				

QC value within limits for Hg 253.7 Recovery = 113.12%
All analyte(s) passed QC.
User canceled analysis.

==========

Analysis Begun

Logged In Analyst: hg7 **Technique: AA FIMS-MHS**
Spectrometer: FIMS-100, P/N B050-9550 **Autosampler: S23**

Sample Information File: C:\Users\Public\PerkinElmer Syngistix\AA\Data\Sample Information\ 122022.SIFX
Batch ID:
Results Data Set: 122022W1
Results Library: C:\Users\Public\PerkinElmer Syngistix\AA\Data\Results\Results.mdb

==========

Method Loaded
Method Name: WATER* **Method Last Saved: 11/28/2022 15:05:31**
Method Description: SW-846 7470A, EPA 245.1

==========

Sequence No.: 1 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/20/2022 09:41:40**
Analyst: JP2 **Data Type: Original**

Replicate Data: CCB **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.007	0.007	-0.0000	0.0003	0.0001	09:42:29	Yes
2	-0.002	-0.002	-0.0001	-0.0007	0.0000	09:42:59	Yes
Mean:	0.002	0.002	-0.0001				
SD:	0.0065	0.0065	0.0001				
%RSD:	259.03%	259.03%	86.33%				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.
User canceled analysis.

==========

Analysis Begun

Logged In Analyst: hg7 **Technique: AA FIMS-MHS**
Spectrometer: FIMS-100, P/N B050-9550 **Autosampler: S23**

Sample Information File: C:\Users\Public\PerkinElmer Syngistix\AA\Data\Sample Information\ 122022.SIFX
Batch ID:
Results Data Set: 122022W1
Results Library: C:\Users\Public\PerkinElmer Syngistix\AA\Data\Results\Results.mdb

==========

Method Loaded
Method Name: WATER* **Method Last Saved: 12/20/2022 09:43:02**
Method Description: SW-846 7470A, EPA 245.1

==========

Sequence No.: 1 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/20/2022 09:43:28**
Analyst: JP2 **Data Type: Original**

Replicate Data: CCV **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.865	4.865	0.0411	0.1867	0.0413	09:44:16	Yes
2	5.269	5.269	0.0446	0.2008	0.0447	09:44:47	Yes
Mean:	5.067	5.067	0.0429				
SD:	0.2856	0.2856	0.0024				
%RSD:	5.64%	5.64%	5.65%				

QC value within limits for Hg 253.7 Recovery = 101.35%
All analyte(s) passed QC.

==========

Sequence No.: 2 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/20/2022 09:45:05**
Analyst: JP2 **Data Type: Original**

Replicate Data: CCB **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.015	0.015	0.0000	0.0009	0.0002	09:45:54	Yes
2	0.007	0.007	-0.0000	0.0004	0.0001	09:46:24	Yes
Mean:	0.011	0.011	0.0000				
SD:	0.0059	0.0059	0.0000				
%RSD:	53.41%	53.41%	556.90%				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 3 **Autosampler Location: 12**
Sample ID: 1205275052|2358207|1 **Date Collected: 12/20/2022 09:46:43**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275052|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.001	-0.001	-0.0001	-0.0003	0.0000	09:47:31	Yes
2	-0.001	-0.001	-0.0001	-0.0006	0.0000	09:48:01	Yes
Mean:	-0.001	-0.001	-0.0001				
SD:	0.0001	0.0001	0.0000				
%RSD:	7.19%	7.19%	0.83%				

Sequence No.: 4 **Autosampler Location: 13**
Sample ID: 1205275053|2358207|1 **Date Collected: 12/20/2022 09:48:19**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275053|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.136	2.136	0.0180	0.0809	0.0181	09:49:08	Yes
2	2.148	2.148	0.0181	0.0808	0.0182	09:49:38	Yes
Mean:	2.142	2.142	0.0181				
SD:	0.0089	0.0089	0.0001				
%RSD:	0.42%	0.42%	0.42%				

Sequence No.: 5 **Autosampler Location: 14**
Sample ID: 604416001|2358207|1 **Date Collected: 12/20/2022 09:49:56**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604416001|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.292	0.292	0.0024	0.0141	0.0025	09:50:45	Yes
2	0.303	0.303	0.0025	0.0144	0.0026	09:51:15	Yes
Mean:	0.298	0.298	0.0024				
SD:	0.0078	0.0078	0.0001				
%RSD:	2.61%	2.61%	2.71%				

Sequence No.: 6 **Autosampler Location: 15**
Sample ID: 604416007|2358207|1 **Date Collected: 12/20/2022 09:51:33**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604416007|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.093	0.093	0.0007	0.0047	0.0008	09:52:21	Yes
2	0.090	0.090	0.0007	0.0048	0.0008	09:52:51	Yes
Mean:	0.091	0.091	0.0007				
SD:	0.0024	0.0024	0.0000				
%RSD:	2.61%	2.61%	2.93%				

Sequence No.: 7 **Autosampler Location: 16**
Sample ID: 604449001|2358207|1 **Date Collected: 12/20/2022 09:53:10**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604449001|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.237	0.237	0.0019	0.0114	0.0020	09:53:58	Yes
2	0.234	0.234	0.0019	0.0114	0.0020	09:54:29	Yes
Mean:	0.236	0.236	0.0019				
SD:	0.0019	0.0019	0.0000				
%RSD:	0.81%	0.81%	0.85%				

==========

Sequence No.: 8 **Autosampler Location: 17**
Sample ID: 1205275054|2358207|1 **Date Collected: 12/20/2022 09:54:47**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275054|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.215	0.215	0.0017	0.0104	0.0018	09:55:35	Yes
2	0.222	0.222	0.0018	0.0106	0.0019	09:56:06	Yes
Mean:	0.218	0.218	0.0018				
SD:	0.0054	0.0054	0.0000				
%RSD:	2.46%	2.46%	2.58%				

==========

Sequence No.: 9 **Autosampler Location: 18**
Sample ID: 1205275055|2358207|1 **Date Collected: 12/20/2022 09:56:25**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275055|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.783	0.783	0.0066	0.0379	0.0067	09:57:13	Yes
2	0.794	0.794	0.0066	0.0379	0.0068	09:57:43	Yes
Mean:	0.789	0.789	0.0066				
SD:	0.0077	0.0077	0.0001				
%RSD:	0.98%	0.98%	0.99%				

==========

Sequence No.: 10 **Autosampler Location: 19**
Sample ID: 1205275056|2358207|5 **Date Collected: 12/20/2022 09:58:02**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275056|2358207|5 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.106	0.106	0.0008	0.0041	0.0009	09:58:50	Yes
2	0.108	0.108	0.0008	0.0043	0.0009	09:59:21	Yes
Mean:	0.107	0.107	0.0008				
SD:	0.0013	0.0013	0.0000				
%RSD:	1.25%	1.25%	1.37%				

==========

Sequence No.: 11 **Autosampler Location: 20**
Sample ID: 1205275066|2358207|1 **Date Collected: 12/20/2022 09:59:40**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275066|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.809	0.809	0.0068	0.0392	0.0069	10:00:29	Yes
2	0.821	0.821	0.0069	0.0397	0.0070	10:00:59	Yes

Mean:	0.815	0.815	0.0068
SD:	0.0078	0.0078	0.0001
%RSD:	0.96%	0.96%	0.97%

==========

Sequence No.: 12 **Autosampler Location: 21**
Sample ID: 604449002|2358207|1 **Date Collected: 12/20/2022 10:01:18**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604449002|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.394	0.394	0.0033	0.0197	0.0034	10:02:07	Yes
2	0.398	0.398	0.0033	0.0195	0.0034	10:02:38	Yes
Mean:	0.396	0.396	0.0033				
SD:	0.0028	0.0028	0.0000				
%RSD:	0.71%	0.71%	0.73%				

==========

Sequence No.: 13 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/20/2022 10:02:57**
Analyst: JP2 **Data Type: Original**

Replicate Data: CCV **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.428	5.428	0.0459	0.2038	0.0460	10:03:46	Yes
2	5.449	5.449	0.0461	0.2026	0.0462	10:04:16	Yes
Mean:	5.438	5.438	0.0460				
SD:	0.0150	0.0150	0.0001				
%RSD:	0.28%	0.28%	0.28%				

QC value within limits for Hg 253.7 Recovery = 108.76%
All analyte(s) passed QC.

==========

Sequence No.: 14 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/20/2022 10:04:34**
Analyst: JP2 **Data Type: Original**

Replicate Data: CCB **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.005	-0.005	-0.0001	-0.0012	-0.0000	10:05:22	Yes
2	0.000	0.000	-0.0001	-0.0006	0.0000	10:05:53	Yes
Mean:	-0.002	-0.002	-0.0001				
SD:	0.0032	0.0032	0.0000				
%RSD:	144.67%	144.67%	26.46%				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 15 **Autosampler Location: 22**
Sample ID: 604449005|2358207|1 **Date Collected: 12/20/2022 10:06:11**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604449005|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.107	0.107	0.0008	0.0041	0.0009	10:07:00	Yes
2	0.107	0.107	0.0008	0.0039	0.0009	10:07:30	Yes
Mean:	0.107	0.107	0.0008				
SD:	0.0000	0.0000	0.0000				
%RSD:	0.04%	0.04%	0.05%				

Sequence No.: 16 **Autosampler Location: 23**
Sample ID: 604449006|2358207|1 **Date Collected: 12/20/2022 10:07:50**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604449006|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.183	0.183	0.0015	0.0084	0.0016	10:08:39	Yes
2	0.192	0.192	0.0015	0.0091	0.0017	10:09:09	Yes
Mean:	0.187	0.187	0.0015				
SD:	0.0067	0.0067	0.0001				
%RSD:	3.58%	3.58%	3.78%				

Sequence No.: 17 **Autosampler Location: 24**
Sample ID: 604449009|2358207|1 **Date Collected: 12/20/2022 10:09:27**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604449009|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.145	0.145	0.0011	0.0053	0.0013	10:10:15	Yes
2	0.143	0.143	0.0011	0.0052	0.0012	10:10:46	Yes
Mean:	0.144	0.144	0.0011				
SD:	0.0015	0.0015	0.0000				
%RSD:	1.06%	1.06%	1.14%				

Sequence No.: 18 **Autosampler Location: 25**
Sample ID: 604449010|2358207|1 **Date Collected: 12/20/2022 10:11:04**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604449010|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.196	0.196	0.0016	0.0092	0.0017	10:11:52	Yes
2	0.197	0.197	0.0016	0.0092	0.0017	10:12:23	Yes
Mean:	0.197	0.197	0.0016				
SD:	0.0003	0.0003	0.0000				
%RSD:	0.16%	0.16%	0.17%				

Sequence No.: 19 **Autosampler Location: 26**
Sample ID: 604449013|2358207|1 **Date Collected: 12/20/2022 10:12:41**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604449013|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.104	0.104	0.0008	0.0037	0.0009	10:13:30	Yes
2	0.096	0.096	0.0007	0.0030	0.0008	10:14:00	Yes
Mean:	0.100	0.100	0.0008				
SD:	0.0058	0.0058	0.0000				
%RSD:	5.83%	5.83%	6.48%				

Sequence No.: 20 **Autosampler Location: 27**
Sample ID: 604449014|2358207|1 **Date Collected: 12/20/2022 10:14:18**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604449014|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.149	0.149	0.0012	0.0064	0.0013	10:15:06	Yes
2	0.154	0.154	0.0012	0.0067	0.0013	10:15:36	Yes
Mean:	0.152	0.152	0.0012				
SD:	0.0032	0.0032	0.0000				
%RSD:	2.09%	2.09%	2.23%				

==========

Sequence No.: 21 **Autosampler Location: 28**
Sample ID: 604449017|2358207|1 **Date Collected: 12/20/2022 10:15:55**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604449017|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.097	0.097	0.0007	0.0040	0.0008	10:16:43	Yes
2	0.093	0.093	0.0007	0.0034	0.0008	10:17:13	Yes
Mean:	0.095	0.095	0.0007				
SD:	0.0027	0.0027	0.0000				
%RSD:	2.80%	2.80%	3.13%				

==========

Sequence No.: 22 **Autosampler Location: 29**
Sample ID: 604449018|2358207|1 **Date Collected: 12/20/2022 10:17:31**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604449018|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.265	0.265	0.0022	0.0132	0.0023	10:18:20	Yes
2	0.246	0.246	0.0020	0.0103	0.0021	10:18:51	Yes
Mean:	0.255	0.255	0.0021				
SD:	0.0134	0.0134	0.0001				
%RSD:	5.26%	5.26%	5.48%				

==========

Sequence No.: 23 **Autosampler Location: 30**
Sample ID: 604464001|2358207|1 **Date Collected: 12/20/2022 10:19:10**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604464001|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.082	0.082	0.0006	0.0029	0.0007	10:19:58	Yes
2	0.073	0.073	0.0005	0.0029	0.0006	10:20:29	Yes
Mean:	0.077	0.077	0.0006				
SD:	0.0061	0.0061	0.0001				
%RSD:	7.84%	7.84%	9.00%				

==========

Sequence No.: 24 **Autosampler Location: 31**
Sample ID: 1205275057|2358207|1 **Date Collected: 12/20/2022 10:20:47**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275057|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.072	0.072	0.0005	0.0030	0.0006	10:21:36	Yes
2	0.074	0.074	0.0005	0.0029	0.0006	10:22:07	Yes
Mean:	0.073	0.073	0.0005				
SD:	0.0011	0.0011	0.0000				

%RSD: 1.56% 1.56% 1.80%

==========

Sequence No.: 25 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/20/2022 10:22:26**
Analyst: JP2 **Data Type: Original**

Replicate Data: CCV **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.941	4.941	0.0418	0.1866	0.0419	10:23:14	Yes
2	4.912	4.912	0.0415	0.1862	0.0416	10:23:44	Yes
Mean:	4.927	4.927	0.0417				
SD:	0.0210	0.0210	0.0002				
%RSD:	0.43%	0.43%	0.43%				

QC value within limits for Hg 253.7 Recovery = 98.53%
All analyte(s) passed QC.

==========

Sequence No.: 26 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/20/2022 10:24:02**
Analyst: JP2 **Data Type: Original**

Replicate Data: CCB **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.006	0.006	-0.0000	0.0001	0.0001	10:24:51	Yes
2	0.005	0.005	-0.0000	-0.0001	0.0001	10:25:21	Yes
Mean:	0.006	0.006	-0.0000				
SD:	0.0008	0.0008	0.0000				
%RSD:	13.18%	13.18%	19.42%				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 27 **Autosampler Location: 32**
Sample ID: 1205275058|2358207|1 **Date Collected: 12/20/2022 10:25:40**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275058|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.002	2.002	0.0169	0.0758	0.0170	10:26:30	Yes
2	2.025	2.025	0.0171	0.0759	0.0172	10:27:00	Yes
Mean:	2.014	2.014	0.0170				
SD:	0.0163	0.0163	0.0001				
%RSD:	0.81%	0.81%	0.81%				

==========

Sequence No.: 28 **Autosampler Location: 33**
Sample ID: 1205275059|2358207|5 **Date Collected: 12/20/2022 10:27:19**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275059|2358207|5 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.011	0.011	0.0000	-0.0005	0.0001	10:28:08	Yes
2	0.028	0.028	0.0002	0.0010	0.0003	10:28:38	Yes
Mean:	0.020	0.020	0.0001				
SD:	0.0119	0.0119	0.0001				
%RSD:	59.86%	59.86%	120.44%				

==========

Sequence No.: 29 **Autosampler Location: 34**
Sample ID: 1205275067|2358207|1 **Date Collected: 12/20/2022 10:28:57**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275067|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.742	1.742	0.0147	0.0661	0.0148	10:29:47	Yes
2	1.847	1.847	0.0156	0.0707	0.0157	10:30:17	Yes
Mean:	1.794	1.794	0.0151				
SD:	0.0745	0.0745	0.0006				
%RSD:	4.15%	4.15%	4.17%				

==========

Sequence No.: 30 **Autosampler Location: 35**
Sample ID: 604522001|2358207|1 **Date Collected: 12/20/2022 10:30:37**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604522001|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.007	0.007	-0.0000	0.0002	0.0001	10:31:25	Yes
2	0.007	0.007	-0.0000	0.0004	0.0001	10:31:55	Yes
Mean:	0.007	0.007	-0.0000				
SD:	0.0003	0.0003	0.0000				
%RSD:	3.79%	3.79%	7.83%				

==========

Sequence No.: 31 **Autosampler Location: 36**
Sample ID: 1205275060|2358207|1 **Date Collected: 12/20/2022 10:32:14**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275060|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.006	0.006	-0.0000	0.0002	0.0001	10:33:03	Yes
2	0.010	0.010	-0.0000	0.0008	0.0001	10:33:33	Yes
Mean:	0.008	0.008	-0.0000				
SD:	0.0026	0.0026	0.0000				
%RSD:	32.96%	32.96%	133.92%				

==========

Sequence No.: 32 **Autosampler Location: 37**
Sample ID: 1205275061|2358207|1 **Date Collected: 12/20/2022 10:33:51**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275061|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.934	1.934	0.0163	0.0735	0.0164	10:34:40	Yes
2	1.959	1.959	0.0165	0.0737	0.0166	10:35:11	Yes
Mean:	1.947	1.947	0.0164				
SD:	0.0172	0.0172	0.0001				
%RSD:	0.88%	0.88%	0.89%				

==========

Sequence No.: 33 **Autosampler Location: 38**
Sample ID: 1205275062|2358207|5 **Date Collected: 12/20/2022 10:35:29**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275062|2358207|5 **Analyte: Hg 253.7**

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

#	µg/L	µg/L	Signal	Area	Height		Stored
1	0.005	0.005	-0.0000	-0.0002	0.0001	10:36:18	Yes
2	0.011	0.011	0.0000	0.0007	0.0001	10:36:49	Yes
Mean:	0.008	0.008	-0.0000				
SD:	0.0044	0.0044	0.0000				
%RSD:	55.30%	55.30%	213.48%				

Sequence No.: 34 **Autosampler Location: 39**
Sample ID: 1205275068|2358207|1 **Date Collected: 12/20/2022 10:37:07**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275068|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.620	1.620	0.0136	0.0606	0.0137	10:37:56	Yes
2	1.915	1.915	0.0161	0.0716	0.0163	10:38:26	Yes
Mean:	1.768	1.768	0.0149				
SD:	0.2091	0.2091	0.0018				
%RSD:	11.83%	11.83%	11.90%				

Sequence No.: 35 **Autosampler Location: 40**
Sample ID: 604579001|2358207|1 **Date Collected: 12/20/2022 10:38:45**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604579001|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.044	0.044	0.0003	0.0019	0.0004	10:39:33	Yes
2	0.051	0.051	0.0003	0.0019	0.0005	10:40:03	Yes
Mean:	0.047	0.047	0.0003				
SD:	0.0050	0.0050	0.0000				
%RSD:	10.43%	10.43%	13.20%				

Sequence No.: 36 **Autosampler Location: 41**
Sample ID: 1205275063|2358207|1 **Date Collected: 12/20/2022 10:40:22**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275063|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.025	0.025	0.0001	0.0007	0.0002	10:41:11	Yes
2	0.044	0.044	0.0003	0.0019	0.0004	10:41:41	Yes
Mean:	0.035	0.035	0.0002				
SD:	0.0139	0.0139	0.0001				
%RSD:	40.04%	40.04%	56.22%				

Sequence No.: 37 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/20/2022 10:42:00**
Analyst: JP2 **Data Type: Original**

Replicate Data: CCV **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.903	4.903	0.0415	0.1836	0.0416	10:42:48	Yes
2	4.970	4.970	0.0420	0.1866	0.0421	10:43:18	Yes
Mean:	4.936	4.936	0.0417				
SD:	0.0474	0.0474	0.0004				
%RSD:	0.96%	0.96%	0.96%				

QC value within limits for Hg 253.7 Recovery = 98.73%

All analyte(s) passed QC.

==========

Sequence No.: 38 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/20/2022 10:43:36**
Analyst: JP2 **Data Type: Original**

Replicate Data: CCB **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.007	0.007	-0.0000	0.0006	0.0001	10:44:25	Yes
2	0.005	0.005	-0.0000	0.0001	0.0001	10:44:55	Yes
Mean:	0.006	0.006	-0.0000				
SD:	0.0018	0.0018	0.0000				
%RSD:	30.17%	30.17%	47.33%				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 39 **Autosampler Location: 42**
Sample ID: 1205275064|2358207|1 **Date Collected: 12/20/2022 10:45:14**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275064|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.990	1.990	0.0168	0.0754	0.0169	10:46:03	Yes
2	2.015	2.015	0.0170	0.0757	0.0171	10:46:33	Yes
Mean:	2.003	2.003	0.0169				
SD:	0.0177	0.0177	0.0002				
%RSD:	0.89%	0.89%	0.89%				

==========

Sequence No.: 40 **Autosampler Location: 43**
Sample ID: 1205275065|2358207|5 **Date Collected: 12/20/2022 10:46:52**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275065|2358207|5 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.019	0.019	0.0001	0.0009	0.0002	10:47:41	Yes
2	0.021	0.021	0.0001	0.0013	0.0002	10:48:11	Yes
Mean:	0.020	0.020	0.0001				
SD:	0.0015	0.0015	0.0000				
%RSD:	7.68%	7.68%	15.44%				

==========

Sequence No.: 41 **Autosampler Location: 44**
Sample ID: 1205275069|2358207|1 **Date Collected: 12/20/2022 10:48:30**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275069|2358207|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.983	1.983	0.0167	0.0744	0.0168	10:49:19	Yes
2	2.009	2.009	0.0169	0.0753	0.0170	10:49:50	Yes
Mean:	1.996	1.996	0.0168				
SD:	0.0188	0.0188	0.0002				
%RSD:	0.94%	0.94%	0.95%				

==========

Sequence No.: 42 **Autosampler Location: 45**
Sample ID: 1205275070|2358211|1 **Date Collected: 12/20/2022 10:50:08**

Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275070|2358211|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	-0.0001	0.0002	0.0001	10:50:57	Yes
2	0.005	0.005	-0.0000	0.0004	0.0001	10:51:28	Yes
Mean:	0.004	0.004	-0.0000				
SD:	0.0011	0.0011	0.0000				
%RSD:	23.55%	23.55%	19.32%				

==========

Sequence No.: 43 **Autosampler Location: 46**
Sample ID: 1205275071|2358211|1 **Date Collected: 12/20/2022 10:51:47**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275071|2358211|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.961	1.961	0.0165	0.0736	0.0166	10:52:37	Yes
2	1.983	1.983	0.0167	0.0744	0.0168	10:53:08	Yes
Mean:	1.972	1.972	0.0166				
SD:	0.0157	0.0157	0.0001				
%RSD:	0.80%	0.80%	0.80%				

==========

Sequence No.: 44 **Autosampler Location: 47**
Sample ID: 603902001|2358211|1 **Date Collected: 12/20/2022 10:53:27**
Analyst: JP2 **Data Type: Original**

Replicate Data: 603902001|2358211|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	-0.0001	0.0003	0.0001	10:54:16	Yes
2	0.011	0.011	0.0000	0.0006	0.0001	10:54:47	Yes
Mean:	0.008	0.008	-0.0000				
SD:	0.0054	0.0054	0.0000				
%RSD:	70.13%	70.13%	232.57%				

==========

Sequence No.: 45 **Autosampler Location: 48**
Sample ID: 1205275072|2358211|1 **Date Collected: 12/20/2022 10:55:05**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275072|2358211|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	-0.0000	0.0000	0.0001	10:55:54	Yes
2	0.003	0.003	-0.0001	-0.0002	0.0000	10:56:24	Yes
Mean:	0.004	0.004	-0.0001				
SD:	0.0010	0.0010	0.0000				
%RSD:	27.51%	27.51%	16.53%				

==========

Sequence No.: 46 **Autosampler Location: 49**
Sample ID: 1205275073|2358211|1 **Date Collected: 12/20/2022 10:56:42**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275073|2358211|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.940	1.940	0.0164	0.0732	0.0165	10:57:31	Yes

2	1.962	1.962	0.0165	0.0723	0.0166	10:58:02	Yes
Mean:	1.951	1.951	0.0164				
SD:	0.0159	0.0159	0.0001				
%RSD:	0.82%	0.82%	0.82%				

Sequence No.: 47 **Autosampler Location: 50**
Sample ID: 1205275074|2358211|5 **Date Collected: 12/20/2022 10:58:20**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275074|2358211|5 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.016	0.016	0.0001	0.0002	0.0002	10:59:09	Yes
2	0.006	0.006	-0.0000	0.0000	0.0001	10:59:40	Yes
Mean:	0.011	0.011	0.0000				
SD:	0.0070	0.0070	0.0001				
%RSD:	63.40%	63.40%	668.25%				

Sequence No.: 48 **Autosampler Location: 51**
Sample ID: 1205275075|2358211|1 **Date Collected: 12/20/2022 10:59:58**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275075|2358211|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.976	1.976	0.0167	0.0753	0.0168	11:00:47	Yes
2	2.001	2.001	0.0169	0.0757	0.0170	11:01:18	Yes
Mean:	1.988	1.988	0.0168				
SD:	0.0175	0.0175	0.0001				
%RSD:	0.88%	0.88%	0.89%				

Sequence No.: 49 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/20/2022 11:01:37**
Analyst: JP2 **Data Type: Original**

Replicate Data: CCV **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.994	4.994	0.0422	0.1873	0.0423	11:02:25	Yes
2	5.043	5.043	0.0427	0.1877	0.0428	11:02:55	Yes
Mean:	5.018	5.018	0.0424				
SD:	0.0350	0.0350	0.0003				
%RSD:	0.70%	0.70%	0.70%				

QC value within limits for Hg 253.7 Recovery = 100.37%
All analyte(s) passed QC.

Sequence No.: 50 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/20/2022 11:03:14**
Analyst: JP2 **Data Type: Original**

Replicate Data: CCB **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.009	0.009	-0.0000	0.0004	0.0001	11:04:02	Yes
2	0.005	0.005	-0.0000	0.0003	0.0001	11:04:33	Yes
Mean:	0.007	0.007	-0.0000				
SD:	0.0029	0.0029	0.0000				
%RSD:	42.74%	42.74%	88.26%				

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

==========

Sequence No.: 51 **Autosampler Location: 52**
Sample ID: 603902002|2358211|1 **Date Collected: 12/20/2022 11:04:51**
Analyst: JP2 **Data Type: Original**

Replicate Data: 603902002|2358211|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	-0.0001	-0.0001	0.0000	11:05:40	Yes
2	0.004	0.004	-0.0000	-0.0001	0.0001	11:06:11	Yes
Mean:	0.003	0.003	-0.0001				
SD:	0.0011	0.0011	0.0000				
%RSD:	32.90%	32.90%	16.58%				

==========

Sequence No.: 52 **Autosampler Location: 53**
Sample ID: 603902004|2358211|1 **Date Collected: 12/20/2022 11:06:29**
Analyst: JP2 **Data Type: Original**

Replicate Data: 603902004|2358211|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.018	0.018	0.0001	0.0006	0.0002	11:07:19	Yes
2	0.003	0.003	-0.0001	0.0001	0.0000	11:07:49	Yes
Mean:	0.011	0.011	0.0000				
SD:	0.0108	0.0108	0.0001				
%RSD:	102.72%	102.72%	>999.9%				

==========

Sequence No.: 53 **Autosampler Location: 54**
Sample ID: 603902005|2358211|1 **Date Collected: 12/20/2022 11:08:08**
Analyst: JP2 **Data Type: Original**

Replicate Data: 603902005|2358211|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.006	0.006	-0.0000	0.0004	0.0001	11:08:57	Yes
2	0.006	0.006	-0.0000	0.0002	0.0001	11:09:27	Yes
Mean:	0.006	0.006	-0.0000				
SD:	0.0001	0.0001	0.0000				
%RSD:	1.58%	1.58%	2.58%				

==========

Sequence No.: 54 **Autosampler Location: 55**
Sample ID: 603902007|2358211|1 **Date Collected: 12/20/2022 11:09:45**
Analyst: JP2 **Data Type: Original**

Replicate Data: 603902007|2358211|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000	0.000	-0.0001	-0.0004	0.0000	11:10:34	Yes
2	0.010	0.010	-0.0000	0.0006	0.0001	11:11:05	Yes
Mean:	0.005	0.005	-0.0000				
SD:	0.0070	0.0070	0.0001				
%RSD:	141.29%	141.29%	141.15%				

==========

Sequence No.: 55 **Autosampler Location: 56**
Sample ID: 603902008|2358211|1 **Date Collected: 12/20/2022 11:11:24**
Analyst: JP2 **Data Type: Original**

Replicate Data: 603902008|2358211|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	-0.0001	-0.0001	0.0001	11:12:13	Yes
2	0.008	0.008	-0.0000	0.0006	0.0001	11:12:43	Yes
Mean:	0.006	0.006	-0.0000				
SD:	0.0029	0.0029	0.0000				
%RSD:	47.57%	47.57%	75.58%				

Sequence No.: 56 **Autosampler Location: 57**
Sample ID: 603902010|2358211|1 **Date Collected: 12/20/2022 11:13:02**
Analyst: JP2 **Data Type: Original**

Replicate Data: 603902010|2358211|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	-0.0001	-0.0001	0.0000	11:13:51	Yes
2	0.005	0.005	-0.0000	0.0005	0.0001	11:14:21	Yes
Mean:	0.003	0.003	-0.0001				
SD:	0.0029	0.0029	0.0000				
%RSD:	88.64%	88.64%	44.16%				

Sequence No.: 57 **Autosampler Location: 58**
Sample ID: 603902011|2358211|1 **Date Collected: 12/20/2022 11:14:41**
Analyst: JP2 **Data Type: Original**

Replicate Data: 603902011|2358211|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.005	0.005	-0.0000	-0.0012	0.0001	11:15:30	Yes
2	0.015	0.015	0.0000	0.0008	0.0002	11:16:01	Yes
Mean:	0.010	0.010	0.0000				
SD:	0.0072	0.0072	0.0001				
%RSD:	71.58%	71.58%	>999.9%				

Sequence No.: 58 **Autosampler Location: 59**
Sample ID: 603902012|2358211|1 **Date Collected: 12/20/2022 11:16:21**
Analyst: JP2 **Data Type: Original**

Replicate Data: 603902012|2358211|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	-0.0001	0.0002	0.0001	11:17:09	Yes
2	0.003	0.003	-0.0001	0.0002	0.0000	11:17:39	Yes
Mean:	0.003	0.003	-0.0001				
SD:	0.0009	0.0009	0.0000				
%RSD:	25.68%	25.68%	13.49%				

Sequence No.: 59 **Autosampler Location: 60**
Sample ID: 603902013|2358211|1 **Date Collected: 12/20/2022 11:17:57**
Analyst: JP2 **Data Type: Original**

Replicate Data: 603902013|2358211|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.011	0.011	0.0000	0.0006	0.0001	11:18:46	Yes
2	0.007	0.007	-0.0000	0.0005	0.0001	11:19:16	Yes
Mean:	0.009	0.009	-0.0000				

SD:	0.0024	0.0024	0.0000
%RSD:	26.57%	26.57%	246.08%

==========

Sequence No.: 60 **Autosampler Location: 61**
Sample ID: 603902015|2358211|1 **Date Collected: 12/20/2022 11:19:35**
Analyst: JP2 **Data Type: Original**

Replicate Data: 603902015|2358211|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.010	0.010	0.0000	0.0004	0.0001	11:20:24	Yes
2	0.002	0.002	-0.0001	-0.0001	0.0000	11:20:54	Yes
Mean:	0.006	0.006	-0.0000				
SD:	0.0060	0.0060	0.0001				
%RSD:	96.69%	96.69%	158.04%				

==========

Sequence No.: 61 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/20/2022 11:21:12**
Analyst: JP2 **Data Type: Original**

Replicate Data: CCV **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.918	4.918	0.0416	0.1855	0.0417	11:22:01	Yes
2	4.986	4.986	0.0422	0.1871	0.0423	11:22:31	Yes
Mean:	4.952	4.952	0.0419				
SD:	0.0485	0.0485	0.0004				
%RSD:	0.98%	0.98%	0.98%				

QC value within limits for Hg 253.7 Recovery = 99.04%
All analyte(s) passed QC.

==========

Sequence No.: 62 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/20/2022 11:22:49**
Analyst: JP2 **Data Type: Original**

Replicate Data: CCB **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.006	0.006	-0.0000	0.0004	0.0001	11:23:37	Yes
2	0.002	0.002	-0.0001	-0.0002	0.0000	11:24:07	Yes
Mean:	0.004	0.004	-0.0001				
SD:	0.0030	0.0030	0.0000				
%RSD:	80.93%	80.93%	48.86%				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 63 **Autosampler Location: 62**
Sample ID: 603902016|2358211|1 **Date Collected: 12/20/2022 11:24:26**
Analyst: JP2 **Data Type: Original**

Replicate Data: 603902016|2358211|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.007	0.007	-0.0000	-0.0001	0.0001	11:25:14	Yes
2	0.011	0.011	0.0000	0.0008	0.0001	11:25:45	Yes
Mean:	0.009	0.009	-0.0000				
SD:	0.0025	0.0025	0.0000				
%RSD:	27.84%	27.84%	286.05%				

Sequence No.: 64 **Autosampler Location: 63**
Sample ID: 603974001|2358211|1 **Date Collected: 12/20/2022 11:26:03**
Analyst: JP2 **Data Type: Original**

Replicate Data: 603974001|2358211|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.023	0.023	0.0001	0.0007	0.0002	11:26:52	Yes
2	0.022	0.022	0.0001	0.0013	0.0002	11:27:23	Yes
Mean:	0.023	0.023	0.0001				
SD:	0.0009	0.0009	0.0000				
%RSD:	4.07%	4.07%	7.28%				

Sequence No.: 65 **Autosampler Location: 64**
Sample ID: 603974002|2358211|1 **Date Collected: 12/20/2022 11:27:41**
Analyst: JP2 **Data Type: Original**

Replicate Data: 603974002|2358211|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.014	0.014	0.0000	0.0007	0.0001	11:28:30	Yes
2	0.021	0.021	0.0001	0.0011	0.0002	11:29:00	Yes
Mean:	0.018	0.018	0.0001				
SD:	0.0045	0.0045	0.0000				
%RSD:	25.45%	25.45%	58.96%				

Sequence No.: 66 **Autosampler Location: 65**
Sample ID: 604112001|2358211|1 **Date Collected: 12/20/2022 11:29:19**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604112001|2358211|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.008	0.008	-0.0000	0.0003	0.0001	11:30:08	Yes
2	0.003	0.003	-0.0001	0.0000	0.0000	11:30:38	Yes
Mean:	0.005	0.005	-0.0000				
SD:	0.0035	0.0035	0.0000				
%RSD:	64.42%	64.42%	75.97%				

Sequence No.: 67 **Autosampler Location: 66**
Sample ID: 604315001|2358211|1 **Date Collected: 12/20/2022 11:30:57**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604315001|2358211|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	-0.0001	-0.0002	0.0000	11:31:45	Yes
2	0.024	0.024	0.0001	0.0016	0.0002	11:32:16	Yes
Mean:	0.013	0.013	0.0000				
SD:	0.0154	0.0154	0.0001				
%RSD:	120.04%	120.04%	543.03%				

Sequence No.: 68 **Autosampler Location: 67**
Sample ID: 604315002|2358211|1 **Date Collected: 12/20/2022 11:32:35**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604315002|2358211|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.014	0.014	0.0000	0.0010	0.0001	11:33:23	Yes
2	0.009	0.009	-0.0000	0.0006	0.0001	11:33:53	Yes
Mean:	0.012	0.012	0.0000				
SD:	0.0040	0.0040	0.0000				
%RSD:	34.33%	34.33%	238.45%				

==========

Sequence No.: 69 **Autosampler Location: 68**
Sample ID: 604445004|2358211|1 **Date Collected: 12/20/2022 11:34:12**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604445004|2358211|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.027	0.027	0.0001	0.0012	0.0002	11:35:01	Yes
2	0.008	0.008	-0.0000	0.0001	0.0001	11:35:31	Yes
Mean:	0.018	0.018	0.0001				
SD:	0.0128	0.0128	0.0001				
%RSD:	72.88%	72.88%	169.04%				

==========

Sequence No.: 70 **Autosampler Location: 69**
Sample ID: 604454002|2358211|1 **Date Collected: 12/20/2022 11:35:50**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604454002|2358211|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.019	0.019	0.0001	0.0015	0.0002	11:36:39	Yes
2	0.017	0.017	0.0001	0.0013	0.0002	11:37:10	Yes
Mean:	0.018	0.018	0.0001				
SD:	0.0017	0.0017	0.0000				
%RSD:	9.57%	9.57%	21.65%				

==========

Sequence No.: 71 **Autosampler Location: 70**
Sample ID: 604486007|2358211|1 **Date Collected: 12/20/2022 11:37:28**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604486007|2358211|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	-0.0001	-0.0001	0.0000	11:38:18	Yes
2	0.011	0.011	0.0000	0.0004	0.0001	11:38:48	Yes
Mean:	0.007	0.007	-0.0000				
SD:	0.0062	0.0062	0.0001				
%RSD:	94.33%	94.33%	181.03%				

==========

Sequence No.: 72 **Autosampler Location: 71**
Sample ID: 1205275076|2358214|1 **Date Collected: 12/20/2022 11:39:08**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275076|2358214|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	-0.0001	0.0001	0.0001	11:39:57	Yes
2	0.006	0.006	-0.0000	0.0003	0.0001	11:40:27	Yes
Mean:	0.005	0.005	-0.0000				
SD:	0.0014	0.0014	0.0000				
%RSD:	27.94%	27.94%	26.62%				

==========

Sequence No.: 73 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/20/2022 11:40:46**
Analyst: JP2 **Data Type: Original**

Replicate Data: CCV **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.832	4.832	0.0409	0.1837	0.0410	11:41:34	Yes
2	4.932	4.932	0.0417	0.1865	0.0418	11:42:04	Yes
Mean:	4.882	4.882	0.0413				
SD:	0.0707	0.0707	0.0006				
%RSD:	1.45%	1.45%	1.45%				

QC value within limits for Hg 253.7 Recovery = 97.65%
All analyte(s) passed QC.

==========

Sequence No.: 74 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/20/2022 11:42:22**
Analyst: JP2 **Data Type: Original**

Replicate Data: CCB **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.005	0.005	-0.0000	-0.0002	0.0001	11:43:10	Yes
2	0.001	0.001	-0.0001	-0.0003	0.0000	11:43:40	Yes
Mean:	0.003	0.003	-0.0001				
SD:	0.0027	0.0027	0.0000				
%RSD:	80.90%	80.90%	39.82%				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 75 **Autosampler Location: 72**
Sample ID: 1205275077|2358214|1 **Date Collected: 12/20/2022 11:43:58**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275077|2358214|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.945	1.945	0.0164	0.0744	0.0165	11:44:47	Yes
2	1.987	1.987	0.0168	0.0761	0.0169	11:45:17	Yes
Mean:	1.966	1.966	0.0166				
SD:	0.0297	0.0297	0.0003				
%RSD:	1.51%	1.51%	1.52%				

==========

Sequence No.: 76 **Autosampler Location: 73**
Sample ID: 604127001|2358214|1 **Date Collected: 12/20/2022 11:45:36**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604127001|2358214|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.006	0.006	-0.0000	0.0001	0.0001	11:46:25	Yes
2	0.010	0.010	0.0000	0.0004	0.0001	11:46:55	Yes
Mean:	0.008	0.008	-0.0000				
SD:	0.0029	0.0029	0.0000				
%RSD:	36.32%	36.32%	150.26%				

==========

Sequence No.: 77 **Autosampler Location: 74**

Sample ID: 1205275078|2358214|1 **Date Collected: 12/20/2022 11:47:14**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275078|2358214|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.008	0.008	-0.0000	0.0006	0.0001	11:48:04	Yes
2	0.009	0.009	-0.0000	0.0004	0.0001	11:48:34	Yes
Mean:	0.009	0.009	-0.0000				
SD:	0.0006	0.0006	0.0000				
%RSD:	7.19%	7.19%	57.99%				

==========

Sequence No.: 78 **Autosampler Location: 75**
Sample ID: 1205275079|2358214|1 **Date Collected: 12/20/2022 11:48:53**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275079|2358214|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.918	1.918	0.0162	0.0737	0.0163	11:49:43	Yes
2	1.927	1.927	0.0162	0.0733	0.0164	11:50:13	Yes
Mean:	1.923	1.923	0.0162				
SD:	0.0064	0.0064	0.0001				
%RSD:	0.33%	0.33%	0.34%				

==========

Sequence No.: 79 **Autosampler Location: 76**
Sample ID: 1205275080|2358214|5 **Date Collected: 12/20/2022 11:50:32**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275080|2358214|5 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	-0.0001	-0.0001	0.0001	11:51:21	Yes
2	0.003	0.003	-0.0001	0.0001	0.0000	11:51:51	Yes
Mean:	0.003	0.003	-0.0001				
SD:	0.0006	0.0006	0.0000				
%RSD:	18.07%	18.07%	8.63%				

==========

Sequence No.: 80 **Autosampler Location: 77**
Sample ID: 1205275087|2358214|1 **Date Collected: 12/20/2022 11:52:10**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275087|2358214|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.960	1.960	0.0165	0.0745	0.0166	11:52:59	Yes
2	1.959	1.959	0.0165	0.0754	0.0166	11:53:30	Yes
Mean:	1.959	1.959	0.0165				
SD:	0.0013	0.0013	0.0000				
%RSD:	0.07%	0.07%	0.07%				

==========

Sequence No.: 81 **Autosampler Location: 78**
Sample ID: 604127002|2358214|1 **Date Collected: 12/20/2022 11:53:48**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604127002|2358214|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	0.003	0.003	-0.0001	-0.0002	0.0000	11:54:38	Yes
2	0.005	0.005	-0.0000	-0.0000	0.0001	11:55:08	Yes
Mean:	0.004	0.004	-0.0001				
SD:	0.0014	0.0014	0.0000				
%RSD:	37.25%	37.25%	23.17%				

Sequence No.: 82 **Autosampler Location: 79**
Sample ID: 604127004|2358214|1 **Date Collected: 12/20/2022 11:55:27**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604127004|2358214|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.009	0.009	-0.0000	0.0005	0.0001	11:56:16	Yes
2	0.006	0.006	-0.0000	-0.0001	0.0001	11:56:46	Yes
Mean:	0.008	0.008	-0.0000				
SD:	0.0021	0.0021	0.0000				
%RSD:	27.27%	27.27%	95.51%				

Sequence No.: 83 **Autosampler Location: 80**
Sample ID: 604127005|2358214|1 **Date Collected: 12/20/2022 11:57:05**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604127005|2358214|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.006	0.006	-0.0000	0.0003	0.0001	11:57:55	Yes
2	0.003	0.003	-0.0001	-0.0002	0.0000	11:58:25	Yes
Mean:	0.005	0.005	-0.0000				
SD:	0.0024	0.0024	0.0000				
%RSD:	53.26%	53.26%	44.61%				

Sequence No.: 84 **Autosampler Location: 81**
Sample ID: 604127006|2358214|1 **Date Collected: 12/20/2022 11:58:44**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604127006|2358214|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.012	0.012	0.0000	0.0010	0.0001	11:59:33	Yes
2	0.011	0.011	0.0000	0.0007	0.0001	12:00:04	Yes
Mean:	0.012	0.012	0.0000				
SD:	0.0007	0.0007	0.0000				
%RSD:	5.72%	5.72%	42.17%				

Sequence No.: 85 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/20/2022 12:00:23**
Analyst: JP2 **Data Type: Original**

Replicate Data: CCV **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.930	4.930	0.0417	0.1849	0.0418	12:01:11	Yes
2	4.955	4.955	0.0419	0.1868	0.0420	12:01:42	Yes
Mean:	4.943	4.943	0.0418				
SD:	0.0177	0.0177	0.0001				
%RSD:	0.36%	0.36%	0.36%				

QC value within limits for Hg 253.7 Recovery = 98.86%
All analyte(s) passed QC.

==========

Sequence No.: 86 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/20/2022 12:02:00**
Analyst: JP2 **Data Type: Original**

Replicate Data: CCB **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.008	0.008	-0.0000	0.0004	0.0001	12:02:48	Yes
2	0.008	0.008	-0.0000	0.0006	0.0001	12:03:19	Yes
Mean:	0.008	0.008	-0.0000				
SD:	0.0004	0.0004	0.0000				
%RSD:	4.67%	4.67%	19.14%				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 87 **Autosampler Location: 82**
Sample ID: 604127007|2358214|1 **Date Collected: 12/20/2022 12:03:38**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604127007|2358214|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	-0.0001	0.0002	0.0001	12:04:27	Yes
2	0.032	0.032	0.0002	0.0014	0.0003	12:04:58	Yes
Mean:	0.018	0.018	0.0001				
SD:	0.0200	0.0200	0.0002				
%RSD:	113.72%	113.72%	263.08%				

==========

Sequence No.: 88 **Autosampler Location: 83**
Sample ID: 604127008|2358214|1 **Date Collected: 12/20/2022 12:05:17**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604127008|2358214|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	-0.0001	-0.0003	0.0000	12:06:06	Yes
2	0.008	0.008	-0.0000	0.0003	0.0001	12:06:37	Yes
Mean:	0.005	0.005	-0.0000				
SD:	0.0041	0.0041	0.0000				
%RSD:	79.17%	79.17%	85.27%				

==========

Sequence No.: 89 **Autosampler Location: 84**
Sample ID: 604249001|2358214|1 **Date Collected: 12/20/2022 12:06:56**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604249001|2358214|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.005	0.005	-0.0000	0.0002	0.0001	12:07:45	Yes
2	0.005	0.005	-0.0000	-0.0001	0.0001	12:08:15	Yes
Mean:	0.005	0.005	-0.0000				
SD:	0.0001	0.0001	0.0000				
%RSD:	1.32%	1.32%	1.40%				

==========

Sequence No.: 90 **Autosampler Location: 85**
Sample ID: 604249002|2358214|1 **Date Collected: 12/20/2022 12:08:35**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604249002|2358214|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.007	0.007	-0.0000	0.0003	0.0001	12:09:24	Yes
2	0.013	0.013	0.0000	0.0010	0.0001	12:09:54	Yes
Mean:	0.010	0.010	0.0000				
SD:	0.0044	0.0044	0.0000				
%RSD:	43.34%	43.34%	>999.9%				

==========

Sequence No.: 91 **Autosampler Location: 86**
Sample ID: 1205275081|2358214|1 **Date Collected: 12/20/2022 12:10:13**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275081|2358214|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.008	0.008	-0.0000	0.0004	0.0001	12:11:03	Yes
2	0.011	0.011	0.0000	0.0009	0.0001	12:11:33	Yes
Mean:	0.010	0.010	-0.0000				
SD:	0.0017	0.0017	0.0000				
%RSD:	18.16%	18.16%	487.03%				

==========

Sequence No.: 92 **Autosampler Location: 87**
Sample ID: 1205275082|2358214|1 **Date Collected: 12/20/2022 12:11:52**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275082|2358214|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.959	1.959	0.0165	0.0739	0.0166	12:12:41	Yes
2	1.956	1.956	0.0165	0.0744	0.0166	12:13:11	Yes
Mean:	1.958	1.958	0.0165				
SD:	0.0020	0.0020	0.0000				
%RSD:	0.10%	0.10%	0.10%				

==========

Sequence No.: 93 **Autosampler Location: 88**
Sample ID: 1205275083|2358214|5 **Date Collected: 12/20/2022 12:13:30**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275083|2358214|5 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.005	0.005	-0.0000	0.0002	0.0001	12:14:19	Yes
2	0.011	0.011	0.0000	0.0006	0.0001	12:14:50	Yes
Mean:	0.008	0.008	-0.0000				
SD:	0.0038	0.0038	0.0000				
%RSD:	47.94%	47.94%	176.34%				

==========

Sequence No.: 94 **Autosampler Location: 89**
Sample ID: 1205275088|2358214|1 **Date Collected: 12/20/2022 12:15:09**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275088|2358214|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.015	2.015	0.0170	0.0766	0.0171	12:15:58	Yes
2	2.012	2.012	0.0170	0.0769	0.0171	12:16:29	Yes

Mean:	2.013	2.013	0.0170
SD:	0.0021	0.0021	0.0000
%RSD:	0.11%	0.11%	0.11%

==========

Sequence No.: 95 **Autosampler Location: 90**
Sample ID: 604292002|2358214|1 **Date Collected: 12/20/2022 12:16:48**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604292002|2358214|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.013	0.013	0.0000	0.0004	0.0001	12:17:37	Yes
2	0.011	0.011	0.0000	0.0003	0.0001	12:18:08	Yes
Mean:	0.012	0.012	0.0000				
SD:	0.0010	0.0010	0.0000				
%RSD:	8.00%	8.00%	47.71%				

==========

Sequence No.: 96 **Autosampler Location: 91**
Sample ID: 604305001|2358214|1 **Date Collected: 12/20/2022 12:18:26**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604305001|2358214|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.007	0.007	-0.0000	0.0001	0.0001	12:19:16	Yes
2	0.005	0.005	-0.0000	-0.0001	0.0001	12:19:46	Yes
Mean:	0.006	0.006	-0.0000				
SD:	0.0009	0.0009	0.0000				
%RSD:	14.96%	14.96%	23.71%				

==========

Sequence No.: 97 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/20/2022 12:20:05**
Analyst: JP2 **Data Type: Original**

Replicate Data: CCV **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.800	4.800	0.0406	0.1817	0.0407	12:20:53	Yes
2	4.847	4.847	0.0410	0.1836	0.0411	12:21:23	Yes
Mean:	4.824	4.824	0.0408				
SD:	0.0331	0.0331	0.0003				
%RSD:	0.69%	0.69%	0.69%				

QC value within limits for Hg 253.7 Recovery = 96.47%
All analyte(s) passed QC.

==========

Sequence No.: 98 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/20/2022 12:21:41**
Analyst: JP2 **Data Type: Original**

Replicate Data: CCB **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	-0.0001	-0.0001	0.0001	12:22:30	Yes
2	-0.004	-0.004	-0.0001	-0.0009	-0.0000	12:23:01	Yes
Mean:	-0.000	-0.000	-0.0001				
SD:	0.0058	0.0058	0.0000				
%RSD:	>999.9%	>999.9%	57.51%				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 99 **Autosampler Location: 92**
Sample ID: 604308001|2358214|1 **Date Collected: 12/20/2022 12:23:19**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604308001|2358214|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.006	0.006	-0.0000	-0.0000	0.0001	12:24:08	Yes
2	0.004	0.004	-0.0000	-0.0001	0.0001	12:24:38	Yes
Mean:	0.005	0.005	-0.0000				
SD:	0.0008	0.0008	0.0000				
%RSD:	15.69%	15.69%	15.81%				

Sequence No.: 100 **Autosampler Location: 93**
Sample ID: 604465016|2358214|1 **Date Collected: 12/20/2022 12:24:58**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604465016|2358214|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.017	0.017	0.0001	0.0010	0.0002	12:25:46	Yes
2	0.012	0.012	0.0000	0.0001	0.0001	12:26:17	Yes
Mean:	0.015	0.015	0.0000				
SD:	0.0037	0.0037	0.0000				
%RSD:	24.58%	24.58%	74.49%				

Sequence No.: 101 **Autosampler Location: 94**
Sample ID: 604465017|2358214|1 **Date Collected: 12/20/2022 12:26:36**
Analyst: JP2 **Data Type: Original**

Replicate Data: 604465017|2358214|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.016	0.016	0.0000	0.0007	0.0002	12:27:26	Yes
2	0.018	0.018	0.0001	0.0007	0.0002	12:27:56	Yes
Mean:	0.017	0.017	0.0001				
SD:	0.0015	0.0015	0.0000				
%RSD:	8.97%	8.97%	22.25%				

Sequence No.: 102 **Autosampler Location: 95**
Sample ID: 1205275084|2358214|1 **Date Collected: 12/20/2022 12:28:15**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275084|2358214|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.016	0.016	0.0000	0.0006	0.0002	12:29:05	Yes
2	0.023	0.023	0.0001	0.0011	0.0002	12:29:35	Yes
Mean:	0.019	0.019	0.0001				
SD:	0.0054	0.0054	0.0000				
%RSD:	27.58%	27.58%	56.73%				

Sequence No.: 103 **Autosampler Location: 96**
Sample ID: 1205275085|2358214|1 **Date Collected: 12/20/2022 12:29:54**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275085|2358214|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.929	1.929	0.0163	0.0737	0.0164	12:30:43	Yes
2	1.967	1.967	0.0166	0.0755	0.0167	12:31:14	Yes
Mean:	1.948	1.948	0.0164				
SD:	0.0268	0.0268	0.0002				
%RSD:	1.37%	1.37%	1.38%				

==========

Sequence No.: 104 **Autosampler Location: 97**
Sample ID: 1205275086|2358214|5 **Date Collected: 12/20/2022 12:31:33**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275086|2358214|5 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.005	0.005	-0.0000	-0.0001	0.0001	12:32:22	Yes
2	0.007	0.007	-0.0000	0.0002	0.0001	12:32:52	Yes
Mean:	0.006	0.006	-0.0000				
SD:	0.0018	0.0018	0.0000				
%RSD:	29.05%	29.05%	46.64%				

==========

Sequence No.: 105 **Autosampler Location: 98**
Sample ID: 1205275089|2358214|1 **Date Collected: 12/20/2022 12:33:12**
Analyst: JP2 **Data Type: Original**

Replicate Data: 1205275089|2358214|1 **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.995	1.995	0.0168	0.0764	0.0169	12:34:01	Yes
2	2.017	2.017	0.0170	0.0766	0.0171	12:34:31	Yes
Mean:	2.006	2.006	0.0169				
SD:	0.0152	0.0152	0.0001				
%RSD:	0.76%	0.76%	0.76%				

==========

Analysis Begun

Logged In Analyst: hg7 **Technique: AA FIMS-MHS**
Spectrometer: FIMS-100, P/N B050-9550 **Autosampler: S23**

Sample Information File: C:\Users\Public\PerkinElmer Syngistix\AA\Data\Sample Information\ 122022.SIFX
Batch ID:
Results Data Set: 122022W1
Results Library: C:\Users\Public\PerkinElmer Syngistix\AA\Data\Results\Results.mdb

==========

Method Loaded
Method Name: WATER* **Method Last Saved: 12/20/2022 09:44:49**
Method Description: SW-846 7470A, EPA 245.1

==========

Sequence No.: 1 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 12/20/2022 13:09:50**
Analyst: JP2 **Data Type: Original**

Replicate Data: CCV **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.808	4.808	0.0407	0.1960	0.0408	13:10:38	Yes
2	4.841	4.841	0.0409	0.1966	0.0410	13:11:08	Yes

Mean:	4.825	4.825	0.0408
SD:	0.0232	0.0232	0.0002
%RSD:	0.48%	0.48%	0.48%

QC value within limits for Hg 253.7 Recovery = 96.50%
All analyte(s) passed QC.

==========

Sequence No.: 2 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 12/20/2022 13:11:26**
Analyst: JP2 **Data Type: Original**

Replicate Data: CCB **Analyte: Hg 253.7**

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.008	0.008	-0.0000	0.0000	0.0001	13:12:15	Yes
2	0.010	0.010	0.0000	0.0008	0.0001	13:12:46	Yes
Mean:	0.009	0.009	-0.0000				
SD:	0.0016	0.0016	0.0000				
%RSD:	17.91%	17.91%	164.14%				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Miscellaneous

Prep Logbook

Sample Preparation for Total Recoverable Elements by EPA Method 200.2

Batch ID: **2357701**
Analyst: Eliza Maurer
Method: EPA 200.2
Lab SOP: GL-MA-E-016 REV# 18
Instrument: MP hot blocks

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1205274085	Metals Spike Mix I	UI221207-01	.25	mL
LCS	1205274085	Metals Spike Mix II	UI221207-02	.25	mL
MS	1205274087	Metals Spike Mix I	UI221207-01	.25	mL
MS	1205274087	Metals Spike Mix II	UI221207-02	.25	mL

Sample ID	Prep Date	Matrix	Initial Volume (mL)	Hot Block Stop Date (date)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1205274084 MB	16-DEC-2022 15:40:00	Water	50	12/16/22 19:40	50	1	<2
1205274085 LCS	16-DEC-2022 15:40:00	Water	50	12/16/22 19:40	50	1	<2
604449001	16-DEC-2022 15:40:00	Water	50	12/16/22 19:40	50	1	<2
1205274088 SDILT (604449001)	16-DEC-2022 15:40:00	Water	50	12/16/22 19:40	50	1	<2
1205274086 DUP (604449001)	16-DEC-2022 15:40:00	Water	50	12/16/22 19:40	50	1	<2
1205274087 MS (604449001)	16-DEC-2022 15:40:00	Water	50	12/16/22 19:40	50	1	<2
604449005	16-DEC-2022 15:40:00	Water	50	12/16/22 19:40	50	1	<2
604449009	16-DEC-2022 15:40:00	Water	50	12/16/22 19:40	50	1	<2
604449013	16-DEC-2022 15:40:00	Water	50	12/16/22 19:40	50	1	<2
604449017	16-DEC-2022 15:40:00	Water	50	12/16/22 19:40	50	1	<2

Reagent/Solvent Lot ID	Description	Amount
3622621	HYDROCHLORIC ACID	.5 mL
3646168	Concentrated Nitric Acid	1 mL

Comments:
Block Temperature (90-95C): 93 C
Temperature within limits (Y/N)?: Y
Thermometer ID: 11732
Hot Block ID: 9
Digestion tube lot #: 2208066

Prep Logbook

Sample Preparation for Total Recoverable Elements by EPA Method 200.2

Batch ID: **2357702**
Analyst: Eliza Maurer
Method: EPA 200.2
Lab SOP: GL-MA-E-016 REV# 18
Instrument: MP hot blocks

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1205274080	ICP-MS spiking soluiton A	UI221108-A	.25	mL
LCS	1205274080	ICP-MS spiking solution B	UI221108-B	.25	mL
MS	1205274082	ICP-MS spiking soluiton A	UI221108-A	.25	mL
MS	1205274082	ICP-MS spiking solution B	UI221108-B	.25	mL

Sample ID	Prep Date	Matrix	Initial Volume (mL)	Hot Block Stop Date (date)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1205274079 MB	16-DEC-2022 15:40:00	Water	50	12/16/22 19:40	50	1	<2
1205274080 LCS	16-DEC-2022 15:40:00	Water	50	12/16/22 19:40	50	1	<2
604449001	16-DEC-2022 15:40:00	Water	50	12/16/22 19:40	50	1	<2
1205274083 SDILT (604449001)	16-DEC-2022 15:40:00	Water	50	12/16/22 19:40	50	1	<2
1205274081 DUP (604449001)	16-DEC-2022 15:40:00	Water	50	12/16/22 19:40	50	1	<2
1205274082 MS (604449001)	16-DEC-2022 15:40:00	Water	50	12/16/22 19:40	50	1	<2
604449005	16-DEC-2022 15:40:00	Water	50	12/16/22 19:40	50	1	<2
604449009	16-DEC-2022 15:40:00	Water	50	12/16/22 19:40	50	1	<2
604449013	16-DEC-2022 15:40:00	Water	50	12/16/22 19:40	50	1	<2
604449017	16-DEC-2022 15:40:00	Water	50	12/16/22 19:40	50	1	<2

Reagent/Solvent Lot ID	Description	Amount
3622621	HYDROCHLORIC ACID	.5 mL
3646168	Concentrated Nitric Acid	1 mL

Comments:
Block Temperature (90-95C): 93 C
Temperature within limits (Y/N)?: Y
Thermometer ID: 11732
Hot Block ID: 9
Digestion tube lot #: 2208066

Prep Logbook

Sample Preparation for Total Recoverable Elements by EPA Method 200.2

Batch ID: **2359021**
Analyst: Christopher Kyle Douglas
Method: EPA 200.2
Lab SOP: GL-MA-E-016 REV# 18
Instrument: MP hot blocks

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1205276605	ICP-MS spiking soluiton A	UI221108-A	.25	mL
LCS	1205276605	ICP-MS spiking solution B	UI221108-B	.25	mL
MS	1205276607	ICP-MS spiking soluiton A	UI221108-A	.25	mL
MS	1205276607	ICP-MS spiking solution B	UI221108-B	.25	mL

Sample ID	Prep Date	Matrix	Initial Volume (mL)	Hot Block Stop Date (date)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1205276604 MB	20-DEC-2022 15:30:00	Water	50	12/20/22 19:30	50	1	<2
1205276605 LCS	20-DEC-2022 15:30:00	Water	50	12/20/22 19:30	50	1	<2
604449001 - 2	20-DEC-2022 15:30:00	Water	50	12/20/22 19:30	50	1	<2
1205276608 - 2 SDILT (604449001)	20-DEC-2022 15:30:00	Water	50	12/20/22 19:30	50	1	<2
1205276606 - 2 DUP (604449001)	20-DEC-2022 15:30:00	Water	50	12/20/22 19:30	50	1	<2
1205276607 - 2 MS (604449001)	20-DEC-2022 15:30:00	Water	50	12/20/22 19:30	50	1	<2
604449005 - 2	20-DEC-2022 15:30:00	Water	50	12/20/22 19:30	50	1	<2
604449009 - 2	20-DEC-2022 15:30:00	Water	50	12/20/22 19:30	50	1	<2
604449013 - 2	20-DEC-2022 15:30:00	Water	50	12/20/22 19:30	50	1	<2
604449017 - 2	20-DEC-2022 15:30:00	Water	50	12/20/22 19:30	50	1	<2

Reagent/Solvent Lot ID	Description	Amount
3646168	Concentrated Nitric Acid	1 mL
3649580	HYDROCHLORIC ACID	.5 mL

Comments:
Block Temperature (90-95C): 93 C
Temperature within limits (Y/N)?: y
Thermometer ID: 11732
Hot Block ID: 9
Digestion tube lot #: 2208066

Prep Logbook

Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

Batch ID: **2358206**
Analyst: Roderick McPherson
Method: EPA 245.1/245.2 Prep
Lab SOP: GL-MA-E-010 REV# 39
Instrument: Metals Manual Instrument

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1205275053	MHGLIQLCSMSSPIKE	WHG221219-13	.2	mL
MS	1205275055	MHGLIQLCSMSSPIKE	WHG221219-13	.2	mL
MS	1205275058	MHGLIQLCSMSSPIKE	WHG221219-13	.2	mL
MS	1205275061	MHGLIQLCSMSSPIKE	WHG221219-13	.2	mL
MS	1205275064	MHGLIQLCSMSSPIKE	WHG221219-13	.2	mL

Sample ID	Prep Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1205275052 MB	19-DEC-2022 11:17:14	Water	20	20	1	<2
1205275053 LCS	19-DEC-2022 11:17:14	Water	20	20	1	<2
604416001	19-DEC-2022 11:17:14	Waste Water	20	20	1	<2
604416007	19-DEC-2022 11:17:14	Waste Water	20	20	1	<2
604449001	19-DEC-2022 11:17:14	Water	20	20	1	<2
1205275056 SDILT (604449001)	19-DEC-2022 11:17:14	Water	20	20	1	<2
1205275054 DUP (604449001)	19-DEC-2022 11:17:14	Water	20	20	1	<2
1205275055 MS (604449001)	19-DEC-2022 11:17:14	Water	20	20	1	<2
604449002	19-DEC-2022 11:17:14	Water	20	20	1	<2
604449005	19-DEC-2022 11:17:14	Water	20	20	1	<2
604449006	19-DEC-2022 11:17:14	Water	20	20	1	<2
604449009	19-DEC-2022 11:17:14	Water	20	20	1	<2
604449010	19-DEC-2022 11:17:14	Water	20	20	1	<2
604449013	19-DEC-2022 11:17:14	Water	20	20	1	<2
604449014	19-DEC-2022 11:17:14	Water	20	20	1	<2
604449017	19-DEC-2022 11:17:14	Water	20	20	1	<2
604449018	19-DEC-2022 11:17:14	Water	20	20	1	<2
604464001	19-DEC-2022 11:17:14	Waste Water	20	20	1	<2
1205275059 SDILT (604464001)	19-DEC-2022 11:17:14	Waste Water	20	20	1	<2
1205275057 DUP (604464001)	19-DEC-2022 11:17:14	Waste Water	20	20	1	<2
1205275058 MS (604464001)	19-DEC-2022 11:17:14	Waste Water	20	20	1	<2
604522001	19-DEC-2022 11:17:14	Water	20	20	1	<2
1205275062 SDILT (604522001)	19-DEC-2022 11:17:14	Water	20	20	1	<2
1205275060 DUP (604522001)	19-DEC-2022 11:17:14	Water	20	20	1	<2
1205275061 MS (604522001)	19-DEC-2022 11:17:14	Water	20	20	1	<2
604579001	19-DEC-2022 11:17:14	Waste Water	20	20	1	<2
1205275065 SDILT (604579001)	19-DEC-2022 11:17:14	Waste Water	20	20	1	<2
1205275063 DUP (604579001)	19-DEC-2022 11:17:14	Waste Water	20	20	1	<2
1205275064 MS (604579001)	19-DEC-2022 11:17:14	Waste Water	20	20	1	<2

Reagent/Solvent Lot ID	Description	Amount
3535202	Sulfuric Acid, Concentrated	1 mL
3645201-C	5% Potassium Persulfate	1.5 mL
3645244-1	NITRIC ACID	.5 mL
3649691-C	Hg reducing agent	2 mL

Comments:
Digestion Start Date: 19-DEC-2022 11:42
Digestion End Date: 19-DEC-2022 13:42
Block Temperature (90-95C): 92 C
Temperature within limits (Y/N)?: Y

Analytical Logbook version 1 11-04-2002 **GEL Laboratories LLC**

Prep Logbook

Sample ID	Prep Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check

Reagent/Solvent Lot ID	Description	Amount
3650583-C	5% KMnO4 solution	3 mL
IHG221219-01	Mercury Intermediate 1st Source 200 ug/L	250 mL
IHG221219-02	Mercury Intermediate 2nd Source 200 ug/L	250 mL
UHG3384022-01	Mercury Source Standard #1 1,000 mg/L	50 uL
UHG3384135-02	Mercury Source Standard #2 1,000 mg/L	50 uL
WHG221219-01A	Mercury Working 1st Source CAL 0.2/CRA	20 uL
WHG221219-02	Mercury Working 1st Source CAL 0.5	50 mL
WHG221219-03	Mercury Working 1st Source CAL 2.0	200 uL
WHG221219-04	Mercury Working 1st Source CAL 5.0/CCV	500 uL
WHG221219-05	Mercury Working 1st Source CAL 10.0	1 mL
WHG221219-06	Mercury Working 2nd Source 5.0/ICV	500 uL

Comments:

Thermometer ID: 2126223
Hot Block ID: 7
Lot number: MP3743

Standard Logbook

Serial ID: UHG3384022-01 **Open/Reference Date:** 28 DEC 2021 **Amount :** 100 mL
Name: MHGSTOCK1 **Received:** 28 DEC 2021 **Catalog Number :** G34-060080-02-01
Type: Source Material **Expires:** 28 DEC 2022 **Lot Number :** 1141387-18
Employee: Cristy Whittington **Solvent :** 2% HNO3
Supplier: O2SI
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG3384135-02 **Open/Reference Date:** 28 DEC 2021 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 28 DEC 2021 **Catalog Number :** HP1000033-1-100
Type: Source Material **Expires:** 28 DEC 2022 **Lot Number :** 2114535-100EE
Employee: Cristy Whittington **Solvent :** 10% HNO3
Supplier: HPS
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UI220104-40 **Open/Reference Date:** 19 JAN 2022 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 28 DEC 2021 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 19 JAN 2023 **Lot Number :** 1105064-68
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: 02SI
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI220113-40 **Open/Reference Date:** 14 JAN 2022 **Amount :** 500 mL
Name: TRACE ICP Stock PQL Sta **Received:** 13 JAN 2022 **Catalog Number :** HPS-427-004-500
Type: Source Material **Expires:** 14 JAN 2023 **Lot Number :** 2201018-500
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: HIGH PURITY STD
Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	10 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L

Analyte	Concentration	Analyte	Concentration
Chromium	5 mg/L	Cobalt	2.5 mg/L
Copper	10 mg/L	Iron	50 mg/L
Lead	10 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	125 mg/L	Selenium	15 mg/L
Silica	106.95 mg/L	Silicon	50 mg/L
Silver	2.5 mg/L	Sodium	150 mg/L
Strontium	2.5 mg/L	Sulfur	50 mg/L
Thallium	10 mg/L	Tin	5 mg/L
Titanium	2.5 mg/L	Uranium	25 mg/L
Vanadium	2.5 mg/L	Zinc	10 mg/L

Serial ID: UI220517-42 **Open/Reference Date:** 13 JUN 2022 **Amount :** 500 mL
Name: SILICON 1000mg/L **Received:** 16 MAY 2022 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 13 JUN 2023 **Lot Number :** 1197533-21
Employee: Helen Camello **Solvent :** in H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI220603-40 **Open/Reference Date:** 28 JUN 2022 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 03 JUN 2022 **Catalog Number :** HP7508-500
Type: Source Material **Expires:** 31 MAY 2023 **Lot Number :** 2214722-500
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: HPS
Description: TRACE ICP ICSA SOLN A mg/L+/-0.5%IN5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI220608-40 **Open/Reference Date:** 11 JUL 2022 **Amount :** 1 L
Name: ICP HIGH RANGE STD-A **Received:** 08 JUN 2022 **Catalog Number :** HP7510-1L
Type: Source Material **Expires:** 31 MAY 2023 **Lot Number :** 2214544-1L
Employee: Helen Camello **Solvent :** 5% HNO3/Tr Hf
Supplier: ENVIRONMENTAL EXPRESS
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Molybdenum	100 mg/L	Silica	1070 mg/L
Silicon	500 mg/L	Titanium	100 mg/L

Serial ID: UI220608-41 **Open/Reference Date:** 22 SEP 2022 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-B **Received:** 08 JUN 2022 **Catalog Number :** HP7508-500
Type: Source Material **Expires:** 31 MAY 2023 **Lot Number :** 2214722-500
Employee: Helen Camello **Solvent :** 5% HNO3
Supplier: ENVIRONMENTAL EXPRESS
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	150 mg/L	Boron	500 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	250 mg/L	Cobalt	100 mg/L
Copper	200 mg/L	Iron	5000 mg/L
Lead	250 mg/L	Magnesium	5000 mg/L
Manganese	100 mg/L	Nickel	100 mg/L
Potassium	2000 mg/L	Sodium	5000 mg/L
Strontium	100 mg/L	Sulfur	500 mg/L
Uranium	150 mg/L	Vanadium	100 mg/L
Zinc	150 mg/L		

Serial ID: UI220726-40 **Open/Reference Date:** 19 AUG 2022 **Amount :** 250 mL
Name: SILICON 1000mg/L **Received:** 25 JUL 2022 **Catalog Number :** HP100050-4F-250
Type: Source Material **Expires:** 19 AUG 2023 **Lot Number :** 2204146-250EE
Employee: Helen Camello **Solvent :** in H2O(NH4)2SiF6
Supplier: HPS
Description: Silicon 1000mg/L in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI220831-40 **Open/Reference Date:** 05 OCT 2022 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUR **Received:** 30 AUG 2022 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31 AUG 2023 **Lot Number :** 2222941-500
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Uranium-235	1.44 mg/L	Uranium-238	198.56 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI220831-41 **Open/Reference Date:** 05 OCT 2022 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUR **Received:** 30 AUG 2022 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31 AUG 2023 **Lot Number :** 2222942-500
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI220907-03 **Open/Reference Date:** 07 SEP 2022 **Catalog Number :** 10-63-3-250
Name: ICPMS Tungsten - 10mg/L S **Received:** 07 SEP 2022 **Lot Number :** 2213806-250
Type: Source Material **Expires:** 30 JUN 2023 **Solvent :** 2% HNO3 + Tr HF
Employee: Paul Boyd
Supplier: HPS
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Serial ID: UI220919-09 **Open/Reference Date:** 19 SEP 2022 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 19 SEP 2022 **Catalog Number :** HPS-427-019-250
Type: Source Material **Expires:** 30 APR 2023 **Lot Number :** 2211729-250
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: HPS
Description: ICPMS CRDL Master Soln #1

Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	50 mg/L	Arsenic	5 mg/L
Barium	4 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	10 mg/L
Cobalt	1 mg/L	Copper	2 mg/L
Iron	100 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	30 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	2 mg/L
Thorium	2 mg/L	Uranium	.2 mg/L
Vanadium	20 mg/L	Zinc	20 mg/L

Serial ID: UI220919-10 **Open/Reference Date:** 19 SEP 2022 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 19 SEP 2022 **Catalog Number :** HPS-427-020-250
Type: Source Material **Expires:** 30 APR 2023 **Lot Number :** 2211726-250
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: HPS
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	3 mg/L	Molybdenum	1 mg/L
Silver	1 mg/L	Tin	5 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI220928-40 **Open/Reference Date:** 19 OCT 2022 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 26 SEP 2022 **Catalog Number :** IV-68033-B
Type: Source Material **Expires:** 19 OCT 2023 **Lot Number :** T2-MEB723564
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: inorganic ventures
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Beryllium	50 ug/mL
Boron	100 mg/L	Cadmium	100 mg/L
Calcium	1000 mg/L	Chromium	100 mg/L
Cobalt	100 mg/L	Copper	100 mg/L
Iron	1000 mg/L	Lead	100 mg/L

Analyte	Concentration	Analyte	Concentration
Magnesium	1000 ug/mL	Manganese	100 ug/mL
Nickel	100 ug/mL	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Silver	50 ug/mL	Sodium	500 mg/L
Strontium	100 mg/L	Thallium	100 ug/mL
Uranium	100 ug/mL	Vanadium	100 ug/mL
Zinc	100 ug/mL		

Serial ID: UI220928-41 **Open/Reference Date:** 19 OCT 2022 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 26 SEP 2022 **Catalog Number :** VAR-CAL-1
Type: Source Material **Expires:** 19 OCT 2023 **Lot Number :** R2-MEB688302
Employee: Helen Camello **Solvent :** 3%HNO3,TR.HF
Supplier: inorganic ventures
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Molybdenum	100 mg/L
Tin	100 mg/L	Titanium	100 mg/L

Serial ID: UI221007-40 **Open/Reference Date:** 28 OCT 2022 **Catalog Number :** HP7032-A-500
Name: Trace ICP ICSAB Source A **Received:** 06 OCT 2022 **Lot Number :** 2227703-500
Type: Source Material **Expires:** 31 OCT 2023
Employee: Helen Camello
Supplier: High Purity Standards
Description: Trace ICP ICSAB Source A
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	10 mg/L	Cadmium	20 mg/L
Chromium	20 mg/L	Cobalt	20 mg/L
Copper	20 mg/L	Lead	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Phosphorous	100 mg/L	Potassium	200 mg/L
Selenium	100 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Uranium	20 mg/L
Vanadium	20 mg/L	Zinc	20 mg/L

Serial ID: UI221007-41 **Open/Reference Date:** 28 OCT 2022 **Catalog Number :** HP7032-B-500
Name: Trace ICP ICSAB Source B **Received:** 06 OCT 2022 **Lot Number :** 2227704-500
Type: Source Material **Expires:** 31 OCT 2023
Employee: Helen Camello
Supplier: High Purity Standards

Description: Trace ICP ICSAB Source B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Boron	20 ug/mL
Molybdenum	20 mg/L	Silica	42.78 mg/L
Silicon	20 mg/L	Silver	10 mg/L
Sulfur	100 mg/L	Tin	20 mg/L
Titanium	20 ug/mL		

Serial ID: UI221013-40 **Open/Reference Date:** 13 OCT 2022 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN. A **Received:** 12 OCT 2022 **Catalog Number :** HPS-427-026-500
Type: Source Material **Expires:** 31 OCT 2023 **Lot Number :** 2227924-500
Employee: Helen Camello **Solvent :** 10% HNO3 mg/l
Supplier: O2SI
Description: Trace ICP Interference Check Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	20000 mg/L	Calcium	20000 mg/L
Iron	8000 mg/L	Magnesium	20000 mg/L

Serial ID: UI221107-08 **Open/Reference Date:** 07 NOV 2022 **Amount :** 500 mL
Name: ICP-MS ICV/CCV Master C **Received:** 07 NOV 2022 **Catalog Number :** IV-68298
Type: Source Material **Expires:** 07 NOV 2023 **Lot Number :** T2-MEB723979
Employee: Paul Boyd **Solvent :** 2% HNO3/Tr. Tart Acid/ Tr. HF 100
Supplier: Inorganic Ventures
Description: ICPMS ICV/CCV Soln C - 20ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Molybdenum	20 mg/L	Silver	20 mg/L
Tin	20 mg/L	Titanium	20 mg/L
Tungsten	20 mg/L	Zirconium	20 mg/L

Serial ID: UI221107-09 **Open/Reference Date:** 07 NOV 2022 **Amount :** 500 mL
Name: ICP-MS ICV/CCV Sb **Received:** 07 NOV 2022 **Catalog Number :** IV-30440
Type: Source Material **Expires:** 07 NOV 2023 **Lot Number :** T2-MEB723978
Employee: Paul Boyd **Solvent :** 2% HNO3/Tr. Tart Acid/ Tr. HF 100
Supplier: Inorganic Ventures
Description: ICPMS ICV/CCV Sb - 20ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L		

Serial ID: UI221108-A **Open/Reference Date:** 10 NOV 2022 **Catalog Number :** HP7512-1L
Name: ICP-MS SPIKE A **Received:** 08 NOV 2022 **Lot Number :** 2228608-1L
Type: Source Material **Expires:** 31 OCT 2023
Employee: Edmund Frampton
Supplier: Enviromental Express
Description: ICP-MS spiking soluiton A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Hafnium	10 mg/L
Molybdenum	10 mg/L	Rhodium	10 mg/L
Tantalum	10 mg/L	Tin	10 mg/L
Titanium	10 mg/L	Tungsten	10 mg/L
Zirconium	10 mg/L		

Serial ID: UI221108-B **Open/Reference Date:** 08 NOV 2022 **Catalog Number :** HP7513-1L
Name: ICP-MS SPIKE B **Received:** 08 NOV 2022 **Lot Number :** 2228620-1L
Type: Source Material **Expires:** 31 OCT 2023
Employee: Edmund Frampton
Supplier: Enviromental Express
Description: ICP-MS spiking solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	400 mg/L	Arsenic	10 mg/L
Barium	10 mg/L	Beryllium	10 mg/L
Bismuth	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Calcium	400 mg/L
Cesium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Iron	400 mg/L	Lead	10 mg/L
Lithium	10 mg/L	Magnesium	400 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Phosphorous	400 mg/L	Potassium	400 mg/L
Rhenium	10 mg/L	Selenium	10 mg/L
Silver	10 mg/L	Sodium	400 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Uranium-235	.072 mg/L	Uranium-238	9.928 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI221127-07 **Open/Reference Date:** 27 NOV 2022 **Amount :** 500 mL
Name: ICP-MS ICV/CCV Master B **Received:** 27 NOV 2022 **Catalog Number :** IV-66578
Type: Source Material **Expires:** 27 NOV 2023 **Lot Number :** T2-MEB724551
Employee: Paul Boyd **Solvent :** 2% HNO3 100 cm2
Supplier: Inorganic Ventures

Description: ICPMS ICV/CCV Soln B - 20ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Serial ID: UI221127-09 **Open/Reference Date:** 27 NOV 2022 **Amount :** 500 mL
Name: ICP-MS ICV/CCV Master A **Received:** 27 NOV 2022 **Catalog Number :** IV-66577-A
Type: Source Material **Expires:** 27 NOV 2023 **Lot Number :** T2-MEB724550
Employee: Paul Boyd **Solvent :** 2% HNO3 100 cm2
Supplier: Inorganic Ventures
Description: ICPMS ICV/CCV SOLN A - 2000ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI221127-12 **Open/Reference Date:** 27 NOV 2022 **Amount :** 500 mL
Name: ICP-MS ICSAB Master B **Received:** 27 NOV 2022 **Catalog Number :** HPS-427-015-A-500
Type: Source Material **Expires:** 30 SEP 2023 **Lot Number :** 2227008-500
Employee: Paul Boyd **Solvent :** +/- 2.0% in 2% HNO3
Supplier: HPS
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L

Analyte	Concentration	Analyte	Concentration
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI221127-13 **Open/Reference Date:** 27 NOV 2022 **Amount :** 500 mL
Name: ICP-MS ICSAB Master C **Received:** 27 NOV 2022 **Catalog Number :** HPS-427-015-B-500
Type: Source Material **Expires:** 30 SEP 2023 **Lot Number :** 2227132-500
Employee: Paul Boyd **Solvent :** +/- 2.0% in 2% HNO3 + tr HF
Supplier: HPS
Description: ICPMS ICSAB Master C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI221127-60 **Open/Reference Date:** 27 NOV 2022 **Amount :** 500 mL
Name: ICPMS High Range Standar **Received:** 27 NOV 2022 **Catalog Number :** IV-65701
Type: Source Material **Expires:** 27 NOV 2023 **Lot Number :** T2-MEB724548
Employee: Paul Boyd **Solvent :** 2%HNO3
Supplier: Inorganic Ventures
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI221127-61 **Open/Reference Date:** 27 NOV 2022 **Amount :** 500 mL
Name: ICPMS High Range Standar **Received:** 27 NOV 2022 **Catalog Number :** IV-65782
Type: Source Material **Expires:** 27 NOV 2023 **Lot Number :** T2-MEB724549
Employee: Paul Boyd **Solvent :** 2% in 2%HNO3 + Tr HF
Supplier: Inorganic Ventures

Description: Linear Range Standard B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Serial ID: UI221207-01 **Open/Reference Date:** 08 DEC 2022 **Catalog Number :** HP7509-1L
Name: METALSPIKE-1 **Received:** 07 DEC 2022 **Lot Number :** 2231835-1000
Type: Source Material **Expires:** 30 NOV 2023
Employee: Edmund Frampton
Supplier: ENVIRONMENTAL EXPRESS
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Lithium	10 ug/mL	Magnesium	1000 ug/mL
Phosphorous	100 ug/mL	Potassium	1000 ug/mL
Silver	20 ug/mL	Sodium	1000 ug/mL
Strontium	100 ug/mL		

Serial ID: UI221207-02 **Open/Reference Date:** 08 DEC 2022 **Catalog Number :** HP7511-1L
Name: METALSPIKE-2 **Received:** 07 DEC 2022 **Lot Number :** 2231801-1000
Type: Source Material **Expires:** 30 NOV 2023
Employee: Edmund Frampton
Supplier: Inorganic Ventures
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2139 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Uranium-235	.72 ug/mL	Uranium-238	99.28 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI221210-11 **Open/Reference Date:** 10 DEC 2022 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A Nex **Received:** 10 DEC 2022 **Catalog Number :** HP7566-1L
Type: Source Material **Expires:** 30 NOV 2023 **Lot Number :** 2224214-1000
Employee: Paul Boyd **Solvent :** 5% HNO3 + Tr HF
Supplier: Environmental Express
Description: ICP-MS ICSA Master A NEXION
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UMS221127-01 **Open/Reference Date:** 27 NOV 2022 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 27 NOV 2022 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 27 NOV 2023 **Lot Number :** 3-164EL
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS221127-02 **Open/Reference Date:** 27 NOV 2022 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 27 NOV 2022 **Lot Number :** 3-166EL
Type: Source Material **Expires:** 27 NOV 2023
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L

Analyte	Concentration	Analyte	Concentration
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS3537790-03 **Open/Reference Date:** 27 NOV 2022 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 27 NOV 2022 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 27 NOV 2023 **Lot Number :** 3-165EL
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG221219-01 **Open/Reference Date:** 19 DEC 2022 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 19 DEC 2022 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 21 DEC 2022 **Solvent :** 1mL HNO3 + TypeI H2O
Employee: Roderick McPherson
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG3384022-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG221219-02 **Open/Reference Date:** 19 DEC 2022 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 19 DEC 2022 **Solvent :** 2% HNO3-1734294
Type: Intermediate **Expires:** 21 DEC 2022
Employee: Roderick McPherson
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG3384135-02	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WHG221219-01A **Open/Reference Date:** 19 DEC 2022 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.2CRA **Received:** 19 DEC 2022 **Solvent :** 2% HNO3-1734294
Type: Working **Expires:** 21 DEC 2022
Employee: Roderick McPherson
Supplier: GEL

Description: Mercury Working 1st Source CAL 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG221219-01	Mercury	200 ug/L	20 uL	20 mL	.2 ug/L

Serial ID: WHG221219-02 **Open/Reference Date:** 19 DEC 2022 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.5 **Received:** 19 DEC 2022 **Solvent :** 2% HNO3-1734294
Type: Working **Expires:** 21 DEC 2022
Employee: Roderick McPherson
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG221219-01	Mercury	200 ug/L	50 uL	20 mL	.5 ug/L

Serial ID: WHG221219-03 **Open/Reference Date:** 19 DEC 2022 **Pipet Id :** Hg1289245
Name: MHGWORKCAL2.0 **Received:** 19 DEC 2022 **Solvent :** 2% HNO3-1734294
Type: Working **Expires:** 21 DEC 2022
Employee: Roderick McPherson
Supplier: GEL
Description: Mercury Working 1st Source CAL 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG221219-01	Mercury	200 ug/L	200 uL	20 mL	2 ug/L

Serial ID: WHG221219-04 **Open/Reference Date:** 19 DEC 2022 **Pipet Id :** Hg1289245
Name: MHGWORKCAL5.0CCV **Received:** 19 DEC 2022 **Solvent :** 2% HNO3-1734294
Type: Working **Expires:** 21 DEC 2022
Employee: Roderick McPherson
Supplier: GEL
Description: Mercury Working 1st Source CAL 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG221219-01	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG221219-05 **Open/Reference Date:** 19 DEC 2022 **Pipet Id :** Hg1289245
Name: MHGWORKCAL10.0 **Received:** 19 DEC 2022 **Solvent :** 2% HNO3-1734294
Type: Working **Expires:** 21 DEC 2022
Employee: Roderick McPherson
Supplier: GEL
Description: Mercury Working 1st Source CAL 10.0

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG221219-01	Mercury	200 ug/L	1000 uL	20 mL	10 ug/L

Serial ID: WHG221219-06 **Open/Reference Date:** 19 DEC 2022 **Pipet Id :** Hg1289245
Name: MHGWORK5.0ICV **Received:** 19 DEC 2022 **Solvent :** 2% HNO3-1734294
Type: Working **Expires:** 21 DEC 2022
Employee: Roderick McPherson
Supplier: GEL
Description: Mercury Working 2nd Source 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG221219-02	Mercury	200 ug/L	1	20 mL	5 ug/L

Serial ID: WHG221219-13 **Open/Reference Date:** 19 DEC 2022 **Pipet Id :** Hg1289245
Name: MHGLIQLCSMSSPIKE **Received:** 19 DEC 2022 **Solvent :** 2% HNO3-1734294
Type: Working **Expires:** 21 DEC 2022
Employee: Roderick McPherson
Supplier: GEL
Description: Mercury working intermediate standard for LCS/MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG3384022-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI221208-48 **Open/Reference Date:** 08 DEC 2022 **Amount :** 25 mL
Name: Trace ICP ICSA **Received:** 13 OCT 2022 **Catalog Number :** 160005-08-03
Type: Working **Expires:** 08 JAN 2023 **Lot Number :** 1109048
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI221013-40	Aluminum	20000 mg/L	25 mL	1000 mL	500000 UG/L
UI221013-40	Calcium	20000 mg/L	25 mL	1000 mL	500000 UG/L
UI221013-40	Iron	8000 mg/L	25 mL	1000 mL	200000 UG/L
UI221013-40	Magnesium	20000 mg/L	25 mL	1000 mL	500000 UG/L

Standard Logbook

Serial ID: WI221208-49 **Open/Reference Date:** 08 DEC 2022 **Balance Id :** 216
Name: Trace ICP ICSAB **Received:** 31 OCT 2022 **Pipet Id :** K13302G
Type: Working **Expires:** 08 JAN 2023 **Solvent :** 3%HCL AND 1%HNO3%
Employee: Helen Camello
Supplier: Environmental Express
Description: Trace ICP Interferent Check Standard AB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI220104-40	Sodium	1000 ug/mL	2.5 mL	500 mL	5000 ug/L
UI221007-40	Arsenic	20 mg/L	12.5 mL	500 mL	500 ug/L
UI221007-40	Barium	20 mg/L	12.5 mL	500 mL	500 ug/L
UI221007-40	Beryllium	10 mg/L	12.5 mL	500 mL	250 ug/L
UI221007-40	Cadmium	20 mg/L	12.5 mL	500 mL	500 ug/L
UI221007-40	Chromium	20 mg/L	12.5 mL	500 mL	500 ug/L
UI221007-40	Cobalt	20 mg/L	12.5 mL	500 mL	500 ug/L
UI221007-40	Copper	20 mg/L	12.5 mL	500 mL	500 ug/L
UI221007-40	Lead	20 mg/L	12.5 mL	500 mL	500 ug/L
UI221007-40	Manganese	20 mg/L	12.5 mL	500 mL	500 ug/L
UI221007-40	Nickel	20 mg/L	12.5 mL	500 mL	500 ug/L
UI221007-40	Phosphorous	100 mg/L	12.5 mL	500 mL	2500 ug/L
UI221007-40	Potassium	200 mg/L	12.5 mL	500 mL	5000 ug/L
UI221007-40	Selenium	100 mg/L	12.5 mL	500 mL	2500 ug/L
UI221007-40	Strontium	20 mg/L	12.5 mL	500 mL	500 ug/L
UI221007-40	Thallium	20 mg/L	12.5 mL	500 mL	500 ug/L
UI221007-40	Uranium	20 mg/L	12.5 mL	500 mL	500 ug/L
UI221007-40	Vanadium	20 mg/L	12.5 mL	500 mL	500 ug/L
UI221007-40	Zinc	20 mg/L	12.5 mL	500 mL	500 ug/L
UI221007-41	Antimony	20 mg/L	12.5 mL	500 mL	500 ug/L
UI221007-41	Boron	20 ug/mL	12.5 mL	500 mL	500 ug/L
UI221007-41	Molybdenum	20 mg/L	12.5 mL	500 mL	500 ug/L
UI221007-41	Silica	42.78 mg/L	12.5 mL	500 mL	10700 ug/L
UI221007-41	Silicon	20 mg/L	12.5 mL	500 mL	5000 ug/L
UI221007-41	Silver	10 mg/L	12.5 mL	500 mL	250 ug/L
UI221007-41	Sulfur	100 mg/L	12.5 mL	500 mL	2500 ug/L
UI221007-41	Tin	20 mg/L	12.5 mL	500 mL	500 ug/L
UI221007-41	Titanium	20 ug/mL	12.5 mL	500 mL	500 ug/L
UI221013-40	Aluminum	20000 mg/L	12.5 mL	500 mL	500000 ug/L
UI221013-40	Calcium	20000 mg/L	12.5 mL	500 mL	500000 ug/L
UI221013-40	Iron	8000 mg/L	12.5 mL	500 mL	200000 ug/L
UI221013-40	Magnesium	20000 mg/L	12.5 mL	500 mL	500000 ug/L

Standard Logbook

Serial ID: WI221219-40 **Open/Reference Date:** 19 DEC 2022 **Balance Id :** 216
Name: ICP HIGH RANGE STANDA **Received:** 08 JUN 2022 **Lot Number :** 2118121-500/2118114-1L
Type: Working **Expires:** 19 JAN 2023 **Pipet Id :** K13302G
Employee: Helen Camello **Solvent :** 3%HCL and1%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STANDARD A
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI220608-40	Molybdenum	100 mg/L	50 mL	500 mL	10000 ug/L
UI220608-40	Silica	1070 mg/L	50 mL	500 mL	107000 ug/L
UI220608-40	Silicon	500 mg/L	50 mL	500 mL	50000 ug/L
UI220608-40	Titanium	100 mg/L	50 mL	500 mL	10000 ug/L
UI220608-41	Arsenic	100 mg/L	50 mL	500 mL	10000 ug/L
UI220608-41	Barium	150 mg/L	50 mL	500 mL	15000 ug/L
UI220608-41	Boron	500 mg/L	50 mL	500 mL	5000 ug/L
UI220608-41	Cadmium	100 mg/L	50 mL	500 mL	10000 ug/L
UI220608-41	Chromium	250 mg/L	50 mL	500 mL	25000 ug/L
UI220608-41	Cobalt	100 mg/L	50 mL	500 mL	10000 ug/L
UI220608-41	Copper	200 mg/L	50 mL	500 mL	20000 ug/L
UI220608-41	Lead	250 mg/L	50 mL	500 mL	25000 ug/L
UI220608-41	Manganese	100 mg/L	50 mL	500 mL	10000 ug/L
UI220608-41	Nickel	100 mg/L	50 mL	500 mL	10000 ug/L
UI220608-41	Strontium	100 mg/L	50 mL	500 mL	10000 ug/L
UI220608-41	Vanadium	100 mg/L	50 mL	500 mL	10000 ug/L
UI220608-41	Zinc	150 mg/L	50 mL	500 mL	15000 ug/L

Serial ID: WI221219-41 **Open/Reference Date:** 19 DEC 2022 **Balance Id :** 216
Name: ICP HIGH RANGE STD B **Received:** 08 JUN 2022 **Lot Number :** 2118121-500/2118114-1L
Type: Working **Expires:** 19 JAN 2023 **Pipet Id :** K13302G
Employee: Helen Camello **Solvent :** 3%HCLand 1%HNO3
Supplier: 02SI
Description: ICP HIGH RANGE STD SOLUTION A and SOLUTION B
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI220608-40	Molybdenum	100 mg/L	50 mL	500 mL	10000 ug/L
UI220608-40	Silica	1070 mg/L	50 mL	500 mL	107000 ug/L
UI220608-40	Silicon	500 mg/L	50 mL	500 mL	50000 ug/L
UI220608-40	Titanium	100 mg/L	50 mL	500 mL	10000 ug/L
UI220608-41	Aluminum	5000 mg/L	50 mL	500 mL	500000 ug/L
UI220608-41	Arsenic	100 mg/L	50 mL	500 mL	10000 ug/L
UI220608-41	Barium	150 mg/L	50 mL	500 mL	15000 ug/L
UI220608-41	Boron	500 mg/L	50 mL	500 mL	5000 ug/L
UI220608-41	Cadmium	100 mg/L	50 mL	500 mL	10000 ug/L
UI220608-41	Calcium	5000 mg/L	50 mL	500 mL	500000 ug/L
UI220608-41	Chromium	250 mg/L	50 mL	500 mL	25000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI220608-41	Cobalt	100 mg/L	50 mL	500 mL	10000 ug/L
UI220608-41	Copper	200 mg/L	50 mL	500 mL	20000 ug/L
UI220608-41	Iron	5000 mg/L	50 mL	500 mL	500000 ug/L
UI220608-41	Lead	250 mg/L	50 mL	500 mL	25000 ug/L
UI220608-41	Magnesium	5000 mg/L	50 mL	500 mL	500000 ug/L
UI220608-41	Manganese	100 mg/L	50 mL	500 mL	10000 ug/L
UI220608-41	Nickel	100 mg/L	50 mL	500 mL	10000 ug/L
UI220608-41	Potassium	2000 mg/L	50 mL	500 mL	300000 ug/L
UI220608-41	Sodium	5000 mg/L	50 mL	500 mL	500000 ug/L
UI220608-41	Strontium	100 mg/L	50 mL	500 mL	10000 ug/L
UI220608-41	Sulfur	500 mg/L	50 mL	500 mL	50000 ug/L
UI220608-41	Uranium	150 mg/L	50 mL	500 mL	15000 ug/L
UI220608-41	Vanadium	100 mg/L	50 mL	500 mL	10000 ug/L
UI220608-41	Zinc	150 mg/L	50 mL	500 mL	15000 ug/L

Serial ID: WI221219-42 **Open/Reference Date:** 19 DEC 2022 **Balance Id :** 216

Name: TRACE ICP 0.1 PPM STD. **Received:** 31 AUG 2022 **Pipet Id :** K13302G

Type: Working **Expires:** 20 DEC 2022 **Solvent :** 3%HCL AND 1%HNO3-3650766

Employee: Helen Camello

Supplier: GEL

Description: TRACE ICP 0.1 PPM CALIBRATION STD.

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI221219-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI221219-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI221219-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI221219-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI221219-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI221219-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI221219-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI221219-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI221219-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI221219-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI221219-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI221219-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI221219-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI221219-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI221219-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI221219-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI221219-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI221219-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI221219-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI221219-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI221219-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI221219-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI221219-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI221219-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI221219-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI221219-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI221219-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI221219-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI221219-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI221219-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI221219-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI221219-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI221219-43 **Open/Reference Date:** 19 DEC 2022 **Balance Id :** 216

Name: TRACE ICP 0.5/CCV STD. **Received:** 31 AUG 2022 **Pipet Id :** K13302G

Type: Working **Expires:** 20 DEC 2022 **Solvent :** 3%HCL AND 1%HNO3-3650766

Employee: Helen Camello

Supplier: GEL

Description: TRACE ICP O.5/CCV CALIBRATION STD.

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI220104-40	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI220517-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI220517-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI220831-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI220831-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI220831-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI220831-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI220831-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI220831-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI220831-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI220831-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI220831-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI220831-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI220831-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI220831-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI220831-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI220831-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI220831-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI220831-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI220831-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI220831-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI220831-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI220831-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI220831-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI220831-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI220831-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI220831-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI220831-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI220831-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI220831-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI220831-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI220831-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI220831-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI221219-44 **Open/Reference Date:** 19 DEC 2022 **Balance Id :** 216

Name: TRACE ICP SCAL 1.0 **Received:** 31 AUG 2022 **Pipet Id :** 3581809

Type: Working **Expires:** 20 DEC 2022 **Solvent :** 3%HCL AND 1%HNO3-3650766

Employee: Helen Camello

Supplier: o2si

Description: Trace ICP Calibration Standard 1.0ppm

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI220517-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI220517-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI220831-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI220831-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI220831-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI220831-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI220831-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI220831-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI220831-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI220831-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI220831-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI220831-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI220831-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI220831-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI220831-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI220831-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI220831-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI220831-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI220831-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI220831-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI220831-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI220831-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI220831-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI220831-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI220831-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI220831-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI220831-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI220831-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI220831-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI220831-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI220831-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI220831-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI221219-45 **Open/Reference Date:** 19 DEC 2022 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 03 JUN 2022 **Pipet Id :** K13002G
Type: Working **Expires:** 20 DEC 2022 **Solvent :** 3%HCL AND 1%HNO3-3650766
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI220104-40	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L
UI220603-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI220603-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI220603-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI220603-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L

Serial ID: WI221219-46 **Open/Reference Date:** 19 DEC 2022 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 28 SEP 2022 **Pipet Id :** K13302G
Type: Working **Expires:** 20 DEC 2022 **Solvent :** 3%HCL AND 1%HNO3-3650766
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI220726-40	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI220726-40	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI220928-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI220928-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI220928-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI220928-40	Beryllium	50 ug/mL	2.5 mL	500 mL	250 ug/L
UI220928-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI220928-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI220928-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI220928-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI220928-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI220928-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI220928-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI220928-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI220928-40	Magnesium	1000 ug/mL	2.5 mL	500 mL	5000 ug/L
UI220928-40	Manganese	100 ug/mL	2.5 mL	500 mL	500 ug/L
UI220928-40	Nickel	100 ug/mL	2.5 mL	500 mL	500 ug/L
UI220928-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI220928-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI220928-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI220928-40	Silver	50 ug/mL	2.5 mL	500 mL	250 ug/L
UI220928-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI220928-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI220928-40	Thallium	100 ug/mL	2.5 mL	500 mL	500 ug/L
UI220928-40	Uranium	100 ug/mL	2.5 mL	500 mL	500 ug/L
UI220928-40	Vanadium	100 ug/mL	2.5 mL	500 mL	500 ug/L
UI220928-40	Zinc	100 ug/mL	2.5 mL	500 mL	500 ug/L
UI220928-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI220928-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI220928-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI220928-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L

Serial ID: WI221219-47 **Open/Reference Date:** 19 DEC 2022 **Balance Id :** 216

Name: PQL Working Standard **Received:** 13 JAN 2022 **Pipet Id :** K13302G

Type: Working **Expires:** 20 DEC 2022 **Solvent :** 3%HCL AND 1%HNO3-3650766

Employee: Helen Camello

Supplier: 02si

Description: PQL Working Standard

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI220113-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI220113-40	Antimony	10 mg/L	2 mL	1000 mL	20 ug/L
UI220113-40	Arsenic	15 mg/L	2 mL	1000 mL	30 ug/L
UI220113-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI220113-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI220113-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI220113-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI220113-40	Calcium	100 mg/L	2 mL	1000 mL	200 ug/L
UI220113-40	Chromium	5 mg/L	2 mL	1000 mL	10 ug/L
UI220113-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI220113-40	Copper	10 mg/L	2 mL	1000 mL	20 ug/L
UI220113-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI220113-40	Lead	10 mg/L	2 mL	1000 mL	20 ug/L
UI220113-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI220113-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI220113-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI220113-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI220113-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI220113-40	Potassium	125 mg/L	2 mL	1000 mL	250 ug/L
UI220113-40	Selenium	15 mg/L	2 mL	1000 mL	30 ug/L
UI220113-40	Silica	106.95 mg/L	2 mL	1000 mL	213 ug/L
UI220113-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI220113-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI220113-40	Sodium	150 mg/L	2 mL	1000 mL	300 ug/L
UI220113-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI220113-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI220113-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI220113-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI220113-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI220113-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI220113-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI220113-40	Zinc	10 mg/L	2 mL	1000 mL	20 ug/L

Serial ID: WMS221219-04 **Open/Reference Date:** 19 DEC 2022 **Amount :** 50 mL

Name: ICPMS Cal Standard 100 **Received:** 19 DEC 2022 **Balance Id :** 4025216

Type: Working **Expires:** 20 DEC 2022 **Pipet Id :** 3541598

Employee: Elizabeth Janssen **Solvent :** 2%HNO3/1%HCl -3651078

Supplier: GEL

Description: ICPMS Calibration Standard (100 ppb)

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI220907-03	Tungsten	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Arsenic	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Barium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Beryllium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Boron	20 mg/L	5 mL	500 mL	200 ug/l
UMS221127-01	Cadmium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Chromium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Cobalt	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Copper	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Lead	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Lithium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Manganese	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Nickel	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Selenium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Silver	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Strontium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Thallium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Thorium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Uranium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Vanadium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Zinc	10 mg/L	5 mL	500 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS221127-02	Aluminum	1000 mg/L	5 mL	500 mL	10000 ug/l
UMS221127-02	Calcium	1000 mg/L	5 mL	500 mL	10000 ug/l
UMS221127-02	Iron	1000 mg/L	5 mL	500 mL	10000 ug/l
UMS221127-02	Magnesium	1000 mg/L	5 mL	500 mL	10000 ug/l
UMS221127-02	Phosphorous	1000 mg/L	5 mL	500 mL	10000 ug/l
UMS221127-02	Potassium	1000 mg/L	5 mL	500 mL	10000 ug/l
UMS221127-02	Sodium	1000 mg/L	5 mL	500 mL	10000 ug/l
UMS3537790-03	Antimony	10 mg/L	5 mL	500 mL	100 ug/l
UMS3537790-03	Molybdenum	10 mg/L	5 mL	500 mL	100 ug/l
UMS3537790-03	Tin	10 mg/L	5 mL	500 mL	100 ug/l
UMS3537790-03	Titanium	10 mg/L	5 mL	500 mL	100 ug/l
UMS3537790-03	Zirconium	10 mg/L	5 mL	500 mL	100 ug/l

Serial ID: WMS221219-04A **Open/Reference Date:** 19 DEC 2022 **Balance Id :** 4025216

Name: ICPMS Cal Standard 10 **Received:** 19 DEC 2022 **Pipet Id :** 3541598

Type: Working **Expires:** 20 DEC 2022 **Solvent :** 2%HNO3/1%HCl -3651078

Employee: Elizabeth Janssen

Supplier: GEL

Description: ICPMS Calibration Standard (10 ppb)

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS221219-04	Aluminum	10000 ug/l	50 mL	500 mL	1000 ug/l
WMS221219-04	Antimony	100 ug/l	50 mL	500 mL	10 ug/l
WMS221219-04	Arsenic	100 ug/l	50 mL	500 mL	10 ug/l
WMS221219-04	Barium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221219-04	Beryllium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221219-04	Boron	200 ug/l	50 mL	500 mL	20 ug/l
WMS221219-04	Cadmium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221219-04	Calcium	10000 ug/l	50 mL	500 mL	1000 ug/l
WMS221219-04	Chromium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221219-04	Cobalt	100 ug/l	50 mL	500 mL	10 ug/l
WMS221219-04	Copper	100 ug/l	50 mL	500 mL	10 ug/l
WMS221219-04	Iron	10000 ug/l	50 mL	500 mL	1000 ug/l
WMS221219-04	Lead	100 ug/l	50 mL	500 mL	10 ug/l
WMS221219-04	Lithium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221219-04	Magnesium	10000 ug/l	50 mL	500 mL	1000 ug/l
WMS221219-04	Manganese	100 ug/l	50 mL	500 mL	10 ug/l
WMS221219-04	Molybdenum	100 ug/l	50 mL	500 mL	10 ug/l
WMS221219-04	Nickel	100 ug/l	50 mL	500 mL	10 ug/l
WMS221219-04	Phosphorous	10000 ug/l	50 mL	500 mL	1000 ug/l
WMS221219-04	Potassium	10000 ug/l	50 mL	500 mL	1000 ug/l
WMS221219-04	Selenium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221219-04	Silver	100 ug/l	50 mL	500 mL	10 ug/l
WMS221219-04	Sodium	10000 ug/l	50 mL	500 mL	1000 ug/l

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS221219-04	Strontium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221219-04	Thallium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221219-04	Thorium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221219-04	Tin	100 ug/l	50 mL	500 mL	10 ug/l
WMS221219-04	Titanium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221219-04	Tungsten	100 ug/l	50 mL	500 mL	10 ug/l
WMS221219-04	Uranium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221219-04	Vanadium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221219-04	Zinc	100 ug/l	50 mL	500 mL	10 ug/l
WMS221219-04	Zirconium	100 ug/l	50 mL	500 mL	10 ug/l

Serial ID: WMS221219-05 **Open/Reference Date:** 19 DEC 2022 **Balance Id :** BAL216

Name: ICPMS ICV **Received:** 19 DEC 2022 **Pipet Id :** 3541598

Type: Working **Expires:** 20 DEC 2022 **Solvent :** 2%HNO3/1%HCl -3651078

Employee: Elizabeth Janssen

Supplier: GEL

Description: ICPMS ICV

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI221107-08	Molybdenum	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221107-08	Silver	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221107-08	Tin	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221107-08	Titanium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221107-08	Tungsten	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221107-08	Zirconium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221107-09	Antimony	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Arsenic	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Barium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Beryllium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Boron	40 mg/L	2.5 mL	1000 mL	100 ug/L
UI221127-07	Cadmium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Chromium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Cobalt	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Copper	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Lead	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Lithium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Manganese	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Nickel	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Selenium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Strontium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Thallium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Thorium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Uranium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Vanadium	20 mg/L	2.5 mL	1000 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI221127-07	Zinc	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-09	Aluminum	2020 mg/L	2.5 mL	1000 mL	5050 ug/L
UI221127-09	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 ug/L
UI221127-09	Iron	2000 mg/L	2.5 mL	1000 mL	5000 ug/L
UI221127-09	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 ug/L
UI221127-09	Phosphorous	2000 mg/L	2.5 mL	1000 mL	5000 ug/L
UI221127-09	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 ug/L
UI221127-09	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 ug/L

Serial ID: WMS221219-06 **Open/Reference Date:** 19 DEC 2022 **Balance Id :** BAL216
Name: ICPMS CRDL **Received:** 19 DEC 2022 **Pipet Id :** 3820544
Type: Working **Expires:** 20 DEC 2022 **Solvent :** 2%HNO3/1%HCl - 3651078
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI220919-09	Aluminum	50 mg/L	.5 mL	500 mL	50 ug/L
UI220919-09	Arsenic	5 mg/L	.5 mL	500 mL	5 ug/L
UI220919-09	Barium	4 mg/L	.5 mL	500 mL	4 ug/L
UI220919-09	Beryllium	.5 mg/L	.5 mL	500 mL	.5 ug/L
UI220919-09	Boron	15 mg/L	.5 mL	500 mL	15 ug/L
UI220919-09	Cadmium	1 mg/L	.5 mL	500 mL	1 ug/L
UI220919-09	Calcium	200 mg/L	.5 mL	500 mL	200 ug/L
UI220919-09	Chromium	10 mg/L	.5 mL	500 mL	10 ug/L
UI220919-09	Cobalt	1 mg/L	.5 mL	500 mL	1 ug/L
UI220919-09	Copper	2 mg/L	.5 mL	500 mL	2 ug/L
UI220919-09	Iron	100 mg/L	.5 mL	500 mL	100 ug/L
UI220919-09	Lead	2 mg/L	.5 mL	500 mL	2 ug/L
UI220919-09	Lithium	10 mg/L	.5 mL	500 mL	10 ug/L
UI220919-09	Magnesium	30 mg/L	.5 mL	500 mL	30 ug/L
UI220919-09	Manganese	5 mg/L	.5 mL	500 mL	5 ug/L
UI220919-09	Nickel	2 mg/L	.5 mL	500 mL	2 ug/L
UI220919-09	Phosphorous	50 mg/L	.5 mL	500 mL	50 ug/L
UI220919-09	Potassium	300 mg/L	.5 mL	500 mL	300 ug/L
UI220919-09	Selenium	5 mg/L	.5 mL	500 mL	5 ug/L
UI220919-09	Sodium	250 mg/L	.5 mL	500 mL	250 ug/L
UI220919-09	Strontium	10 mg/L	.5 mL	500 mL	10 ug/L
UI220919-09	Thallium	2 mg/L	.5 mL	500 mL	2 ug/L
UI220919-09	Thorium	2 mg/L	.5 mL	500 mL	2 ug/L
UI220919-09	Uranium	.2 mg/L	.5 mL	500 mL	.2 ug/L
UI220919-09	Vanadium	20 mg/L	.5 mL	500 mL	20 ug/L
UI220919-09	Zinc	20 mg/L	.5 mL	500 mL	20 ug/L
UI220919-10	Antimony	3 mg/L	.5 mL	500 mL	3 ug/L

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI220919-10	Molybdenum	1 mg/L	.5 mL	500 mL	1 ug/L
UI220919-10	Silver	1 mg/L	.5 mL	500 mL	1 ug/L
UI220919-10	Tin	5 mg/L	.5 mL	500 mL	5 ug/L
UI220919-10	Titanium	10 mg/L	.5 mL	500 mL	10 ug/L
UI220919-10	Tungsten	5 mg/L	.5 mL	500 mL	5 ug/L
UI220919-10	Zirconium	2 mg/L	.5 mL	500 mL	10 ug/L

Serial ID: WMS221219-20 **Open/Reference Date:** 19 DEC 2022 **Balance Id :** BAL216
Name: ICPMS ICSA **Received:** 19 DEC 2022 **Lot Number :** 1064482
Type: Working **Expires:** 20 DEC 2022 **Pipet Id :** 3541598
Employee: Elizabeth Janssen **Solvent :** 2%HNO3/1%HCl -3651078
Supplier: GEL
Description: ICPMS ICSA NexION
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI221210-11	Aluminum	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Calcium	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Carbon	2000 mg/L	25 mL	250 mL	200000 ug/L
UI221210-11	Chloride	10000 mg/L	25 mL	250 mL	1000000 ug/L
UI221210-11	Iron	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Magnesium	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Molybdenum	20 mg/L	25 mL	250 mL	2000 ug/L
UI221210-11	Phosphorous	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Potassium	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Sodium	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Sulfur	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Titanium	20 mg/L	25 mL	250 mL	2000 ug/L

Serial ID: WMS221219-21 **Open/Reference Date:** 19 DEC 2022 **Balance Id :** BAL216
Name: ICPMS ICSAB **Received:** 19 DEC 2022 **Pipet Id :** 1758088
Type: Working **Expires:** 20 DEC 2022 **Solvent :** 2%HNO3/1%HCl -3651078
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS ICSAB NexION
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI221127-12	Arsenic	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-12	Barium	2 mg/L	2.5 mL	250 mL	21.9 ug/L
UI221127-12	Beryllium	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-12	Boron	2 mg/L	2.5 mL	250 mL	22.06 ug/L
UI221127-12	Cadmium	2 mg/L	2.5 mL	250 mL	20.64 ug/L
UI221127-12	Chromium	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-12	Cobalt	2 mg/L	2.5 mL	250 mL	20.9 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI221127-12	Copper	2 mg/L	2.5 mL	250 mL	21.03 ug/L
UI221127-12	Lead	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-12	Lithium	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-12	Manganese	2 mg/L	2.5 mL	250 mL	25.82 ug/L
UI221127-12	Nickel	2 mg/L	2.5 mL	250 mL	21.2 ug/L
UI221127-12	Selenium	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-12	Strontium	2 mg/L	2.5 mL	250 mL	21.65 ug/L
UI221127-12	Thallium	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-12	Thorium	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-12	Uranium	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-12	Vanadium	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-12	Zinc	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-13	Antimony	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-13	Silver	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-13	Tin	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-13	Tungsten	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-13	Zirconium	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221210-11	Aluminum	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Calcium	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Carbon	2000 mg/L	25 mL	250 mL	200000 ug/L
UI221210-11	Chloride	10000 mg/L	25 mL	250 mL	1000000 ug/L
UI221210-11	Iron	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Magnesium	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Molybdenum	20 mg/L	25 mL	250 mL	2000 ug/L
UI221210-11	Phosphorous	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Potassium	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Sodium	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Sulfur	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Titanium	20 mg/L	25 mL	250 mL	2000 ug/L

Serial ID: WMS221219-70 **Open/Reference Date:** 19 DEC 2022 **Balance Id :** BAL216

Name: ICPMS LINEAR RANGE ST **Received:** 19 DEC 2022 **Pipet Id :** 3408156

Type: Working **Expires:** 20 DEC 2022 **Solvent :** 2%HNO3/1%HCl -3651078

Employee: Elizabeth Janssen

Supplier: 02SI

Description: ICPMS LINEAR RANGE STANDARD

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI221127-60	Aluminum	5000 mg/L	2.5 mL	250 mL	50000 ug/L
UI221127-60	Arsenic	100 mg/L	2.5 mL	250 mL	1000 ug/L
UI221127-60	Barium	250 mg/L	2.5 mL	250 mL	2500 ug/L
UI221127-60	Beryllium	100 mg/L	2.5 mL	250 mL	1000 ug/L
UI221127-60	Cadmium	100 mg/L	2.5 mL	250 mL	1000 ug/L
UI221127-60	Calcium	5000 mg/L	2.5 mL	250 mL	50000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI221127-60	Chromium	100 mg/L	2.5 mL	250 mL	1000 ug/L
UI221127-60	Cobalt	100 mg/L	2.5 mL	250 mL	1000 ug/L
UI221127-60	Copper	100 mg/L	2.5 mL	250 mL	1000 ug/L
UI221127-60	Iron	5000 mg/L	2.5 mL	250 mL	50000 ug/L
UI221127-60	Lead	500 mg/L	2.5 mL	250 mL	5000 ug/L
UI221127-60	Lithium	100 mg/L	2.5 mL	250 mL	1000 ug/L
UI221127-60	Magnesium	5000 mg/L	2.5 mL	250 mL	50000 ug/L
UI221127-60	Manganese	100 mg/L	2.5 mL	250 mL	1000 ug/L
UI221127-60	Nickel	100 mg/L	2.5 mL	250 mL	1000 ug/L
UI221127-60	Phosphorous	2500 mg/L	2.5 mL	250 mL	25000 ug/L
UI221127-60	Potassium	5000 mg/L	2.5 mL	250 mL	50000 ug/L
UI221127-60	Selenium	50 mg/L	2.5 mL	250 mL	500 ug/L
UI221127-60	Sodium	5000 mg/L	2.5 mL	250 mL	50000 ug/L
UI221127-60	Strontium	100 mg/L	2.5 mL	250 mL	1000 ug/L
UI221127-60	Thallium	50 mg/L	2.5 mL	250 mL	500 ug/L
UI221127-60	Thorium	250 mg/L	2.5 mL	250 mL	2500 ug/L
UI221127-60	Uranium	500 mg/L	2.5 mL	250 mL	5000 ug/L
UI221127-60	Vanadium	100 mg/L	2.5 mL	250 mL	1000 ug/L
UI221127-60	Zinc	250 mg/L	2.5 mL	250 mL	2500 ug/L
UI221127-61	Antimony	25 mg/L	2.5 mL	250 mL	250 ug/L
UI221127-61	Molybdenum	100 mg/L	2.5 mL	250 mL	1000 ug/L
UI221127-61	Silver	25 mg/L	2.5 mL	250 mL	250 ug/L
UI221127-61	Tin	100 mg/L	2.5 mL	250 mL	1000 ug/L
UI221127-61	Tungsten	100 mg/L	2.5 mL	250 mL	1000 ug/L
UI221127-61	Zirconium	50 mg/L	2.5 mL	250 mL	500 ug/L

Serial ID: WMS221220-04 **Open/Reference Date:** 20 DEC 2022 **Amount :** 50 mL

Name: ICPMS Cal Standard 100 **Received:** 20 DEC 2022 **Balance Id :** 4025216

Type: Working **Expires:** 21 DEC 2022 **Pipet Id :** 3541598

Employee: Elizabeth Janssen **Solvent :** 2%HNO3/1%HCl -3651078

Supplier: GEL

Description: ICPMS Calibration Standard (100 ppb)

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI220907-03	Tungsten	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Arsenic	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Barium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Beryllium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Boron	20 mg/L	5 mL	500 mL	200 ug/l
UMS221127-01	Cadmium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Chromium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Cobalt	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Copper	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Lead	10 mg/L	5 mL	500 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS221127-01	Lithium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Manganese	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Nickel	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Selenium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Silver	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Strontium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Thallium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Thorium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Uranium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Vanadium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Zinc	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-02	Aluminum	1000 mg/L	5 mL	500 mL	10000 ug/l
UMS221127-02	Calcium	1000 mg/L	5 mL	500 mL	10000 ug/l
UMS221127-02	Iron	1000 mg/L	5 mL	500 mL	10000 ug/l
UMS221127-02	Magnesium	1000 mg/L	5 mL	500 mL	10000 ug/l
UMS221127-02	Phosphorous	1000 mg/L	5 mL	500 mL	10000 ug/l
UMS221127-02	Potassium	1000 mg/L	5 mL	500 mL	10000 ug/l
UMS221127-02	Sodium	1000 mg/L	5 mL	500 mL	10000 ug/l
UMS3537790-03	Antimony	10 mg/L	5 mL	500 mL	100 ug/l
UMS3537790-03	Molybdenum	10 mg/L	5 mL	500 mL	100 ug/l
UMS3537790-03	Tin	10 mg/L	5 mL	500 mL	100 ug/l
UMS3537790-03	Titanium	10 mg/L	5 mL	500 mL	100 ug/l
UMS3537790-03	Zirconium	10 mg/L	5 mL	500 mL	100 ug/l

Serial ID: WMS221220-04A **Open/Reference Date:** 20 DEC 2022 **Balance Id :** 4025216

Name: ICPMS Cal Standard 10 **Received:** 20 DEC 2022 **Pipet Id :** 3541598

Type: Working **Expires:** 21 DEC 2022 **Solvent :** 2%HNO3/1%HCl -3651078

Employee: Elizabeth Janssen

Supplier: GEL

Description: ICPMS Calibration Standard (10 ppb)

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS221220-04	Aluminum	10000 ug/l	50 mL	500 mL	1000 ug/l
WMS221220-04	Antimony	100 ug/l	50 mL	500 mL	10 ug/l
WMS221220-04	Arsenic	100 ug/l	50 mL	500 mL	10 ug/l
WMS221220-04	Barium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221220-04	Beryllium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221220-04	Boron	200 ug/l	50 mL	500 mL	20 ug/l
WMS221220-04	Cadmium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221220-04	Calcium	10000 ug/l	50 mL	500 mL	1000 ug/l
WMS221220-04	Chromium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221220-04	Cobalt	100 ug/l	50 mL	500 mL	10 ug/l
WMS221220-04	Copper	100 ug/l	50 mL	500 mL	10 ug/l
WMS221220-04	Iron	10000 ug/l	50 mL	500 mL	1000 ug/l

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS221220-04	Lead	100 ug/l	50 mL	500 mL	10 ug/l
WMS221220-04	Lithium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221220-04	Magnesium	10000 ug/l	50 mL	500 mL	1000 ug/l
WMS221220-04	Manganese	100 ug/l	50 mL	500 mL	10 ug/l
WMS221220-04	Molybdenum	100 ug/l	50 mL	500 mL	10 ug/l
WMS221220-04	Nickel	100 ug/l	50 mL	500 mL	10 ug/l
WMS221220-04	Phosphorous	10000 ug/l	50 mL	500 mL	1000 ug/l
WMS221220-04	Potassium	10000 ug/l	50 mL	500 mL	1000 ug/l
WMS221220-04	Selenium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221220-04	Silver	100 ug/l	50 mL	500 mL	10 ug/l
WMS221220-04	Sodium	10000 ug/l	50 mL	500 mL	1000 ug/l
WMS221220-04	Strontium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221220-04	Thallium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221220-04	Thorium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221220-04	Tin	100 ug/l	50 mL	500 mL	10 ug/l
WMS221220-04	Titanium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221220-04	Tungsten	100 ug/l	50 mL	500 mL	10 ug/l
WMS221220-04	Uranium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221220-04	Vanadium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221220-04	Zinc	100 ug/l	50 mL	500 mL	10 ug/l
WMS221220-04	Zirconium	100 ug/l	50 mL	500 mL	10 ug/l

Serial ID: WMS221220-05 **Open/Reference Date:** 20 DEC 2022 **Balance Id :** BAL216

Name: ICPMS ICV **Received:** 20 DEC 2022 **Pipet Id :** 3541598

Type: Working **Expires:** 21 DEC 2022 **Solvent :** 2%HNO3/1%HCl -3651078

Employee: Elizabeth Janssen

Supplier: GEL

Description: ICPMS ICV

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI221107-08	Molybdenum	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221107-08	Silver	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221107-08	Tin	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221107-08	Titanium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221107-08	Tungsten	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221107-08	Zirconium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221107-09	Antimony	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Arsenic	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Barium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Beryllium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Boron	40 mg/L	2.5 mL	1000 mL	100 ug/L
UI221127-07	Cadmium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Chromium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Cobalt	20 mg/L	2.5 mL	1000 mL	50 ug/L

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI221127-07	Copper	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Lead	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Lithium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Manganese	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Nickel	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Selenium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Strontium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Thallium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Thorium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Uranium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Vanadium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Zinc	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-09	Aluminum	2020 mg/L	2.5 mL	1000 mL	5050 ug/L
UI221127-09	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 ug/L
UI221127-09	Iron	2000 mg/L	2.5 mL	1000 mL	5000 ug/L
UI221127-09	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 ug/L
UI221127-09	Phosphorous	2000 mg/L	2.5 mL	1000 mL	5000 ug/L
UI221127-09	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 ug/L
UI221127-09	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 ug/L

Serial ID: WMS221220-06 **Open/Reference Date:** 20 DEC 2022 **Balance Id :** BAL216

Name: ICPMS CRDL **Received:** 20 DEC 2022 **Pipet Id :** 3820544

Type: Working **Expires:** 21 DEC 2022 **Solvent :** 2%HNO3/1%HCl - 3651078

Employee: Elizabeth Janssen

Supplier: GEL

Description: ICPMS CRDL

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI220919-09	Aluminum	50 mg/L	.5 mL	500 mL	50 ug/L
UI220919-09	Arsenic	5 mg/L	.5 mL	500 mL	5 ug/L
UI220919-09	Barium	4 mg/L	.5 mL	500 mL	4 ug/L
UI220919-09	Beryllium	.5 mg/L	.5 mL	500 mL	.5 ug/L
UI220919-09	Boron	15 mg/L	.5 mL	500 mL	15 ug/L
UI220919-09	Cadmium	1 mg/L	.5 mL	500 mL	1 ug/L
UI220919-09	Calcium	200 mg/L	.5 mL	500 mL	200 ug/L
UI220919-09	Chromium	10 mg/L	.5 mL	500 mL	10 ug/L
UI220919-09	Cobalt	1 mg/L	.5 mL	500 mL	1 ug/L
UI220919-09	Copper	2 mg/L	.5 mL	500 mL	2 ug/L
UI220919-09	Iron	100 mg/L	.5 mL	500 mL	100 ug/L
UI220919-09	Lead	2 mg/L	.5 mL	500 mL	2 ug/L
UI220919-09	Lithium	10 mg/L	.5 mL	500 mL	10 ug/L
UI220919-09	Magnesium	30 mg/L	.5 mL	500 mL	30 ug/L
UI220919-09	Manganese	5 mg/L	.5 mL	500 mL	5 ug/L
UI220919-09	Nickel	2 mg/L	.5 mL	500 mL	2 ug/L

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI220919-09	Phosphorous	50 mg/L	.5 mL	500 mL	50 ug/L
UI220919-09	Potassium	300 mg/L	.5 mL	500 mL	300 ug/L
UI220919-09	Selenium	5 mg/L	.5 mL	500 mL	5 ug/L
UI220919-09	Sodium	250 mg/L	.5 mL	500 mL	250 ug/L
UI220919-09	Strontium	10 mg/L	.5 mL	500 mL	10 ug/L
UI220919-09	Thallium	2 mg/L	.5 mL	500 mL	2 ug/L
UI220919-09	Thorium	2 mg/L	.5 mL	500 mL	2 ug/L
UI220919-09	Uranium	.2 mg/L	.5 mL	500 mL	.2 ug/L
UI220919-09	Vanadium	20 mg/L	.5 mL	500 mL	20 ug/L
UI220919-09	Zinc	20 mg/L	.5 mL	500 mL	20 ug/L
UI220919-10	Antimony	3 mg/L	.5 mL	500 mL	3 ug/L
UI220919-10	Molybdenum	1 mg/L	.5 mL	500 mL	1 ug/L
UI220919-10	Silver	1 mg/L	.5 mL	500 mL	1 ug/L
UI220919-10	Tin	5 mg/L	.5 mL	500 mL	5 ug/L
UI220919-10	Titanium	10 mg/L	.5 mL	500 mL	10 ug/L
UI220919-10	Tungsten	5 mg/L	.5 mL	500 mL	5 ug/L
UI220919-10	Zirconium	2 mg/L	.5 mL	500 mL	10 ug/L

Serial ID: WMS221220-20 **Open/Reference Date:** 20 DEC 2022 **Balance Id :** BAL216
Name: ICPMS ICSA **Received:** 20 DEC 2022 **Lot Number :** 1064482
Type: Working **Expires:** 21 DEC 2022 **Pipet Id :** 3541598
Employee: Elizabeth Janssen **Solvent :** 2%HNO3/1%HCl -3651078
Supplier: GEL
Description: ICPMS ICSA NexION
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI221210-11	Aluminum	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Calcium	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Carbon	2000 mg/L	25 mL	250 mL	200000 ug/L
UI221210-11	Chloride	10000 mg/L	25 mL	250 mL	1000000 ug/L
UI221210-11	Iron	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Magnesium	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Molybdenum	20 mg/L	25 mL	250 mL	2000 ug/L
UI221210-11	Phosphorous	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Potassium	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Sodium	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Sulfur	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Titanium	20 mg/L	25 mL	250 mL	2000 ug/L

Serial ID: WMS221220-21 **Open/Reference Date:** 20 DEC 2022 **Balance Id :** BAL216
Name: ICPMS ICSAB **Received:** 20 DEC 2022 **Pipet Id :** 1758088
Type: Working **Expires:** 21 DEC 2022 **Solvent :** 2%HNO3/1%HCl -3651078
Employee: Elizabeth Janssen
Supplier: GEL

Standard Logbook

Description: ICPMS ICSAB NexION

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI221127-12	Arsenic	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-12	Barium	2 mg/L	2.5 mL	250 mL	21.9 ug/L
UI221127-12	Beryllium	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-12	Boron	2 mg/L	2.5 mL	250 mL	22.06 ug/L
UI221127-12	Cadmium	2 mg/L	2.5 mL	250 mL	20.64 ug/L
UI221127-12	Chromium	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-12	Cobalt	2 mg/L	2.5 mL	250 mL	20.9 ug/L
UI221127-12	Copper	2 mg/L	2.5 mL	250 mL	21.03 ug/L
UI221127-12	Lead	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-12	Lithium	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-12	Manganese	2 mg/L	2.5 mL	250 mL	25.82 ug/L
UI221127-12	Nickel	2 mg/L	2.5 mL	250 mL	21.2 ug/L
UI221127-12	Selenium	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-12	Strontium	2 mg/L	2.5 mL	250 mL	21.65 ug/L
UI221127-12	Thallium	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-12	Thorium	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-12	Uranium	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-12	Vanadium	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-12	Zinc	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-13	Antimony	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-13	Silver	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-13	Tin	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-13	Tungsten	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-13	Zirconium	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221210-11	Aluminum	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Calcium	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Carbon	2000 mg/L	25 mL	250 mL	200000 ug/L
UI221210-11	Chloride	10000 mg/L	25 mL	250 mL	1000000 ug/L
UI221210-11	Iron	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Magnesium	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Molybdenum	20 mg/L	25 mL	250 mL	2000 ug/L
UI221210-11	Phosphorous	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Potassium	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Sodium	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Sulfur	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Titanium	20 mg/L	25 mL	250 mL	2000 ug/L

Serial ID: WMS221221-04
Name: ICPMS Cal Standard 100
Type: Working
Employee: Elizabeth Janssen
Supplier: GEL

Open/Reference Date: 21 DEC 2022
Received: 21 DEC 2022
Expires: 22 DEC 2022

Amount : 50 mL
Balance Id : 4025216
Pipet Id : 3541598
Solvent : 2%HNO3/1%HCl -3651078

Standard Logbook

Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI220907-03	Tungsten	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Arsenic	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Barium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Beryllium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Boron	20 mg/L	5 mL	500 mL	200 ug/l
UMS221127-01	Cadmium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Chromium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Cobalt	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Copper	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Lead	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Lithium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Manganese	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Nickel	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Selenium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Silver	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Strontium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Thallium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Thorium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Uranium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Vanadium	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-01	Zinc	10 mg/L	5 mL	500 mL	100 ug/l
UMS221127-02	Aluminum	1000 mg/L	5 mL	500 mL	10000 ug/l
UMS221127-02	Calcium	1000 mg/L	5 mL	500 mL	10000 ug/l
UMS221127-02	Iron	1000 mg/L	5 mL	500 mL	10000 ug/l
UMS221127-02	Magnesium	1000 mg/L	5 mL	500 mL	10000 ug/l
UMS221127-02	Phosphorous	1000 mg/L	5 mL	500 mL	10000 ug/l
UMS221127-02	Potassium	1000 mg/L	5 mL	500 mL	10000 ug/l
UMS221127-02	Sodium	1000 mg/L	5 mL	500 mL	10000 ug/l
UMS3537790-03	Antimony	10 mg/L	5 mL	500 mL	100 ug/l
UMS3537790-03	Molybdenum	10 mg/L	5 mL	500 mL	100 ug/l
UMS3537790-03	Tin	10 mg/L	5 mL	500 mL	100 ug/l
UMS3537790-03	Titanium	10 mg/L	5 mL	500 mL	100 ug/l
UMS3537790-03	Zirconium	10 mg/L	5 mL	500 mL	100 ug/l

Serial ID: WMS221221-04A **Open/Reference Date:** 21 DEC 2022 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 21 DEC 2022 **Pipet Id :** 3541598
Type: Working **Expires:** 22 DEC 2022 **Solvent :** 2%HNO3/1%HCl -3651078
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS221221-04	Aluminum	10000 ug/l	50 mL	500 mL	1000 ug/l
WMS221221-04	Antimony	100 ug/l	50 mL	500 mL	10 ug/l
WMS221221-04	Arsenic	100 ug/l	50 mL	500 mL	10 ug/l
WMS221221-04	Barium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221221-04	Beryllium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221221-04	Boron	200 ug/l	50 mL	500 mL	20 ug/l
WMS221221-04	Cadmium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221221-04	Calcium	10000 ug/l	50 mL	500 mL	1000 ug/l
WMS221221-04	Chromium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221221-04	Cobalt	100 ug/l	50 mL	500 mL	10 ug/l
WMS221221-04	Copper	100 ug/l	50 mL	500 mL	10 ug/l
WMS221221-04	Iron	10000 ug/l	50 mL	500 mL	1000 ug/l
WMS221221-04	Lead	100 ug/l	50 mL	500 mL	10 ug/l
WMS221221-04	Lithium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221221-04	Magnesium	10000 ug/l	50 mL	500 mL	1000 ug/l
WMS221221-04	Manganese	100 ug/l	50 mL	500 mL	10 ug/l
WMS221221-04	Molybdenum	100 ug/l	50 mL	500 mL	10 ug/l
WMS221221-04	Nickel	100 ug/l	50 mL	500 mL	10 ug/l
WMS221221-04	Phosphorous	10000 ug/l	50 mL	500 mL	1000 ug/l
WMS221221-04	Potassium	10000 ug/l	50 mL	500 mL	1000 ug/l
WMS221221-04	Selenium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221221-04	Silver	100 ug/l	50 mL	500 mL	10 ug/l
WMS221221-04	Sodium	10000 ug/l	50 mL	500 mL	1000 ug/l
WMS221221-04	Strontium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221221-04	Thallium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221221-04	Thorium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221221-04	Tin	100 ug/l	50 mL	500 mL	10 ug/l
WMS221221-04	Titanium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221221-04	Tungsten	100 ug/l	50 mL	500 mL	10 ug/l
WMS221221-04	Uranium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221221-04	Vanadium	100 ug/l	50 mL	500 mL	10 ug/l
WMS221221-04	Zinc	100 ug/l	50 mL	500 mL	10 ug/l
WMS221221-04	Zirconium	100 ug/l	50 mL	500 mL	10 ug/l

Serial ID: WMS221221-05
Name: ICPMS ICV
Type: Working
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS ICV
Comments: None

Open/Reference Date: 21 DEC 2022
Received: 21 DEC 2022
Expires: 22 DEC 2022

Balance Id : BAL216
Pipet Id : 3541598
Solvent : 2%HNO3/1%HCl -3651078

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI221107-08	Molybdenum	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221107-08	Silver	20 mg/L	2.5 mL	1000 mL	50 ug/L

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI221107-08	Tin	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221107-08	Titanium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221107-08	Tungsten	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221107-08	Zirconium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221107-09	Antimony	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Arsenic	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Barium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Beryllium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Boron	40 mg/L	2.5 mL	1000 mL	100 ug/L
UI221127-07	Cadmium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Chromium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Cobalt	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Copper	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Lead	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Lithium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Manganese	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Nickel	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Selenium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Strontium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Thallium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Thorium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Uranium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Vanadium	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-07	Zinc	20 mg/L	2.5 mL	1000 mL	50 ug/L
UI221127-09	Aluminum	2020 mg/L	2.5 mL	1000 mL	5050 ug/L
UI221127-09	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 ug/L
UI221127-09	Iron	2000 mg/L	2.5 mL	1000 mL	5000 ug/L
UI221127-09	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 ug/L
UI221127-09	Phosphorous	2000 mg/L	2.5 mL	1000 mL	5000 ug/L
UI221127-09	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 ug/L
UI221127-09	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 ug/L

Serial ID: WMS221221-06 **Open/Reference Date:** 21 DEC 2022 **Balance Id :** BAL216
Name: ICPMS CRDL **Received:** 21 DEC 2022 **Pipet Id :** 3820544
Type: Working **Expires:** 22 DEC 2022 **Solvent :** 2%HNO3/1%HCl - 3651078
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI220919-09	Aluminum	50 mg/L	.5 mL	500 mL	50 ug/L
UI220919-09	Arsenic	5 mg/L	.5 mL	500 mL	5 ug/L
UI220919-09	Barium	4 mg/L	.5 mL	500 mL	4 ug/L
UI220919-09	Beryllium	.5 mg/L	.5 mL	500 mL	.5 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI220919-09	Boron	15 mg/L	.5 mL	500 mL	15 ug/L
UI220919-09	Cadmium	1 mg/L	.5 mL	500 mL	1 ug/L
UI220919-09	Calcium	200 mg/L	.5 mL	500 mL	200 ug/L
UI220919-09	Chromium	10 mg/L	.5 mL	500 mL	10 ug/L
UI220919-09	Cobalt	1 mg/L	.5 mL	500 mL	1 ug/L
UI220919-09	Copper	2 mg/L	.5 mL	500 mL	2 ug/L
UI220919-09	Iron	100 mg/L	.5 mL	500 mL	100 ug/L
UI220919-09	Lead	2 mg/L	.5 mL	500 mL	2 ug/L
UI220919-09	Lithium	10 mg/L	.5 mL	500 mL	10 ug/L
UI220919-09	Magnesium	30 mg/L	.5 mL	500 mL	30 ug/L
UI220919-09	Manganese	5 mg/L	.5 mL	500 mL	5 ug/L
UI220919-09	Nickel	2 mg/L	.5 mL	500 mL	2 ug/L
UI220919-09	Phosphorous	50 mg/L	.5 mL	500 mL	50 ug/L
UI220919-09	Potassium	300 mg/L	.5 mL	500 mL	300 ug/L
UI220919-09	Selenium	5 mg/L	.5 mL	500 mL	5 ug/L
UI220919-09	Sodium	250 mg/L	.5 mL	500 mL	250 ug/L
UI220919-09	Strontium	10 mg/L	.5 mL	500 mL	10 ug/L
UI220919-09	Thallium	2 mg/L	.5 mL	500 mL	2 ug/L
UI220919-09	Thorium	2 mg/L	.5 mL	500 mL	2 ug/L
UI220919-09	Uranium	.2 mg/L	.5 mL	500 mL	.2 ug/L
UI220919-09	Vanadium	20 mg/L	.5 mL	500 mL	20 ug/L
UI220919-09	Zinc	20 mg/L	.5 mL	500 mL	20 ug/L
UI220919-10	Antimony	3 mg/L	.5 mL	500 mL	3 ug/L
UI220919-10	Molybdenum	1 mg/L	.5 mL	500 mL	1 ug/L
UI220919-10	Silver	1 mg/L	.5 mL	500 mL	1 ug/L
UI220919-10	Tin	5 mg/L	.5 mL	500 mL	5 ug/L
UI220919-10	Titanium	10 mg/L	.5 mL	500 mL	10 ug/L
UI220919-10	Tungsten	5 mg/L	.5 mL	500 mL	5 ug/L
UI220919-10	Zirconium	2 mg/L	.5 mL	500 mL	10 ug/L

Serial ID: WMS221221-20 **Open/Reference Date:** 21 DEC 2022 **Balance Id :** BAL216

Name: ICPMS ICSA **Received:** 21 DEC 2022 **Lot Number :** 1064482

Type: Working **Expires:** 22 DEC 2022 **Pipet Id :** 3541598

Employee: Elizabeth Janssen **Solvent :** 2%HNO3/1%HCl -3651078

Supplier: GEL

Description: ICPMS ICSA NexION

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI221210-11	Aluminum	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Calcium	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Carbon	2000 mg/L	25 mL	250 mL	200000 ug/L
UI221210-11	Chloride	10000 mg/L	25 mL	250 mL	1000000 ug/L
UI221210-11	Iron	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Magnesium	1000 mg/L	25 mL	250 mL	100000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI221210-11	Molybdenum	20 mg/L	25 mL	250 mL	2000 ug/L
UI221210-11	Phosphorous	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Potassium	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Sodium	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Sulfur	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Titanium	20 mg/L	25 mL	250 mL	2000 ug/L

Serial ID: WMS221221-21 **Open/Reference Date:** 21 DEC 2022 **Balance Id :** BAL216

Name: ICPMS ICSAB **Received:** 21 DEC 2022 **Pipet Id :** 1758088

Type: Working **Expires:** 22 DEC 2022 **Solvent :** 2%HNO3/1%HCl -3651078

Employee: Elizabeth Janssen

Supplier: GEL

Description: ICPMS ICSAB NexION

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI221127-12	Arsenic	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-12	Barium	2 mg/L	2.5 mL	250 mL	21.9 ug/L
UI221127-12	Beryllium	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-12	Boron	2 mg/L	2.5 mL	250 mL	22.06 ug/L
UI221127-12	Cadmium	2 mg/L	2.5 mL	250 mL	20.64 ug/L
UI221127-12	Chromium	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-12	Cobalt	2 mg/L	2.5 mL	250 mL	20.9 ug/L
UI221127-12	Copper	2 mg/L	2.5 mL	250 mL	21.03 ug/L
UI221127-12	Lead	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-12	Lithium	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-12	Manganese	2 mg/L	2.5 mL	250 mL	25.82 ug/L
UI221127-12	Nickel	2 mg/L	2.5 mL	250 mL	21.2 ug/L
UI221127-12	Selenium	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-12	Strontium	2 mg/L	2.5 mL	250 mL	21.65 ug/L
UI221127-12	Thallium	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-12	Thorium	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-12	Uranium	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-12	Vanadium	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-12	Zinc	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-13	Antimony	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-13	Silver	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-13	Tin	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-13	Tungsten	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221127-13	Zirconium	2 mg/L	2.5 mL	250 mL	20 ug/L
UI221210-11	Aluminum	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Calcium	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Carbon	2000 mg/L	25 mL	250 mL	200000 ug/L
UI221210-11	Chloride	10000 mg/L	25 mL	250 mL	1000000 ug/L
UI221210-11	Iron	1000 mg/L	25 mL	250 mL	100000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI221210-11	Magnesium	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Molybdenum	20 mg/L	25 mL	250 mL	2000 ug/L
UI221210-11	Phosphorous	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Potassium	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Sodium	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Sulfur	1000 mg/L	25 mL	250 mL	100000 ug/L
UI221210-11	Titanium	20 mg/L	25 mL	250 mL	2000 ug/L

Serial ID: WMS221221-70 **Open/Reference Date:** 21 DEC 2022 **Balance Id :** BAL216
Name: ICPMS LINEAR RANGE ST **Received:** 21 DEC 2022 **Pipet Id :** 3408156
Type: Working **Expires:** 22 DEC 2022 **Solvent :** 2%HNO3/1%HCl -3651078
Employee: Elizabeth Janssen
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI221127-60	Aluminum	5000 mg/L	2.5 mL	250 mL	50000 ug/L
UI221127-60	Arsenic	100 mg/L	2.5 mL	250 mL	1000 ug/L
UI221127-60	Barium	250 mg/L	2.5 mL	250 mL	2500 ug/L
UI221127-60	Beryllium	100 mg/L	2.5 mL	250 mL	1000 ug/L
UI221127-60	Cadmium	100 mg/L	2.5 mL	250 mL	1000 ug/L
UI221127-60	Calcium	5000 mg/L	2.5 mL	250 mL	50000 ug/L
UI221127-60	Chromium	100 mg/L	2.5 mL	250 mL	1000 ug/L
UI221127-60	Cobalt	100 mg/L	2.5 mL	250 mL	1000 ug/L
UI221127-60	Copper	100 mg/L	2.5 mL	250 mL	1000 ug/L
UI221127-60	Iron	5000 mg/L	2.5 mL	250 mL	50000 ug/L
UI221127-60	Lead	500 mg/L	2.5 mL	250 mL	5000 ug/L
UI221127-60	Lithium	100 mg/L	2.5 mL	250 mL	1000 ug/L
UI221127-60	Magnesium	5000 mg/L	2.5 mL	250 mL	50000 ug/L
UI221127-60	Manganese	100 mg/L	2.5 mL	250 mL	1000 ug/L
UI221127-60	Nickel	100 mg/L	2.5 mL	250 mL	1000 ug/L
UI221127-60	Phosphorous	2500 mg/L	2.5 mL	250 mL	25000 ug/L
UI221127-60	Potassium	5000 mg/L	2.5 mL	250 mL	50000 ug/L
UI221127-60	Selenium	50 mg/L	2.5 mL	250 mL	500 ug/L
UI221127-60	Sodium	5000 mg/L	2.5 mL	250 mL	50000 ug/L
UI221127-60	Strontium	100 mg/L	2.5 mL	250 mL	1000 ug/L
UI221127-60	Thallium	50 mg/L	2.5 mL	250 mL	500 ug/L
UI221127-60	Thorium	250 mg/L	2.5 mL	250 mL	2500 ug/L
UI221127-60	Uranium	500 mg/L	2.5 mL	250 mL	5000 ug/L
UI221127-60	Vanadium	100 mg/L	2.5 mL	250 mL	1000 ug/L
UI221127-60	Zinc	250 mg/L	2.5 mL	250 mL	2500 ug/L
UI221127-61	Antimony	25 mg/L	2.5 mL	250 mL	250 ug/L
UI221127-61	Molybdenum	100 mg/L	2.5 mL	250 mL	1000 ug/L
UI221127-61	Silver	25 mg/L	2.5 mL	250 mL	250 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI221127-61	Tin	100 mg/L	2.5 mL	250 mL	1000 ug/L
UI221127-61	Tungsten	100 mg/L	2.5 mL	250 mL	1000 ug/L
UI221127-61	Zirconium	50 mg/L	2.5 mL	250 mL	500 ug/L

Serial ID: 221206-tclp **Open/Reference Date:** 06 DEC 2022 **Lot Number :** 2022092605
Name: I-HNO3 **Received:** 06 DEC 2022
Type: Reagent/Solvent **Expires:** 25 SEP 2024
Employee: Luke Gormley
Supplier: VWR - BDH Chemicals
Description: Concentrated Nitric Acid
Comments: None

Serial ID: 3265791-A **Open/Reference Date:** 03 MAR 2021 **Lot Number :** 199039
Name: B-NaCl-MER **Received:** 03 MAR 2022
Type: Reagent/Solvent **Expires:** 03 MAR 2023
Employee: Monifa Basdeo
Supplier: Fisher Scientific
Description: Sodium Chloride
Comments: None

Serial ID: 3462130-A **Open/Reference Date:** 15 JUL 2022 **Lot Number :** 22G0156753
Name: B-NH2OH.HCl-MER **Received:** 15 JUL 2022
Type: Reagent/Solvent **Expires:** 15 JUL 2024
Employee: Jessica Palumbo
Supplier: VWR
Description: Hydroxlyamine Hydrochloride
Comments: None

Serial ID: 3491803-A **Open/Reference Date:** 27 SEP 2022 **Lot Number :** 50054609
Name: B-KMnO4(VWR)-MER **Received:** 27 SEP 2022
Type: Reagent/Solvent **Expires:** 27 SEP 2024
Employee: Roderick McPherson
Supplier: BEANTOWN CHEMICAL
Description: Potassium Permanganate
Comments: None

Serial ID: 3492819 **Open/Reference Date:** 29 SEP 2022 **Amount :** 1 kg
Name: B-K2S2O8S-MER **Received:** 29 SEP 2022 **Lot Number :** A0432356
Type: Reagent/Solvent **Expires:** 29 SEP 2024
Employee: Roderick McPherson
Supplier: Thermo Scientific

Description: Potassium Persulfate Concentrate.
Comments: None

Serial ID: 3535202 **Open/Reference Date:** 18 NOV 2022 **Lot Number :** 2022041285
Name: B-H2SO4-MER **Received:** 18 NOV 2022
Type: Reagent/Solvent **Expires:** 18 NOV 2024
Employee: Roderick McPherson
Supplier: BDH
Description: Sulfuric Acid, Concentrated
Comments: None

Serial ID: 3622621 **Open/Reference Date:** 28 NOV 2022 **Lot Number :** 2022091513
Name: I-HCL **Received:** 28 NOV 2022
Type: Reagent/Solvent **Expires:** 28 NOV 2024
Employee: Edmund Frampton
Supplier: VWR
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 3645201-C **Open/Reference Date:** 05 DEC 2022 **Balance Id :** BAL-002
Name: B-K2S2O8-MER **Received:** 05 DEC 2022
Type: Reagent/Solvent **Expires:** 29 SEP 2024
Employee: Roderick McPherson
Supplier: GEL
Description: 5% Potassium Persulfate
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
3492819	B-K2S2O8S-MER	N/A	175 g	3500 mL	5%

Serial ID: 3645244-1 **Open/Reference Date:** 05 DEC 2022 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 05 DEC 2022 **Lot Number :** 2022092605
Type: Reagent/Solvent **Expires:** 05 DEC 2024
Employee: Roderick McPherson
Supplier: Fisher
Description: NITRIC ACID
Comments: None

Standard Logbook

Serial ID: 3646168 **Open/Reference Date:** 07 DEC 2022 **Lot Number :** 2022092605
Name: I-HNO3 **Received:** 07 DEC 2022
Type: Reagent/Solvent **Expires:** 25 SEP 2024
Employee: Edmund Frampton
Supplier: VWR - BDH Chemicals
Description: Concentrated Nitric Acid
Comments: None

Serial ID: 3648642 **Open/Reference Date:** 13 DEC 2022 **Lot Number :** 2022102438
Name: I-HNO3 **Received:** 13 DEC 2022
Type: Reagent/Solvent **Expires:** 13 DEC 2024
Employee: Edmund Frampton
Supplier: VWR - BDH Chemicals
Description: Concentrated Nitric Acid
Comments: None

Serial ID: 3649580 **Open/Reference Date:** 15 DEC 2022 **Lot Number :** 2022102007
Name: I-HCL **Received:** 15 DEC 2022
Type: Reagent/Solvent **Expires:** 15 DEC 2024
Employee: Edmund Frampton
Supplier: VWR
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 3649691-C **Open/Reference Date:** 15 DEC 2022 **Balance Id :** BAL-423
Name: B-NaCl.NH2OH.HCl-MER **Received:** 15 DEC 2022
Type: Reagent/Solvent **Expires:** 03 MAR 2023
Employee: Jessica Palumbo
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
3265791-A	B-NaCl-MER	NA	420 g	3500 mL	12 PERCENT
3462130-A	B-NH2OH.HCl-MER	N/A	420 g	3500 mL	12 PERCENT

Serial ID: 3650583-C **Open/Reference Date:** 17 DEC 2022 **Balance Id :** BAL-423
Name: B-KMnO4-MER **Received:** 17 DEC 2022
Type: Reagent/Solvent **Expires:** 27 SEP 2024
Employee: Roderick McPherson
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
3491803-A	B-KMnO4(VWR)-MER	100	175 g	3500 mL	5%

Serial ID: 3650766 **Open/Reference Date:** 19 DEC 2022 **Balance Id :** 216
Name: B-ICP-RINSE SOLN **Received:** 15 DEC 2022 **Solvent :** 3%HCL+1%HNO3
Type: Reagent/Solvent **Expires:** 26 DEC 2022
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
3648642	I-HNO3	68.0-70.0%	80 mL	8000 mL	N/A
3649580	I-HCL	36.5-38.0	240 mL	8000 mL	N/A

Serial ID: 3651078 **Open/Reference Date:** 19 DEC 2022 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 19 DEC 2022
Type: Reagent/Solvent **Expires:** 02 JAN 2023
Employee: Elizabeth Janssen
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
221206-tclp	I-HNO3	68.0-70.0%	160 mL	8 l	N/A
3622621	I-HCL	36.5-38.0	80 mL	8 l	N/A

General Chem Analysis

Case Narrative

General Chemistry
Technical Case Narrative
Triad National Security, LLC
SDG #: 2023-289
Work Order #: 604449

Product: **Cyanide, Total**
Analytical Method: EPA 335.4
Analytical Procedure: GL-GC-E-095 REV# 23
Analytical Batch: 2358099

Preparation Method: EPA 335.4
Preparation Procedure: GL-GC-E-067 REV# 24
Preparation Batch: 2358098

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
604449002	SMEB01-23-265371
604449006	SMEB02-23-265372
604449010	SMEB03-23-265373
604449014	SMEB04-23-265374
604449018	SMEB05-23-265375
1205274863	Method Blank (MB)
1205274864	Laboratory Control Sample (LCS)
1205274869	604449002(SMEB01-23-265371) Sample Duplicate (DUP)
1205274870	604449002(SMEB01-23-265371) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Quality Control (QC) Information

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The percent recoveries (%R) obtained from the spike analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The matrix spike recovered outside of the established acceptance limits due to matrix interference and/or non-homogeneity.

Analyte	Sample	Value
Cyanide, Total	1205274870 (SMEB01-23-265371MS)	71.7* (90%-110%)

Product: **Ion Chromatography**
Analytical Method: EPA 300.0
Analytical Procedure: GL-GC-E-086 REV# 30
Analytical Batch: 2357485

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
604449001	SMEB01-23-265344
604449005	SMEB02-23-265345
604449009	SMEB03-23-265346
604449013	SMEB04-23-265347
604449017	SMEB05-23-265348
1205273768	Method Blank (MB)
1205273769	Laboratory Control Sample (LCS)
1205274029	604449017(SMEB05-23-265348) Sample Duplicate (DUP)
1205274030	604449017(SMEB05-23-265348) Post Spike (PS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Technical Information

Sample Dilutions
The following samples 1205274029 (SMEB05-23-265348DUP), 1205274030 (SMEB05-23-265348PS), 604449001 (SMEB01-23-265344), 604449005 (SMEB02-23-265345), 604449009 (SMEB03-23-265346), 604449013 (SMEB04-23-265347) and 604449017 (SMEB05-23-265348) were diluted because target analyte concentrations exceeded the calibration range. Samples 1205274029 (SMEB05-23-265348DUP), 1205274030 (SMEB05-23-265348PS), 604449001 (SMEB01-23-265344), 604449005 (SMEB02-23-265345), 604449009 (SMEB03-23-265346), 604449013 (SMEB04-23-265347) and 604449017 (SMEB05-23-265348) were diluted to minimize matrix effects on instrument performance. Samples 1205274029 (SMEB05-23-265348DUP), 1205274030 (SMEB05-23-265348PS), 604449001 (SMEB01-23-265344), 604449005 (SMEB02-23-265345), 604449009 (SMEB03-23-265346), 604449013 (SMEB04-23-265347) and 604449017 (SMEB05-23-265348) were diluted based on historical data. Dilutions may be required for many reasons, including to minimize matrix interferences or to bring over range target analyte concentrations into the linear calibration range.

Analyte	604449				
	001	005	009	013	017
Fluoride	200X	200X	500X	100X	50X
Sulfate	1000X	1000X	1000X	500X	200X

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Qualifier Definition Report
for

TNSL001 Triad National Security, LLC (620266)

Client SDG: 2023-289 GEL Work Order: 604449

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria
J Value is estimated
U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature: Jenny Jones **Name: Jennifer Jones**

Date: 22 DEC 2022 **Title: Analyst II**

Sample Data Summary

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: December 22, 2022

Company : Los Alamos National Laboratory
Address : TA-00, SM1237, Rm104C

Los Alamos, New Mexico 87545
Contact: Mr. Stanislaw Marczak
Project: LANL

Client SDG: 2023-289

Client Sample ID: SMEB01-23-265344
Sample ID: 604449001
Matrix: W
Collect Date: 14-DEC-22 09:28
Receive Date: 16-DEC-22
Collector: GEL

Project: TNSL00100
Client ID: TNSL001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
WSP-Fluoride "As Received"												
Sulfate		3890	133	400	mg/L		1000	JLD1	12/16/22	1814	2357485	1
Fluoride	U	ND	6.60	20.0	mg/L		200	JLD1	12/20/22	1650	2357485	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 300.0	

Notes:

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Lc/LC: Critical Level
PF: Prep Factor
RL: Reporting Limit
SQL: Sample Quantitation Limit

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: December 22, 2022

Company :	Los Alamos National Laboratory
Address :	TA-00, SM1237, Rm104C
	Los Alamos, New Mexico 87545
Contact:	Mr. Stanislaw Marczak
Project:	LANL

Client SDG: 2023-289

Client Sample ID:	SMEB01-23-265371	Project:	TNSL00100
Sample ID:	604449002	Client ID:	TNSL001
Matrix:	W		
Collect Date:	14-DEC-22 09:28		
Receive Date:	16-DEC-22		
Collector:	GEL		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis												
DP-CN(TOTAL) "As Received"												
Cyanide, Total	J	1.77	1.67	5.00	ug/L	1.00	1	AXH3	12/19/22	0759	2358099	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 335.4	EPA 335.4 Total Cyanide	AXH3	12/19/22	0732	2358098

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 335.4	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: December 22, 2022

Company :	Los Alamos National Laboratory
Address :	TA-00, SM1237, Rm104C
	Los Alamos, New Mexico 87545
Contact:	Mr. Stanislaw Marczak
Project:	LANL

Client SDG: 2023-289

Client Sample ID:	SMEB02-23-265345	Project:	TNSL00100
Sample ID:	604449005	Client ID:	TNSL001
Matrix:	W		
Collect Date:	14-DEC-22 09:36		
Receive Date:	16-DEC-22		
Collector:	GEL		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
WSP-Fluoride "As Received"												
Sulfate		4320	133	400	mg/L		1000	JLD1	12/16/22	1843	2357485	1
Fluoride	U	ND	6.60	20.0	mg/L		200	JLD1	12/20/22	1720	2357485	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 300.0	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: December 22, 2022

Company :	Los Alamos National Laboratory
Address :	TA-00, SM1237, Rm104C
	Los Alamos, New Mexico 87545
Contact:	Mr. Stanislaw Marczak
Project:	LANL

Client SDG: 2023-289

Client Sample ID:	SMEB02-23-265372	Project:	TNSL00100
Sample ID:	604449006	Client ID:	TNSL001
Matrix:	W		
Collect Date:	14-DEC-22 09:36		
Receive Date:	16-DEC-22		
Collector:	GEL		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis												
DP-CN(TOTAL) "As Received"												
Cyanide, Total		7.02	1.67	5.00	ug/L	1.00	1	AXH3	12/19/22	0803	2358099	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 335.4	EPA 335.4 Total Cyanide	AXH3	12/19/22	0732	2358098

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 335.4	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: December 22, 2022

Company :	Los Alamos National Laboratory
Address :	TA-00, SM1237, Rm104C
	Los Alamos, New Mexico 87545
Contact:	Mr. Stanislaw Marczak
Project:	LANL

Client SDG: 2023-289

Client Sample ID:	SMEB03-23-265346	Project:	TNSL00100
Sample ID:	604449009	Client ID:	TNSL001
Matrix:	W		
Collect Date:	14-DEC-22 09:35		
Receive Date:	16-DEC-22		
Collector:	GEL		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
WSP-Fluoride "As Received"												
Sulfate		11300	133	400	mg/L		1000	JLD1	12/16/22	1913	2357485	1
Fluoride	U	ND	16.5	50.0	mg/L		500	JLD1	12/20/22	1750	2357485	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 300.0	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: December 22, 2022

Company :	Los Alamos National Laboratory
Address :	TA-00, SM1237, Rm104C
	Los Alamos, New Mexico 87545
Contact:	Mr. Stanislaw Marczak
Project:	LANL

Client SDG: 2023-289

Client Sample ID:	SMEB03-23-265373	Project:	TNSL00100
Sample ID:	604449010	Client ID:	TNSL001
Matrix:	W		
Collect Date:	14-DEC-22 09:35		
Receive Date:	16-DEC-22		
Collector:	GEL		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis												
DP-CN(TOTAL) "As Received"												
Cyanide, Total	U	ND	1.67	5.00	ug/L	1.00	1	AXH3	12/19/22	0808	2358099	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 335.4	EPA 335.4 Total Cyanide	AXH3	12/19/22	0732	2358098

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 335.4	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: December 22, 2022

Company :	Los Alamos National Laboratory
Address :	TA-00, SM1237, Rm104C
	Los Alamos, New Mexico 87545
Contact:	Mr. Stanislaw Marczak
Project:	LANL

Client SDG: 2023-289

Client Sample ID:	SMEB04-23-265347	Project:	TNSL00100
Sample ID:	604449013	Client ID:	TNSL001
Matrix:	W		
Collect Date:	14-DEC-22 13:01		
Receive Date:	16-DEC-22		
Collector:	GEL		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
WSP-Fluoride "As Received"												
Sulfate		4240	66.5	200	mg/L		500	JLD1	12/16/22	1943	2357485	1
Fluoride	U	ND	3.30	10.0	mg/L		100	JLD1	12/16/22	2013	2357485	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 300.0	

Notes:

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Lc/LC: Critical Level
PF: Prep Factor
RL: Reporting Limit
SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: December 22, 2022

Company :	Los Alamos National Laboratory
Address :	TA-00, SM1237, Rm104C
	Los Alamos, New Mexico 87545
Contact:	Mr. Stanislaw Marczak
Project:	LANL

Client SDG: 2023-289

Client Sample ID:	SMEB04-23-265374	Project:	TNSL00100
Sample ID:	604449014	Client ID:	TNSL001
Matrix:	W		
Collect Date:	14-DEC-22 13:01		
Receive Date:	16-DEC-22		
Collector:	GEL		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis												
DP-CN(TOTAL) "As Received"												
Cyanide, Total		14.6	1.67	5.00	ug/L	1.00	1	AXH3	12/19/22	0809	2358099	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 335.4	EPA 335.4 Total Cyanide	AXH3	12/19/22	0732	2358098

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 335.4	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: December 22, 2022

Company :	Los Alamos National Laboratory
Address :	TA-00, SM1237, Rm104C
	Los Alamos, New Mexico 87545
Contact:	Mr. Stanislaw Marczak
Project:	LANL

Client SDG: 2023-289

Client Sample ID:	SMEB05-23-265348	Project:	TNSL00100
Sample ID:	604449017	Client ID:	TNSL001
Matrix:	W		
Collect Date:	14-DEC-22 13:12		
Receive Date:	16-DEC-22		
Collector:	GEL		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
WSP-Fluoride "As Received"												
Sulfate		2110	26.6	80.0	mg/L		200	JLD1	12/16/22	2143	2357485	1
Fluoride	U	ND	1.65	5.00	mg/L		50	JLD1	12/16/22	2313	2357485	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 300.0	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: December 22, 2022

Company :	Los Alamos National Laboratory
Address :	TA-00, SM1237, Rm104C
	Los Alamos, New Mexico 87545
Contact:	Mr. Stanislaw Marczak
Project:	LANL

Client SDG: 2023-289

Client Sample ID:	SMEB05-23-265375	Project:	TNSL00100
Sample ID:	604449018	Client ID:	TNSL001
Matrix:	W		
Collect Date:	14-DEC-22 13:12		
Receive Date:	16-DEC-22		
Collector:	GEL		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis												
DP-CN(TOTAL) "As Received"												
Cyanide, Total	U	ND	1.67	5.00	ug/L	1.00	1	AXH3	12/19/22	0810	2358099	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 335.4	EPA 335.4 Total Cyanide	AXH3	12/19/22	0732	2358098

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 335.4	

Notes:

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

Quality Control Summary

QC Summary

Report Date: December 22, 2022

Los Alamos National Laboratory
TA-00, SM1237, Rm104C
Los Alamos, New Mexico

Contact: **Mr. Stanislaw Marczak**

Workorder: **604449**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Flow Injection Analysis											
Batch 2358099											
QC1205274869 604449002 DUP											
Cyanide, Total		J	1.77	U	ND	ug/L	200			AXH3	12/19/22 08:00
QC1205274864 LCS											
Cyanide, Total	50.0				47.0	ug/L		94	(90%-110%)		12/19/22 07:38
QC1205274863 MB											
Cyanide, Total				U	ND	ug/L					12/19/22 07:37
QC1205274870 604449002 MS											
Cyanide, Total	100	J	1.77		73.5	ug/L		71.7*	(90%-110%)		12/19/22 08:02
Ion Chromatography											
Batch 2357485											
QC1205274029 604449017 DUP											
Fluoride		U	ND	U	ND	mg/L	N/A			JLD1	12/16/22 23:42
Sulfate			2110		2110	mg/L	0.0738		(0%-20%)		12/16/22 22:13
QC1205273769 LCS											
Fluoride	2.50				2.53	mg/L		101	(90%-110%)		12/16/22 11:46
Sulfate	10.0				9.39	mg/L		93.9	(90%-110%)		
QC1205273768 MB											
Fluoride				U	ND	mg/L					12/16/22 11:16
Sulfate				U	ND	mg/L					
QC1205274030 604449017 PS											
Fluoride	2.50	U	ND		2.39	mg/L		95.7	(90%-110%)		12/17/22 00:12

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QC Summary

Workorder: **604449**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Ion Chromatography										
Batch 2357485										
Sulfate	10.0	10.6		20.4	mg/L		98.1	(90%-110%)	JLD1	12/16/22 22:43

Notes:

<	Result is less than value reported
>	Result is greater than value reported
B	The target analyte was detected in the associated blank.
E	General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
H	Analytical holding time was exceeded
J	See case narrative for an explanation
J	Value is estimated
N/A	RPD or %Recovery limits do not apply.
N1	See case narrative
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Q	One or more quality control criteria have not been met. Refer to the applicable narrative or DER.
R	Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes.
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
e	5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where the duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 22-DEC-2022 08:31

GEL Laboratories LLC

Contract: TNSL00100

SDG #: 2023-289

Flow Injection Analysis

Method: EPA 335.4

Instrument: Lachat Quickchem FIA+ 8500 Series (LACHAT3)

Parmname: Cyanide, Total Concentration Units:ug/L

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**19-DEC-2022 07:31:12**	**OM_12-19-2022_07-20-27**	**142**	**150**	**94.7**	**(90%-110%)**	**Yes**
CCV	19-DEC-2022 07:48:53	OM_12-19-2022_07-20-27	102	100	102	(90%-110%)	Yes
CCV	19-DEC-2022 08:04:19	OM_12-19-2022_07-20-27	102	100	102	(90%-110%)	Yes
CCV	19-DEC-2022 08:19:44	OM_12-19-2022_07-20-27	103	100	103	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**19-DEC-2022 07:33:24**	**OM_12-19-2022_07-20-27**	**0.312**	**5**	**Yes**
CCB	19-DEC-2022 07:51:05	OM_12-19-2022_07-20-27	-0.982	5	Yes
CCB	19-DEC-2022 08:06:31	OM_12-19-2022_07-20-27	-1.23	5	Yes
CCB	19-DEC-2022 08:21:56	OM_12-19-2022_07-20-27	-1.2	5	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 22-DEC-2022 08:31

GEL Laboratories LLC

Contract: TNSL00100

SDG #: 2023-289

Ion Chromatography

Method: EPA 300.0

Instrument: DIONEX ICS-1600 Ion Chromatograph (IC9)

Parmname: Fluoride Concentration Units:mg/L

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**16-DEC-2022 08:47:00**	**221216**	**2.5249**	**2.5**	**101**	**(90%-110%)**	**Yes**
CCV	16-DEC-2022 14:44:00	221216	3.8079	3.75	102	(90%-110%)	Yes
CCV	16-DEC-2022 20:43:00	221216	2.5835	2.5	103	(90%-110%)	Yes
CCV	17-DEC-2022 00:42:00	221216	3.8617	3.75	103	(90%-110%)	Yes
ICV	**20-DEC-2022 08:38:00**	**221220**	**2.3268**	**2.5**	**93.1**	**(90%-110%)**	**Yes**
CCV	20-DEC-2022 18:19:00	221220	3.8102	3.75	102	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**16-DEC-2022 09:17:00**	**221216**	**0**	**0.1**	**Yes**
CCB	16-DEC-2022 15:14:00	221216	0	0.1	Yes
CCB	16-DEC-2022 21:13:00	221216	0	0.1	Yes
CCB	17-DEC-2022 01:12:00	221216	0	0.1	Yes
ICB	**20-DEC-2022 09:08:00**	**221220**	**0**	**0.1**	**Yes**
CCB	20-DEC-2022 18:49:00	221220	0	0.1	Yes

Parmname: Sulfate Concentration Units:mg/L

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	**16-DEC-2022 08:47:00**	**221216**	**9.8826**	**10**	**98.8**	**(90%-110%)**	**Yes**
CCV	16-DEC-2022 14:44:00	221216	14.3946	15	96	(90%-110%)	Yes
CCV	16-DEC-2022 20:43:00	221216	9.9096	10	99.1	(90%-110%)	Yes
CCV	17-DEC-2022 00:42:00	221216	14.432	15	96.2	(90%-110%)	Yes
ICV	**20-DEC-2022 08:38:00**	**221220**	**9.5412**	**10**	**95.4**	**(90%-110%)**	**Yes**
CCV	20-DEC-2022 18:19:00	221220	14.3579	15	95.7	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**16-DEC-2022 09:17:00**	**221216**	**0**	**0.4**	**Yes**
CCB	16-DEC-2022 15:14:00	221216	0	0.4	Yes
CCB	16-DEC-2022 21:13:00	221216	0	0.4	Yes
CCB	17-DEC-2022 01:12:00	221216	0	0.4	Yes
ICB	**20-DEC-2022 09:08:00**	**221220**	**0**	**0.4**	**Yes**
CCB	20-DEC-2022 18:49:00	221220	0	0.4	Yes

Cyanide, Total Raw Data

Prep Logbook

Cyanide Sample Distillation

Batch ID: **2358098**
Analyst: Aubrey Kingsbury
Method: SW846 9010C Distillation EPA 335.4
Lab SOP: GL-GC-E-067 REV# 24
Instrument: No instrument-manual method

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1205274864	RFASPIKE-2	URF3410173-02	.0125	mL
MS	1205274866	RFASPIKE-2	URF3410173-02	.025	mL
MS	1205274868	RFASPIKE-2	URF3410173-02	.025	mL
MS	1205274870	RFASPIKE-2	URF3410173-02	.025	mL

Sample ID	Prep Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1205274863 MB	19-DEC-2022 07:32:26	Water	25	25	1	>12
1205274864 LCS	19-DEC-2022 07:32:26	Water	25	25	1	>12
604390009	19-DEC-2022 07:32:26	Water	25	25	1	>12
1205274865 DUP (604390009)	19-DEC-2022 07:32:26	Water	25	25	1	>12
1205274866 MS (604390009)	19-DEC-2022 07:32:26	Water	25	25	1	>12
604398001	19-DEC-2022 07:32:26	Water	25	25	1	>12
604398005	19-DEC-2022 07:32:26	Water	25	25	1	>12
604398009	19-DEC-2022 07:32:26	Water	25	25	1	>12
604398013	19-DEC-2022 07:32:26	Water	25	25	1	>12
604398017	19-DEC-2022 07:32:26	Water	25	25	1	>12
604398021	19-DEC-2022 07:32:26	Water	25	25	1	>12
604398025	19-DEC-2022 07:32:26	Water	25	25	1	>12
604413001	19-DEC-2022 07:32:26	Water	25	25	1	>12
1205274867 DUP (604413001)	19-DEC-2022 07:32:26	Water	25	25	1	>12
1205274868 MS (604413001)	19-DEC-2022 07:32:26	Water	25	25	1	>12
604413002	19-DEC-2022 07:32:26	Water	25	25	1	>12
604449002	19-DEC-2022 07:32:26	Water	25	25	1	>12
1205274869 DUP (604449002)	19-DEC-2022 07:32:26	Water	25	25	1	>12
1205274870 MS (604449002)	19-DEC-2022 07:32:26	Water	25	25	1	>12
604449006	19-DEC-2022 07:32:26	Water	25	25	1	>12
604449010	19-DEC-2022 07:32:26	Water	25	25	1	>12
604449014	19-DEC-2022 07:32:26	Water	25	25	1	>12
604449018	19-DEC-2022 07:32:26	Water	25	25	1	>12
604465014	19-DEC-2022 07:32:26	Water	25	25	1	>12
604465015	19-DEC-2022 07:32:26	Water	25	25	1	>12
604563001	19-DEC-2022 07:32:26	Waste Water	25	25	1	>12
604585001	19-DEC-2022 07:32:26	Waste Water	25	25	1	>12

Reagent/Solvent Lot ID	Description	Amount
3477947-C	0.8N H3NO3S	1.25 mL
3477949-C	51% MgCl2 Soln	1 mL
3480886-C	50% H2SO4 CN Prep	2.5 mL
3524110-C	Bismuth Nitrate Solution	1.25 mL
3533910-C	0.25N Sodium Hydroxide Solution	25 mL
WCN221219-07	150 ppb CN Distilled ICV Standard	.0375 mL

Comments:
Start Time: 19-DEC-22 07:02:11
End Time: 19-DEC-22 07:32:11
Lot Number: 215993-2161-SS

This is runlog lachat3

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	AXH3	12/19/2022 7:22:18	OM_12-19-2022_07-20-27
150 ppb		1	AXH3	12/19/2022 7:23:24	OM_12-19-2022_07-20-27
100 ppb		1	AXH3	12/19/2022 7:24:31	OM_12-19-2022_07-20-27
50 ppb		1	AXH3	12/19/2022 7:25:37	OM_12-19-2022_07-20-27
10 ppb		1	AXH3	12/19/2022 7:26:45	OM_12-19-2022_07-20-27
5.0 ppb		1	AXH3	12/19/2022 7:27:52	OM_12-19-2022_07-20-27
ICAL-00		1	AXH3	12/19/2022 7:29:00	OM_12-19-2022_07-20-27
ICV		1	AXH3	12/19/2022 7:31:12	OM_12-19-2022_07-20-27
ICB		1	AXH3	12/19/2022 7:33:24	OM_12-19-2022_07-20-27
CRDL		1	AXH3	12/19/2022 7:35:35	OM_12-19-2022_07-20-27
1205274863	2358099	1	AXH3	12/19/2022 7:37:46	OM_12-19-2022_07-20-27
1205274864	2358099	1	AXH3	12/19/2022 7:38:53	OM_12-19-2022_07-20-27
604390009	2358099	1	AXH3	12/19/2022 7:40:00	OM_12-19-2022_07-20-27
1205274865	2358099	1	AXH3	12/19/2022 7:41:06	OM_12-19-2022_07-20-27
1205274866	2358099	1	AXH3	12/19/2022 7:42:14	OM_12-19-2022_07-20-27
604398001	2358099	1	AXH3	12/19/2022 7:43:20	OM_12-19-2022_07-20-27
604398005*	2358099	1	AXH3	12/19/2022 7:44:28	OM_12-19-2022_07-20-27
604398009	2358099	1	AXH3	12/19/2022 7:45:34	OM_12-19-2022_07-20-27
604398013*	2358099	1	AXH3	12/19/2022 7:46:40	OM_12-19-2022_07-20-27
604398017	2358099	1	AXH3	12/19/2022 7:47:46	OM_12-19-2022_07-20-27
CCV		1	AXH3	12/19/2022 7:48:53	OM_12-19-2022_07-20-27
CCB		1	AXH3	12/19/2022 7:51:05	OM_12-19-2022_07-20-27
604398021*	2358099	1	AXH3	12/19/2022 7:53:14	OM_12-19-2022_07-20-27
604398025	2358099	1	AXH3	12/19/2022 7:54:20	OM_12-19-2022_07-20-27
604413001	2358099	1	AXH3	12/19/2022 7:55:26	OM_12-19-2022_07-20-27
1205274867	2358099	1	AXH3	12/19/2022 7:56:31	OM_12-19-2022_07-20-27
1205274868	2358099	1	AXH3	12/19/2022 7:57:37	OM_12-19-2022_07-20-27
604413002*	2358099	1	AXH3	12/19/2022 7:58:45	OM_12-19-2022_07-20-27
604449002	2358099	1	AXH3	12/19/2022 7:59:52	OM_12-19-2022_07-20-27
1205274869	2358099	1	AXH3	12/19/2022 8:00:59	OM_12-19-2022_07-20-27
1205274870	2358099	1	AXH3	12/19/2022 8:02:05	OM_12-19-2022_07-20-27
604449006	2358099	1	AXH3	12/19/2022 8:03:13	OM_12-19-2022_07-20-27
CCV		1	AXH3	12/19/2022 8:04:19	OM_12-19-2022_07-20-27
CCB		1	AXH3	12/19/2022 8:06:31	OM_12-19-2022_07-20-27
604449010	2358099	1	AXH3	12/19/2022 8:08:41	OM_12-19-2022_07-20-27
604449014	2358099	1	AXH3	12/19/2022 8:09:47	OM_12-19-2022_07-20-27
604449018	2358099	1	AXH3	12/19/2022 8:10:54	OM_12-19-2022_07-20-27
604465014*	2358099	1	AXH3	12/19/2022 8:12:00	OM_12-19-2022_07-20-27
604465015	2358099	1	AXH3	12/19/2022 8:13:06	OM_12-19-2022_07-20-27
604563001	2358099	1	AXH3	12/19/2022 8:14:12	OM_12-19-2022_07-20-27
604585001	2358099	1	AXH3	12/19/2022 8:15:18	OM_12-19-2022_07-20-27
604398005	2358099	1	AXH3	12/19/2022 8:16:25	OM_12-19-2022_07-20-27
604398013	2358099	1	AXH3	12/19/2022 8:17:31	OM_12-19-2022_07-20-27
604398021	2358099	1	AXH3	12/19/2022 8:18:37	OM_12-19-2022_07-20-27
CCV		1	AXH3	12/19/2022 8:19:44	OM_12-19-2022_07-20-27
CCB		1	AXH3	12/19/2022 8:21:56	OM_12-19-2022_07-20-27
604413002	2358099	1	AXH3	12/19/2022 8:24:07	OM_12-19-2022_07-20-27
604465014	2358099	1	AXH3	12/19/2022 8:25:13	OM_12-19-2022_07-20-27
1205274874*	2358102	1	AXH3	12/19/2022 8:26:19	OM_12-19-2022_07-20-27
1205274875*	2358102	1	AXH3	12/19/2022 8:27:25	OM_12-19-2022_07-20-27
604390009	2358102	1	AXH3	12/19/2022 8:28:30	OM_12-19-2022_07-20-27
1205274876	2358102	1	AXH3	12/19/2022 8:29:37	OM_12-19-2022_07-20-27
604465014	2358102	1	AXH3	12/19/2022 8:30:45	OM_12-19-2022_07-20-27
604465015	2358102	1	AXH3	12/19/2022 8:31:51	OM_12-19-2022_07-20-27
1205268239*	2354644	1	AXH3	12/19/2022 8:32:58	OM_12-19-2022_07-20-27
1205274874*	2358102	1	AXH3	12/19/2022 8:34:04	OM_12-19-2022_07-20-27
CCV		1	AXH3	12/19/2022 8:35:11	OM_12-19-2022_07-20-27
CCB		1	AXH3	12/19/2022 8:37:22	OM_12-19-2022_07-20-27

1205274875	2358102	1	AXH3	12/19/2022 8:39:32	OM_12-19-2022_07-20-27
1205268240	2354644	1	AXH3	12/19/2022 8:40:38	OM_12-19-2022_07-20-27
603265001	2354644	1	AXH3	12/19/2022 8:41:45	OM_12-19-2022_07-20-27
1205268241	2354644	1	AXH3	12/19/2022 8:42:52	OM_12-19-2022_07-20-27
1205268242	2354644	1	AXH3	12/19/2022 8:43:59	OM_12-19-2022_07-20-27
603265002	2354644	1	AXH3	12/19/2022 8:45:04	OM_12-19-2022_07-20-27
603267001	2354644	1	AXH3	12/19/2022 8:46:11	OM_12-19-2022_07-20-27
603267002*	2354644	1	AXH3	12/19/2022 8:47:17	OM_12-19-2022_07-20-27
603267003	2354644	1	AXH3	12/19/2022 8:48:23	OM_12-19-2022_07-20-27
603267005	2354644	1	AXH3	12/19/2022 8:49:29	OM_12-19-2022_07-20-27
CCV		1	AXH3	12/19/2022 8:50:36	OM_12-19-2022_07-20-27
CCB		1	AXH3	12/19/2022 8:52:47	OM_12-19-2022_07-20-27
603267007*	2354644	1	AXH3	12/19/2022 8:54:56	OM_12-19-2022_07-20-27
603267008*	2354644	1	AXH3	12/19/2022 8:56:02	OM_12-19-2022_07-20-27

Original Run Filename: OM_12-19-2022_07-20-27.OMN created 12/19/2022 07:20:27
Original Run Author's Signature: [lachat]
Current Run Filename: OM_12-19-2022_07-20-27.OMN last modified 12/19/2022 08:57:44
Current Run Author's Signature: [lachat]

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN221219-01	1	S1	200	8.58	12/19/2022@07:22:18			200 ppb
WCN221219-02	1	S2	150	6.72	12/19/2022@07:23:24			150 ppb
WCN221219-03	1	S3	100	4.43	12/19/2022@07:24:31			100 ppb
WCN221219-04	1	S4	50.0	2.32	12/19/2022@07:25:37			50 ppb
WCN221219-05	1	S5	10.0	0.526	12/19/2022@07:26:45			10 ppb
WCN221219-06	1	S6	5.00	0.270	12/19/2022@07:27:52			5.0 ppb
WCN221219-08	1	S7	0.00	0.0307	12/19/2022@07:29:00			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99961 > 0.99500					
Message			Pass					
Action			Continue					
WCN221219-07	1	S8	142	6.22	12/19/2022@07:31:12			ICV
Known Conc:			150					
DQM Test: > + Concentration Limit								
Result:			142 < 165					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			142 > 135					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN221219-08	1	S7	0.312	0.104	12/19/2022@07:33:24			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			0.312 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.312 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN221219-06	1	S6	4.09	0.267	12/19/2022@07:35:35			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			4.09 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			4.09 > 2.50					
Message			Pass					
Action			None					
1205274863|2358099|MB	1	1	-3.78	-0.0730	12/19/2022@07:37:46			
1205274864||LCS	1	2	47.0	2.12	12/19/2022@07:38:53			
604390009	1	3	0.733	0.122	12/19/2022@07:40:00			
1205274865||DUP	1	4	0.181	0.0980	12/19/2022@07:41:06			
1205274866||MS	1	5	90.9	4.02	12/19/2022@07:42:14			
604398001	1	6	2.27	0.188	12/19/2022@07:43:20			
604398005	1	7	2.91	0.216	12/19/2022@07:44:28			
604398009	1	8	3.24	0.230	12/19/2022@07:45:34			
604398013	1	9	-14.0	-0.515	12/19/2022@07:46:40			
604398017	1	10	11.7	0.596	12/19/2022@07:47:46			
WCN221219-03	1	S3	102	4.48	12/19/2022@07:48:53			CCV
Known Conc:			100					
DQM Test: > + Concentration Limit								
Result:			102 < 110					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								

		Result:	102 > 90.0					
		Message	CCV Passed					
		Action	Continue					
WCN221219-08	1	S7	-0.982	0.0478	12/19/2022@07:51:05			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-0.982 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.982 > -5.00					
		Message	CCB Passed					
		Action	Continue					
604398021	1	11	-2.09	0.00	12/19/2022@07:53:14			
604398025	1	12	2.97	0.219	12/19/2022@07:54:20			
604413001	1	13	-1.48	0.0265	12/19/2022@07:55:26			
1205274867||DUP	1	14	-1.54	0.0236	12/19/2022@07:56:31			
1205274868||MS	1	15	89.5	3.96	12/19/2022@07:57:37			
604413002	1	16	-12.6	-0.454	12/19/2022@07:58:45			
604449002	1	17	1.77	0.167	12/19/2022@07:59:52			
1205274869||DUP	1	18	1.49	0.155	12/19/2022@08:00:59			
1205274870||MS	1	19	73.5	3.27	12/19/2022@08:02:05			
604449006	1	20	7.02	0.394	12/19/2022@08:03:13			
WCN221219-03	1	S3	102	4.49	12/19/2022@08:04:19			CCV
		Known Conc:	100					
DQM Test: > + Concentration Limit								
		Result:	102 < 110					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	102 > 90.0					
		Message	CCV Passed					
		Action	Continue					
WCN221219-08	1	S7	-1.23	0.0371	12/19/2022@08:06:31			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.23 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.23 > -5.00					
		Message	CCB Passed					
		Action	Continue					
604449010	1	21	-0.428	0.0717	12/19/2022@08:08:41			
604449014	1	22	14.6	0.721	12/19/2022@08:09:47			
604449018	1	23	-0.511	0.0681	12/19/2022@08:10:54			
604465014	1	24	-5.99	-0.169	12/19/2022@08:12:00			
604465015	1	25	-1.81	0.0120	12/19/2022@08:13:06			
604563001	1	26	-2.24	-0.00670	12/19/2022@08:14:12			
604585001	1	27	1.09	0.137	12/19/2022@08:15:18			
604398005	1	7	2.21	0.186	12/19/2022@08:16:25			
604398013	1	9	-2.45	-0.0158	12/19/2022@08:17:31			
604398021	1	11	-2.54	-0.0195	12/19/2022@08:18:37			
WCN221219-03	1	S3	103	4.53	12/19/2022@08:19:44			CCV
		Known Conc:	100					
DQM Test: > + Concentration Limit								
		Result:	103 < 110					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	103 > 90.0					
		Message	CCV Passed					
		Action	Continue					
WCN221219-08	1	S7	-1.20	0.0383	12/19/2022@08:21:56			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.20 < 5.00					
		Message	CCB Passed					

		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.20 > -5.00					
		Message	CCB Passed					
		Action	Continue					
604413002	1	16	-1.63	0.0200	12/19/2022@08:24:07			
604465014	1	24	-1.93	0.00700	12/19/2022@08:25:13			
1205274874|2358102|MB	1	28	-299	-12.8	12/19/2022@08:26:19			
1205274875||LCS	1	29	-25.9	-1.03	12/19/2022@08:27:25			
604390009	1	30	-1.37	0.0309	12/19/2022@08:28:30			
1205274876||DUP	1	31	-1.24	0.0366	12/19/2022@08:29:37			
604465014	1	32	-1.34	0.0323	12/19/2022@08:30:45			
604465015	1	33	0.257	0.101	12/19/2022@08:31:51			
1205268239|2354644|MB	1	34	-3.35	-0.0543	12/19/2022@08:32:58			
1205274874|2358102|MB	1	28	23.9	1.12	12/19/2022@08:34:04			
WCN221219-03	1	S3	103	4.53	12/19/2022@08:35:11			CCV
		Known Conc:	100					
DQM Test: > + Concentration Limit								
		Result:	103 < 110					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	103 > 90.0					
		Message	CCV Passed					
		Action	Continue					
WCN221219-08	1	S7	-2.53	-0.0192	12/19/2022@08:37:22			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-2.53 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-2.53 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1205274875||LCS	1	29	-1.17	0.0396	12/19/2022@08:39:32			
1205268240|2354644|LCS	1	35	48.2	2.17	12/19/2022@08:40:38			
603265001	1	36	-1.83	0.0110	12/19/2022@08:41:45			
1205268241||DUP	1	37	-1.50	0.0254	12/19/2022@08:42:52			
1205268242||MS	1	38	95.4	4.21	12/19/2022@08:43:59			
603265002	1	39	7.84	0.429	12/19/2022@08:45:04			
603267001	1	40	-1.56	0.0226	12/19/2022@08:46:11			
603267002	1	41	-6.95	-0.210	12/19/2022@08:47:17			
603267003	1	42	-1.23	0.0371	12/19/2022@08:48:23			
603267005	1	43	-0.150	0.0837	12/19/2022@08:49:29			
WCN221219-03	1	S3	104	4.57	12/19/2022@08:50:36			CCV
		Known Conc:	100					
DQM Test: > + Concentration Limit								
		Result:	104 < 110					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	104 > 90.0					
		Message	CCV Passed					
		Action	Continue					
WCN221219-08	1	S7	-1.56	0.0230	12/19/2022@08:52:47			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.56 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.56 > -5.00					
		Message	CCB Passed					
		Action	Continue					
603267007	1	44	-1.61	0.0207	12/19/2022@08:54:56			
603267008	1	45	-1.54	0.0235	12/19/2022@08:56:02			

Channel 1: Current View

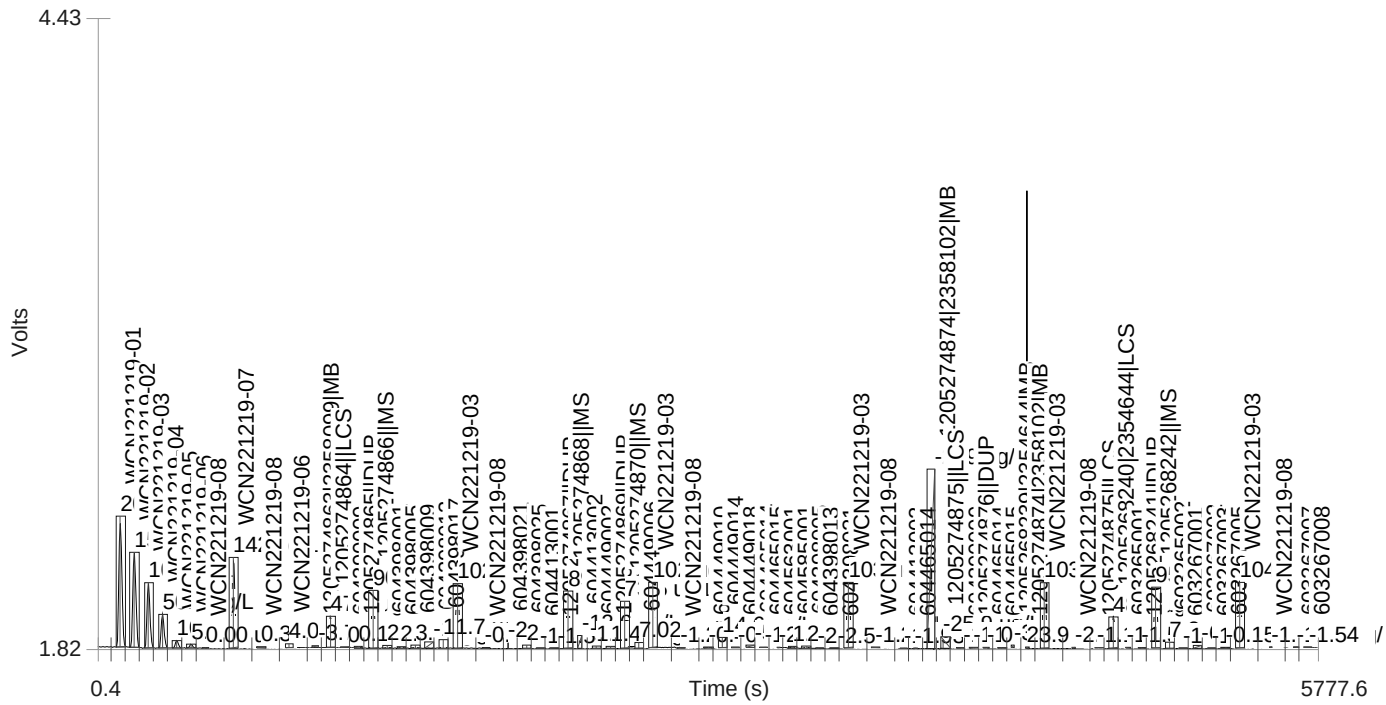
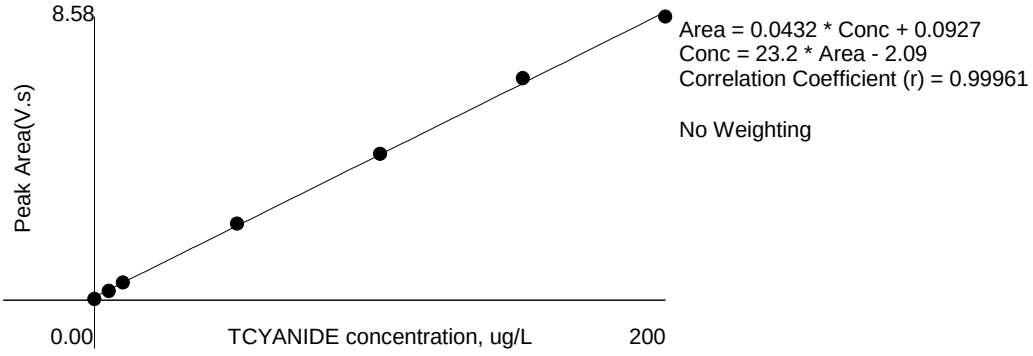


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	8.58	0.541	1.6	12/19/2022	07:23:28
2	150	1	6.72	0.394	-2.4	12/19/2022	07:24:35
3	100	1	4.43	0.270	-0.4	12/19/2022	07:25:41
4	50.0	1	2.32	0.140	-2.9	12/19/2022	07:26:48
5	10.0	1	0.526	0.0304	-0.3	12/19/2022	07:27:55
6	5.00	1	0.270	0.0156	12.4	12/19/2022	07:29:03
7	0.00	1	0.0307	0.00229		12/19/2022	07:30:11

Figure 1: TCYANIDE



Ion Chromatography Raw Data

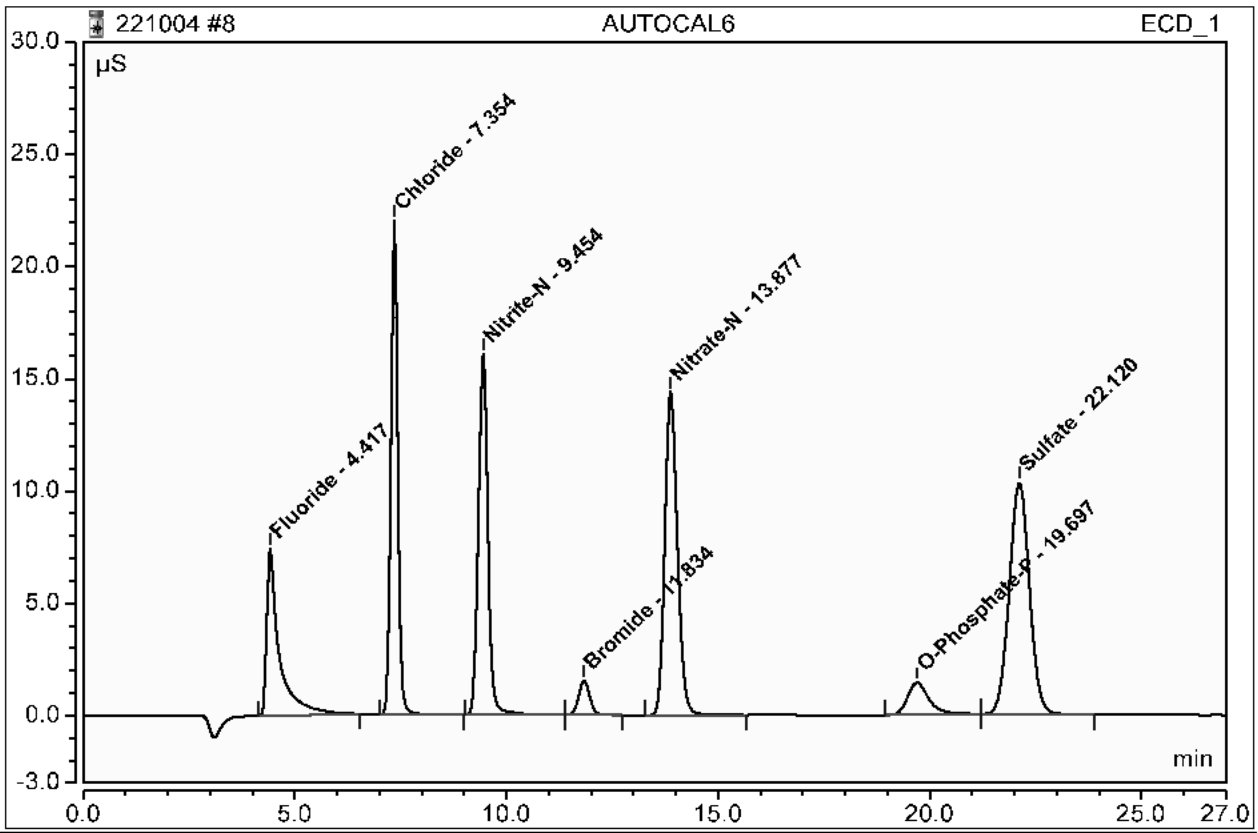
This is runlog for Sequence 221004.seq for IC9

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
BLK	10/04/22 07:42		1	221004	JLD1
ICAL-06	10/04/22 08:12		1	221004	JLD1
ICAL-05	10/04/22 08:42		1	221004	JLD1
ICAL-04	10/04/22 09:12		1	221004	JLD1
ICAL-03	10/04/22 09:41		1	221004	JLD1
ICAL-02	10/04/22 10:11		1	221004	JLD1
ICAL-01	10/04/22 10:41		1	221004	JLD1
ICAL-06	10/04/22 08:12		1	221004	JLD1
ICAL-05	10/04/22 08:42		1	221004	JLD1
ICAL-04	10/04/22 09:12		1	221004	JLD1
ICAL-03	10/04/22 09:41		1	221004	JLD1
ICAL-02	10/04/22 10:11		1	221004	JLD1
ICAL-01	10/04/22 10:41		1	221004	JLD1
ICV	10/04/22 11:11		1	221004	JLD1
ICB	10/04/22 11:41		1	221004	JLD1
1205205848	10/04/22 12:32	2323736	1	221004	JLD1
1205205849	10/04/22 13:01	2323736	1	221004	JLD1
595023001	10/04/22 13:31	2323736	1	221004	JLD1
1205207483	10/04/22 14:17	2324633	1	221004	JLD1
1205207484	10/04/22 14:47	2324633	1	221004	JLD1
595455001	10/04/22 15:16	2324633	100	221004	JLD1
1205207485	10/04/22 15:45	2324633	100	221004	JLD1
1205207486	10/04/22 16:15	2324633	100	221004	JLD1
595455002	10/04/22 16:45	2324633	200	221004	JLD1
595455003	10/04/22 17:15	2324633	200	221004	JLD1
CVH	10/04/22 17:45		1	221004	JLD1
CCB	10/04/22 18:15		1	221004	JLD1
595455004	10/04/22 18:45	2324633	200	221004	JLD1

595455005	10/04/22	19:15	2324633	200	221004	JLD1
595455006	10/04/22	19:45	2324633	200	221004	JLD1
595455007	10/04/22	20:14	2324633	200	221004	JLD1
595455008	10/04/22	20:44	2324633	200	221004	JLD1
595455009	10/04/22	21:14	2324633	200	221004	JLD1
595455010	10/04/22	21:44	2324633	200	221004	JLD1
595455011	10/04/22	22:14	2324633	200	221004	JLD1
1205207487	10/04/22	22:44	2324633	200	221004	JLD1
1205207488	10/04/22	23:14	2324633	200	221004	JLD1
CCV	10/04/22	23:43	1		221004	JLD1

8 AUTOCAL6

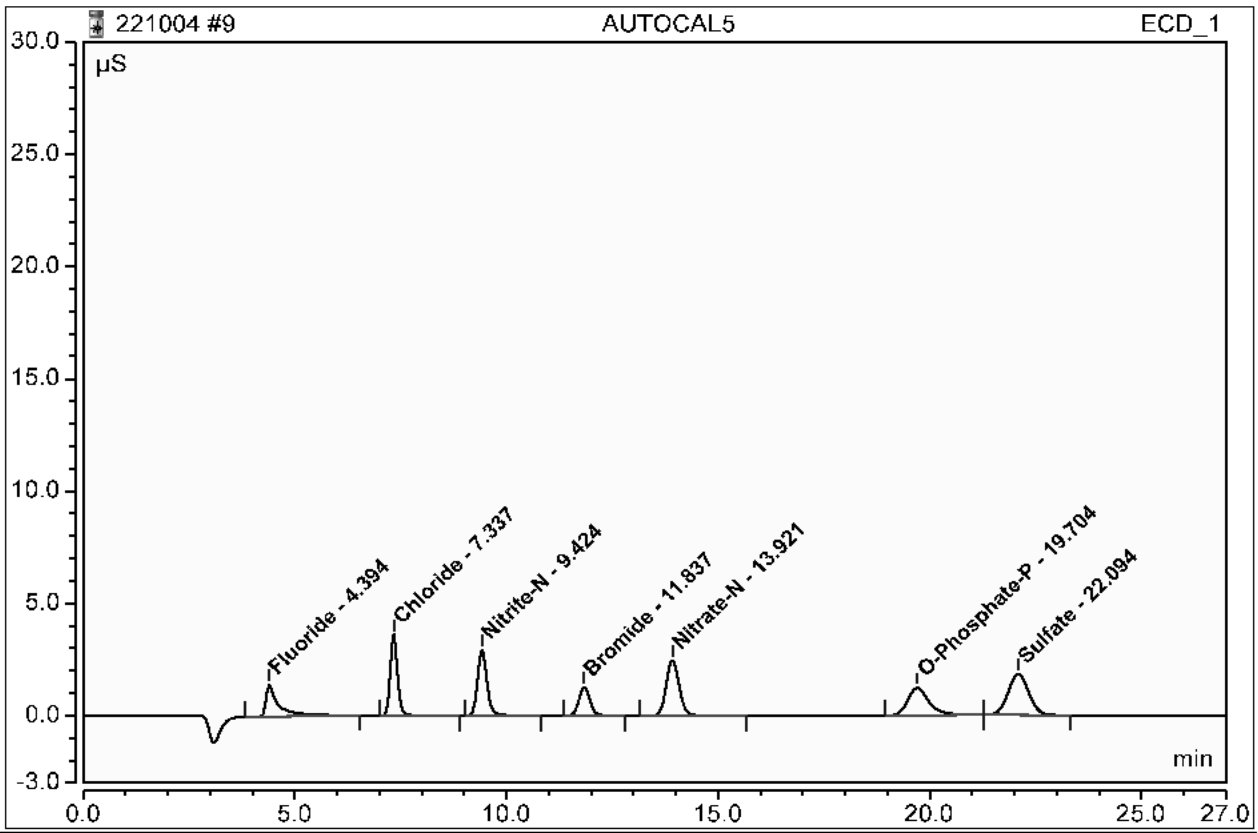
Sample Name:	**AUTOCAL6**	*Injection Volume:*	**1.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**10/4/2022 8:12**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.42	Fluoride	5.0000	5.0064		2.58503	11.30
2	7.35	Chloride	10.0000	10.0336		4.12903	18.05
3	9.45	Nitrite-N	5.0000	5.0117		4.20766	18.40
4	11.83	Bromide	3.0000	2.9999		0.45704	2.00
5	13.88	Nitrate-N	5.0000	5.0139		4.94438	21.62
6	19.70	O-Phosphate-P	3.0000	2.9568		0.83958	3.67
7	22.12	Sulfate	20.0000	20.0500		5.70688	24.95
Total:				51.0723	0.000	22.870	100.00

9 AUTOCAL5

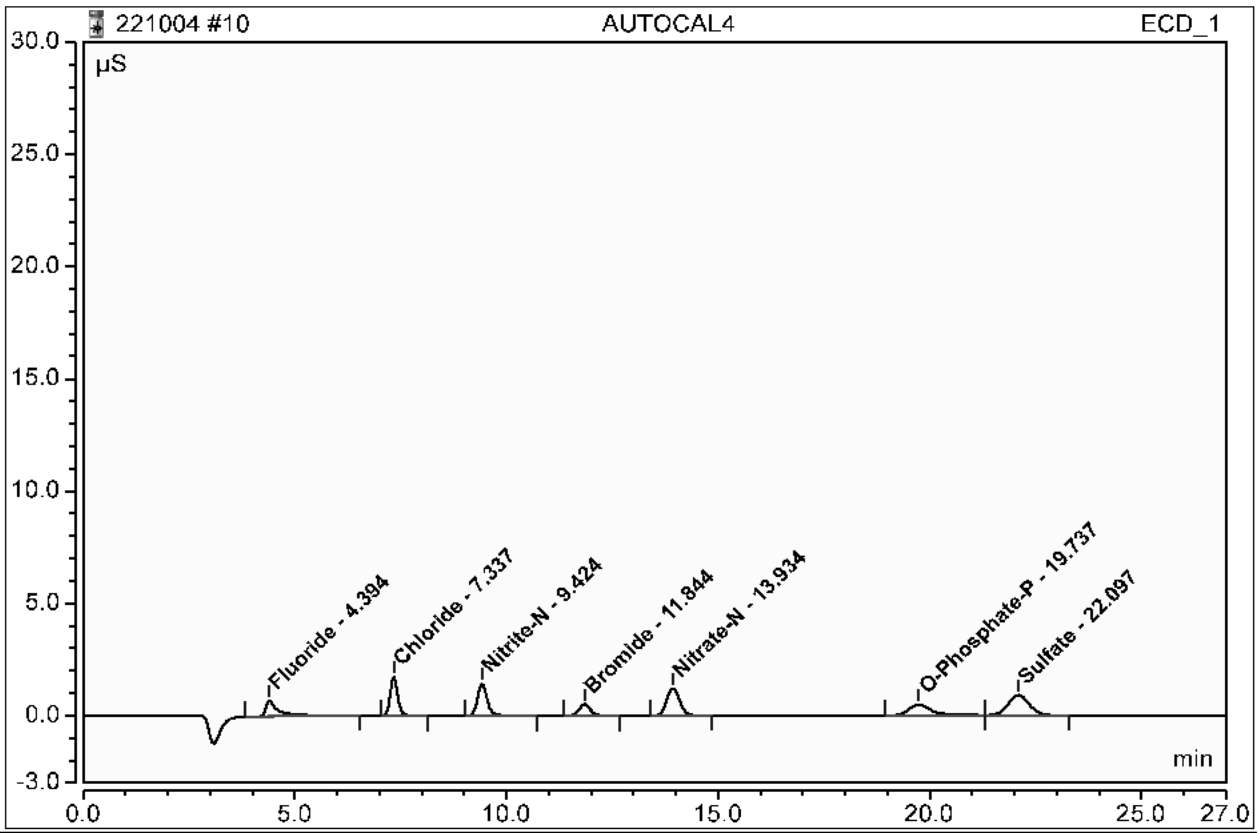
Sample Name:	**AUTOCAL5**	*Injection Volume:*	**1.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**10/4/2022 8:42**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.39	Fluoride	1.0000	0.9625		0.51060	10.23
2	7.34	Chloride	2.0000	1.8205		0.70892	14.20
3	9.42	Nitrite-N	1.0000	0.9363		0.75722	15.17
4	11.84	Bromide	2.5000	2.5010		0.38092	7.63
5	13.92	Nitrate-N	1.0000	0.9288		0.88174	17.67
6	19.70	O-Phosphate-P	2.5000	2.5433		0.72367	14.50
7	22.09	Sulfate	4.0000	3.7311		1.02799	20.60
Total:				13.4235	0.000	4.991	100.00

10 AUTOCAL4

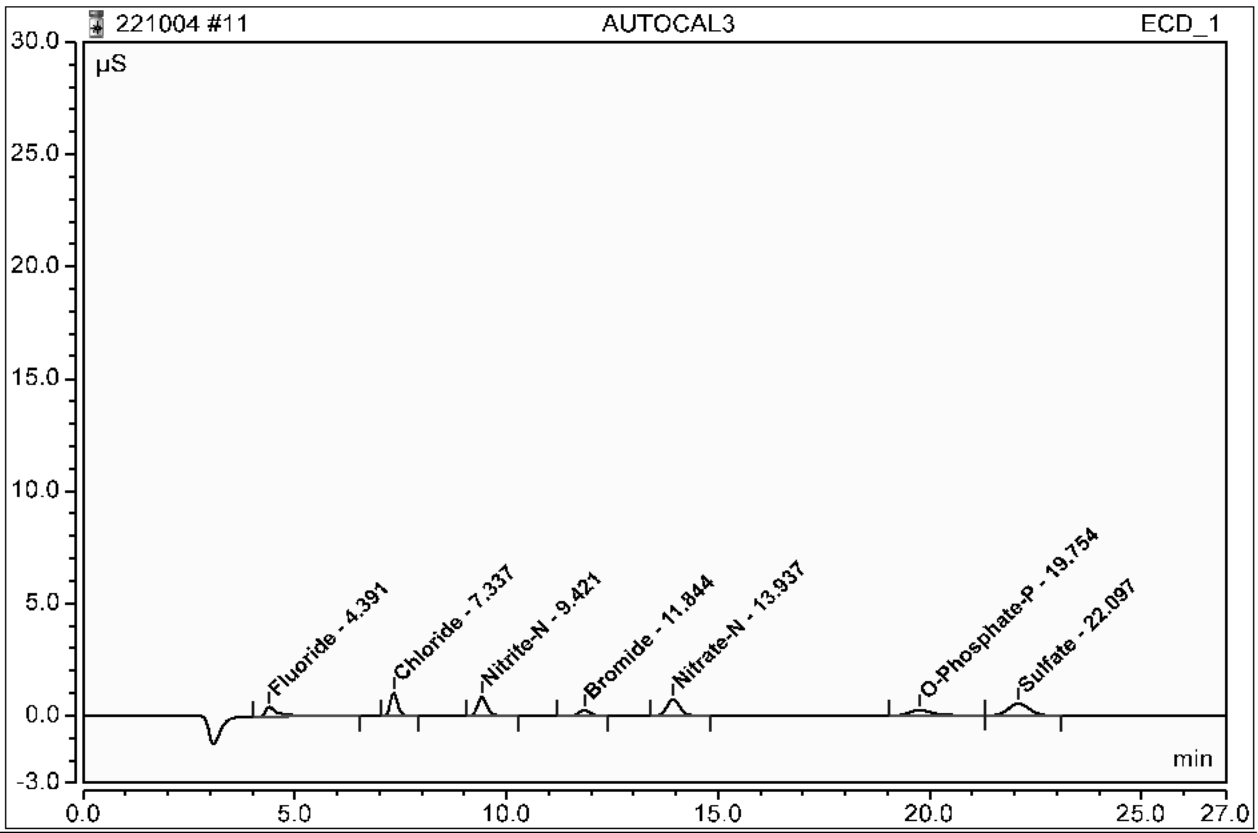
Sample Name:	**AUTOCAL4**	*Injection Volume:*	**1.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**10/4/2022 9:12**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.39	Fluoride	0.5000	0.4847		0.26549	11.21
2	7.34	Chloride	1.0000	0.9507		0.34673	14.64
3	9.42	Nitrite-N	0.5000	0.4821		0.37263	15.74
4	11.84	Bromide	1.0000	0.9993		0.15179	6.41
5	13.93	Nitrate-N	0.5000	0.4725		0.42795	18.07
6	19.74	O-Phosphate-P	1.0000	1.0162		0.29570	12.49
7	22.10	Sulfate	2.0000	1.9167		0.50777	21.44
Total:				6.3222	0.000	2.368	100.00

11 AUTOCAL3

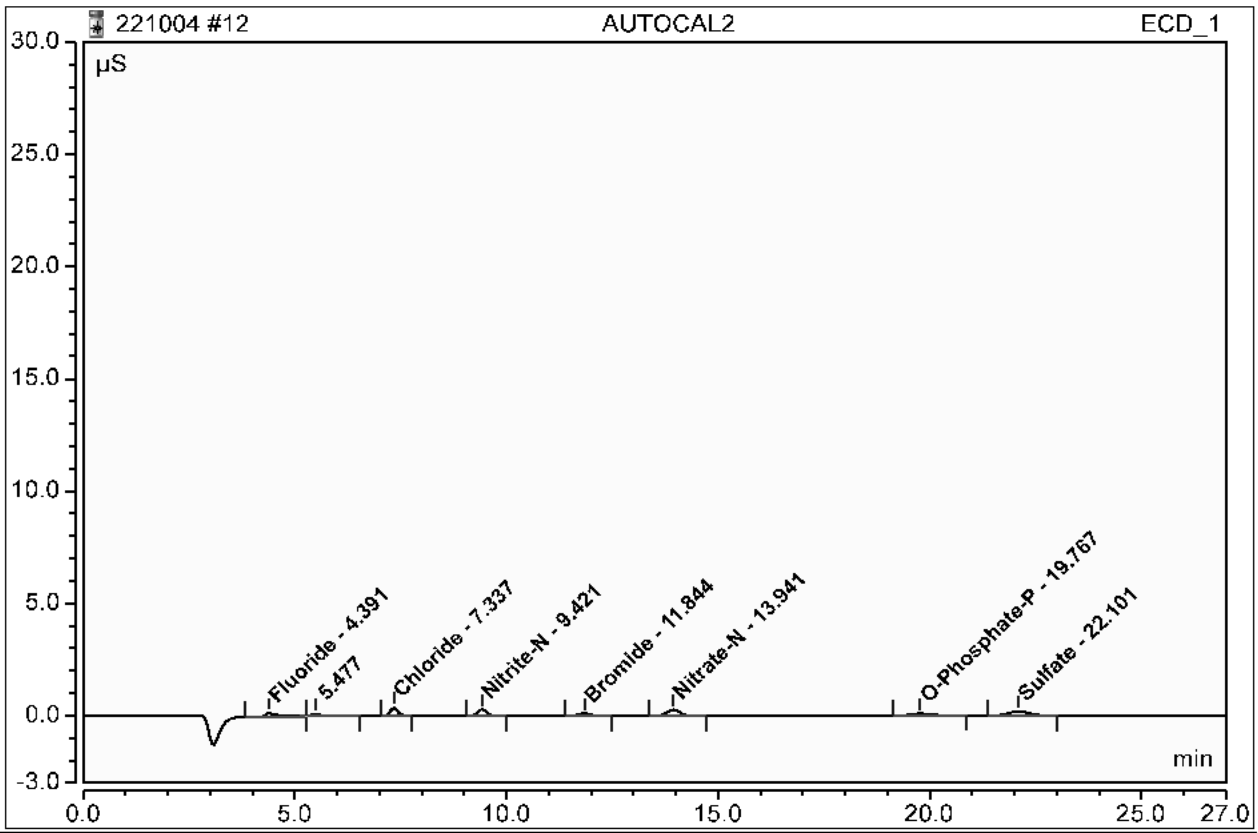
Sample Name:	**AUTOCAL3**	*Injection Volume:*	**1.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**10/4/2022 9:41**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.39	Fluoride	0.2500	0.3079		0.17479	12.60
2	7.34	Chloride	0.5000	0.6108		0.20517	14.79
3	9.42	Nitrite-N	0.2500	0.2967		0.21568	15.55
4	11.84	Bromide	0.5000	0.4947		0.07481	5.39
5	13.94	Nitrate-N	0.2500	0.2980		0.25436	18.34
6	19.75	O-Phosphate-P	0.5000	0.5278		0.15881	11.45
7	22.10	Sulfate	1.0000	1.2032		0.30319	21.86
Total:				3.7390	0.000	1.387	100.00

12 AUTOCAL2

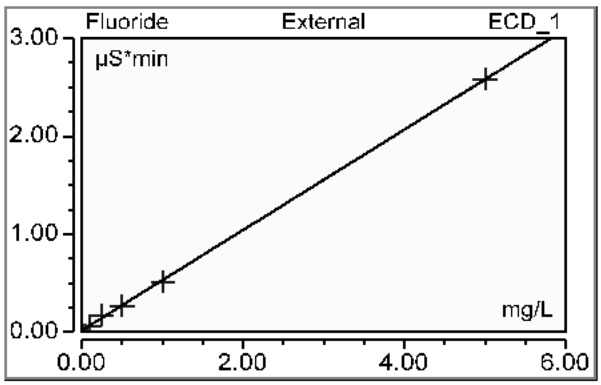
Sample Name:	**AUTOCAL2**	*Injection Volume:*	**1.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**10/4/2022 10:11**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**

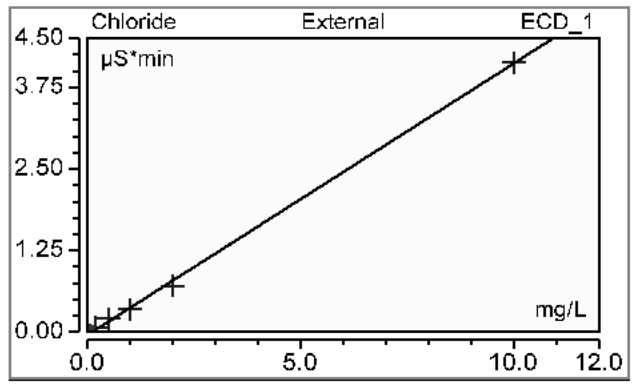


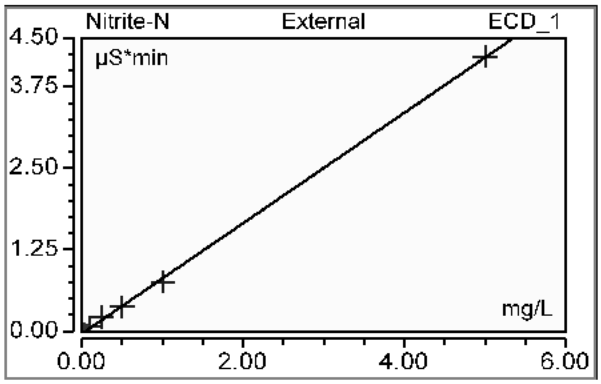
No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.39	Fluoride	0.1000	0.0886		0.06230	12.13
3	7.34	Chloride	0.2000	0.2844		0.06927	13.49
4	9.42	Nitrite-N	0.1000	0.1232		0.06876	13.39
5	11.84	Bromide	0.2000	0.2050		0.03061	5.96
6	13.94	Nitrate-N	0.1000	0.1369		0.09416	18.34
7	19.77	O-Phosphate-P	0.2000	0.1559		0.05459	10.63
8	22.10	Sulfate	0.4000	0.4990		0.10128	19.72
Total:				1.4930	0.000	0.481	93.66

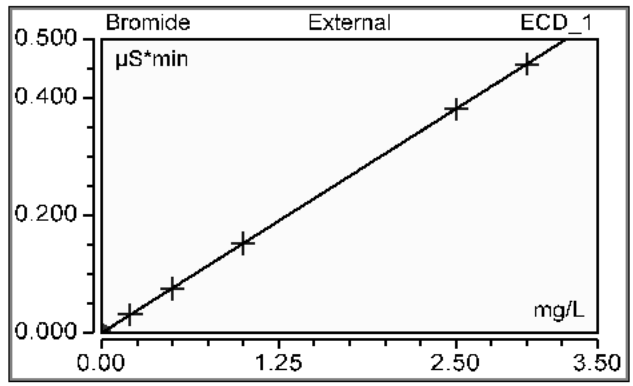
13 AUTOCAL1

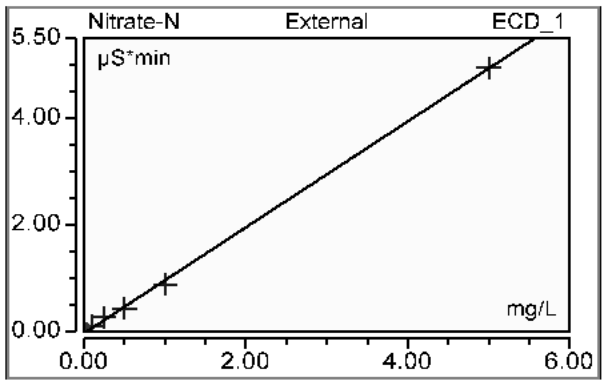
Sample Name:	**AUTOCAL1**	*Injection Volume:*	**1.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**10/4/2022 10:41**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column: **n.a.**	

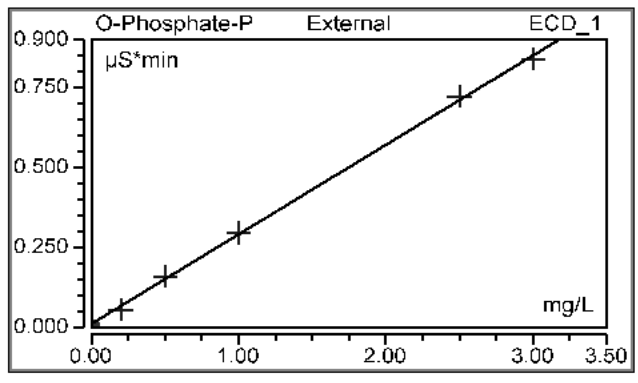


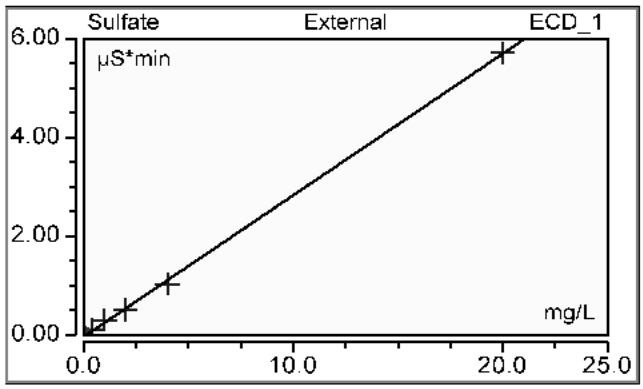








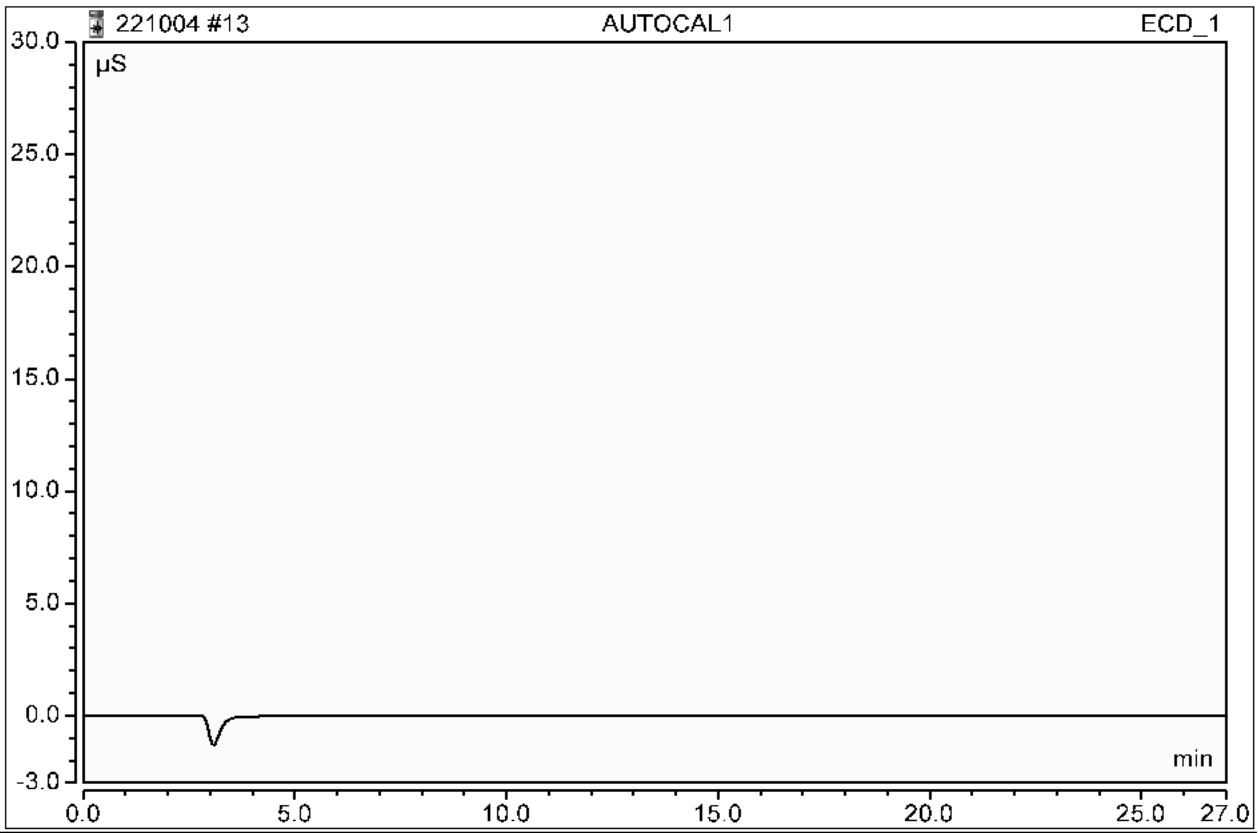




No.	Ret.Time min	Peak Name	Cal.Type	Coeff.Det. %	Offset	Slope	Curve
n.a.	n.a.	Fluoride	n, WithOffs	99.9695	0.0169	0.5130	0.0000
n.a.	n.a.	Chloride	n, WithOffs	99.9186	-0.0492	0.4164	0.0000
n.a.	n.a.	Nitrite-N	n, WithOffs	99.9573	-0.0355	0.8467	0.0000
n.a.	n.a.	Bromide	n, WithOffs	99.9991	-0.0007	0.1526	0.0000
n.a.	n.a.	Nitrate-N	n, WithOffs	99.9429	-0.0420	0.9945	0.0000
n.a.	n.a.	O-Phosphate-P	n, WithOffs	99.8913	0.0109	0.2803	0.0000
n.a.	n.a.	Sulfate	n, WithOffs	99.9510	-0.0418	0.2867	0.0000
Average:				99.9471	-0.0202	0.4986	0.0000

13 AUTOCAL1

Sample Name:	**AUTOCAL1**	*Injection Volume:*	**1.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**10/4/2022 10:41**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	0.0000	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	0.0000	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

This is runlog for Sequence 221216.seq for IC9

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
BLK	12/16/22 08:18		1	221216	JLD1
ICV	12/16/22 08:47		1	221216	JLD1
ICB	12/16/22 09:17		1	221216	JLD1
604390011	12/16/22 09:47	2357485	1	221216	JLD1
1205273770	12/16/22 10:16	2357485	1	221216	JLD1
1205273771	12/16/22 10:46	2357485	1	221216	JLD1
1205273768	12/16/22 11:16	2357485	1	221216	JLD1
1205273769	12/16/22 11:46	2357485	1	221216	JLD1
604390011	12/16/22 12:15	2357485	10	221216	JLD1
1205273770	12/16/22 12:45	2357485	10	221216	JLD1
1205273771	12/16/22 13:15	2357485	10	221216	JLD1
604449001	12/16/22 13:45	2357485	10	221216	JLD1
604449005	12/16/22 14:15	2357485	10	221216	JLD1
CVH	12/16/22 14:44		1	221216	JLD1
CCB	12/16/22 15:14		1	221216	JLD1
604449009	12/16/22 15:44	2357485	10	221216	JLD1
604449013	12/16/22 16:14	2357485	10	221216	JLD1
604449017	12/16/22 16:44	2357485	10	221216	JLD1
1205274029	12/16/22 17:14	2357485	10	221216	JLD1
1205274030	12/16/22 17:44	2357485	10	221216	JLD1
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604449005	12/16/22 18:43	2357485	1000	221216	JLD1
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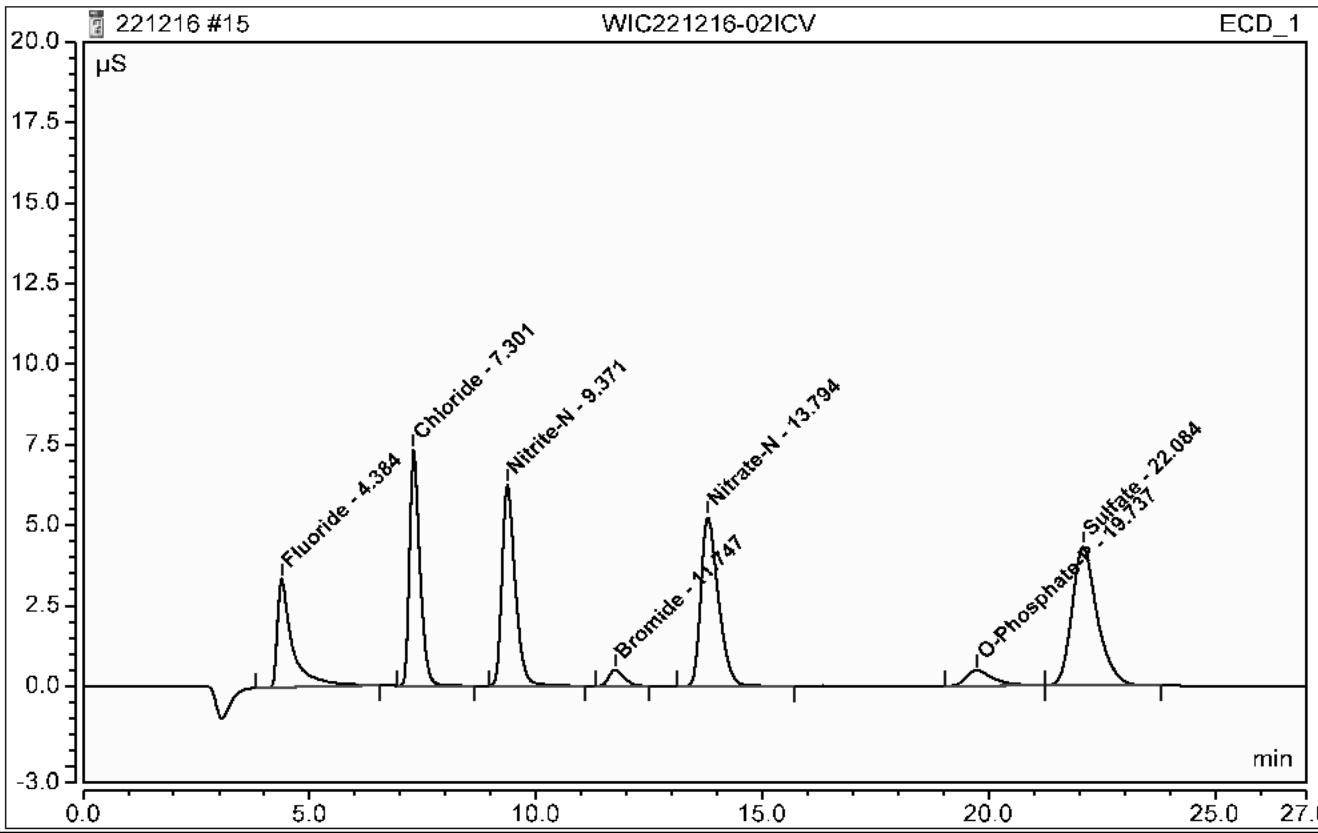
604449013	12/16/22 19:43	2357485	500	221216	JLD1
604449013	12/16/22 20:13	2357485	100	221216	JLD1
CCV	12/16/22 20:43		1	221216	JLD1
CCB	12/16/22 21:13		1	221216	JLD1
604449017	12/16/22 21:43	2357485	200	221216	JLD1

1205274029	12/16/22 22:13	2357485	200	221216	JLD1
1205274030	12/16/22 22:43	2357485	200	221216	JLD1
604449017	12/16/22 23:13	2357485	50	221216	JLD1
1205274029	12/16/22 23:42	2357485	50	221216	JLD1

15 WIC221216-02ICV

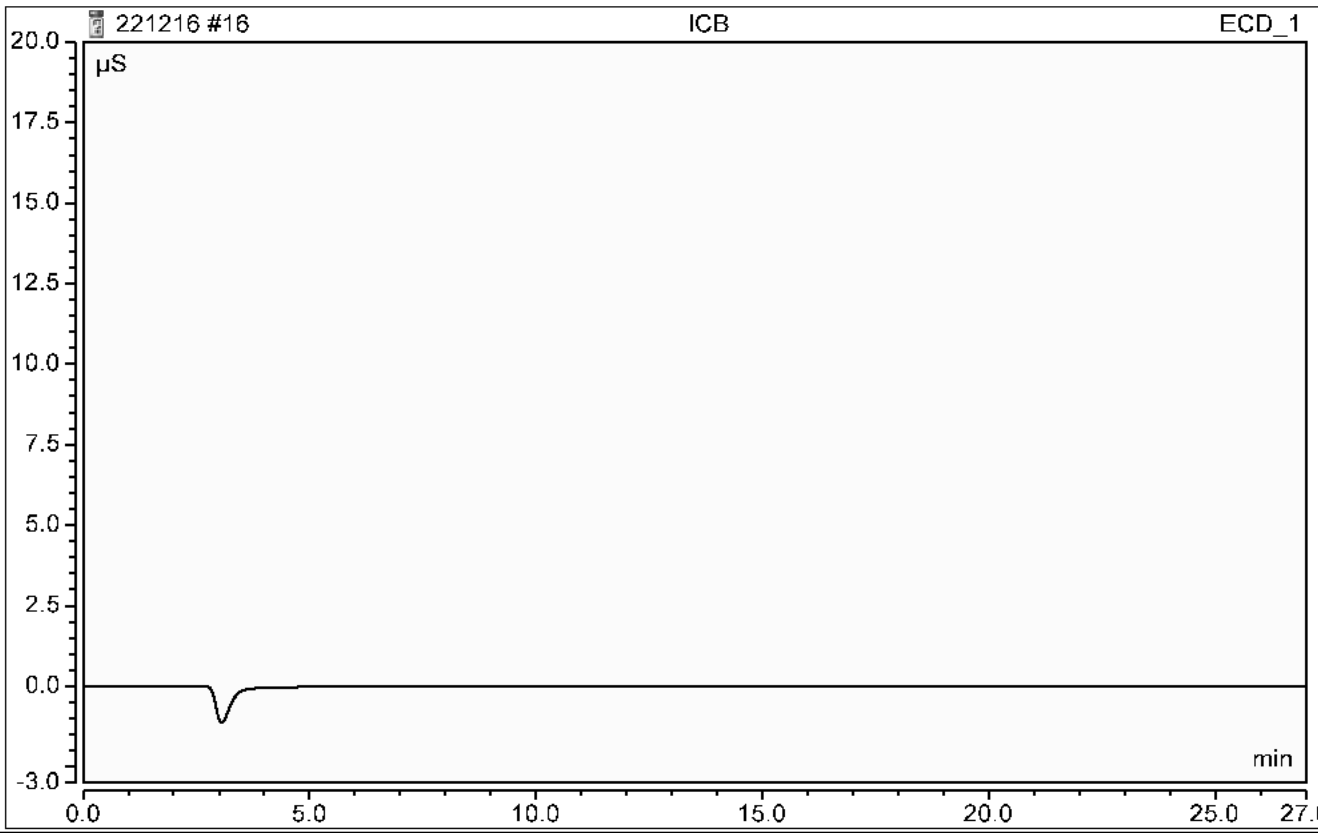
Sample Name:	**WIC221216-02ICV**	*Injection Volume:*	**1.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/16/2022 8:47**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.38	Fluoride	n.a.	2.5249		1.31210	11.89
2	7.30	Chloride	n.a.	4.7634		1.93440	17.52
3	9.37	Nitrite-N	n.a.	2.5313		2.10759	19.09
4	11.75	Bromide	n.a.	1.2596		0.19152	1.73
5	13.79	Nitrate-N	n.a.	2.4191		2.36386	21.41
6	19.74	O-Phosphate-P	n.a.	1.1654		0.33752	3.06
7	22.08	Sulfate	n.a.	9.8826		2.79173	25.29
Total:				24.5464	0.000	11.039	100.00

16 ICB

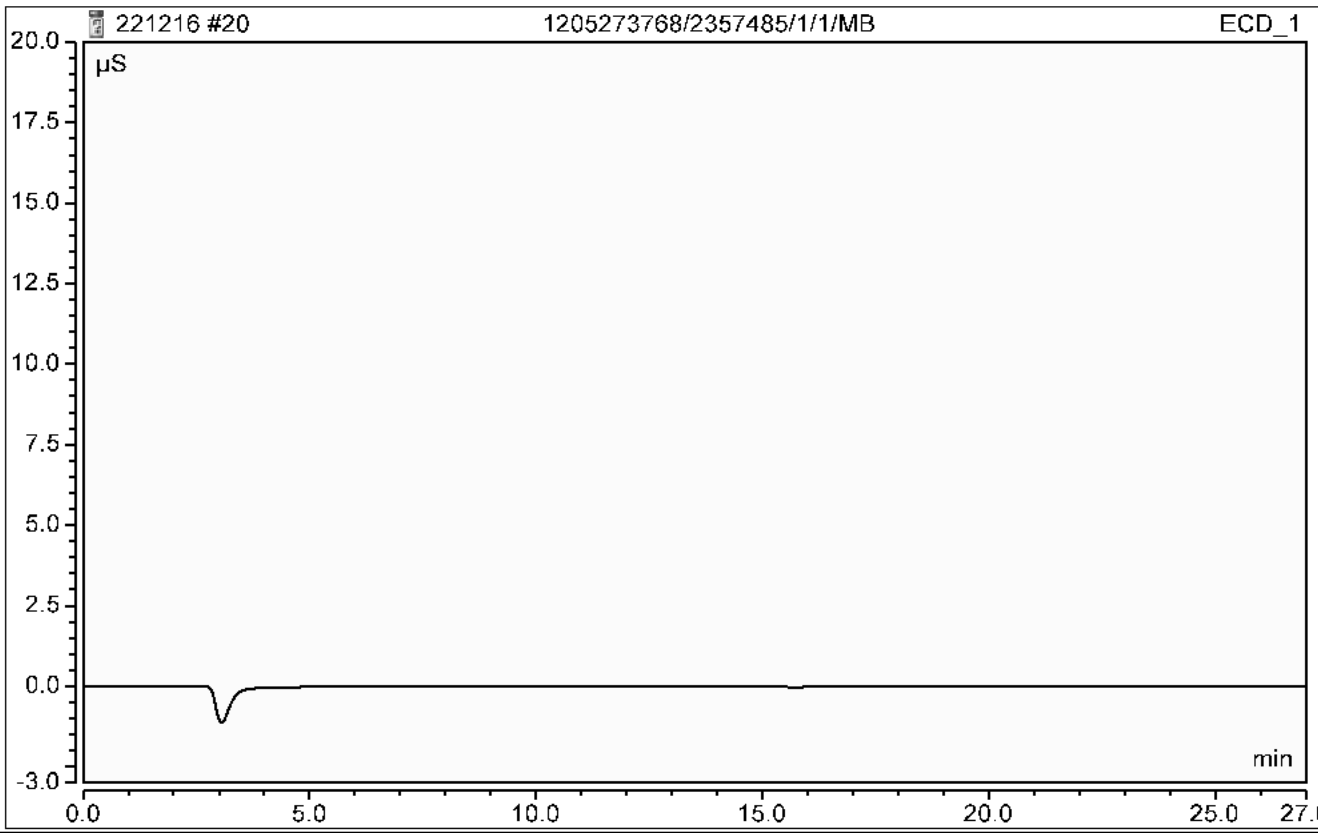
Sample Name:	**ICB**	*Injection Volume:*	**1.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/16/2022 9:17**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

20 1205273768/2357485/1/1/MB

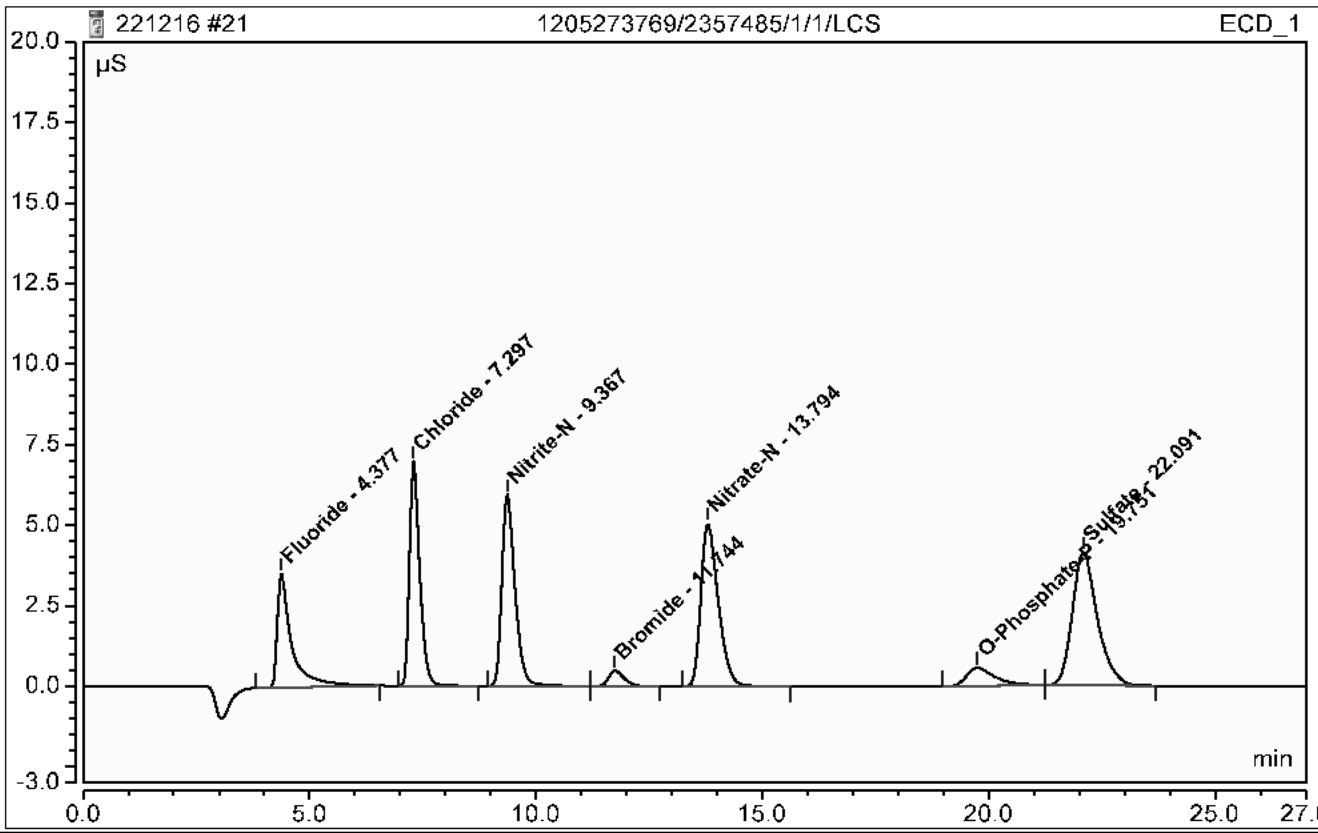
Sample Name:	**1205273768/2357485/1/1/MB**	*Injection Volume:*	**1.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/16/2022 11:16**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

21 1205273769/2357485/1/1/LCS

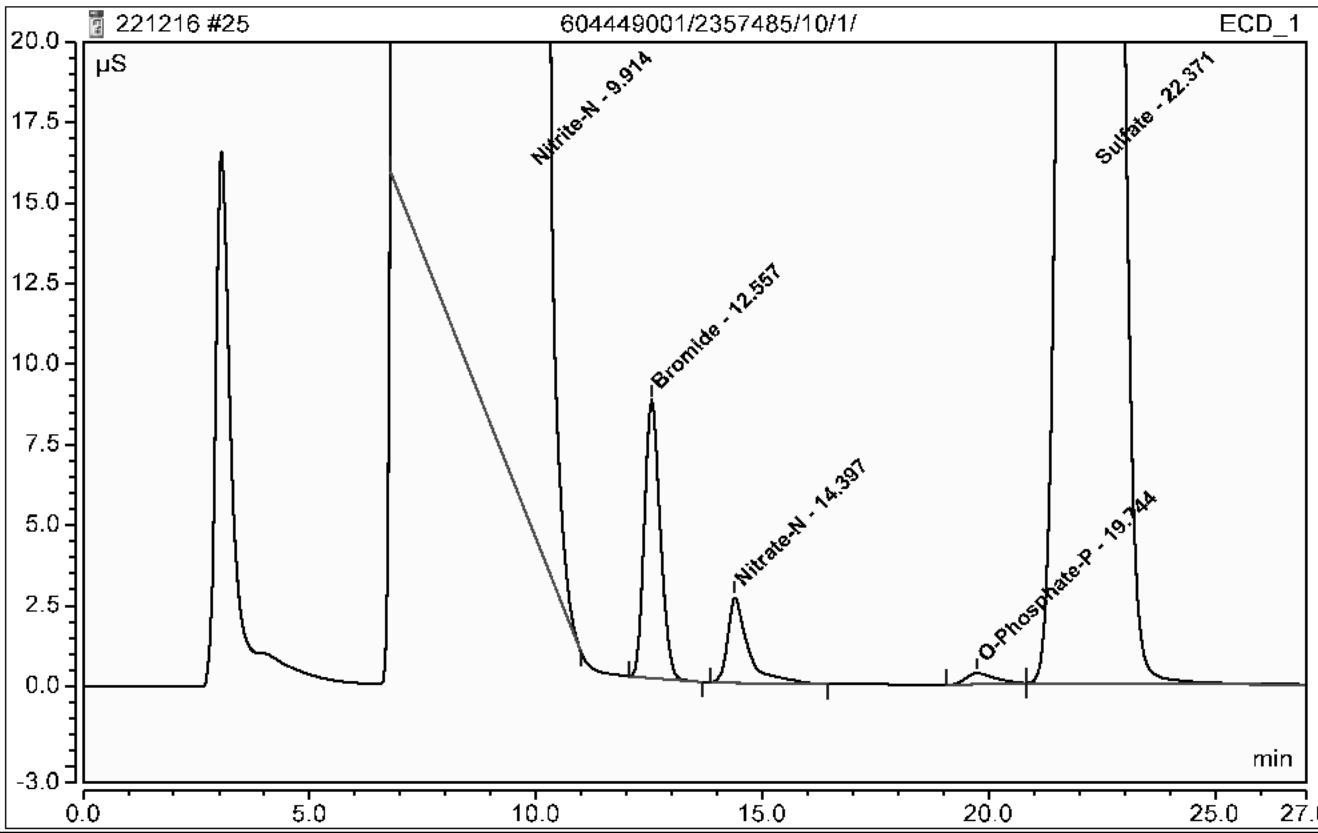
Sample Name:	**1205273769/2357485/1/1/LCS**	*Injection Volume:*	**1.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/16/2022 11:46**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.38	Fluoride	n.a.	2.5311		1.31524	12.34
2	7.30	Chloride	n.a.	4.5216		1.83371	17.20
3	9.37	Nitrite-N	n.a.	2.4081		2.00327	18.79
4	11.74	Bromide	n.a.	1.2557		0.19092	1.79
5	13.79	Nitrate-N	n.a.	2.3097		2.25503	21.15
6	19.75	O-Phosphate-P	n.a.	1.4261		0.41056	3.85
7	22.09	Sulfate	n.a.	9.3934		2.65146	24.87
Total:				23.8455	0.000	10.660	100.00

25 604449001/2357485/10/1/

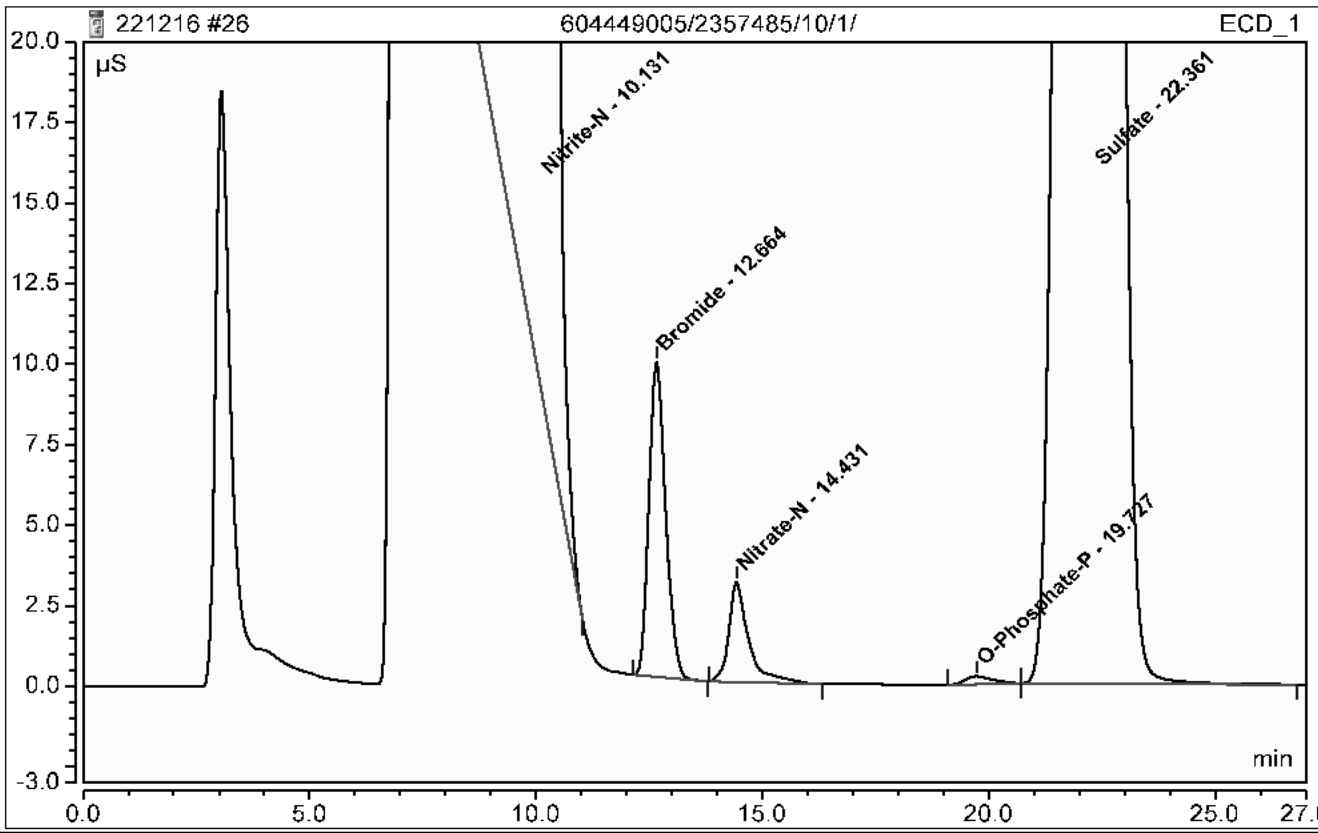
Sample Name:	**604449001/2357485/10/1/**	*Injection Volume:*	**1.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/16/2022 13:45**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
1	9.91	Nitrite-N	n.a.	4104.6377		3475.15816	94.36
2	12.56	Bromide	n.a.	22.9515		3.50116	0.10
3	14.40	Nitrate-N	n.a.	1.4364		1.38660	0.04
4	19.74	O-Phosphate-P	n.a.	0.8499		0.24908	0.01
5	22.37	Sulfate	n.a.	706.8146		202.61418	5.50
Total:				4836.6902	0.000	3682.909	100.00

26 604449005/2357485/10/1/

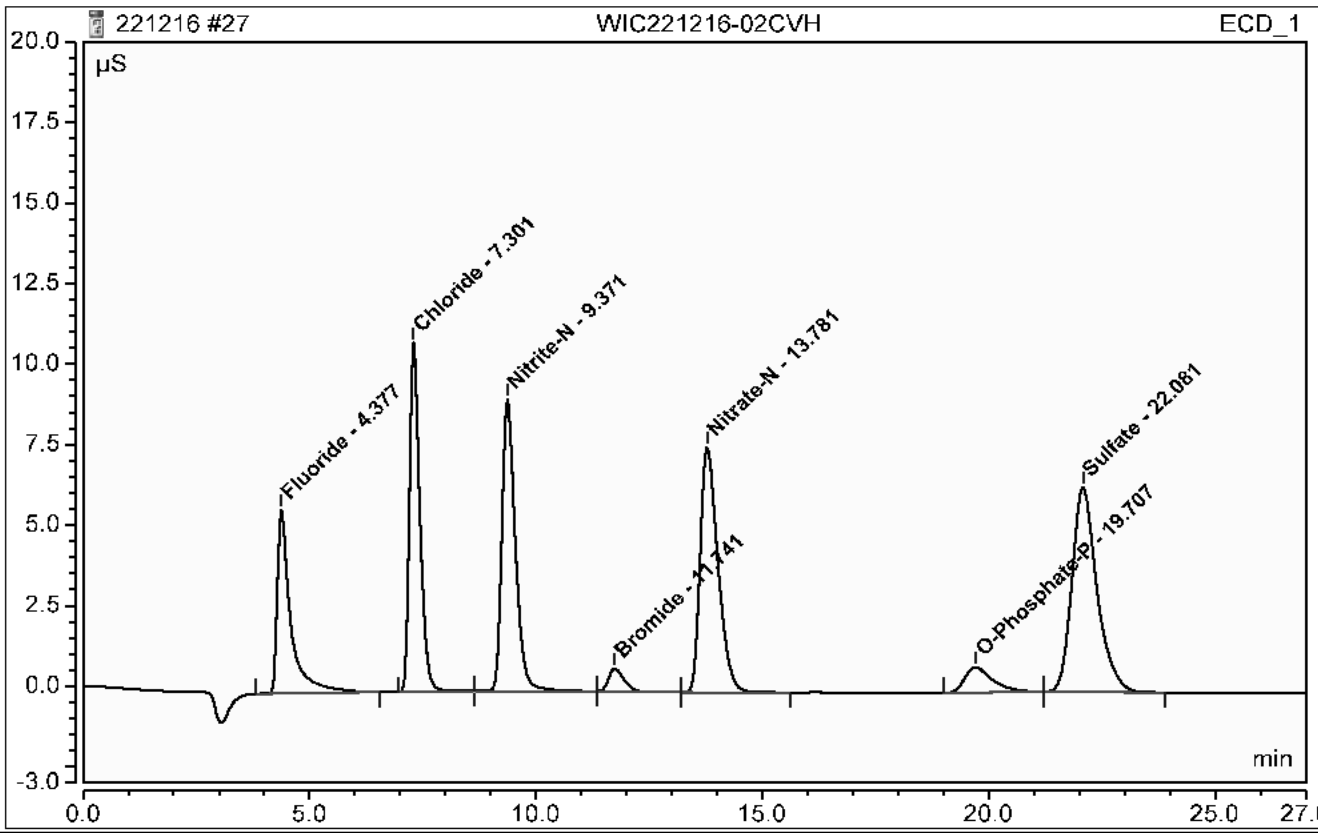
Sample Name:	**604449005/2357485/10/1/**	*Injection Volume:*	**1.0**
Vial Number:	**13**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/16/2022 14:15**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
1	10.13	Nitrite-N	n.a.	4633.4026		3922.83726	94.10
2	12.66	Bromide	n.a.	27.4328		4.18490	0.10
3	14.43	Nitrate-N	n.a.	1.6347		1.58372	0.04
4	19.73	O-Phosphate-P	n.a.	0.5919		0.17678	0.00
5	22.36	Sulfate	n.a.	837.1273		239.97707	5.76
Total:				5500.1893	0.000	4168.760	100.00

27 WIC221216-02CVH

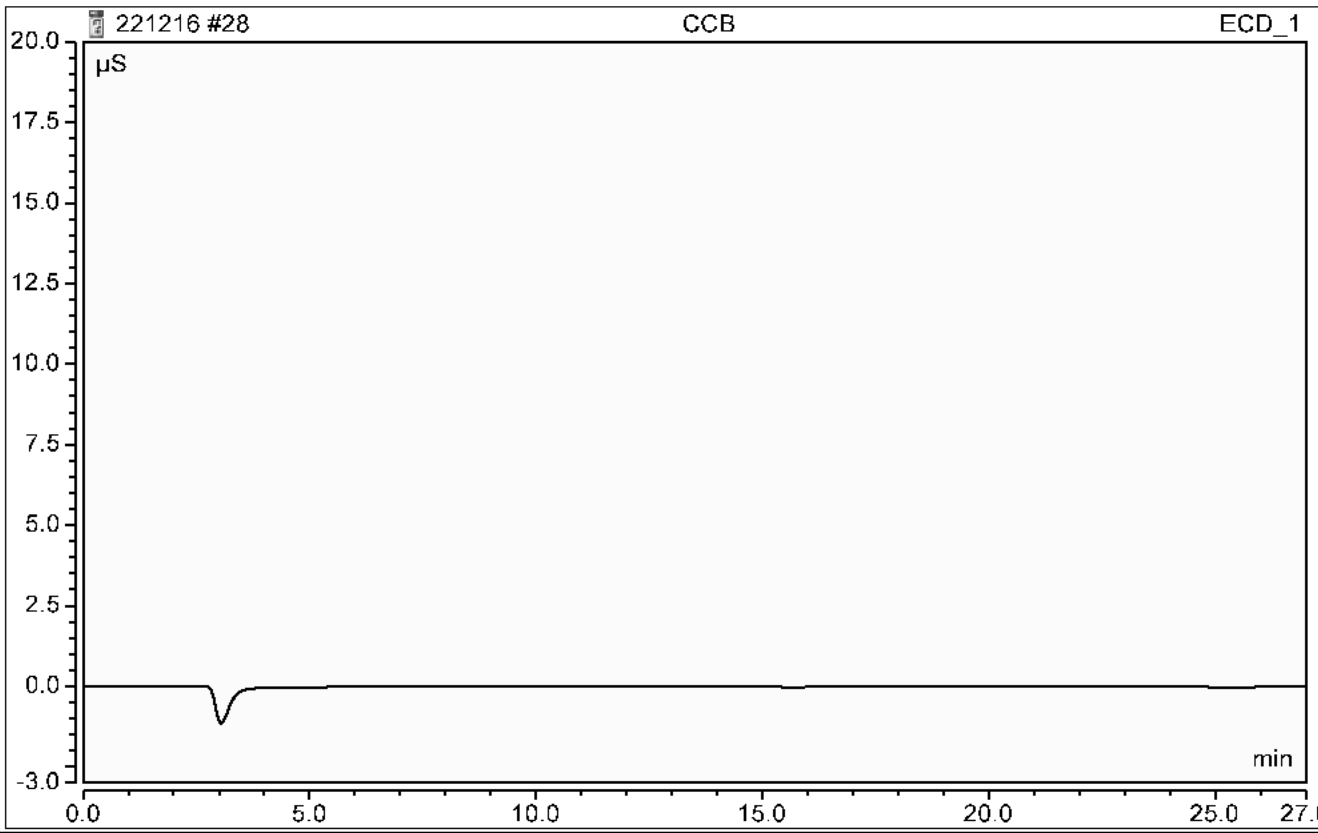
Sample Name:	**WIC221216-02CVH**	*Injection Volume:*	**1.0**
Vial Number:	**14**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/16/2022 14:44**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.38	Fluoride	n.a.	3.8079		1.97023	11.91
2	7.30	Chloride	n.a.	7.1203		2.91588	17.63
3	9.37	Nitrite-N	n.a.	3.8437		3.21879	19.46
4	11.74	Bromide	n.a.	2.0526		0.31250	1.89
5	13.78	Nitrate-N	n.a.	3.5330		3.47165	20.99
6	19.71	O-Phosphate-P	n.a.	1.9820		0.56637	3.42
7	22.08	Sulfate	n.a.	14.3946		4.08540	24.70
Total:				36.7342	0.000	16.541	100.00

28 CCB

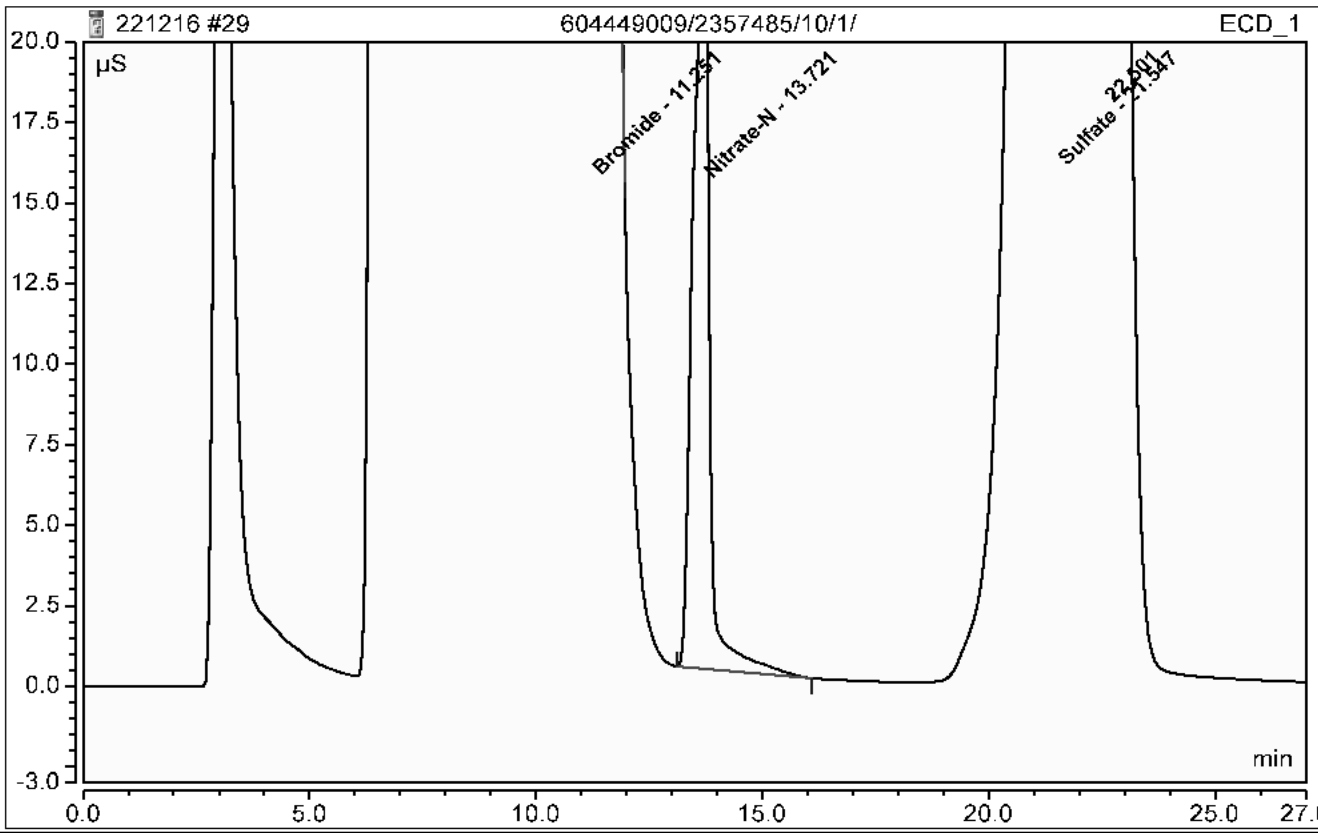
Sample Name:	**CCB**	*Injection Volume:*	**1.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/16/2022 15:14**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

29 604449009/2357485/10/1/

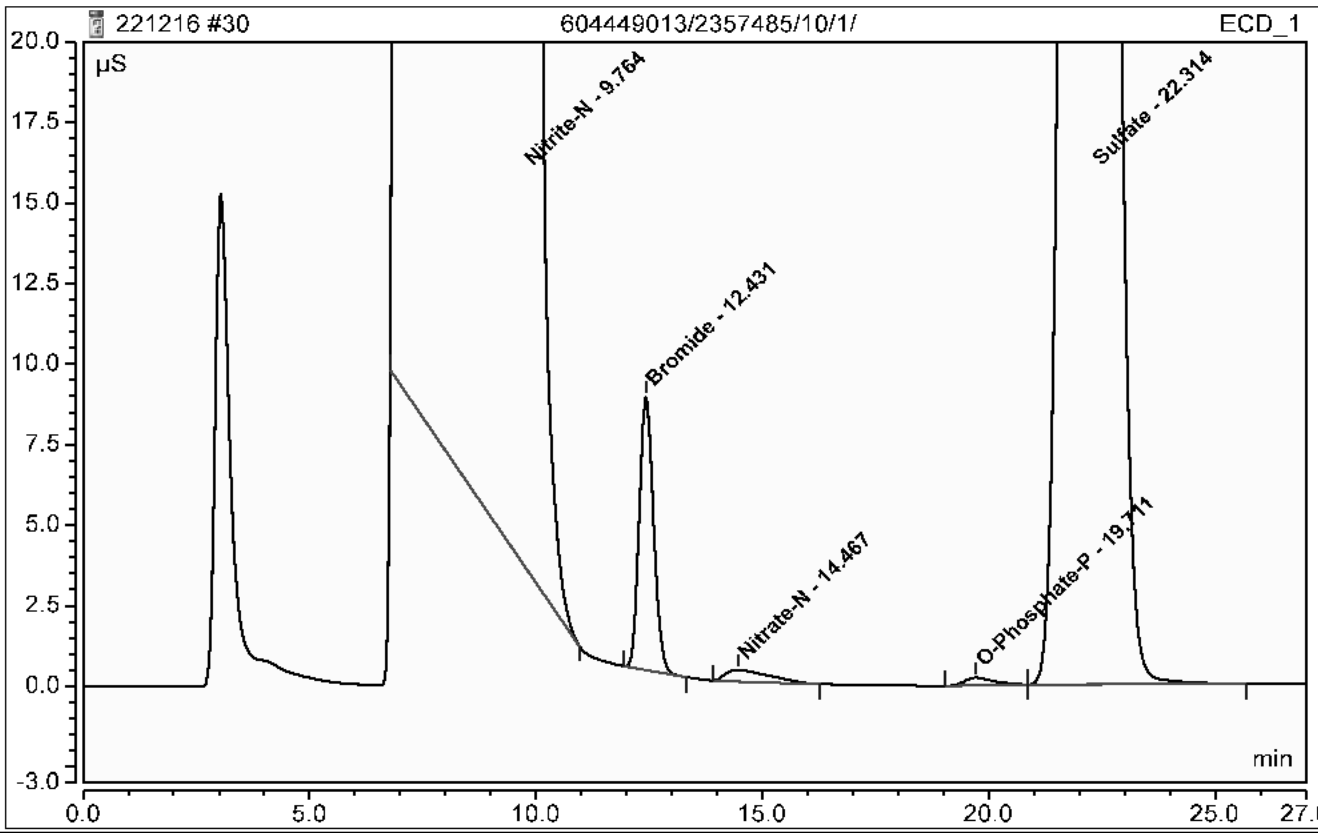
Sample Name:	**604449009/2357485/10/1/**	*Injection Volume:*	**1.0**
Vial Number:	**16**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/16/2022 15:44**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
1	11.25	Bromide	n.a.	#########		6650.96146	97.40
2	13.72	Nitrate-N	n.a.	10.8158		10.71449	0.16
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	21.55	Sulfate	n.a.	330.3946		94.68804	1.39
Total:				#########	0.000	6756.364	98.94

30 604449013/2357485/10/1/

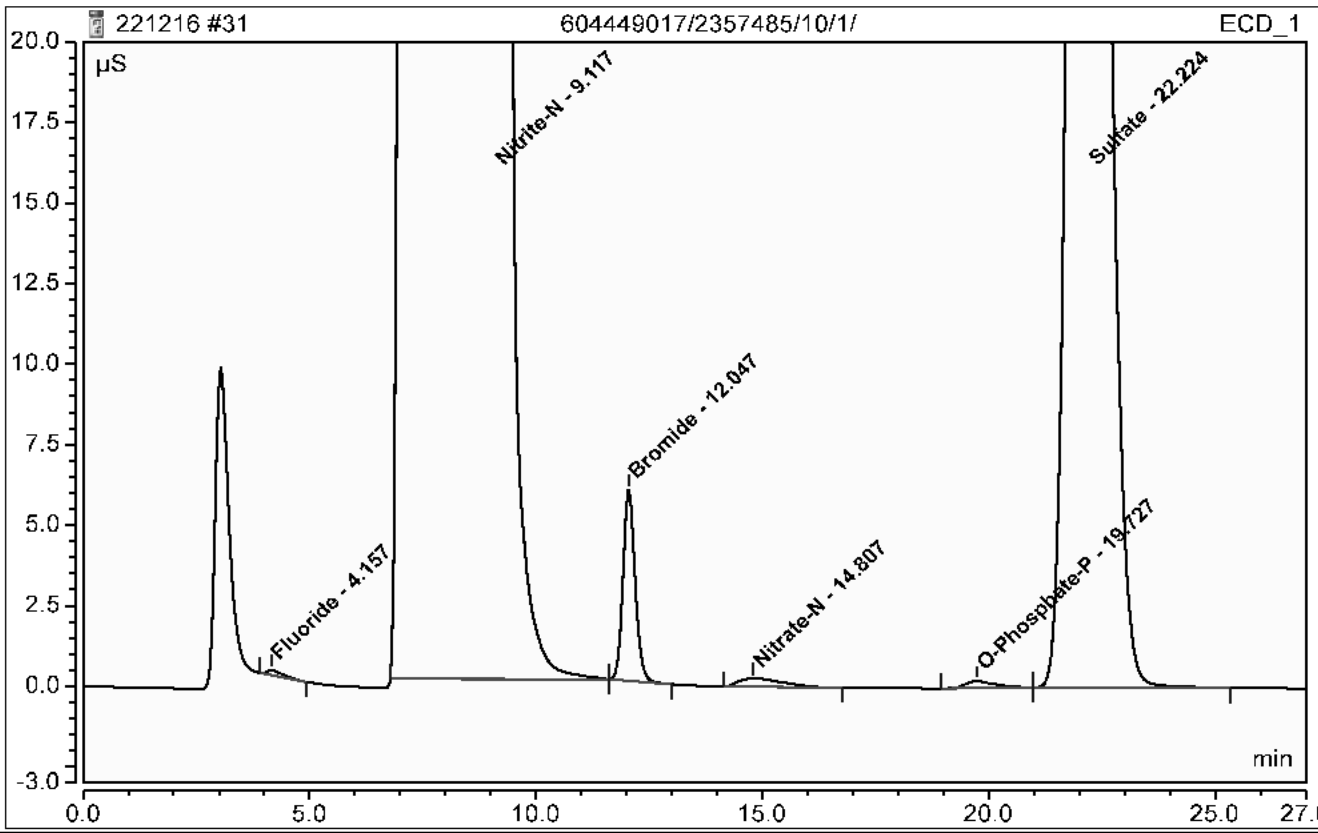
Sample Name:	**604449013/2357485/10/1/**	*Injection Volume:*	**1.0**
Vial Number:	**17**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/16/2022 16:14**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
1	9.76	Nitrite-N	n.a.	3732.7486		3160.29807	94.74
2	12.43	Bromide	n.a.	20.4657		3.12189	0.09
3	14.47	Nitrate-N	n.a.	0.4488		0.40437	0.01
4	19.71	O-Phosphate-P	n.a.	0.6021		0.17963	0.01
5	22.31	Sulfate	n.a.	599.1166		171.73530	5.15
Total:				4353.3818	0.000	3335.739	100.00

31 604449017/2357485/10/1/

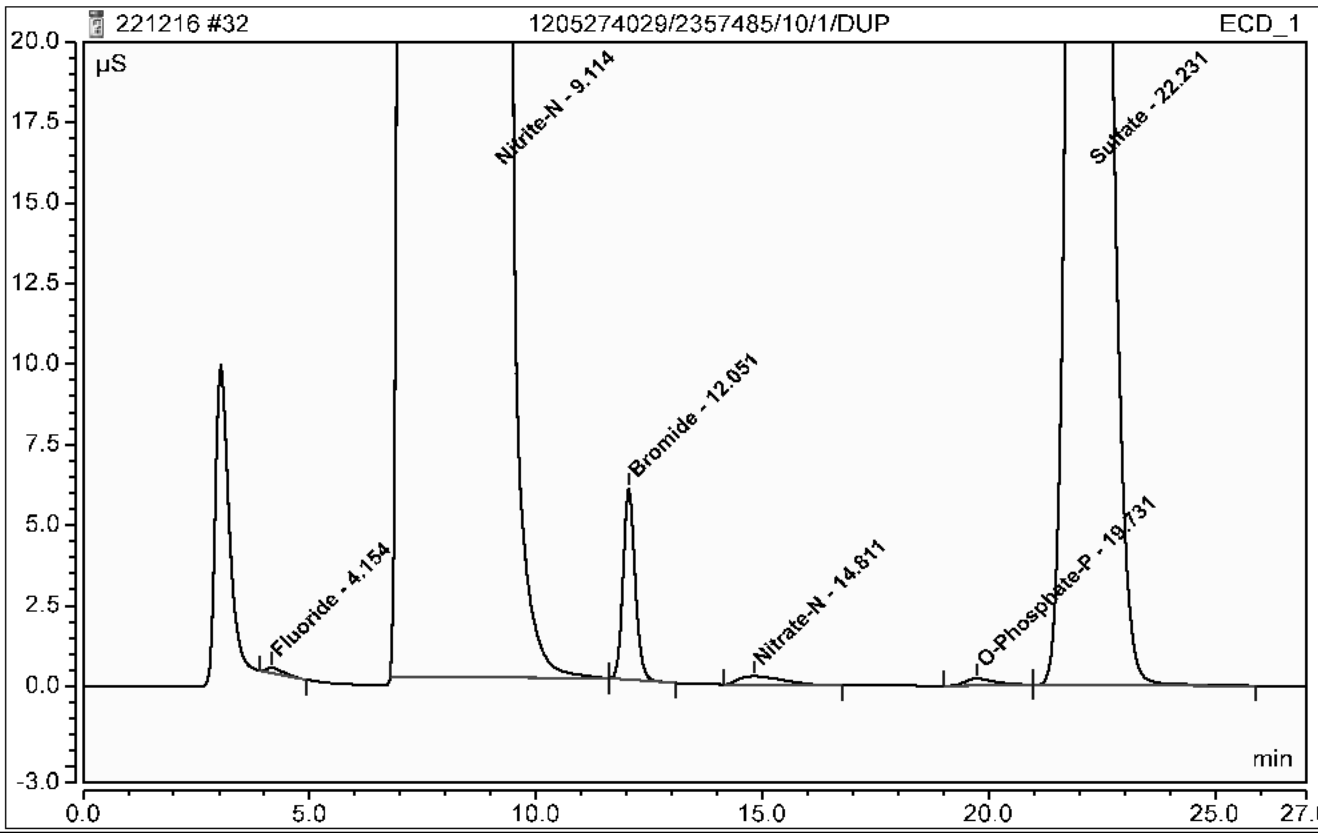
Sample Name:	**604449017/2357485/10/1/**	*Injection Volume:*	**1.0**
Vial Number:	**18**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/16/2022 16:44**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.16	Fluoride	n.a.	0.1040		0.07023	0.00
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
2	9.12	Nitrite-N	n.a.	2296.3035		1944.13104	95.76
3	12.05	Bromide	n.a.	12.0749		1.84167	0.09
4	14.81	Nitrate-N	n.a.	0.3335		0.28971	0.01
5	19.73	O-Phosphate-P	n.a.	0.5533		0.16596	0.01
6	22.22	Sulfate	n.a.	291.9904		83.67690	4.12
Total:				2601.3596	0.000	2030.176	100.00

32 1205274029/2357485/10/1/DUP

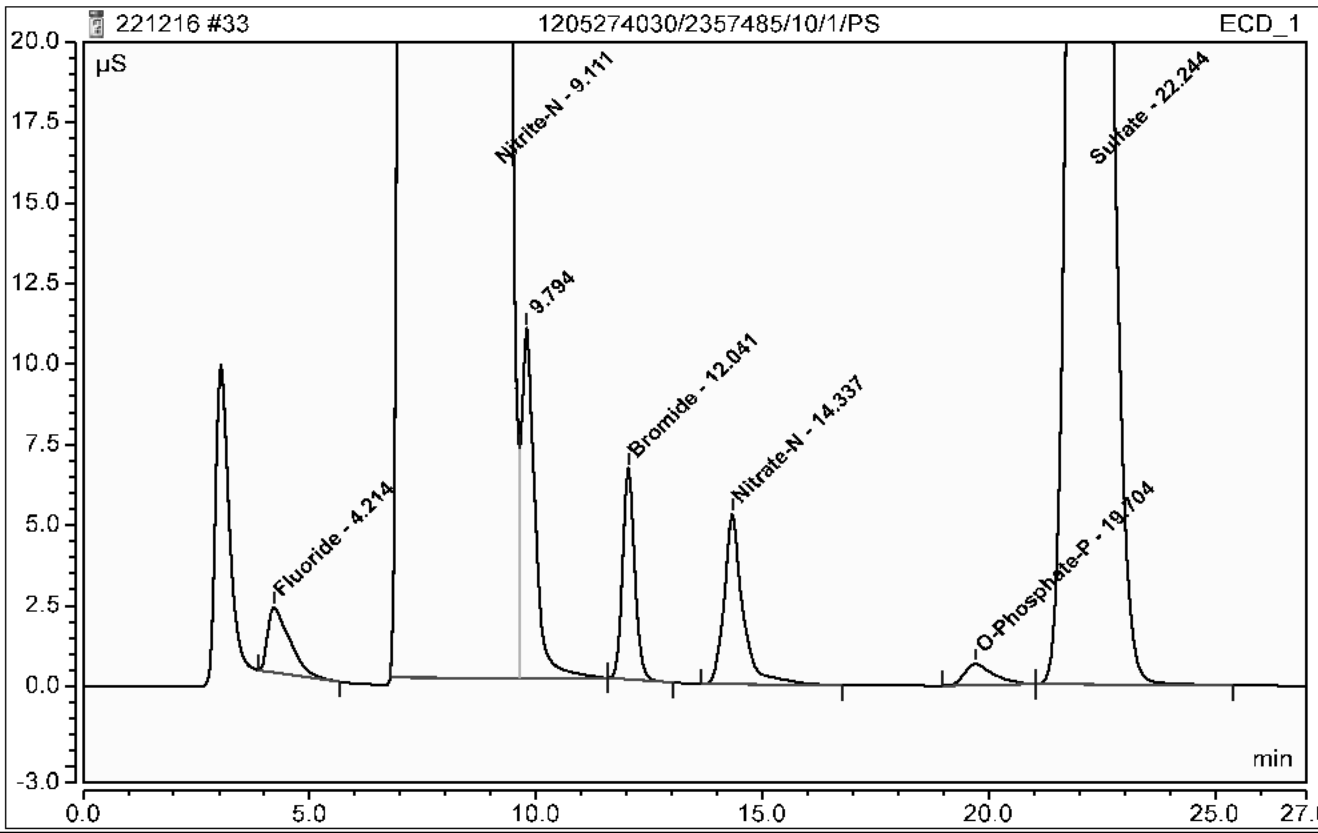
Sample Name:	**1205274029/2357485/10/1/DUP**	*Injection Volume:*	**1.0**
Vial Number:	**19**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/16/2022 17:14**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.15	Fluoride	n.a.	0.1026		0.06947	0.00
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
2	9.11	Nitrite-N	n.a.	2295.0262		1943.04961	95.76
3	12.05	Bromide	n.a.	12.0678		1.84057	0.09
4	14.81	Nitrate-N	n.a.	0.3433		0.29940	0.01
5	19.73	O-Phosphate-P	n.a.	0.5608		0.16807	0.01
6	22.23	Sulfate	n.a.	292.1501		83.72268	4.13
Total:				2600.2506	0.000	2029.150	100.00

33 1205274030/2357485/10/1/PS

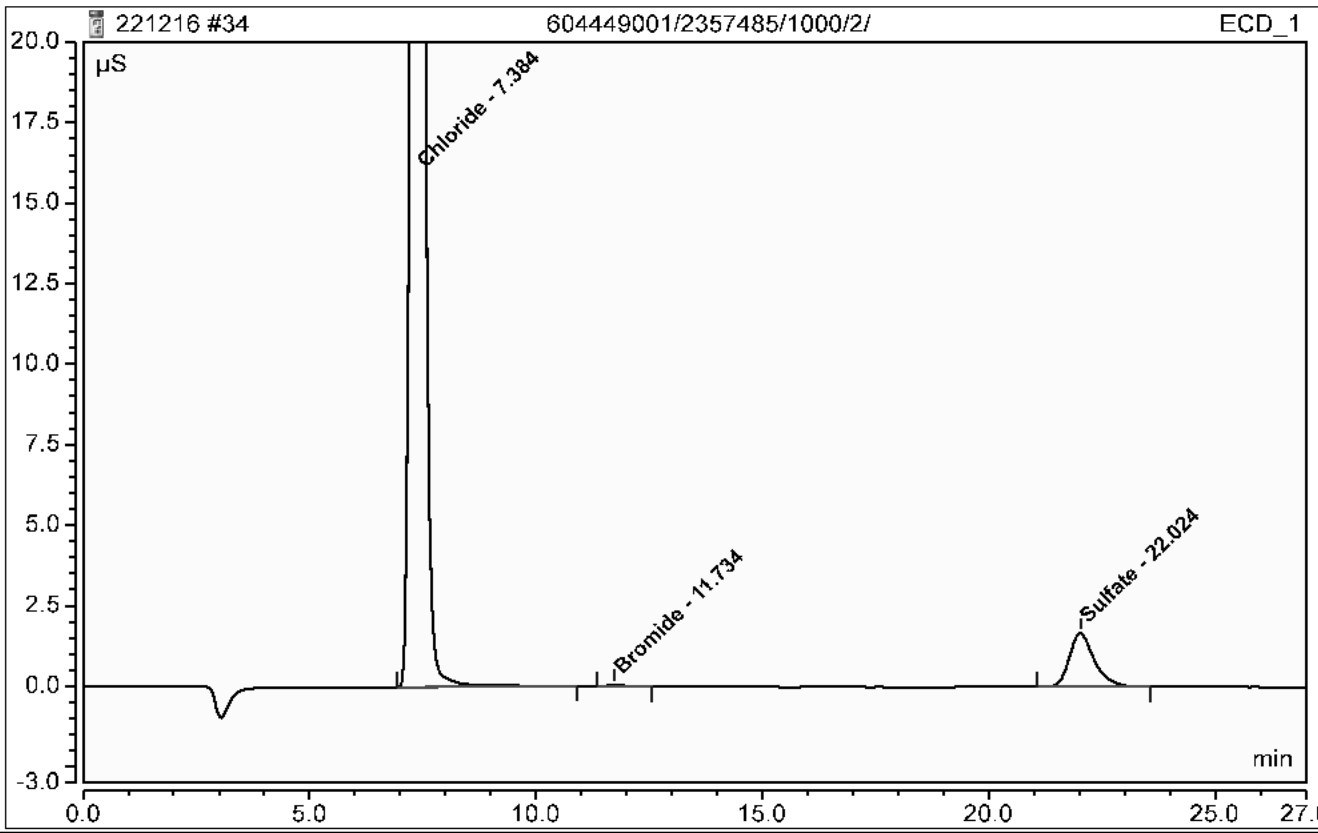
Sample Name:	**1205274030/2357485/10/1/PS**	*Injection Volume:*	**1.0**
Vial Number:	**20**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/16/2022 17:44**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.21	Fluoride	n.a.	2.1829		1.13664	0.06
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
2	9.11	Nitrite-N	n.a.	2273.1881		1924.56035	95.21
4	12.04	Bromide	n.a.	13.3465		2.03567	0.10
5	14.34	Nitrate-N	n.a.	2.5895		2.53328	0.13
6	19.70	O-Phosphate-P	n.a.	1.7164		0.49192	0.02
7	22.24	Sulfate	n.a.	303.2324		86.90018	4.30
Total:				2596.2556	0.000	2017.658	99.81

34 604449001/2357485/1000/2/

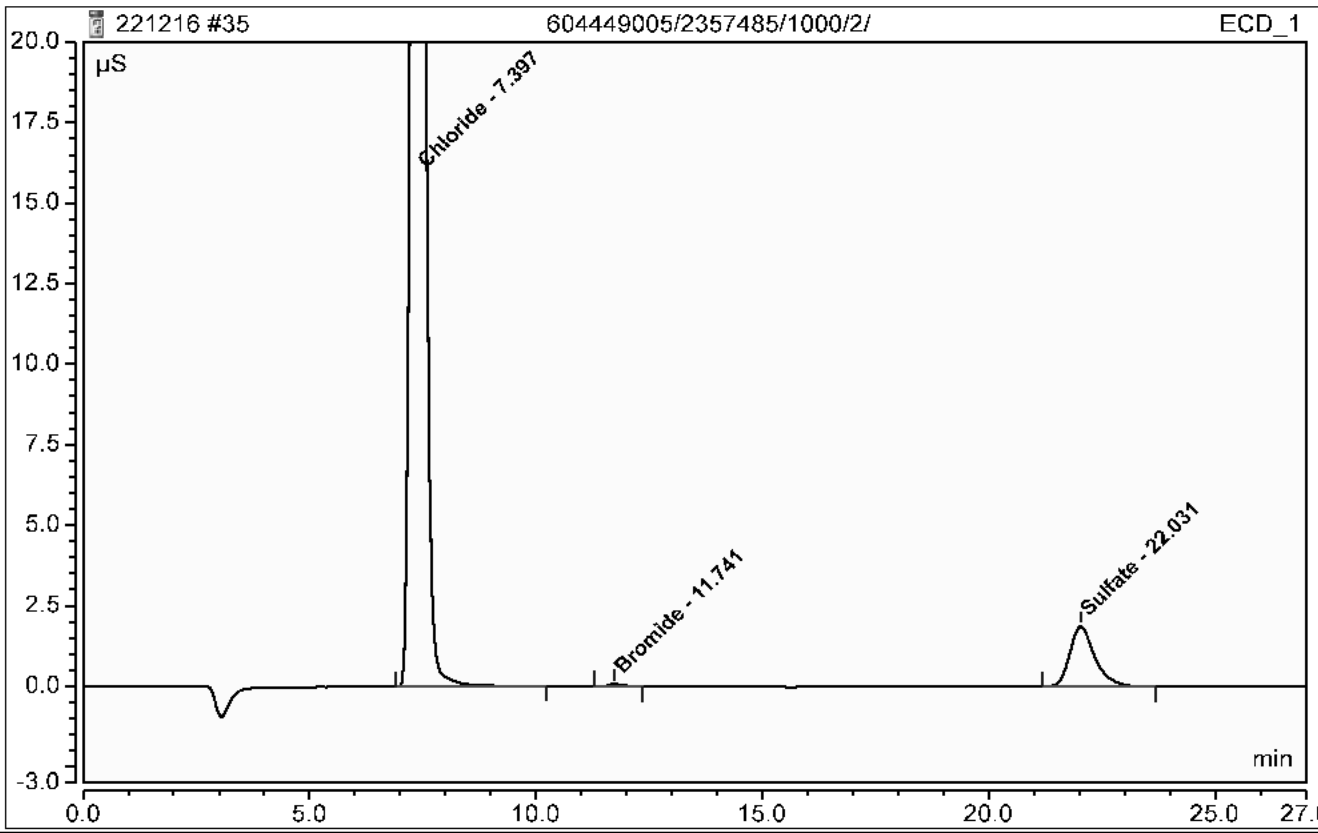
Sample Name:	**604449001/2357485/1000/2/**	*Injection Volume:*	**1.0**
Vial Number:	**21**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/16/2022 18:14**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
1	7.38	Chloride	n.a.	57.4012		23.85381	95.60
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
2	11.73	Bromide	n.a.	0.1727		0.02567	0.10
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	22.02	Sulfate	n.a.	3.8868		1.07262	4.30
Total:				61.4606	0.000	24.952	100.00

35 604449005/2357485/1000/2/

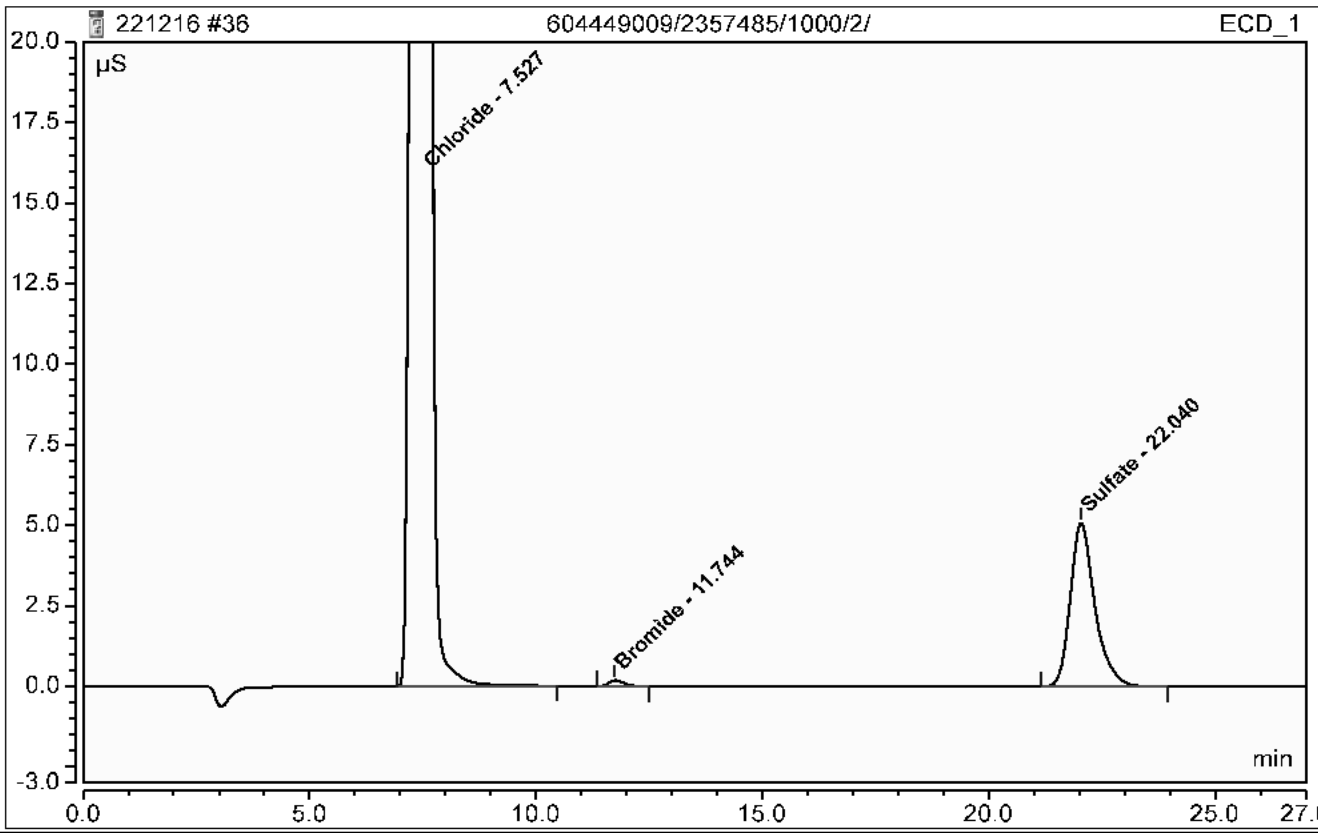
Sample Name:	**604449005/2357485/1000/2/**	*Injection Volume:*	**1.0**
Vial Number:	**22**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/16/2022 18:43**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
1	7.40	Chloride	n.a.	62.2713		25.88184	95.49
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
2	11.74	Bromide	n.a.	0.1855		0.02763	0.10
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	22.03	Sulfate	n.a.	4.3162		1.19574	4.41
Total:				66.7731	0.000	27.105	100.00

36 604449009/2357485/1000/2/

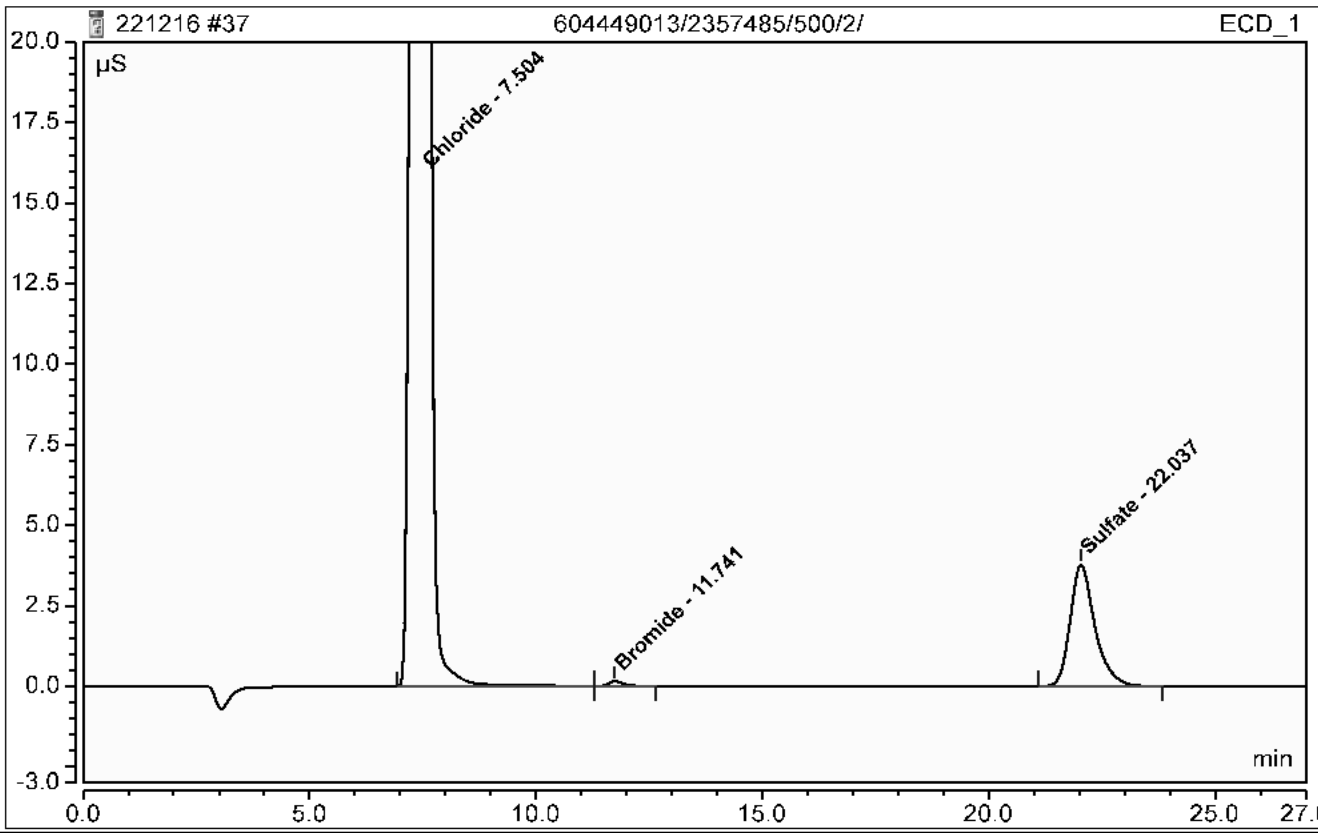
Sample Name:	**604449009/2357485/1000/2/**	*Injection Volume:*	**1.0**
Vial Number:	**23**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/16/2022 19:13**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
1	7.53	Chloride	n.a.	165.4134		68.83223	95.47
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
2	11.74	Bromide	n.a.	0.4672		0.07061	0.10
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	22.04	Sulfate	n.a.	11.2798		3.19233	4.43
Total:				177.1603	0.000	72.095	100.00

37 604449013/2357485/500/2/

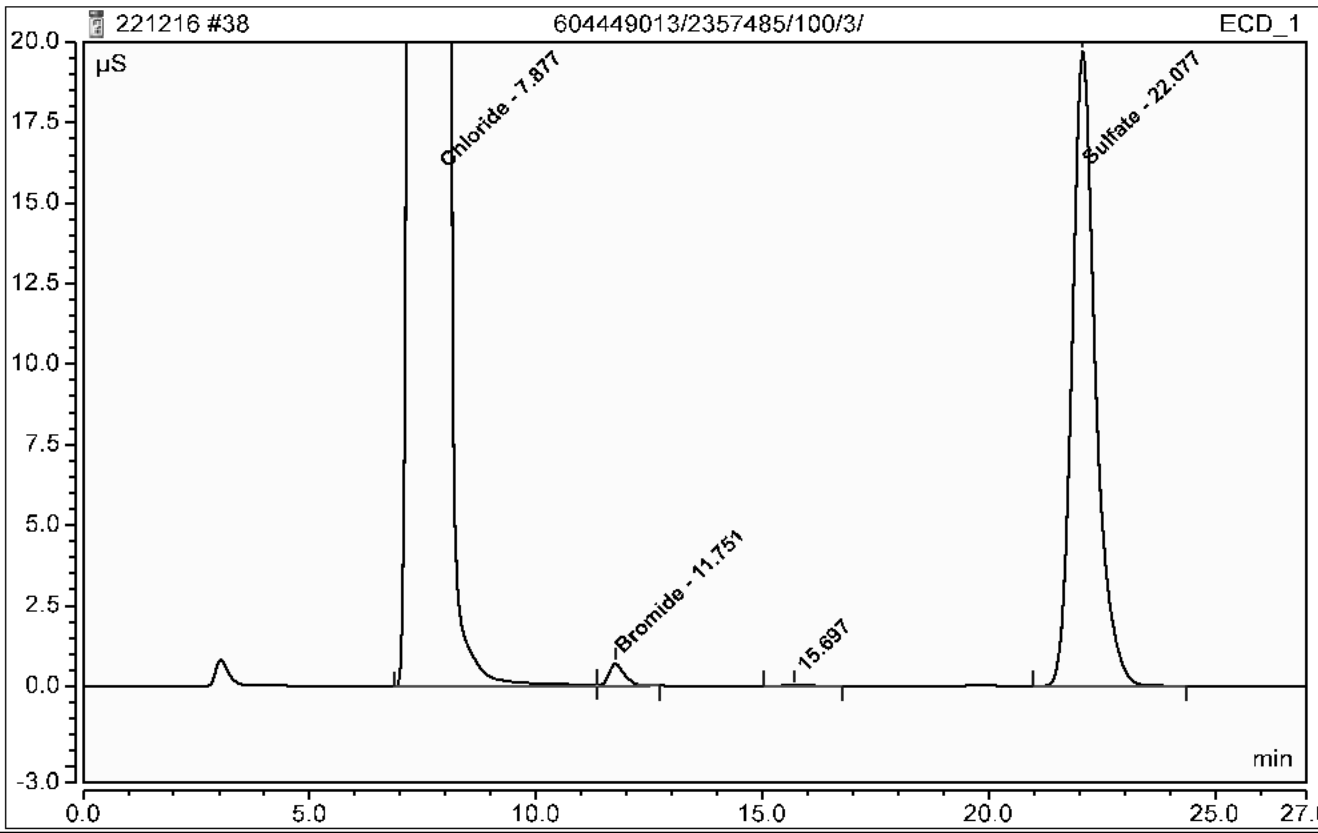
Sample Name:	**604449013/2357485/500/2/**	*Injection Volume:*	**1.0**
Vial Number:	**24**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/16/2022 19:43**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
1	7.50	Chloride	n.a.	144.3661		60.06775	96.08
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
2	11.74	Bromide	n.a.	0.4154		0.06271	0.10
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	22.04	Sulfate	n.a.	8.4713		2.38707	3.82
Total:				153.2528	0.000	62.518	100.00

38 604449013/2357485/100/3/

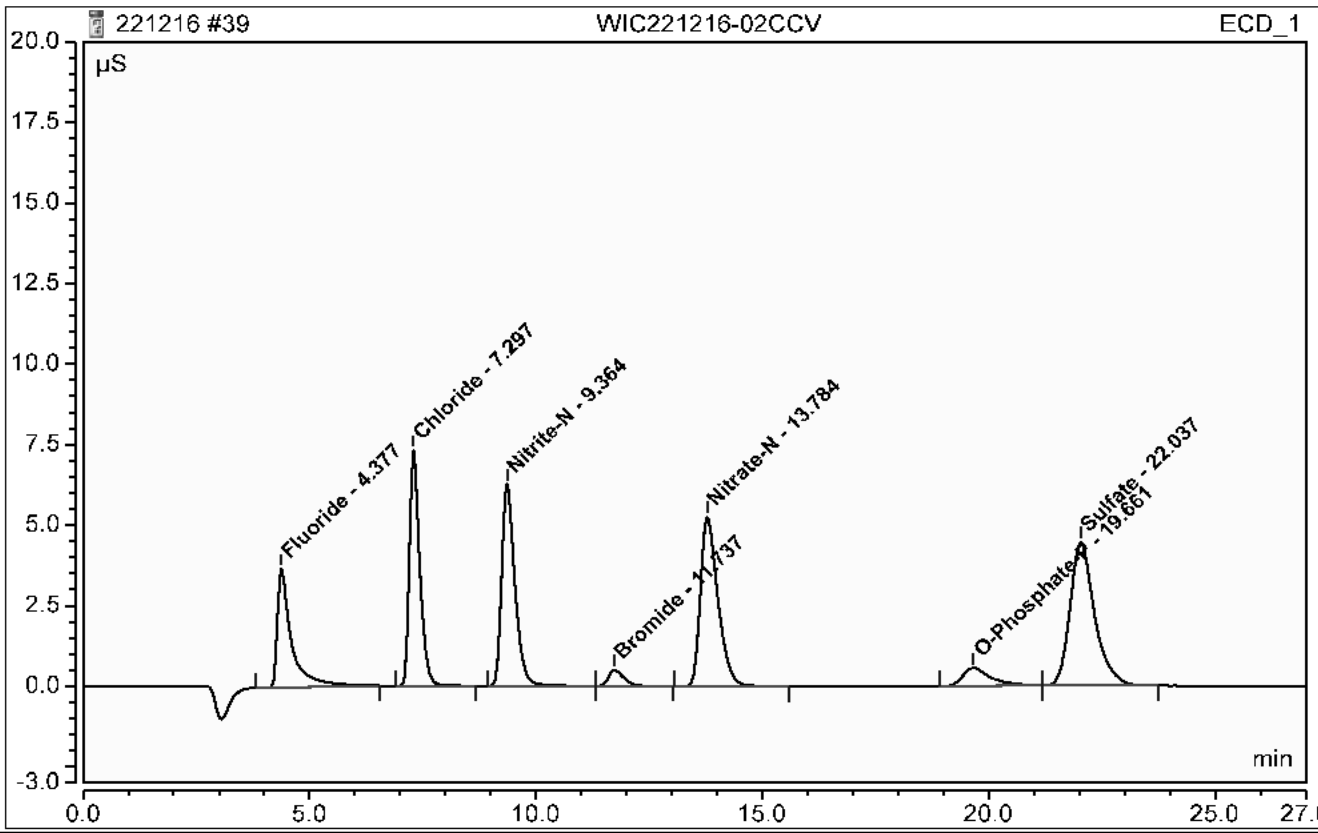
Sample Name:	**604449013/2357485/100/3/**	*Injection Volume:*	**1.0**
Vial Number:	**25**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/16/2022 20:13**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
1	7.88	Chloride	n.a.	678.8718		282.64650	95.88
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
2	11.75	Bromide	n.a.	1.8100		0.27549	0.09
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	22.08	Sulfate	n.a.	41.4291		11.83664	4.02
Total:				722.1108	0.000	294.759	99.99

39 WIC221216-02CCV

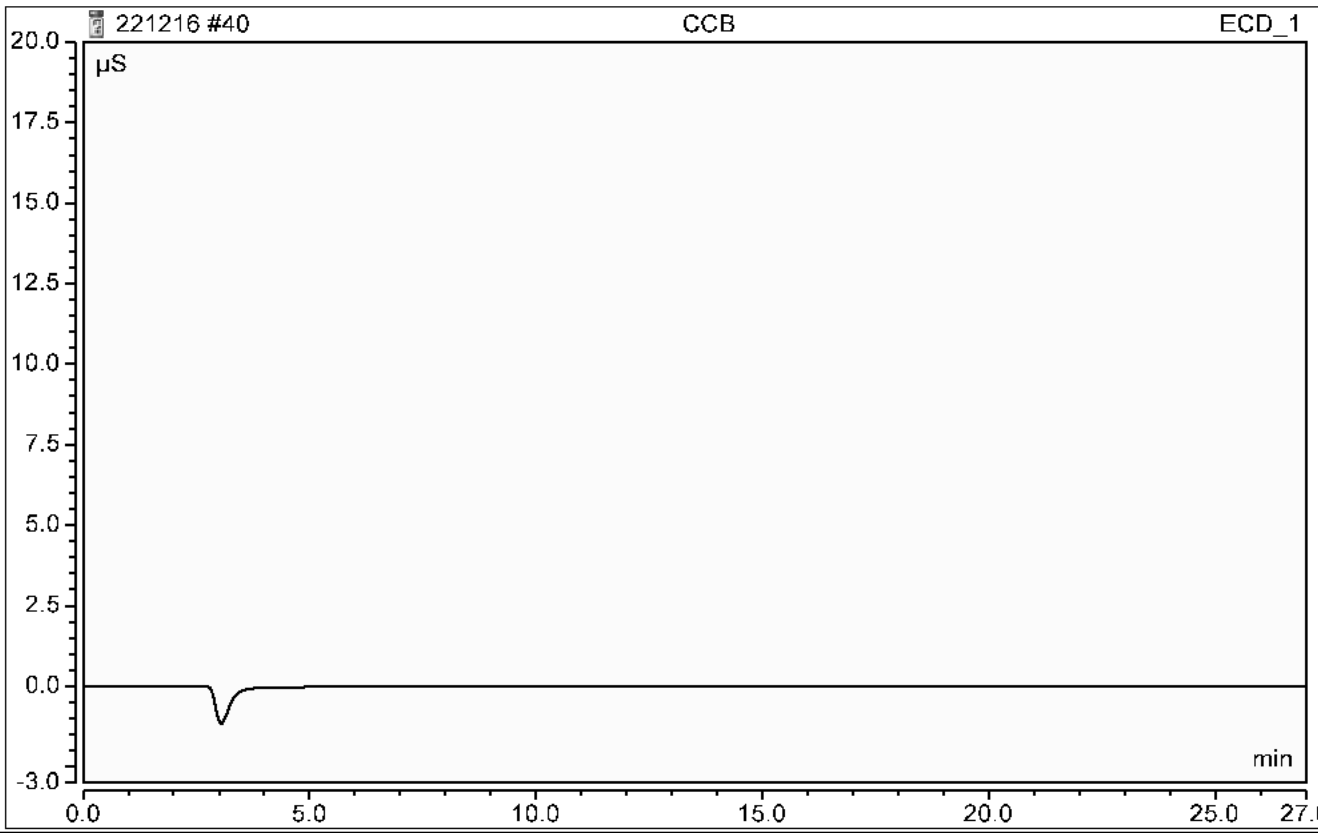
Sample Name:	**WIC221216-02CCV**	*Injection Volume:*	**1.0**
Vial Number:	**26**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/16/2022 20:43**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.38	Fluoride	n.a.	2.5835		1.34214	12.03
2	7.30	Chloride	n.a.	4.7772		1.94018	17.39
3	9.36	Nitrite-N	n.a.	2.5494		2.12296	19.03
4	11.74	Bromide	n.a.	1.3087		0.19900	1.78
5	13.78	Nitrate-N	n.a.	2.4142		2.35896	21.14
6	19.66	O-Phosphate-P	n.a.	1.3653		0.39353	3.53
7	22.04	Sulfate	n.a.	9.9096		2.79947	25.09
Total:				24.9079	0.000	11.156	100.00

40 CCB

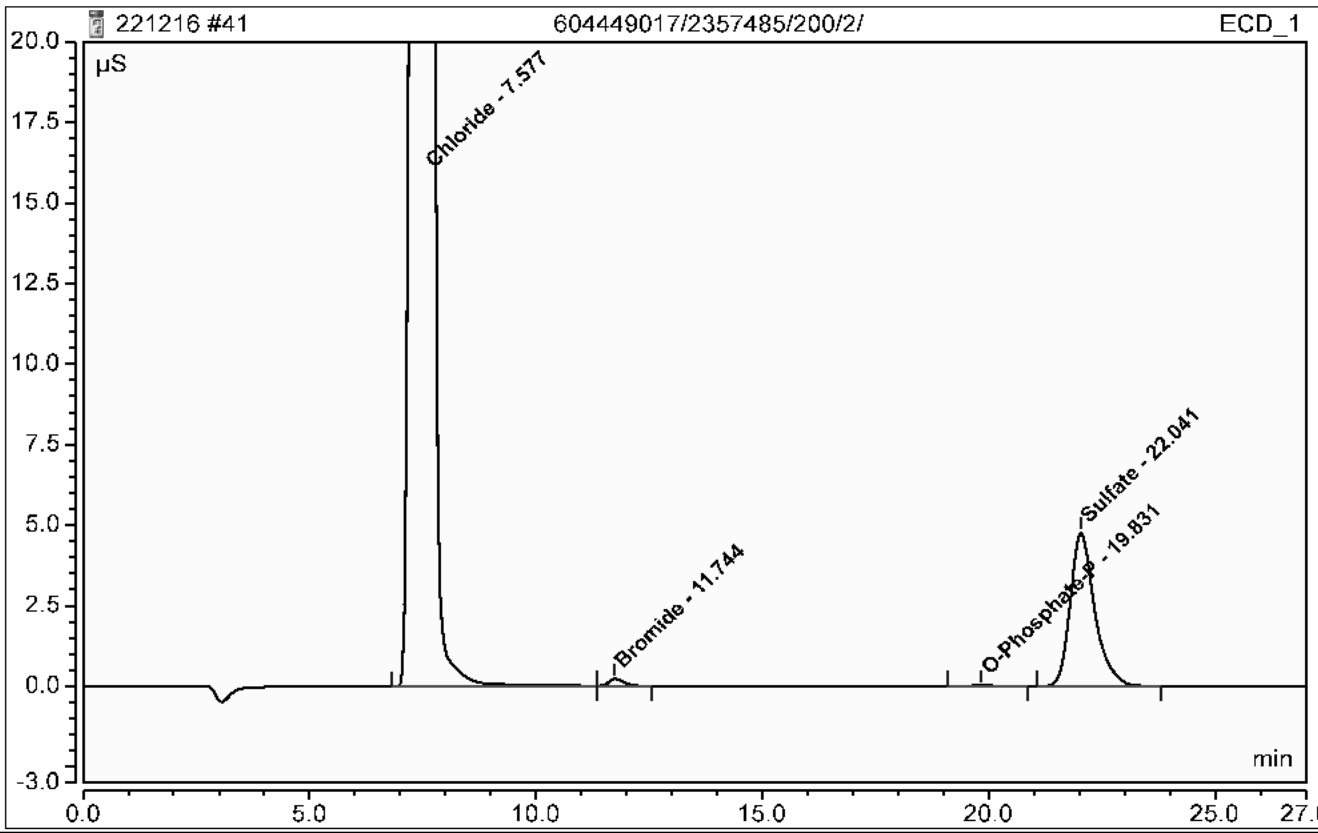
Sample Name:	**CCB**	*Injection Volume:*	**1.0**
Vial Number:	**27**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/16/2022 21:13**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

41 604449017/2357485/200/2/

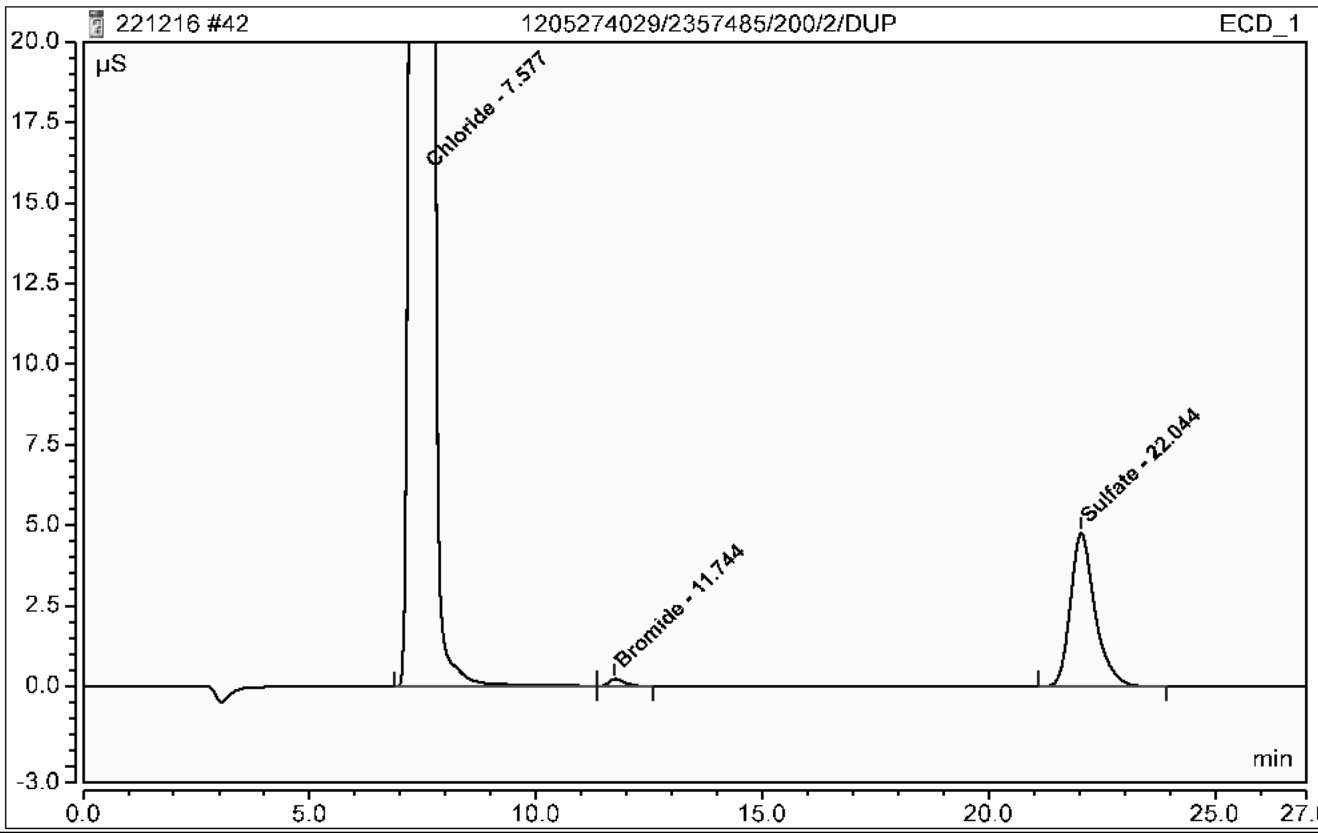
Sample Name:	**604449017/2357485/200/2/**	*Injection Volume:*	**1.0**
Vial Number:	**28**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/16/2022 21:43**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
1	7.58	Chloride	n.a.	219.3844		91.30684	96.72
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
2	11.74	Bromide	n.a.	0.6060		0.09178	0.10
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
3	19.83	O-Phosphate-P	n.a.	0.0169		0.01564	0.02
4	22.04	Sulfate	n.a.	10.5645		2.98723	3.16
Total:				230.5718	0.000	94.401	100.00

42 1205274029/2357485/200/2/DUP

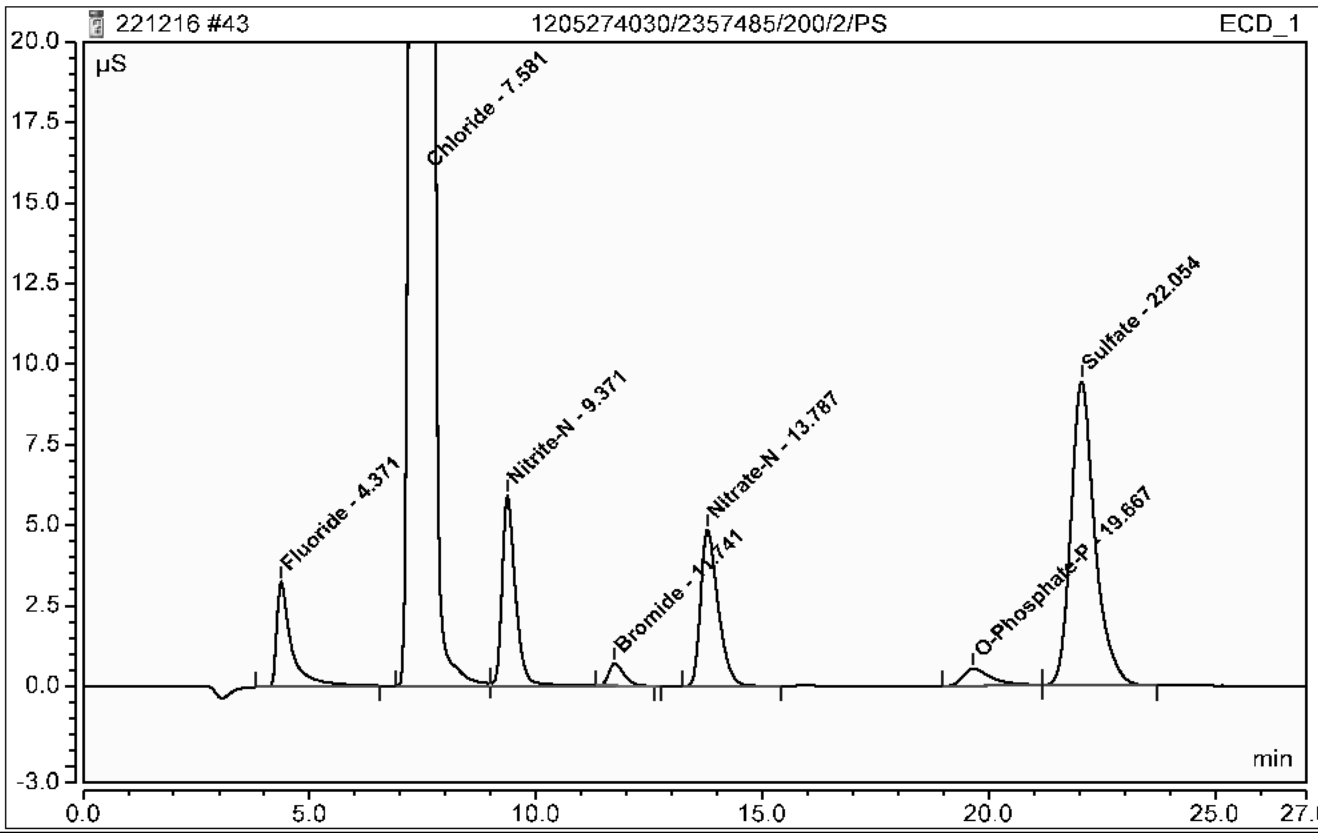
Sample Name:	**1205274029/2357485/200/2/DUP**	*Injection Volume:*	**1.0**
Vial Number:	**29**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/16/2022 22:13**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
1	7.58	Chloride	n.a.	219.4020		91.31419	96.74
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
2	11.74	Bromide	n.a.	0.5680		0.08599	0.09
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	22.04	Sulfate	n.a.	10.5723		2.98949	3.17
Total:				230.5424	0.000	94.390	100.00

43 1205274030/2357485/200/2/PS

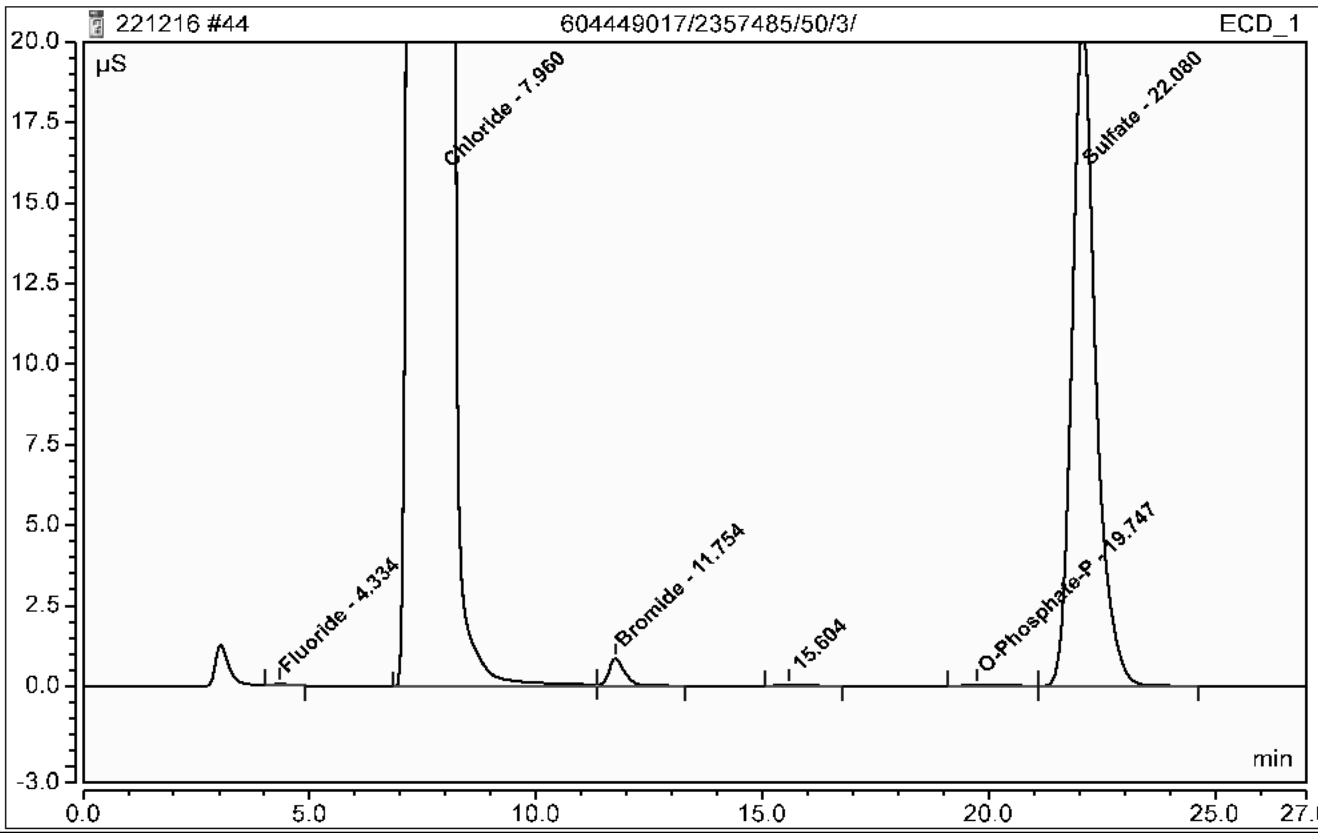
Sample Name:	**1205274030/2357485/200/2/PS**	*Injection Volume:*	**1.0**
Vial Number:	**30**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/16/2022 22:43**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.37	Fluoride	n.a.	2.3830		1.23930	1.18
2	7.58	Chloride	n.a.	223.8672		93.17357	88.66
3	9.37	Nitrite-N	n.a.	2.4533		2.04153	1.94
4	11.74	Bromide	n.a.	1.7728		0.26981	0.26
5	13.79	Nitrate-N	n.a.	2.2303		2.17613	2.07
6	19.67	O-Phosphate-P	n.a.	1.3375		0.38574	0.37
7	22.05	Sulfate	n.a.	20.3782		5.80101	5.52
Total:				254.4223	0.000	105.087	100.00

44 604449017/2357485/50/3/

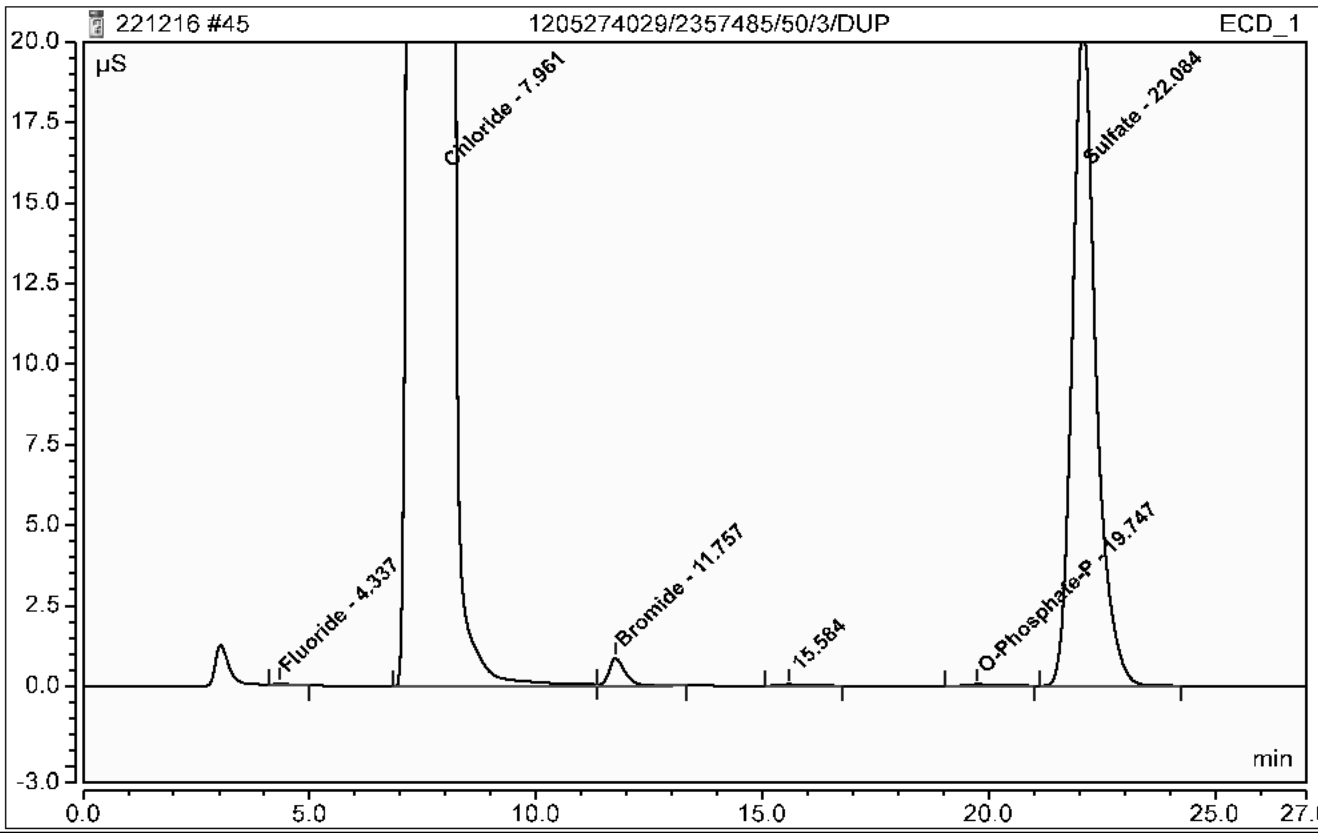
Sample Name:	**604449017/2357485/50/3/**	*Injection Volume:*	**1.0**
Vial Number:	**31**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/16/2022 23:13**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.33	Fluoride	n.a.	n.a.		0.01628	0.00
2	7.96	Chloride	n.a.	846.9647		352.64372	96.49
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
3	11.75	Bromide	n.a.	2.3091		0.35165	0.10
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
5	19.75	O-Phosphate-P	n.a.	0.1157		0.04333	0.01
6	22.08	Sulfate	n.a.	43.3750		12.39459	3.39
Total:				892.7647	0.000	365.450	99.99

45 1205274029/2357485/50/3/DUP

Sample Name:	**1205274029/2357485/50/3/DUP**	*Injection Volume:*	**1.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/16/2022 23:42**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



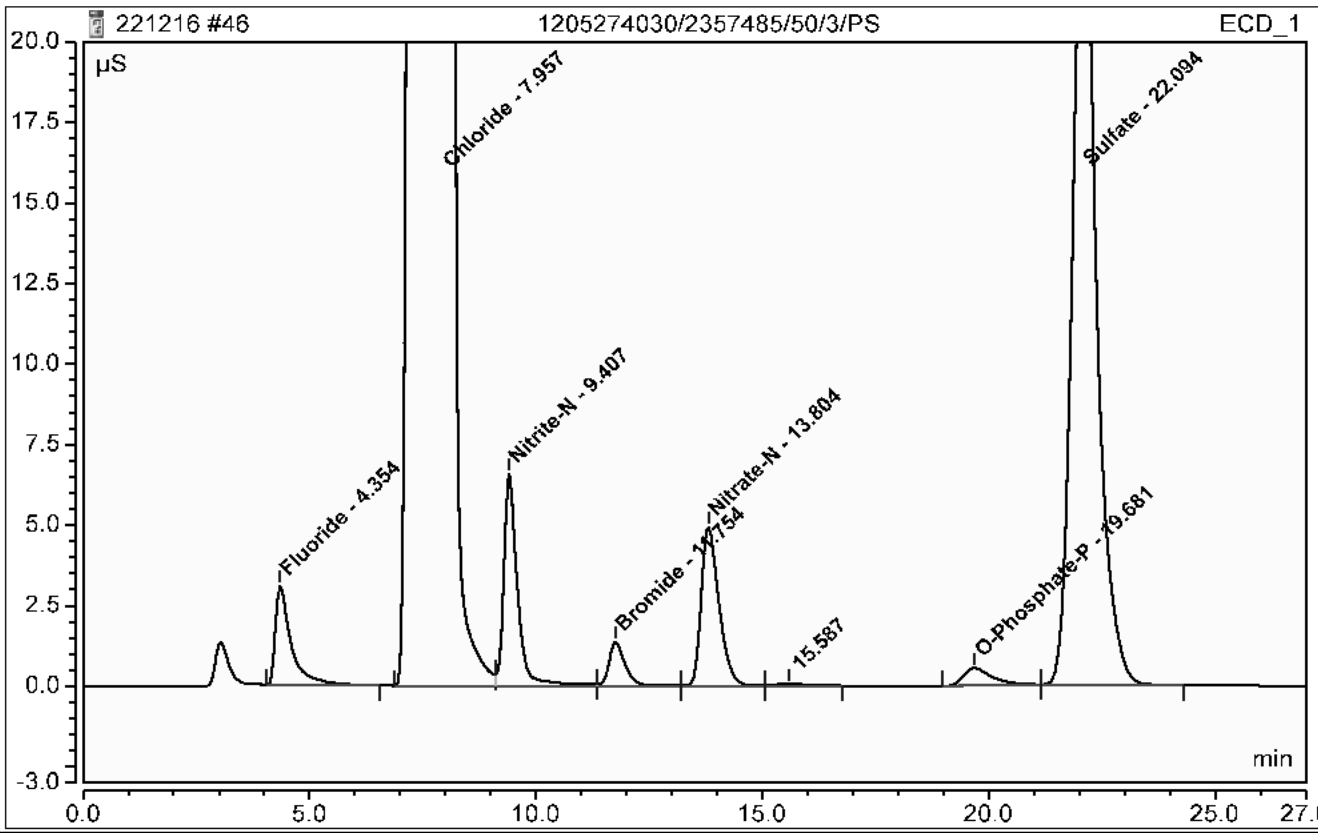
No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.34	Fluoride	n.a.	n.a.		0.01555	0.00
2	7.96	Chloride	n.a.	847.6133		352.91382	96.49
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
3	11.76	Bromide	n.a.	2.3270		0.35437	0.10
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
5	19.75	O-Phosphate-P	n.a.	0.1071		0.04091	0.01
6	22.08	Sulfate	n.a.	43.3745		12.39442	3.39
Total:				893.4219	0.000	365.719	99.99

This is runlog for Sequence 221216.seq for IC9

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
1205274030	12/17/22 00:12	2357485	50	221216	JLD1
CVH	12/17/22 00:42		1	221216	JLD1
CCB	12/17/22 01:12		1	221216	JLD1

46 1205274030/2357485/50/3/PS

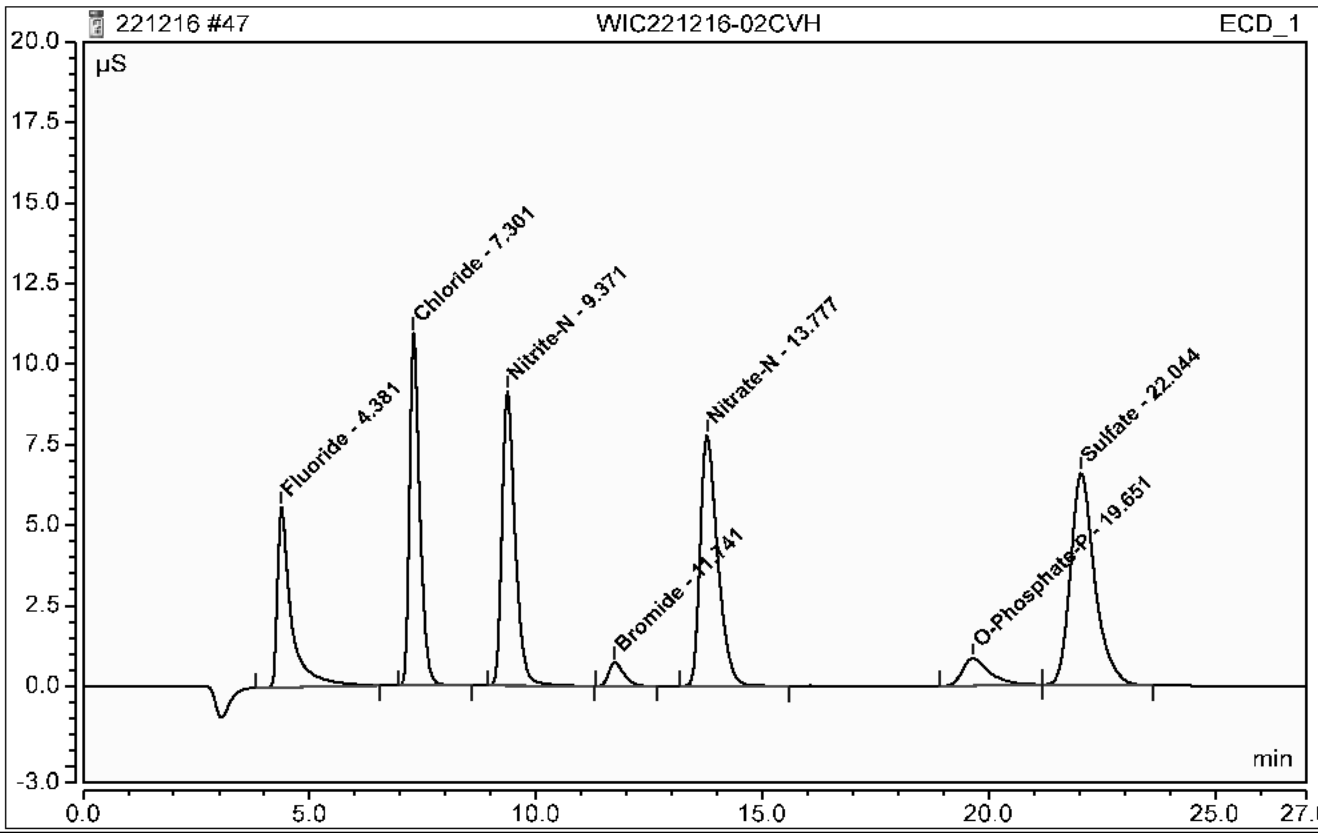
Sample Name:	**1205274030/2357485/50/3/PS**	*Injection Volume:*	**1.0**
Vial Number:	**33**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/17/2022 0:12**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.35	Fluoride	n.a.	2.3918		1.24381	0.33
2	7.96	Chloride	n.a.	845.1025		351.86825	93.98
3	9.41	Nitrite-N	n.a.	2.7351		2.28017	0.61
4	11.75	Bromide	n.a.	3.6585		0.55753	0.15
5	13.80	Nitrate-N	n.a.	2.2872		2.23264	0.60
7	19.68	O-Phosphate-P	n.a.	1.3785		0.39724	0.11
8	22.09	Sulfate	n.a.	55.1258		15.76372	4.21
Total:				912.6793	0.000	374.343	99.99

47 WIC221216-02CVH

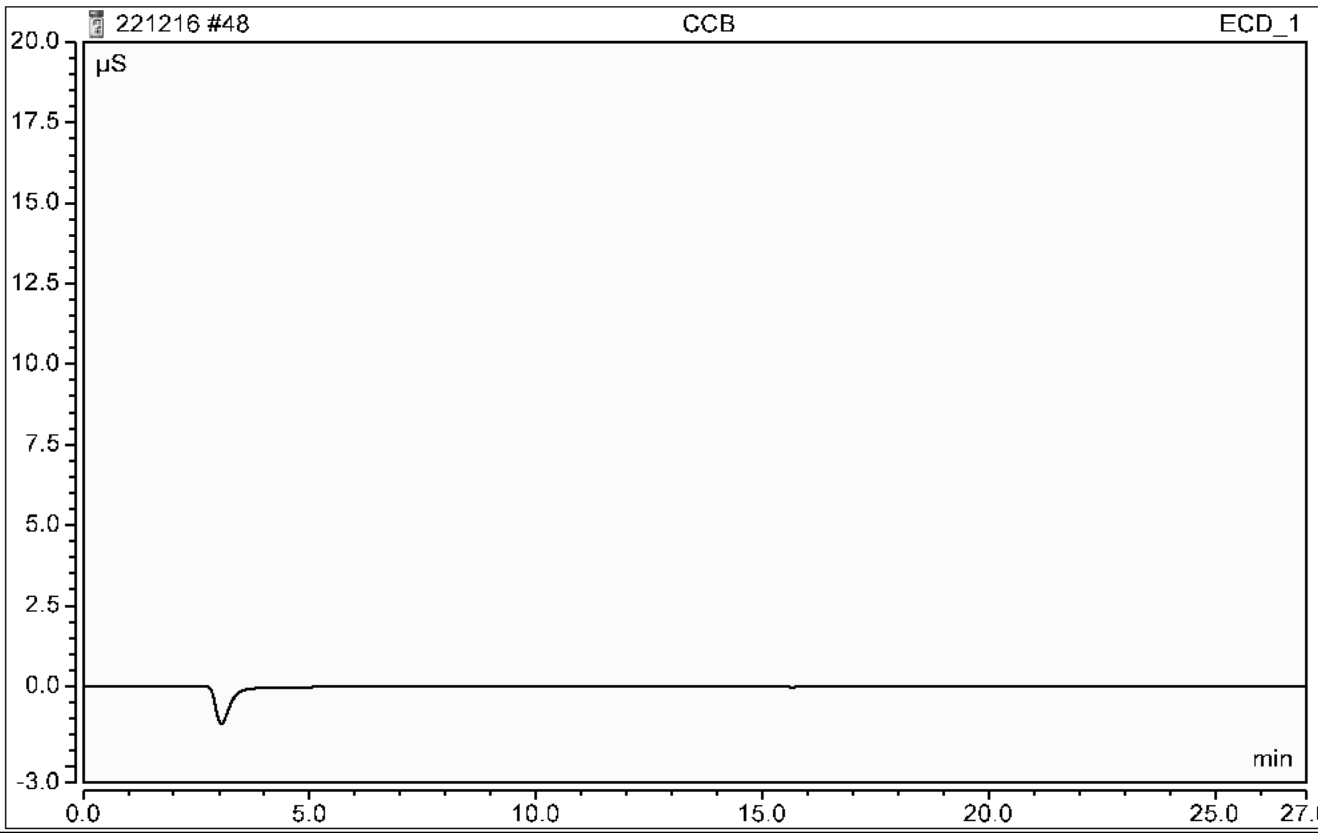
Sample Name:	**WIC221216-02CVH**	*Injection Volume:*	**1.0**
Vial Number:	**34**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/17/2022 0:42**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.38	Fluoride	n.a.	3.8617		1.99782	12.18
2	7.30	Chloride	n.a.	6.9871		2.86038	17.44
3	9.37	Nitrite-N	n.a.	3.6828		3.08249	18.79
4	11.74	Bromide	n.a.	1.8616		0.28336	1.73
5	13.78	Nitrate-N	n.a.	3.5571		3.49558	21.31
6	19.65	O-Phosphate-P	n.a.	2.0657		0.58983	3.60
7	22.04	Sulfate	n.a.	14.4320		4.09611	24.97
Total:				36.4478	0.000	16.406	100.00

48 CCB

Sample Name:	**CCB**	*Injection Volume:*	**1.0**
Vial Number:	**35**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/17/2022 1:12**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



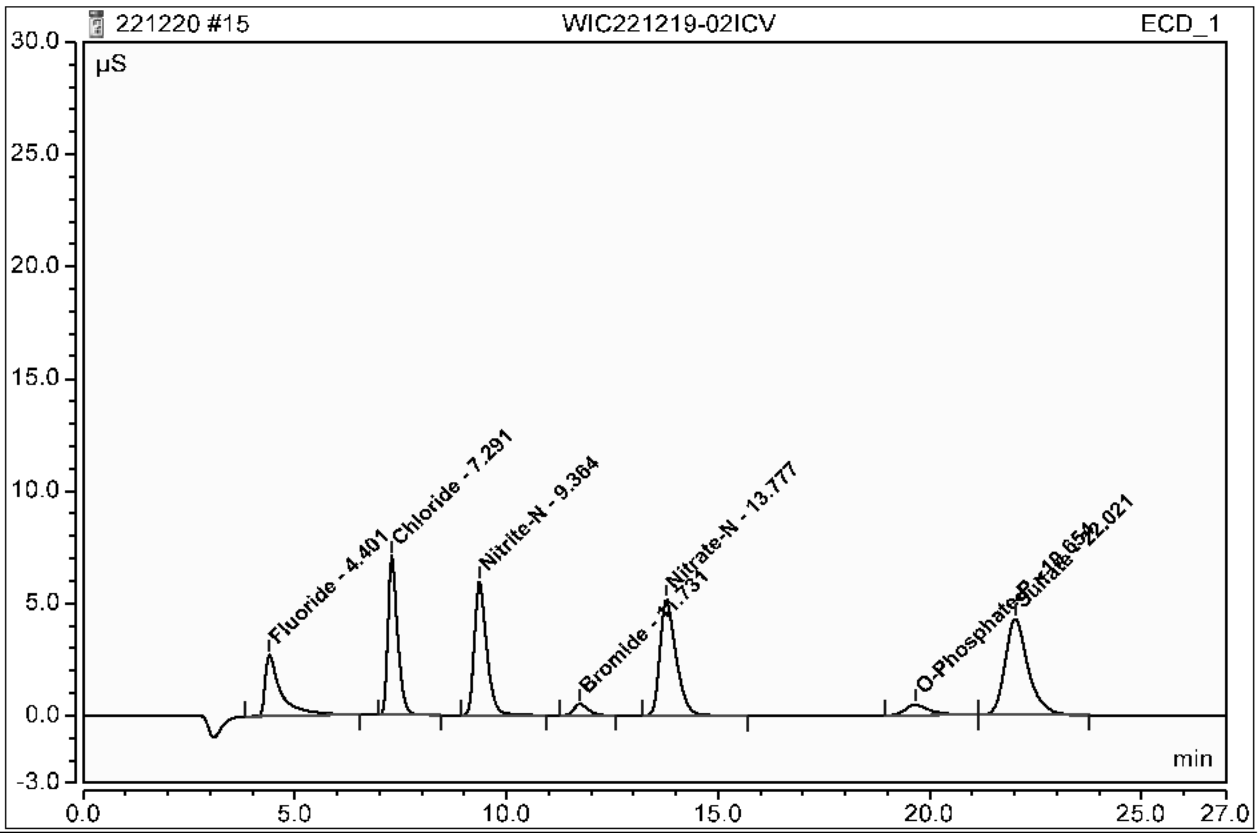
No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

This is runlog for Sequence 221220.seq for IC9

Sample ID	Run Time	Batch	Dilution	Dataset	Analyst
BLK	12/20/22 08:09	1		221220	JLD1
ICV	12/20/22 08:38	1		221220	JLD1
ICB	12/20/22 09:08	1		221220	JLD1
604449001	12/20/22 16:50	2357485	200	221220	JLD1
604449005	12/20/22 17:20	2357485	200	221220	JLD1
604449009	12/20/22 17:50	2357485	500	221220	JLD1
CVH	12/20/22 18:19	1		221220	JLD1
CCB	12/20/22 18:49	1		221220	JLD1
604819015	12/20/22 19:33	2359394	10	221220	JLD1
604819016	12/20/22 20:03	2359394	10	221220	JLD1
604819017	12/20/22 20:33	2359394	10	221220	JLD1
604819018	12/20/22 21:02	2359394	10	221220	JLD1
604819019	12/20/22 21:32	2359394	100	221220	JLD1
604819020	12/20/22 22:02	2359394	100	221220	JLD1
604827001	12/20/22 22:32	2359394	100	221220	JLD1
604827002	12/20/22 23:02	2359394	10	221220	JLD1
604911001	12/20/22 23:32	2359394	10	221220	JLD1

15 WIC221219-02ICV

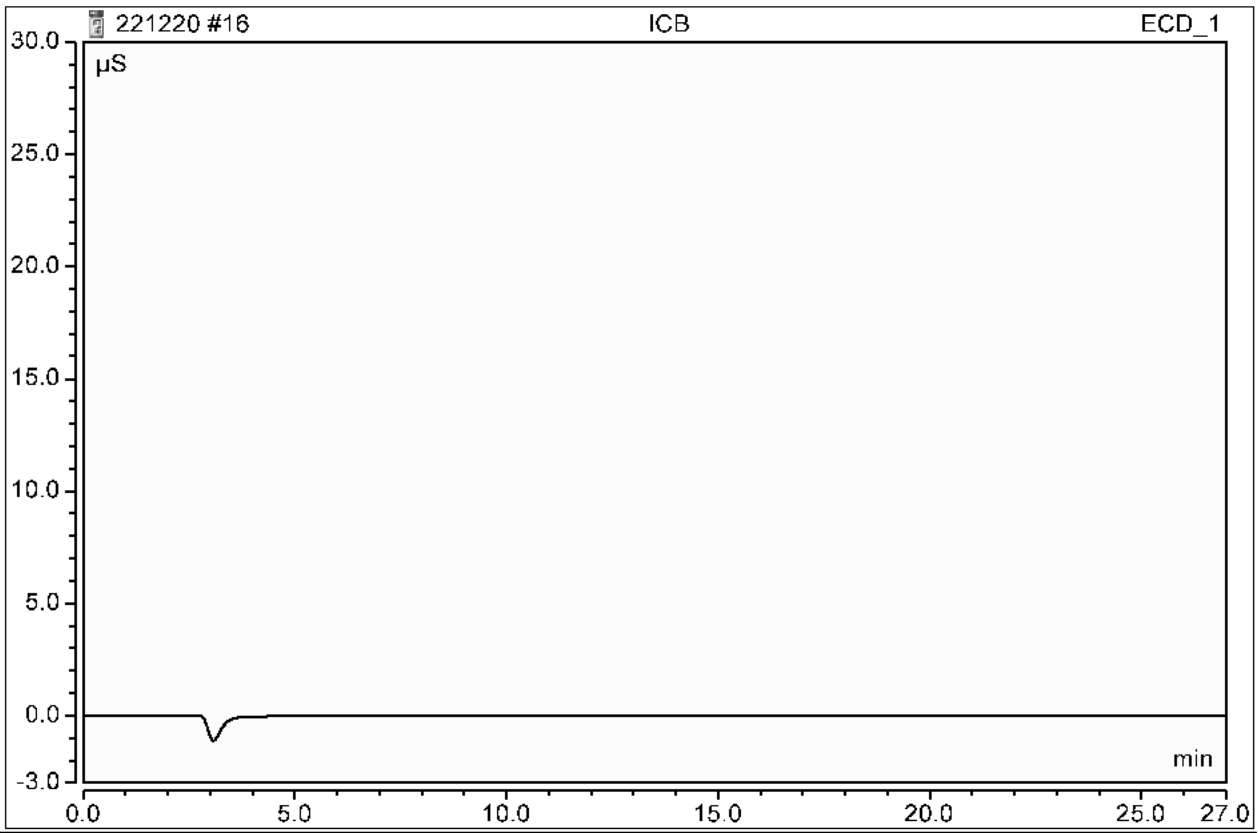
Sample Name:	**WIC221219-02ICV**	*Injection Volume:*	**1.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/20/2022 8:38**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.40	Fluoride	n.a.	2.3268		1.21044	11.51
2	7.29	Chloride	n.a.	4.5654		1.85198	17.61
3	9.36	Nitrite-N	n.a.	2.3984		1.99513	18.98
4	11.73	Bromide	n.a.	1.2415		0.18876	1.80
5	13.78	Nitrate-N	n.a.	2.3212		2.26648	21.56
6	19.65	O-Phosphate-P	n.a.	1.0572		0.30719	2.92
7	22.02	Sulfate	n.a.	9.5412		2.69384	25.62
Total:				23.4518	0.000	10.514	100.00

16 ICB

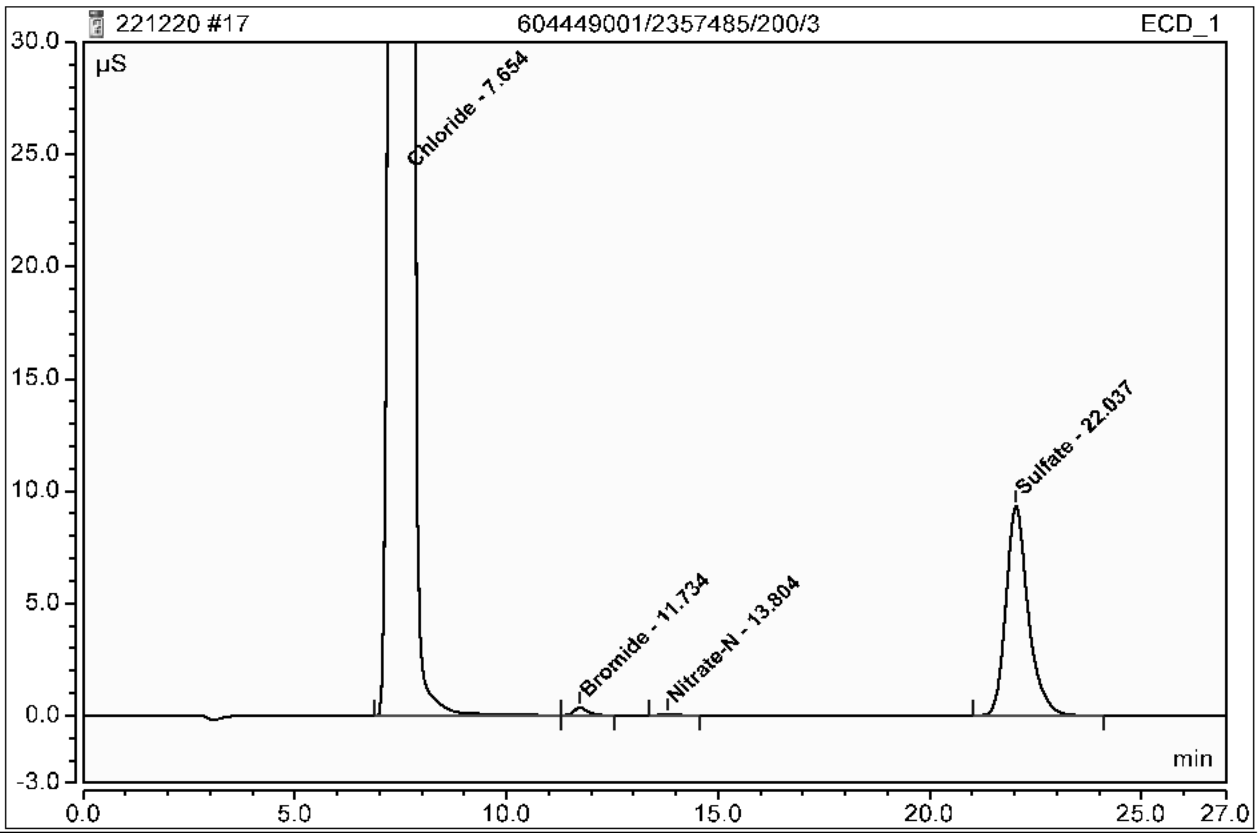
Sample Name:	**ICB**	*Injection Volume:*	**1.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/20/2022 9:08**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

17 604449001/2357485/200/3

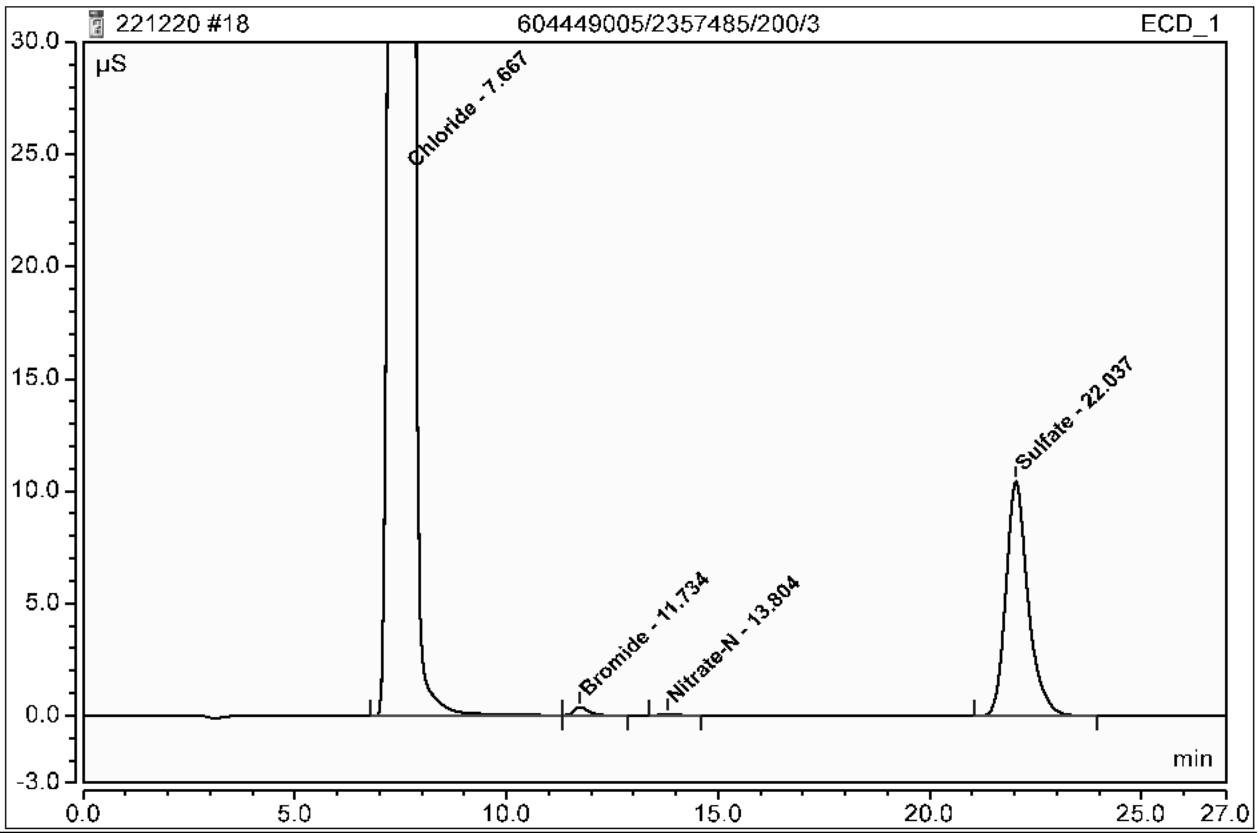
Sample Name:	**604449001/2357485/200/3**	*Injection Volume:*	**1.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/20/2022 16:50**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
1	7.65	Chloride	n.a.	319.6744		133.06959	95.79
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
2	11.73	Bromide	n.a.	0.8627		0.13095	0.09
3	13.80	Nitrate-N	n.a.	0.0747		0.03229	0.02
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	22.04	Sulfate	n.a.	19.9868		5.68877	4.09
Total:				340.5985	0.000	138.922	100.00

18 604449005/2357485/200/3

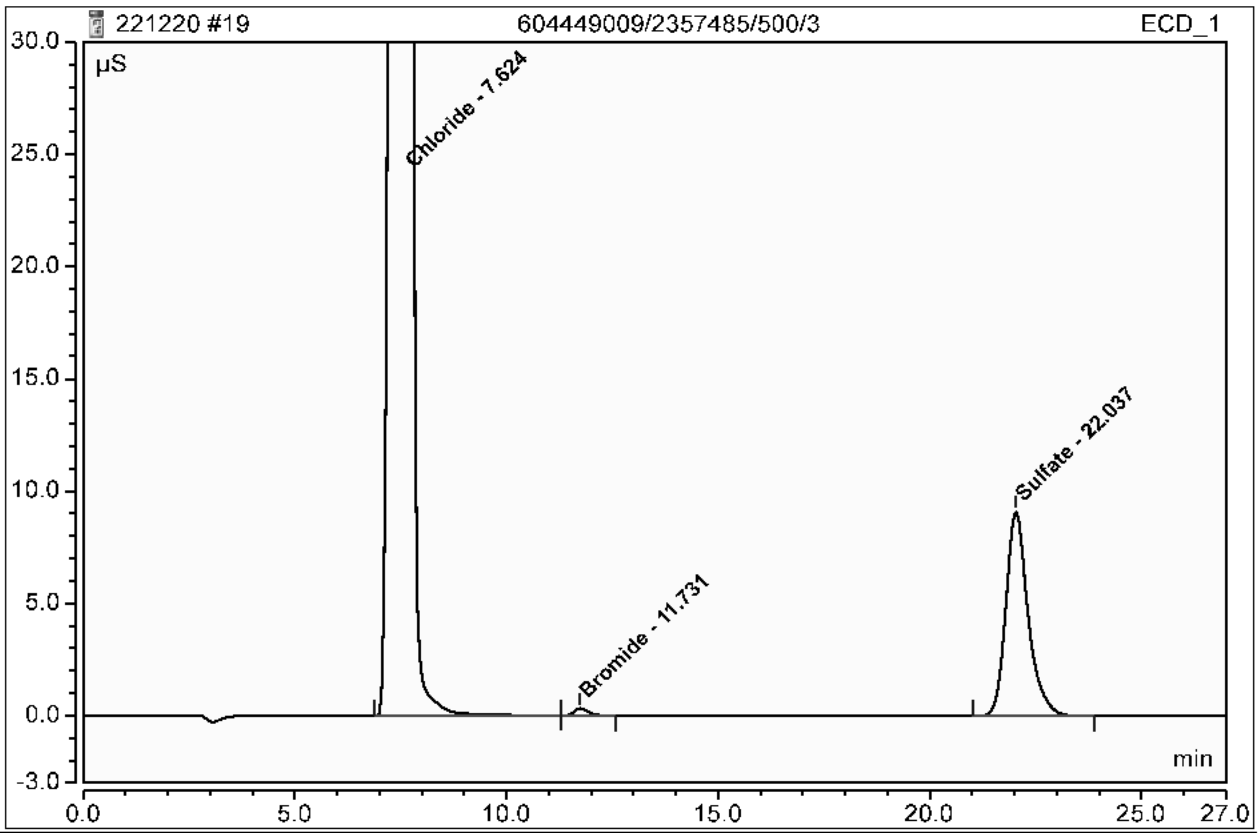
Sample Name:	**604449005/2357485/200/3**	*Injection Volume:*	**1.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/20/2022 17:20**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
1	7.67	Chloride	n.a.	344.0184		143.20692	95.65
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
2	11.73	Bromide	n.a.	1.0105		0.15350	0.10
3	13.80	Nitrate-N	n.a.	0.0784		0.03604	0.02
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
4	22.04	Sulfate	n.a.	22.2244		6.33035	4.23
Total:				367.3318	0.000	149.727	100.00

19 604449009/2357485/500/3

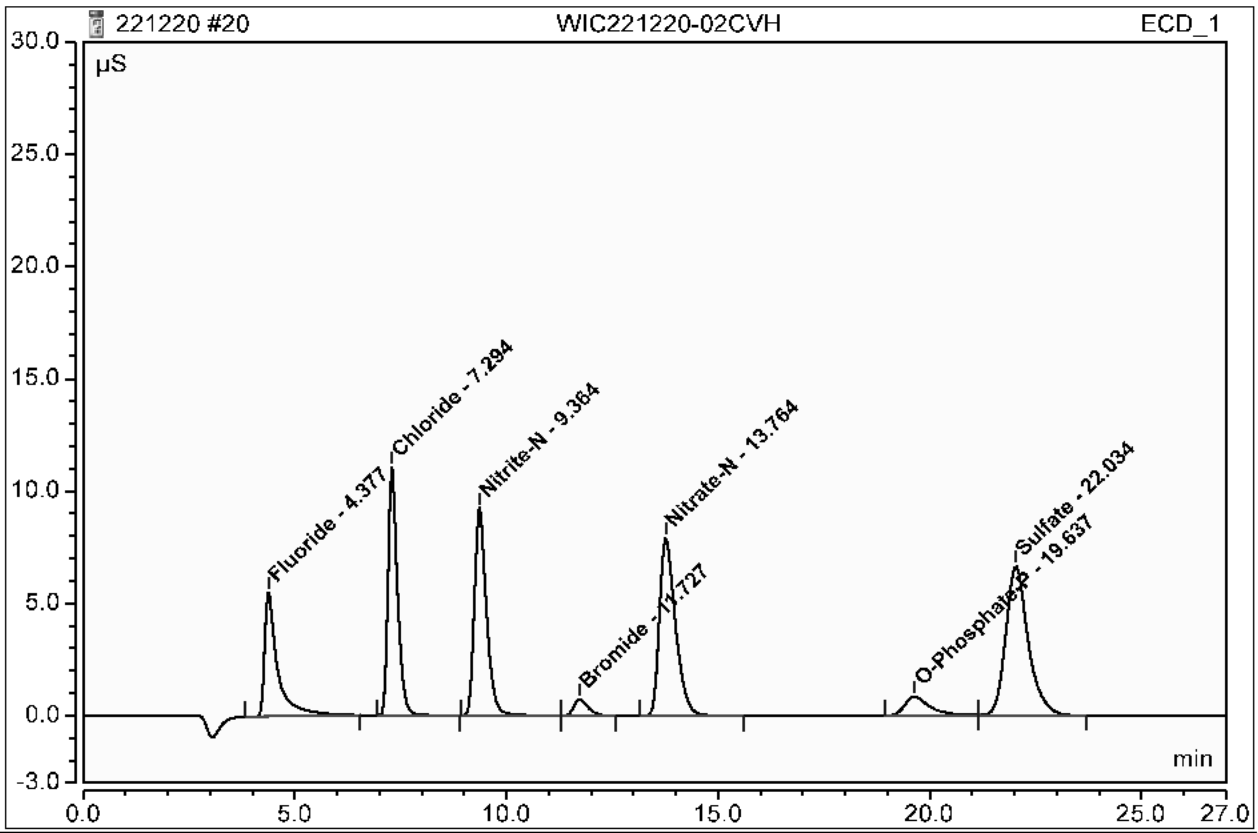
Sample Name:	**604449009/2357485/500/3**	*Injection Volume:*	**1.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/20/2022 17:50**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
1	7.62	Chloride	n.a.	284.9829		118.62338	95.44
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
2	11.73	Bromide	n.a.	0.8438		0.12808	0.10
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
3	22.04	Sulfate	n.a.	19.4550		5.53629	4.45
Total:				305.2818	0.000	124.288	100.00

20 WIC221220-02CVH

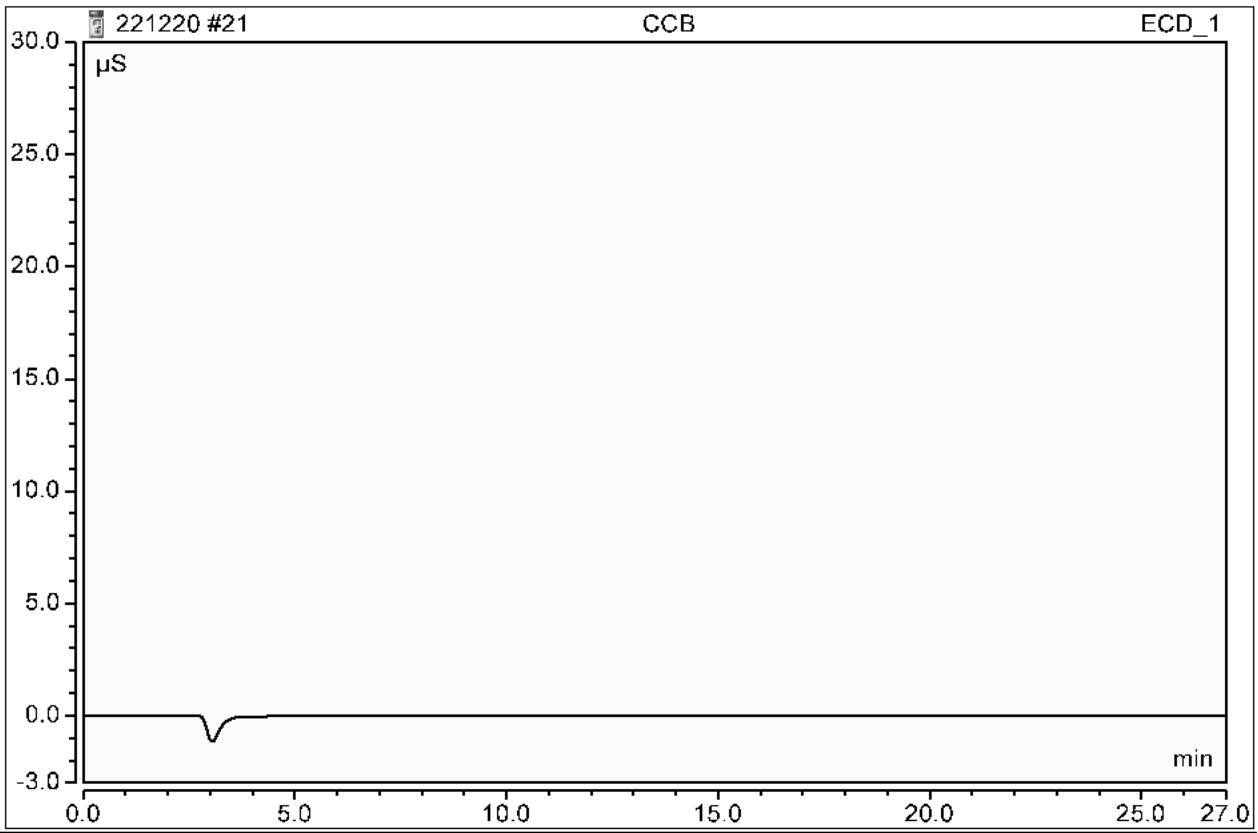
Sample Name:	**WIC221220-02CVH**	*Injection Volume:*	**1.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/20/2022 18:19**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
1	4.38	Fluoride	n.a.	3.8102		1.97142	12.12
2	7.29	Chloride	n.a.	6.9390		2.84037	17.46
3	9.36	Nitrite-N	n.a.	3.6533		3.05758	18.79
4	11.73	Bromide	n.a.	1.8623		0.28347	1.74
5	13.76	Nitrate-N	n.a.	3.5352		3.47388	21.35
6	19.64	O-Phosphate-P	n.a.	1.9925		0.56931	3.50
7	22.03	Sulfate	n.a.	14.3579		4.07486	25.04
Total:				36.1505	0.000	16.271	100.00

21 CCB

Sample Name:	**CCB**	*Injection Volume:*	**1.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Control Program:	**AS23**	*Sample Weight:*	**1.0000**
Quantif. Method:	**221004an**	*Sample Amount:*	**1.0000**
Recording Time:	**12/20/2022 18:49**	Analyst:	**JLD1**
Run Time (min):	**27.00**	Column:	**AS23-001528;GLGCE086;300;9056**



No.	Ret.Time min	Peak Name	Concentration mg/L	Amount mg/L	Modified?	Area µS*min	Rel.Area %
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrite-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Nitrate-N	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	O-Phosphate-P	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.
Total:				0.0000	0.000	0.000	0.00

Radiological Analysis

Case Narrative

Radiochemistry
Technical Case Narrative
Triad National Security, LLC
SDG #: 2023-289
Work Order #: 604449

Product: **Ra228**
Analytical Method: EPA 904.0/SW846 9320 Modified
Analytical Procedure: GL-RAD-A-063 REV# 5
Analytical Batch: 2358072

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
604449002	SMEB01-23-265371
604449006	SMEB02-23-265372
604449010	SMEB03-23-265373
604449014	SMEB04-23-265374
604449018	SMEB05-23-265375
1205274775	Method Blank (MB)
1205274776	604449002(SMEB01-23-265371) Sample Duplicate (DUP)
1205274777	604449002(SMEB01-23-265371) Matrix Spike (MS)
1205274778	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Preparation Information

Homogenous Matrix
Samples were non-homogenous matrix. Samples were cloudy and tinted yellow

Quality Control (QC) Information

Blank Information
Aliquots for samples 1205274775 (MB) and 1205274778 (LCS) were changed to 1.0 per client request.

RDL Met
The following RDL was met with rounding.

Sample	Analyte	Value
1205274776 (SMEB01-23-265371DUP)	Radium-228	Result 0.85 < MDA 1.35 > RDL 1 pCi/L

Technical Information

Recounts

Sample 1205274776 (SMEB01-23-265371DUP) was recounted to verify sample results. Recount is reported.

Miscellaneous Information

Additional Comments
The matrix spike, 1205274777 (SMEB01-23-265371MS), aliquot was reduced to conserve sample volume. Samples (See Below) did not meet the client's yield requirement; however, the GEL internal yield requirement was met.

Sample	Analyte	Value
1205274776 (SMEB01-23-265371DUP)	Barium-133 Tracer	38.2* (50%-105%)
604449002 (SMEB01-23-265371)	Barium-133 Tracer	37.7* (50%-105%)
604449006 (SMEB02-23-265372)	Barium-133 Tracer	37.3* (50%-105%)
604449010 (SMEB03-23-265373)	Barium-133 Tracer	37.3* (50%-105%)
604449014 (SMEB04-23-265374)	Barium-133 Tracer	28.9* (50%-105%)
604449018 (SMEB05-23-265375)	Barium-133 Tracer	37.9* (50%-105%)

Product: **Ra226**
Analytical Method: EPA 903.1 Modified
Analytical Procedure: GL-RAD-A-008 REV# 15
Analytical Batch: 2358065

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
604449002	SMEB01-23-265371
604449006	SMEB02-23-265372
604449010	SMEB03-23-265373
604449014	SMEB04-23-265374
604449018	SMEB05-23-265375
1205274748	Method Blank (MB)
1205274749	604449002(SMEB01-23-265371) Sample Duplicate (DUP)
1205274750	604449002(SMEB01-23-265371) Matrix Spike (MS)
1205274751	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Preparation Information

Homogenous Matrix
Samples were non-homogenous matrix.

Quality Control (QC) Information

Blank Information
Aliquots for samples 1205274748 (MB) and 1205274751 (LCS) were changed to 1.0 per client request.

Miscellaneous Information

Additional Comments
The matrix spike, 1205274750 (SMEB01-23-265371MS), aliquot was reduced to conserve sample volume.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Qualifier Definition Report
for

TNSL001 Triad National Security, LLC (620266)

Client SDG: 2023-289 GEL Work Order: 604449

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria
** Analyte is a Tracer compound
U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature:  **Name: Theresa Austin**

Date: 22 DEC 2022 **Title: Group Leader**

Sample Data Summary

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-00, SM1237, Rm104C
Los Alamos, New Mexico 87545
Report Date: December 22, 2022
Contact: Mr. Stanislaw Marczak
Project: LANL

Client Sample ID: SMEB01-23-265371
Sample ID: 604449002
Matrix: W
Collect Date: 14-DEC-22
Receive Date: 16-DEC-22
Collector: GEL

Project: TNSL00100
Client ID: TNSL001

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting															
Calculation "See Parent Products"															
Radium-226+228 Sum		0.326	+/-0.309			+/-0.310		pCi/L			NXL1	12/22/22	1547	2358071	1
Ra228 "As Received"															
Radium-228	U	-0.0997	+/-0.242	0.945	0.412	+/-0.242	1.00	pCi/L			JE1	12/22/22	0820	2358072	2
Rad Radium-226															
Ra226 "As Received"															
Radium-226	U	0.326	+/-0.192	0.625	0.242	+/-0.194	1.00	pCi/L			LXP1	12/22/22	0950	2358065	3

The following Analytical Methods were performed

Method	Description
1	Calculation
2	EPA 904.0/SW846 9320 Modified
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%		Acceptable Limits
Barium-133 Tracer	Ra228 "As Received"	2358072	37.7	*	(50%-105%)

Notes:

The MDC is a sample specific MDC.
TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
Lc/LC: Critical Level
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Mtd.: Method
PF: Prep Factor
RL: Reporting Limit
TPU: Total Propagated Uncertainty

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-00, SM1237, Rm104C
Los Alamos, New Mexico 87545
Report Date: December 22, 2022
Contact: Mr. Stanislaw Marczak
Project: LANL

Client Sample ID: SMEB02-23-265372
Sample ID: 604449006
Matrix: W
Collect Date: 14-DEC-22
Receive Date: 16-DEC-22
Collector: GEL

Project: TNSL00100
Client ID: TNSL001

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting															
Calculation "See Parent Products"															
Radium-226+228 Sum		1.06	+/-0.364			+/-0.376		pCi/L			NXL1	12/22/22	1547	2358071	1
Ra228 "As Received"															
Radium-228	U	0.578	+/-0.304	0.980	0.420	+/-0.313	1.00	pCi/L			JE1	12/22/22	0820	2358072	2
Rad Radium-226															
Ra226 "As Received"															
Radium-226	U	0.483	+/-0.201	0.588	0.228	+/-0.209	1.00	pCi/L			LXP1	12/22/22	0950	2358065	3

The following Analytical Methods were performed

Method	Description
1	Calculation
2	EPA 904.0/SW846 9320 Modified
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%		Acceptable Limits
Barium-133 Tracer	Ra228 "As Received"	2358072	37.3	*	(50%-105%)

Notes:

The MDC is a sample specific MDC.
TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
Lc/LC: Critical Level
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Mtd.: Method
PF: Prep Factor
RL: Reporting Limit
TPU: Total Propagated Uncertainty

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-00, SM1237, Rm104C
Los Alamos, New Mexico 87545
Report Date: December 22, 2022
Contact: Mr. Stanislaw Marczak
Project: LANL

Client Sample ID: SMEB03-23-265373
Sample ID: 604449010
Matrix: W
Collect Date: 14-DEC-22
Receive Date: 16-DEC-22
Collector: GEL

Project: TNSL00100
Client ID: TNSL001

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting															
Calculation "See Parent Products"															
Radium-226+228 Sum		2.47	+/-0.444			+/-0.500		pCi/L			NXL1	12/22/22	1547	2358071	1
Ra228 "As Received"															
Radium-228		1.58	+/-0.360	0.989	0.439	+/-0.413	1.00	pCi/L			JE1	12/22/22	0820	2358072	2
Rad Radium-226															
Ra226 "As Received"															
Radium-226		0.887	+/-0.260	0.672	0.266	+/-0.281	1.00	pCi/L			LXP1	12/22/22	0950	2358065	3

The following Analytical Methods were performed

Method	Description
1	Calculation
2	EPA 904.0/SW846 9320 Modified
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%		Acceptable Limits
Barium-133 Tracer	Ra228 "As Received"	2358072	37.3	*	(50%-105%)

Notes:

The MDC is a sample specific MDC.
TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
Lc/LC: Critical Level
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Mtd.: Method
PF: Prep Factor
RL: Reporting Limit
TPU: Total Propagated Uncertainty

GEL LABORATORIES LLC
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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-00, SM1237, Rm104C

Los Alamos, New Mexico 87545 Report Date: December 22, 2022

Contact: Mr. Stanislaw Marczak
Project: LANL

Client Sample ID: SMEB04-23-265374 Project: TNSL00100
Sample ID: 604449014 Client ID: TNSL001
Matrix: W
Collect Date: 14-DEC-22
Receive Date: 16-DEC-22
Collector: GEL

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting															
Calculation "See Parent Products"															
Radium-226+228 Sum		2.54	+/-0.437			+/-0.518		pCi/L			NXL1	12/22/22	1547	2358071	1
Ra228 "As Received"															
Radium-228		2.16	+/-0.383	0.981	0.438	+/-0.473	1.00	pCi/L			JE1	12/22/22	0820	2358072	2
Rad Radium-226															
Ra226 "As Received"															
Radium-226	U	0.375	+/-0.210	0.675	0.267	+/-0.213	1.00	pCi/L			LXP1	12/22/22	0950	2358065	3

The following Analytical Methods were performed

Method	Description
1	Calculation
2	EPA 904.0/SW846 9320 Modified
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%		Acceptable Limits
Barium-133 Tracer	Ra228 "As Received"	2358072	28.9	*	(50%-105%)

Notes:

The MDC is a sample specific MDC.
TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
Lc/LC: Critical Level
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Mtd.: Method
PF: Prep Factor
RL: Reporting Limit
TPU: Total Propagated Uncertainty

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-00, SM1237, Rm104C
Los Alamos, New Mexico 87545
Report Date: December 22, 2022
Contact: Mr. Stanislaw Marczak
Project: LANL

Client Sample ID: SMEB05-23-265375
Sample ID: 604449018
Matrix: W
Collect Date: 14-DEC-22
Receive Date: 16-DEC-22
Collector: GEL

Project: TNSL00100
Client ID: TNSL001

Parameter	Qualifier	Result	Uncertainty	MDC	Lc	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting															
Calculation "See Parent Products"															
Radium-226+228 Sum		0.363	+/-0.299			+/-0.302		pCi/L			NXL1	12/22/22	1547	2358071	1
Ra228 "As Received"															
Radium-228	U	-0.0199	+/-0.262	0.985	0.433	+/-0.262	1.00	pCi/L			JE1	12/22/22	0820	2358072	2
Rad Radium-226															
Ra226 "As Received"															
Radium-226	U	0.363	+/-0.145	0.386	0.133	+/-0.150	1.00	pCi/L			LXP1	12/22/22	0950	2358065	3

The following Analytical Methods were performed

Method	Description
1	Calculation
2	EPA 904.0/SW846 9320 Modified
3	EPA 903.1 Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%		Acceptable Limits
Barium-133 Tracer	Ra228 "As Received"	2358072	37.9	*	(50%-105%)

Notes:

The MDC is a sample specific MDC.
TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
Lc/LC: Critical Level
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Mtd.: Method
PF: Prep Factor
RL: Reporting Limit
TPU: Total Propagated Uncertainty

Quality Control Summary

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Client : **Los Alamos National Laboratory**
TA-00, SM1237, Rm104C
Los Alamos, New Mexico
Contact: **Mr. Stanislaw Marczak**
Workorder: **604449**

Report Date: December 22, 2022

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 2358072										
QC1205274776 604449002 DUP										
Radium-228	U	-0.0997	U	0.850	pCi/L	0.706		(0-1)	JE1	12/22/22 10:33
	Uncert:	+/-0.242		+/-0.417						
	TPU:	+/-0.242		+/-0.431						
**Barium-133 Tracer	1280	484		491	CPM		38.2*	(50%-105%)		
QC1205274778 LCS										
Radium-228	19.7			19.3	pCi/L		98.1	(80%-120%)	JE1	12/22/22 08:20
	Uncert:			+/-0.758						
	TPU:			+/-2.59						
**Barium-133 Tracer	656			372	CPM		56.7	(50%-105%)		
QC1205274775 MB										
Radium-228			U	-0.0847	pCi/L				JE1	12/22/22 08:19
	Uncert:			+/-0.124						
	TPU:			+/-0.124						
**Barium-133 Tracer	1280			1070	CPM		83.1	(50%-105%)		
QC1205274777 604449002 MS										
Radium-228	391 U	-0.0997		444	pCi/L		114	(75%-125%)	JE1	12/22/22 08:19
	Uncert:	+/-0.242		+/-12.7						
	TPU:	+/-0.242		+/-58.0						
**Barium-133 Tracer	1280	484		1130	CPM		88.4	(50%-105%)		
Rad Ra-226										
Batch 2358065										
QC1205274749 604449002 DUP										
Radium-226	U	0.326		0.711	pCi/L	0.471		(0-1)	LXP1	12/22/22 09:51
	Uncert:	+/-0.192		+/-0.207						
	TPU:	+/-0.194		+/-0.214						
QC1205274751 LCS										
Radium-226	13.4			13.0	pCi/L		97.4	(80%-120%)	LXP1	12/22/22 10:23
	Uncert:			+/-0.539						
	TPU:			+/-1.21						
QC1205274748 MB										
Radium-226			U	0.107	pCi/L				LXP1	12/22/22 09:50
	Uncert:			+/-0.0932						
	TPU:			+/-0.0941						
QC1205274750 604449002 MS										
Radium-226	130 U	0.326		106	pCi/L		81.5	(75%-125%)	LXP1	12/22/22 09:51
	Uncert:	+/-0.192		+/-4.78						
	TPU:	+/-0.194		+/-10.6						

Notes:

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

QC Summary

Workorder: **604449**

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date	Time

The Qualifiers in this report are defined as follows:

**	Analyte is a Tracer compound
<	Result is less than value reported
>	Result is greater than value reported
BD	Results are either below the MDC or tracer recovery is low
FA	Failed analysis.
H	Analytical holding time was exceeded
J	See case narrative for an explanation
J	Value is estimated
K	Analyte present. Reported value may be biased high. Actual value is expected to be lower.
L	Analyte present. Reported value may be biased low. Actual value is expected to be higher.
M	M if above MDC and less than LLD
M	REMP Result > MDC/CL and < RDL
N/A	RPD or %Recovery limits do not apply.
N1	See case narrative
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Q	One or more quality control criteria have not been met. Refer to the applicable narrative or DER.
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
UI	Gamma Spectroscopy--Uncertain identification
UJ	Gamma Spectroscopy--Uncertain identification
UL	Not considered detected. The associated number is the reported concentration, which may be inaccurate due to a low bias.
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	Other specific qualifiers were required to properly define the results. Consult case narrative.
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
** Indicates analyte is a surrogate/tracer compound.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptence criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Gas Flow Raw Data

Blank Correction Report

Batch ID 2358072

GEL ID	Sample Type	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1205274776	DUP	Barium-133 Tracer	901 mL	491			1187.56937	CPM	YES
		Radium-228	901 mL	0.850	0.431	1.35	-.09400666	pCi/L	NO
1205274778	LCS	Barium-133 Tracer	1000 mL	372			1070	CPM	YES
		Radium-228	1000 mL	19.3	2.59	0.725	-.0847	pCi/L	NO
1205274775	MB	Barium-133 Tracer	1000 mL	1070			1070	CPM	YES
		Radium-228	1000 mL	-0.0847	0.124	0.486	-.0847	pCi/L	NO
1205274777	MS	Barium-133 Tracer	50.4 mL	1130			21230.1587	CPM	YES
		Radium-228	50.4 mL	444	58.0	10.1	-1.6805556	pCi/L	NO
604449002	SAMPLE	Barium-133 Tracer	901 mL	484			1187.56937	CPM	YES
		Radium-228	901 mL	-0.0997	0.242	0.945	-.09400666	pCi/L	NO
604449006	SAMPLE	Barium-133 Tracer	904 mL	478			1183.62832	CPM	YES
		Radium-228	904 mL	0.578	0.313	0.980	-.09369469	pCi/L	NO
604449010	SAMPLE	Barium-133 Tracer	901 mL	478			1187.56937	CPM	YES
		Radium-228	901 mL	1.58	0.413	0.989	-.09400666	pCi/L	NO
604449014	SAMPLE	Barium-133 Tracer	900 mL	371			1188.88889	CPM	YES
		Radium-228	900 mL	2.16	0.473	0.981	-.09411111	pCi/L	NO
604449018	SAMPLE	Barium-133 Tracer	901 mL	487			1187.56937	CPM	YES
		Radium-228	901 mL	-0.0199	0.262	0.985	-.09400666	pCi/L	NO

Batch 2358072 Check-list

This check-list was completed on 22-DEC-22 by Nat Long

This batch was reviewed by Kenshalla Oston on 22-DEC-22 and Nat Long on 22-DEC-22.

Batch ID: 2358072

Product: GFC28RAL

Description: Gas Flow Radium 228 GL-RAD-A-063

#	Criteria	Yes	No	Comments
Preparation Information				
1	Were all of the samples homogenous? Include sample description if not homogenous		No	
2	Was the preservation correct for this analysis?	Yes		
Internal Checklist Information				
3	Are instrument source checks within limits?	Yes		
4	Has an Aliquot Correction been completed for this batch?		No	
5	Have sample historical results been reviewed for this batch?	Yes		
Technical Information				
6	Were all the samples prepared/analyzed within the required holding time period?	Yes		
7	Are any sample results more negative than 3xTPU?		No	
Quality Control (QC) Information				
8	Was the method blank (MB) within the acceptance criteria?	Yes		
9	Is the blank result less than 1.65 times the CSU?	Yes		
10	Is the blank result less than the decision level? Use the results greater than CL report to check.	Yes		
11	Were the laboratory control sample (LCS/LCSD) recoveries within the acceptance limits?	Yes		
12	Were the matrix spike (MS/MSD) recoveries within the acceptance limits?	Yes		
13	Were the relative percent differences and/or error (RPD/RER) between the sample and its duplicate within acceptable limits?	Yes		
14	Has the method required detection limit been met?		No	
Miscellaneous Information				
15	Are sample-specific MDA/MDC calculated and reported?	Yes		

Prep Logbook

Radium−228 in Liquid

Batch ID: **2358072**
Analyst: Jacqueline Emond (JE1)
Method: EPA 904.0/SW846 9320 Modified
Lab SOP: GL−RAD−A−063 REV# 5
Instrument: LUCAS−C202389980

Due Dates for Lab: 21−DEC−2022 **Package: 23−DEC−2022** **SDG: 23−DEC−2022**

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1205274778	228 DW spike	1952−B	.1	mL
MS	1205274777	228 DW spike	1952−B	.1	mL

#	Sample ID	Prep Date	Min RDL (pCi/L)	Unadjusted Aliquot (g)	Aliquot (mL)	Ac−228 Ingrow (date)	Ac−228 Separation (date)
1	604449002	19−DEC−2022	1	901.11	901.11	12/20/22 13:30	12/22/22 06:25
2	604449006	19−DEC−2022	1	904.37	904.37	12/20/22 13:30	12/22/22 06:25
3	604449010	19−DEC−2022	1	901.37	901.37	12/20/22 13:30	12/22/22 06:25
4	604449014	19−DEC−2022	1	900.31	900.31	12/20/22 13:30	12/22/22 06:25
5	604449018	19−DEC−2022	1	900.61	900.61	12/20/22 13:30	12/22/22 06:25
6	1205274775 MB	19−DEC−2022	1		1000	12/20/22 13:30	12/22/22 06:25
7	1205274776 DUP (604449002)	19−DEC−2022	1	900.84	900.84	12/20/22 13:30	12/22/22 06:25
8	1205274777 MS (604449002)	19−DEC−2022	1	50.4	50.4	12/20/22 13:30	12/22/22 06:25
9	1205274778 LCS	19−DEC−2022	1		1000	12/20/22 13:30	12/22/22 06:25

Reagent/Solvent Lot ID	Description	Amount
WORK 1951−D	Ba−133	.1 mL
REGNT 3418276.6	29M HF (48−50%)	4 mL
REGNT 3454370.1	Nitric Acid	5 mL
REGNT 3465466	Barium Carrier Ra228 REG	1 mL
REGNT 3521298	RGF−Neodymium Subtrate	5 mL
REGNT 3528714	500 mg/mL Neodymium Carrier	.2 mL
REGNT 3532398	RGF−1M Citric Acid	5 mL
REGNT 3645221.6	Acetic Acid Glacial ACS Poly Coated Bottle	10 mL
REGNT 3647296	RGF−50% Potassium Carbonate	2 mL
REGNT 3648545	2M HCl	20 mL
REGNT 3648549	RGF−7M Nitric Acid	25 mL
REGNT 3648637	RGF−1.5M Ammonium Sulfate	10 mL
REGNT DGA0040	2346736	2 g

Comments:
Pipet Id: RAD−GFC−1795419
Data Entry Date2: 19−DEC−2022 00:00

Radium-228 Liquid

Filename : RA228.XLS
File type : Excel
Version # : 1.4.2

Tracer S/N : 1951-D
Tracer Exp Date : 6/2/2023
Tracer Volume Added: 0.10

Batch : 2358072
Analyst : JAC02417
Prep Date : 12/19/2022
Ra-228 Method Uncertainty : 0.1268

Geometry: 25mm Filter

Procedure Code : GFC28RAL
Parmname : Radium-228
Required MDC : 1 pCi/L
Ra-228 Abundance : 1.00
Halflife of Ra-228 : 5.75 years
Halflife of Ac-228 : 6.15 hours

Sample Characteristics					Tracer Calculations					
Pos.	Sample ID	Sample Aliquot L	Sample Aliquot StDev. L	Sample Date/Time	Tracer Ref. Activity (CPM)	Tracer Ref. Count Uncertainty (%)	Tracer Samp. Activity (CPM)	Tracer Samp. Count Uncertainty (%)	Tracer Aliquot (mL)	Tracer Aliquot StDev. (mL)
1	604449002.1	0.9011	2.0765E-05	12/14/2022 9:28	1282.9	1.61%	483.7	2.62%	0.1	0.000200
2	604449006.1	0.9044	2.0758E-05	12/14/2022 9:36	1282.9	1.61%	478.5	2.64%	0.1	0.000200
3	604449010.1	0.9014	2.0765E-05	12/14/2022 9:35	1282.9	1.61%	478.3	2.64%	0.1	0.000200
4	604449014.1	0.9003	2.0767E-05	12/14/2022 13:01	1282.9	1.61%	370.6	3.00%	0.1	0.000200
5	604449018.1	0.9006	2.0766E-05	12/14/2022 13:12	1282.9	1.61%	486.6	2.62%	0.1	0.000200
6	1205274775.1	1.0000	2.0399E-05	12/19/2022 0:00	1282.9	1.61%	1066.3	1.77%	0.1	0.000200
7	1205274776.1	0.9008	2.0766E-05	12/14/2022 9:28	1282.9	1.61%	490.6	2.61%	0.1	0.000200
8	1205274777.1	0.0504	7.8659E-06	12/14/2022 9:28	1282.9	1.61%	1134.6	1.71%	0.1	0.000200
9	1205274778.1	1.0000	2.0399E-05	12/19/2022 0:00	655.9	2.36%	371.9	3.23%	0.1	0.000200

Pipet, 0.1 ml Stdev : +/-	0.000200	ml
Pipet, 0.5 ml Stdev : +/-	0.001000	ml
Pipet, 1 ml Stdev : +/-	0.002000	ml

Analytical SOP: GL-RAD-A-063
Instrument SOP: GL-RAD-I-016

Count raw Data

Pos.	Detector ID	Counting Time (min.)	Gross Counts Alpha	Gross Counts Beta	Beta cpm	Count Start Date/Time	Ac-228 Ingrowth Date/Time	Ac-228 Decay Date/Time	Ra-228 Decay	Ac-228 Decay	Ac-228 Ingrowth	Ac-228 Count Correction	Calculated Sample Recovery %	Sample Recovery Error %
1	7D	70	6	31	0.443	12/22/2022 8:20	12/20/2022 13:30	12/22/2022 6:25	0.997	0.805	0.990	1.067	37.7%	1.56%
2	9D	60	9	39	0.650	12/22/2022 8:20	12/20/2022 13:30	12/22/2022 6:25	0.997	0.805	0.990	1.057	37.3%	1.57%
3	10D	80	25	88	1.100	12/22/2022 8:20	12/20/2022 13:30	12/22/2022 6:25	0.997	0.805	0.990	1.077	37.3%	1.57%
4	7A	110	9	109	0.991	12/22/2022 8:20	12/20/2022 13:30	12/22/2022 6:25	0.997	0.805	0.990	1.107	28.9%	1.73%
5	7B	70	11	38	0.543	12/22/2022 8:20	12/20/2022 13:30	12/22/2022 6:25	0.997	0.805	0.990	1.067	37.9%	1.56%
6	9A	60	10	38	0.633	12/22/2022 8:19	12/20/2022 13:30	12/22/2022 6:25	0.999	0.806	0.990	1.057	83.1%	1.23%
7	5B	90	16	94	1.044	12/22/2022 10:33	12/20/2022 13:30	12/22/2022 6:25	0.997	0.626	0.990	1.087	38.2%	1.56%
8	7C	60	11	1325	22.083	12/22/2022 8:19	12/20/2022 13:30	12/22/2022 6:25	0.997	0.806	0.990	1.057	88.4%	1.21%
9	9B	60	19	737	12.283	12/22/2022 8:20	12/20/2022 13:30	12/22/2022 6:25	0.999	0.806	0.990	1.057	56.7%	2.02%

Calibration Data								
Pos.	Counted on	Calibration Date	Calibration Due Date	Detector Efficiency (cpm/dpm)	Detector Efficiency Error (cpm/dpm)	Bkg cpm	Weekly Bkg Count Start Date/Time	Bkg Count Time (min.)
1	PIC	6/1/2022	5/31/2023	0.6270	0.01113	0.478	12/17/2022 10:42	500
2	PIC	6/1/2022	5/31/2023	0.6330	0.02610	0.444	12/17/2022 10:43	500
3	PIC	6/1/2022	5/31/2023	0.6148	0.00557	0.564	12/17/2022 10:44	500
4	PIC	6/1/2022	5/31/2023	0.6257	0.00594	0.430	12/17/2022 10:42	500
5	PIC	6/1/2022	5/31/2023	0.6366	0.00627	0.550	12/17/2022 10:42	500
6	PIC	6/1/2022	5/31/2023	0.6336	0.00758	0.708	12/17/2022 10:43	500
7	PIC	6/1/2022	5/31/2023	0.6336	0.00426	0.810	12/17/2022 10:42	500
8	PIC	6/1/2022	5/31/2023	0.6407	0.00790	0.920	12/17/2022 10:42	500
9	PIC	6/1/2022	5/31/2023	0.6318	0.00754	0.732	12/17/2022 10:43	500

Notes:
1 - Results are decay corrected to Sample Date/Time
2 - Reference date for Spike Activity (dpm/ml) is the batch Prep Date
3 - Spike Nominals are decay corrected to Sample Date/Time

* - RPD changed to 0% due to sample & dup activity below MDC

Spike S/N : 1952-B
Spike Exp Date : 8/9/2023
Spike Activity (dpm/ml): 436.42
Spike Volume Added: 0.10

LCS S/N : 1952-B
LCS Exp Date : 8/9/2023
LCS Activity (dpm/ml): 436.42
LCS Volume Added: 0.10

Results

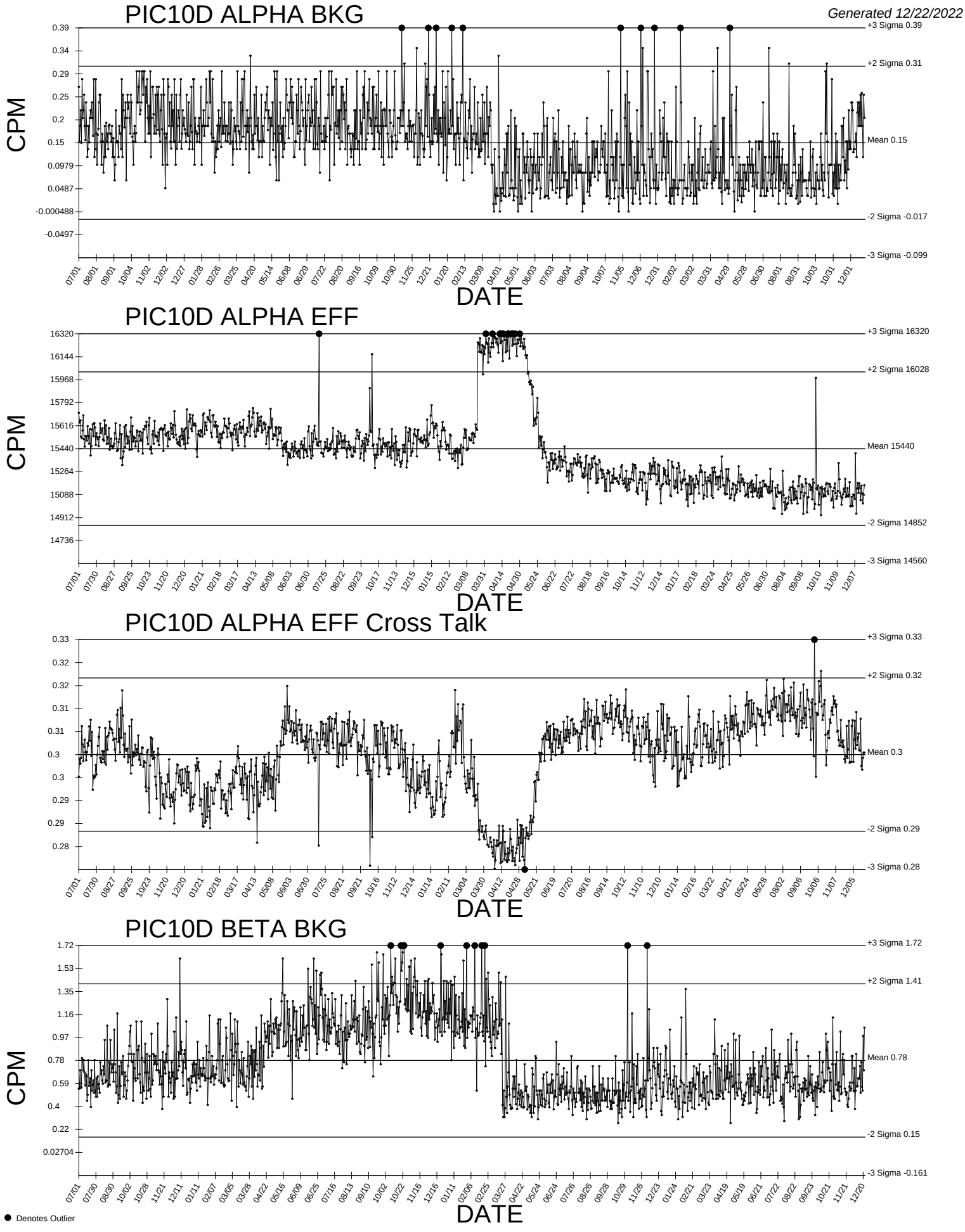
Pos.	Decision Level pCi/L	Critical Level pCi/L	Required MDC pCi/L	MDC pCi/L	Sample Act. Conc. pCi/L	Sample Act. Error %	Net Count Rate CPM	Net Count Rate Error CPM	**1 SIGMA** Counting Uncertainty pCi/L	**1 SIGMA** Total Prop. Uncertainty pCi/L	Sample QC	Sample Type	RPD	RER	Nominal pCi/L	Recovery
1	0.5832	0.4118	1	0.9451	**-0.0997**	242.84%	-0.0351	0.0853	0.2421	0.2422		SAMPLE				
2	0.5950	0.4201	1	0.9804	**0.5778**	52.64%	0.2060	0.1083	0.3037	0.3129		SAMPLE				
3	0.6223	0.4393	1	0.9894	**1.5830**	22.82%	0.5360	0.1220	0.3602	0.4132		SAMPLE				
4	0.6202	0.4379	1	0.9809	**2.1621**	17.80%	0.5609	0.0993	0.3829	0.4726		SAMPLE				
5	0.6134	0.4331	1	0.9853	**-0.0199**	1317.42%	-0.0071	0.0941	0.2618	0.2618		SAMPLE				
6	0.3039	0.2146	1	0.4859	**-0.0847**	146.54%	-0.0747	0.1094	0.1242	0.1242		MB				
7	0.8706	0.6146	1	1.3502	**0.8500**	49.08%	0.2344	0.1150	0.4170	0.4309	604449002.1	DUP	* 0.0%	0.7055		
8	6.4001	4.5185	1	10.0850	**443.5934**	3.22%	21.1633	0.6082	12.7480	58.0285	604449002.1	MS			390.6444	113.6%
9	0.4545	0.3209	1	0.7252	**19.2771**	4.48%	11.5513	0.4541	0.7578	2.5926		LCS			19.6586	98.1%

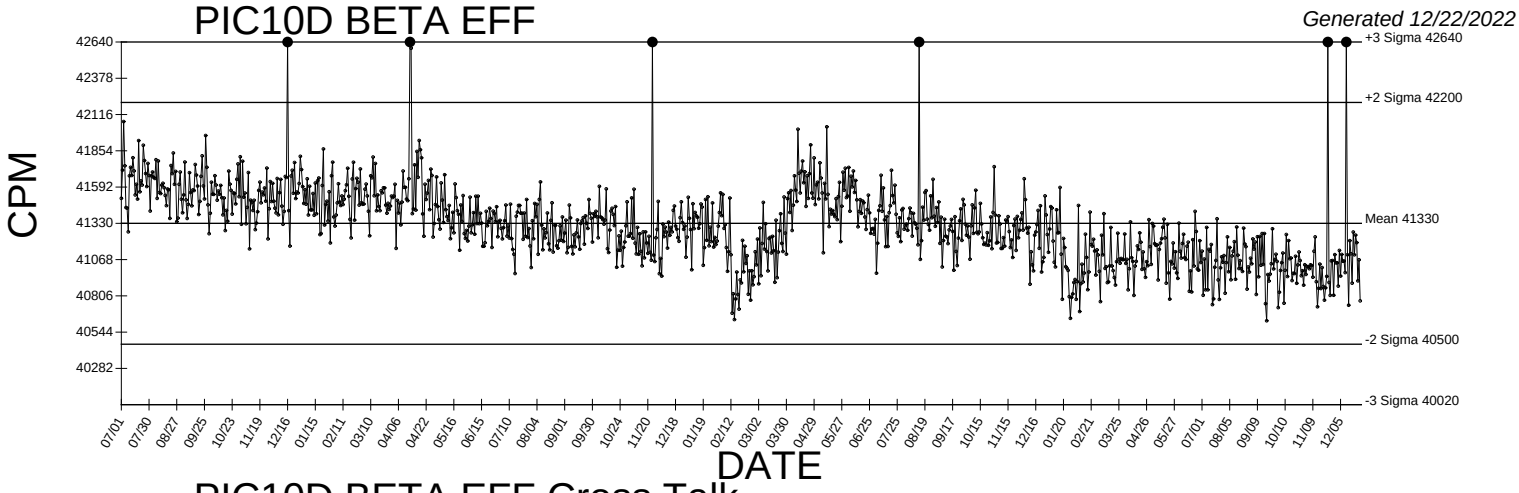
SampleID	Instr	Time (min.)	Alpha Counts	Beta Counts	Count Start Time	Count End Time	Machine	Batch ID
604449002	7D	70	6	31	12/22/2022 8:20	12/22/2022 9:30	PIC	2358072
604449006	9D	60	9	39	12/22/2022 8:20	12/22/2022 9:20	PIC	2358072
604449010	10D	80	25	88	12/22/2022 8:20	12/22/2022 9:40	PIC	2358072
604449014	7A	110	9	109	12/22/2022 8:20	12/22/2022 10:10	PIC	2358072
604449018	7B	70	11	38	12/22/2022 8:20	12/22/2022 9:30	PIC	2358072
1205274775	9A	60	10	38	12/22/2022 8:19	12/22/2022 9:19	PIC	2358072
1205274776	5B	90	16	94	12/22/2022 10:33	12/22/2022 12:03	PIC	2358072
1205274777	7C	60	11	1325	12/22/2022 8:19	12/22/2022 9:19	PIC	2358072
1205274778	9B	60	19	737	12/22/2022 8:20	12/22/2022 9:20	PIC	2358072

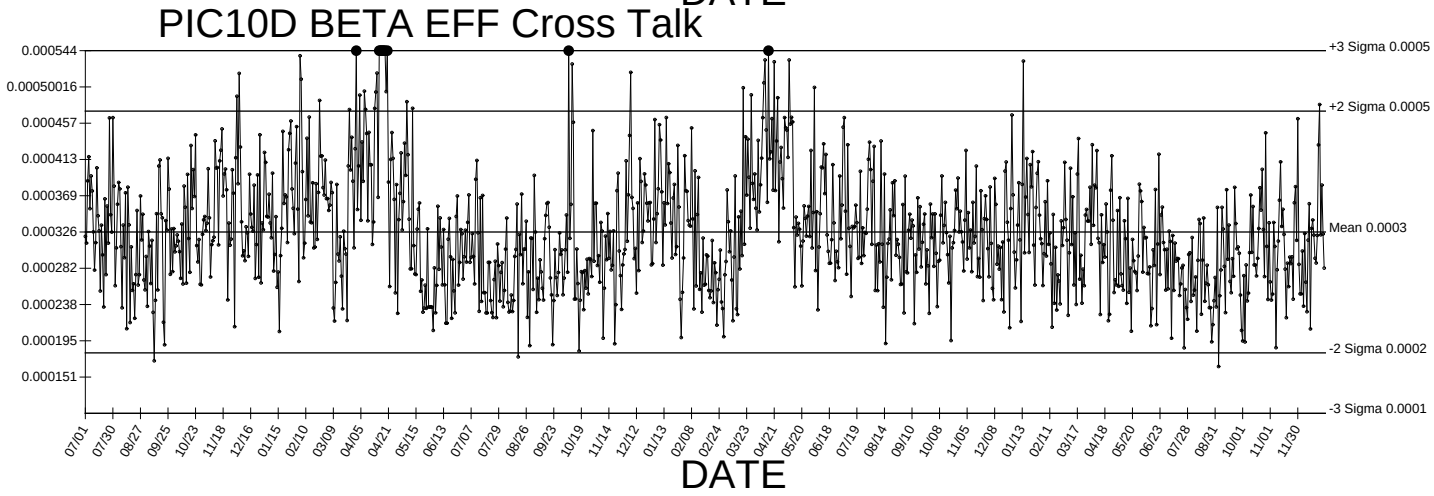
ASSAY		22-Dec-22	7:02:36							
Wizard 2480 s/n 46190630										
Protocol		id		8 Ba-133						
Time		limit								
Count		limit								
Isotope		Ba-133								
Protocol		date	12/22/2022							
Run		id.	5975							
Samp_ID		POS	RACK	BATCH	TIME	COUNTS	CPM	ERROR	% RECOVERY	COUNT TIME
REF		1	93	1	180	3849	1282.85	1.61		07:02:36
	604449002	2	93	2	180	1451.57	483.74	2.62	37.71	07:05:50
	604449006	3	93	3	180	1435.57	478.46	2.64	37.30	07:09:03
	604449010	4	93	4	180	1435.13	478.3	2.64	37.28	07:12:17
	604449014	5	93	5	180	1112	370.58	3	28.89	07:15:32
	604449018	1	2	1	180	1460	486.57	2.62	37.93	07:19:07
	1205274775	2	2	2	180	3199.57	1066.33	1.77	83.12	07:22:21
	1205274776	3	2	3	180	1472	490.6	2.61	38.24	07:25:35
	1205274777	4	2	4	180	3404.28	1134.61	1.71	88.44	07:28:49
NL 12/22/22.	~~1205274778~~	~~5~~	~~2~~	~~5~~	~~180~~	~~3306~~	~~1101.78~~	~~1.74~~	~~85.89~~	~~07:32:03~~
END		OF	ASSAY							

ASSAY		22-Dec-22	13:42:30								
Wizard 1480 s/n 4800440											
Protocol		id	8	228_REC							
Time		limit	180								
Count		limit	50000								
Isotope		Ba-133									
Protocol		date	10-Jan-20	14:21:10							
Run		id.	94								
Samp_ID		POS	RACK	BATCH	TIME	COUNTS	CPM	ERROR	% RECOVERY	COUNT TIME	
REF		1	97	1	180	2107	655.9	2.36		13:42:38	
	1205274778	10	39	10	180	1255	371.9	3.23	56.70	14:11:33	
END		OF	ASSAY								

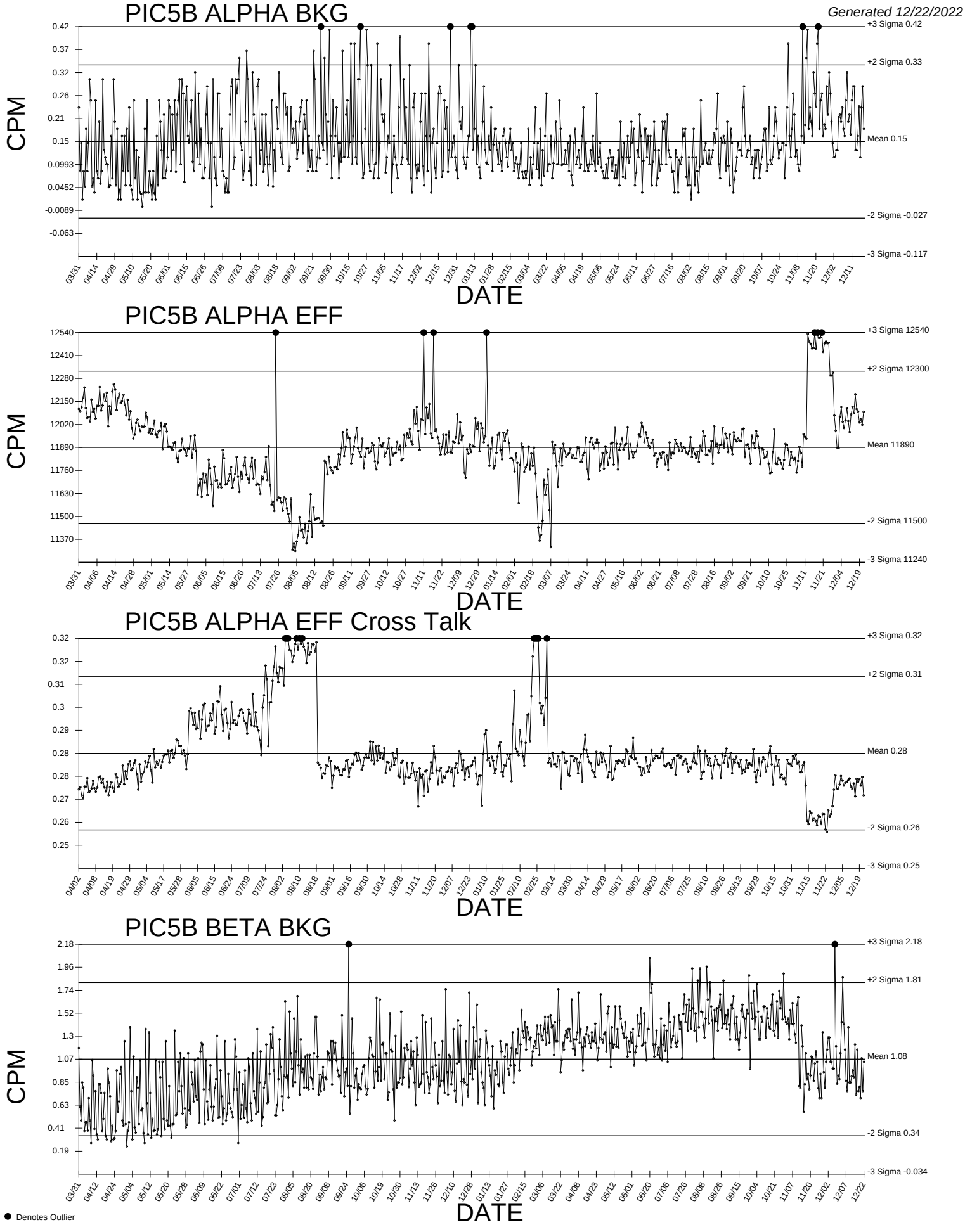
Background and Efficiency Data

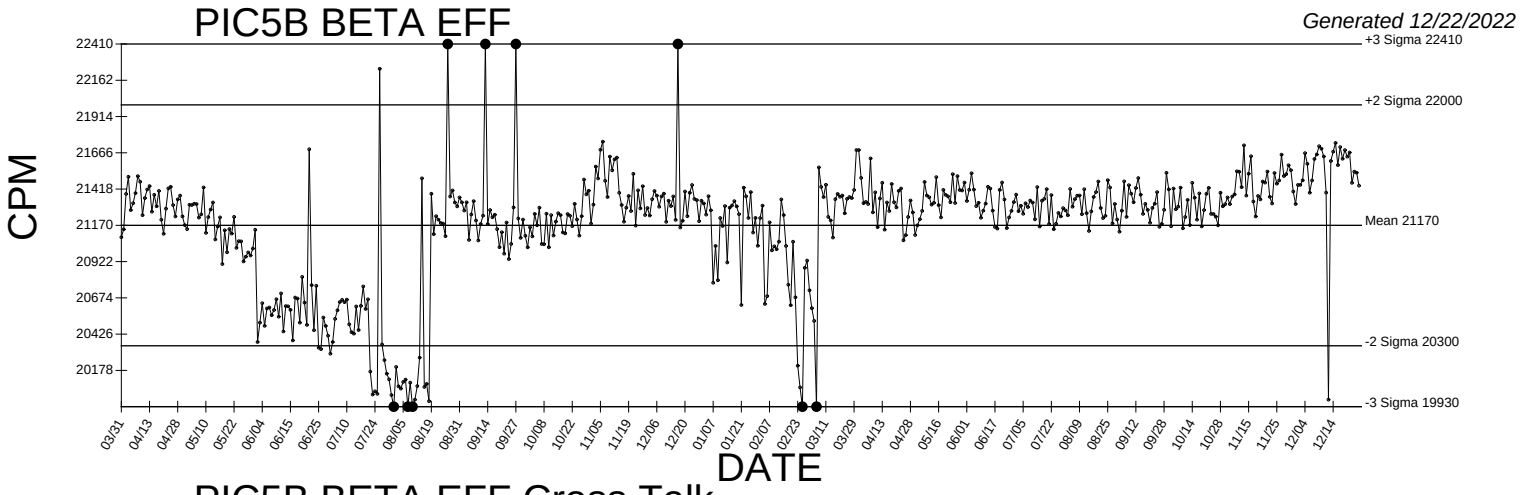

PIC10D ALPHA BKG
Generated 12/22/2022
CPM
DATE
+3 Sigma 0.39
+2 Sigma 0.31
Mean 0.15
-2 Sigma -0.017
-3 Sigma -0.099
PIC10D ALPHA EFF
+3 Sigma 16320
+2 Sigma 16028
Mean 15440
-2 Sigma 14852
-3 Sigma 14560
PIC10D ALPHA EFF Cross Talk
+3 Sigma 0.33
+2 Sigma 0.32
Mean 0.3
-2 Sigma 0.29
-3 Sigma 0.28
PIC10D BETA BKG
+3 Sigma 1.72
+2 Sigma 1.41
Mean 0.78
-2 Sigma 0.15
-3 Sigma -0.161
● Denotes Outlier

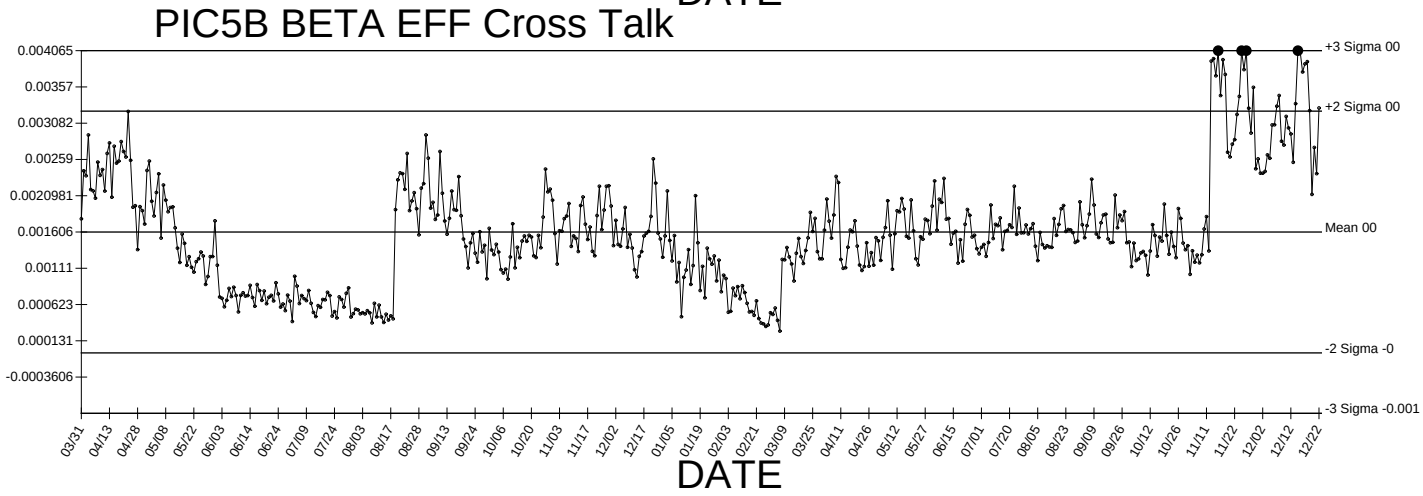




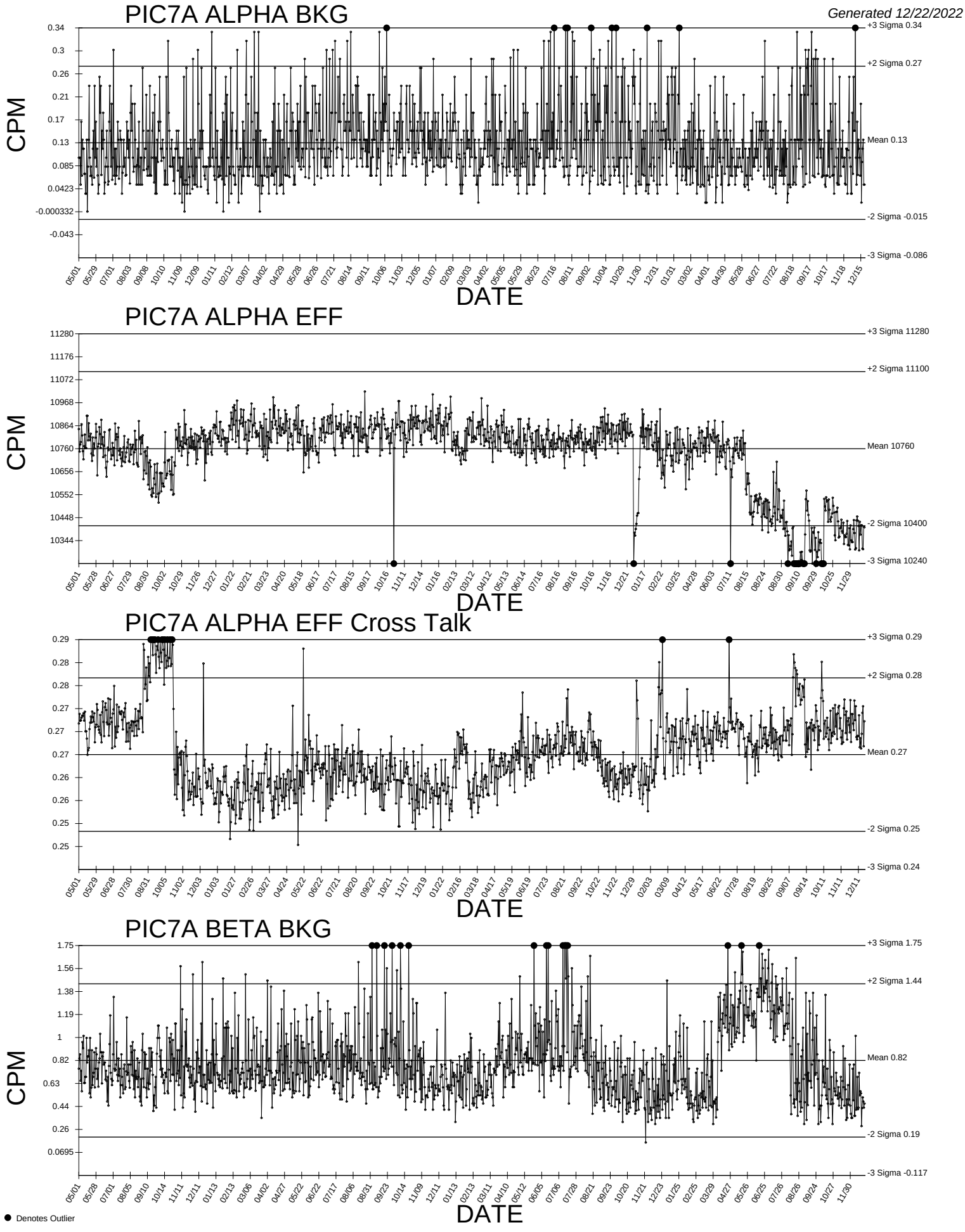
● Denotes Outlier

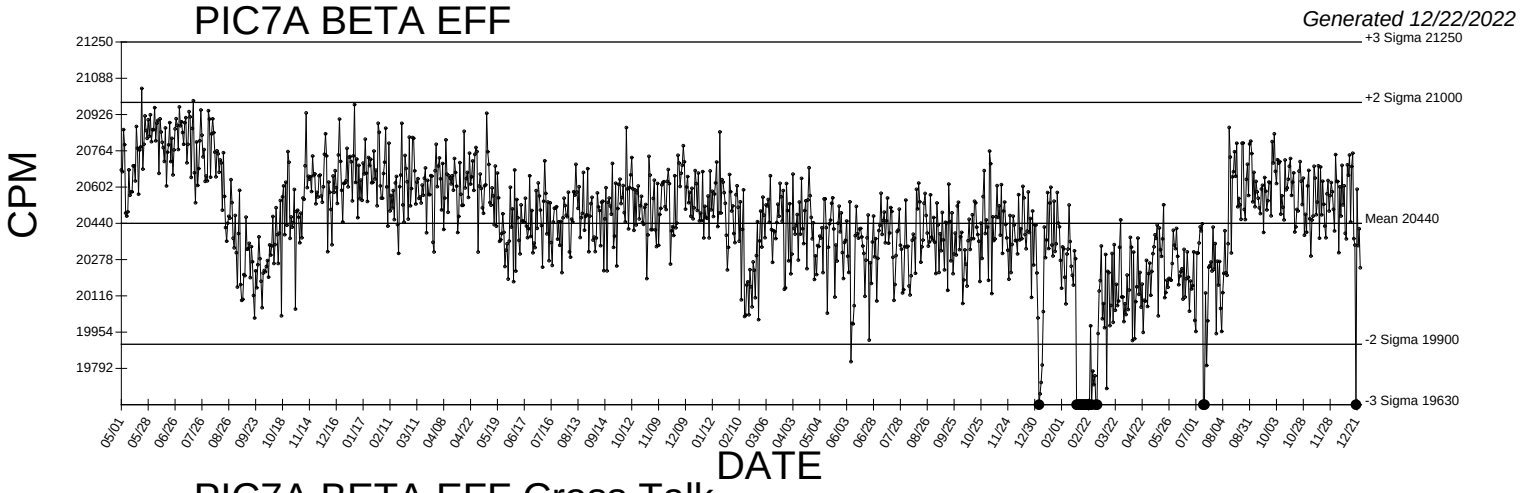

PIC5B ALPHA BKG
Generated 12/22/2022
CPM
0.42
0.37
0.32
0.26
0.21
0.15
0.0993
0.0452
-0.0089
-0.063
+3 Sigma 0.42
+2 Sigma 0.33
Mean 0.15
-2 Sigma -0.027
-3 Sigma -0.117
03/31 04/14 04/29 05/10 05/20 06/01 06/15 06/26 07/09 07/23 08/03 08/18 09/02 09/21 09/30 10/15 10/27 11/05 11/17 12/02 12/15 12/31 01/13 01/28 02/15 03/04 03/22 04/05 04/19 05/06 05/24 06/11 06/27 07/16 08/02 08/15 09/01 09/20 10/07 10/24 11/08 11/20 12/02 12/11
DATE
PIC5B ALPHA EFF
CPM
12540
12410
12280
12150
12020
11890
11760
11630
11500
11370
+3 Sigma 12540
+2 Sigma 12300
Mean 11890
-2 Sigma 11500
-3 Sigma 11240
03/31 04/06 04/14 04/28 05/01 05/14 05/27 06/05 06/15 06/26 07/13 07/26 08/05 08/12 08/26 09/11 09/27 10/12 10/27 11/11 11/22 12/09 12/29 01/14 02/01 02/18 03/07 03/24 04/11 04/27 05/16 06/02 06/21 07/08 07/28 08/16 09/02 09/21 10/10 10/25 11/11 11/21 12/04 12/19
DATE
PIC5B ALPHA EFF Cross Talk
0.32
0.32
0.31
0.3
0.29
0.28
0.28
0.27
0.26
0.25
+3 Sigma 0.32
+2 Sigma 0.31
Mean 0.28
-2 Sigma 0.26
-3 Sigma 0.25
04/02 04/08 04/19 04/29 05/04 05/17 05/28 06/05 06/15 06/24 07/09 07/24 08/02 08/10 08/18 09/01 09/16 09/30 10/14 10/28 11/11 11/20 12/07 12/23 01/10 01/25 02/10 02/25 03/14 03/30 04/14 04/29 05/17 06/02 06/20 07/06 07/25 08/10 08/26 09/13 09/29 10/15 10/31 11/15 11/22 12/05 12/19
DATE
PIC5B BETA BKG
CPM
2.18
1.96
1.74
1.52
1.3
1.07
0.85
0.63
0.41
0.19
+3 Sigma 2.18
+2 Sigma 1.81
Mean 1.08
-2 Sigma 0.34
-3 Sigma -0.034
03/31 04/12 04/24 05/04 05/12 05/20 05/28 06/09 06/22 07/01 07/12 07/23 08/05 08/20 09/08 09/24 10/06 10/19 10/30 11/13 11/26 12/10 12/28 01/13 01/27 02/15 03/06 03/22 04/08 04/23 05/12 06/01 06/20 07/06 07/26 08/08 08/26 09/15 10/04 10/21 11/07 11/20 12/02 12/07 12/22
DATE
● Denotes Outlier

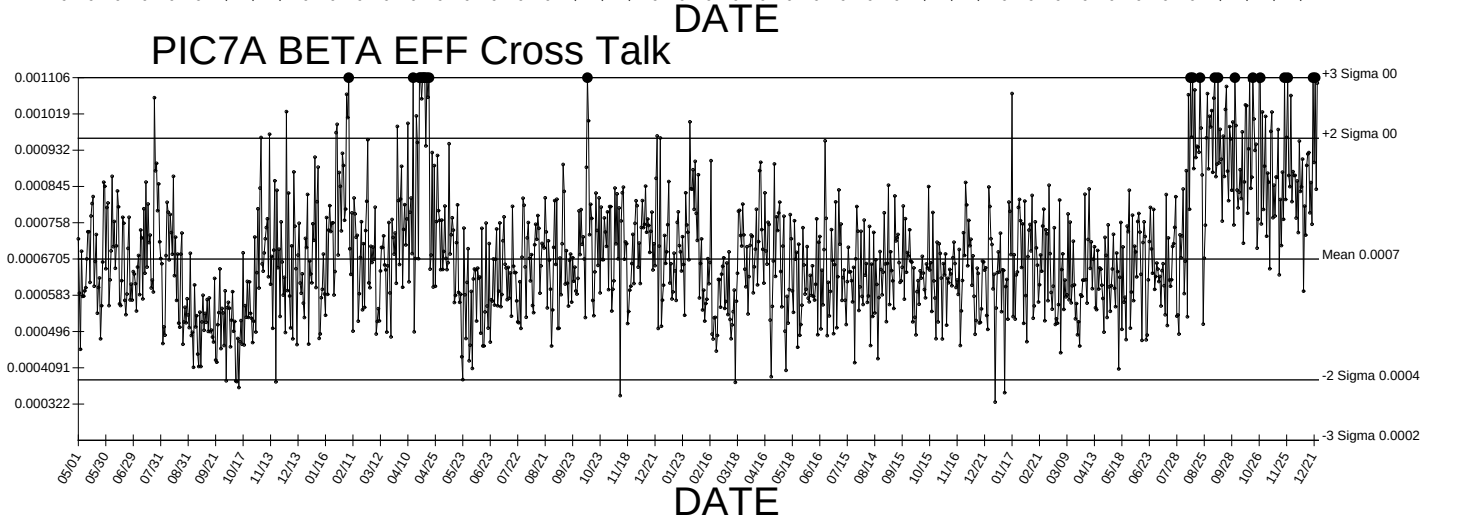




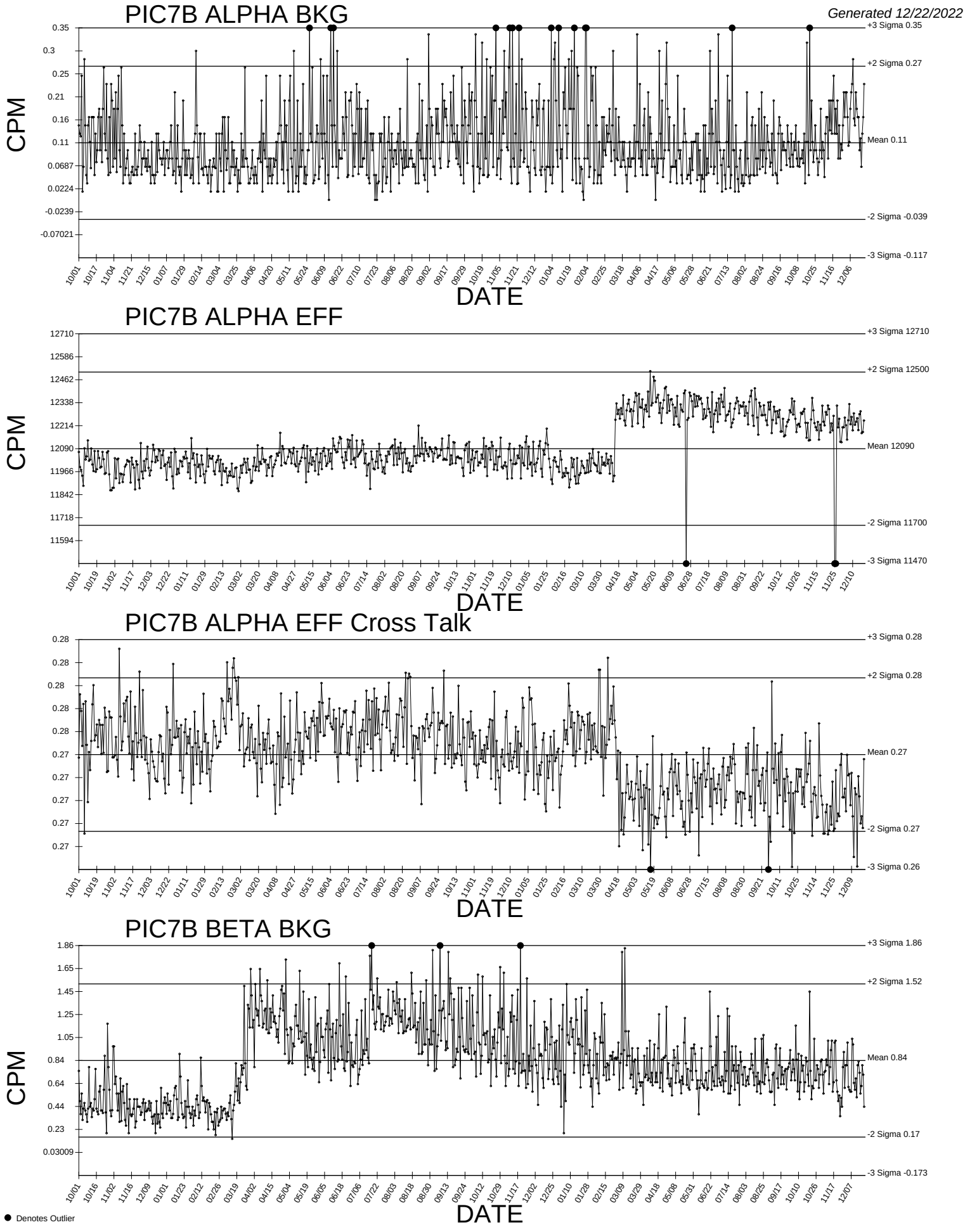
● Denotes Outlier

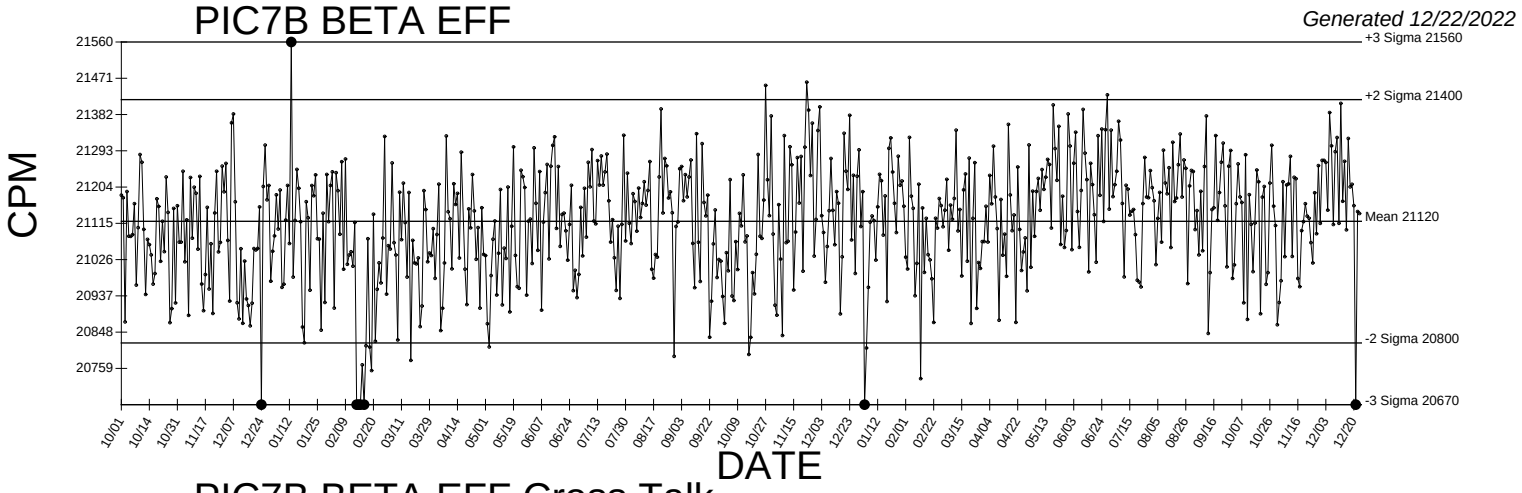

PIC7A ALPHA BKG
Generated 12/22/2022
CPM
DATE
+3 Sigma 0.34
+2 Sigma 0.27
Mean 0.13
-2 Sigma -0.015
-3 Sigma -0.086
PIC7A ALPHA EFF
+3 Sigma 11280
+2 Sigma 11100
Mean 10760
-2 Sigma 10400
-3 Sigma 10240
PIC7A ALPHA EFF Cross Talk
+3 Sigma 0.29
+2 Sigma 0.28
Mean 0.27
-2 Sigma 0.25
-3 Sigma 0.24
PIC7A BETA BKG
+3 Sigma 1.75
+2 Sigma 1.44
Mean 0.82
-2 Sigma 0.19
-3 Sigma -0.117
● Denotes Outlier

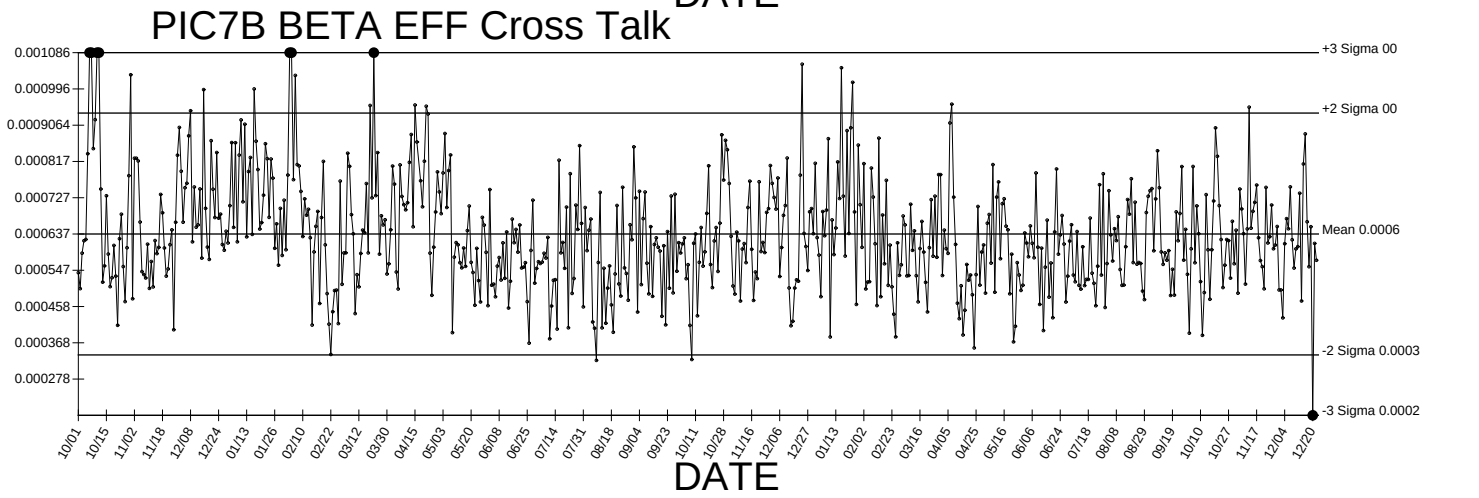




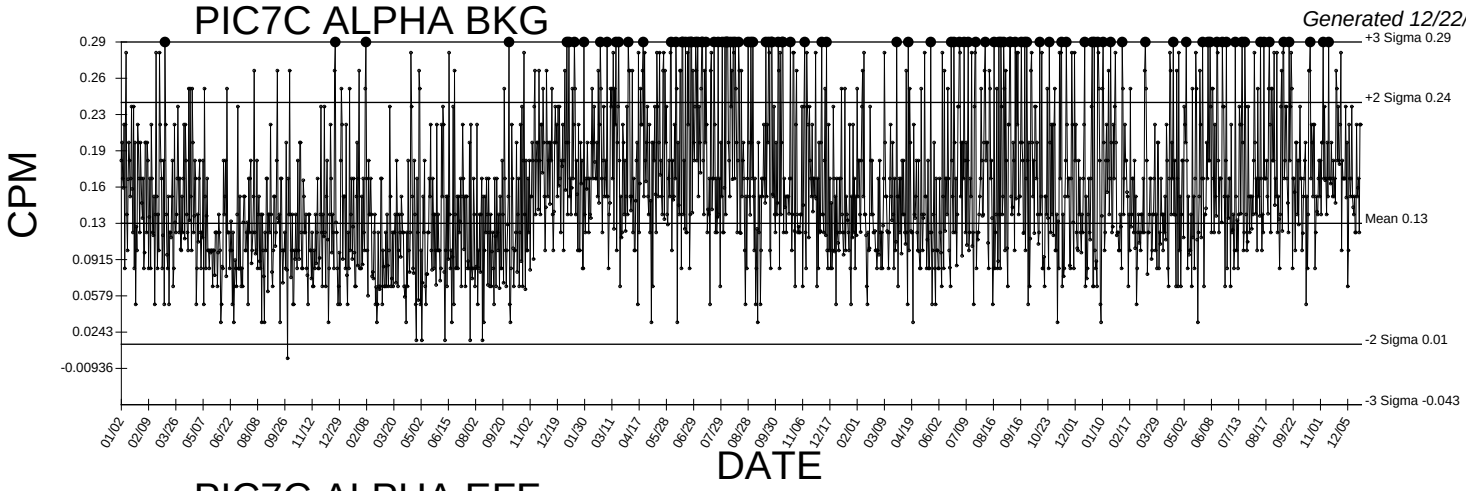
● Denotes Outlier

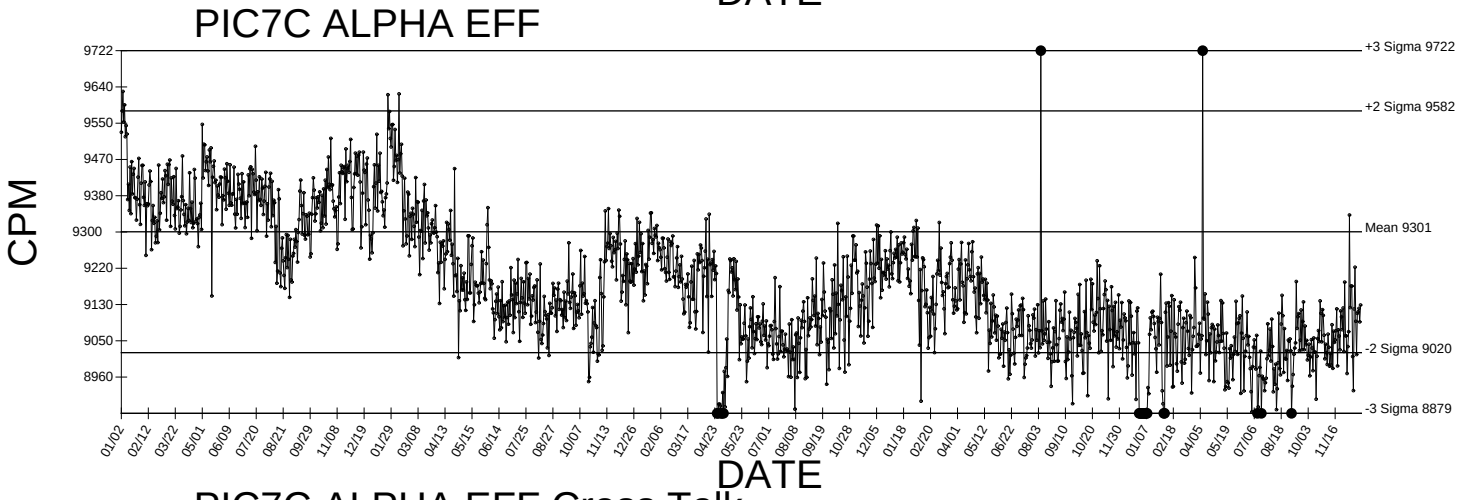

PIC7B ALPHA BKG
Generated 12/22/2022
CPM
DATE
+3 Sigma 0.35
+2 Sigma 0.27
Mean 0.11
-2 Sigma -0.039
-3 Sigma -0.117
PIC7B ALPHA EFF
+3 Sigma 12710
+2 Sigma 12500
Mean 12090
-2 Sigma 11700
-3 Sigma 11470
PIC7B ALPHA EFF Cross Talk
+3 Sigma 0.28
+2 Sigma 0.28
Mean 0.27
-2 Sigma 0.27
-3 Sigma 0.26
PIC7B BETA BKG
+3 Sigma 1.86
+2 Sigma 1.52
Mean 0.84
-2 Sigma 0.17
-3 Sigma -0.173
● Denotes Outlier

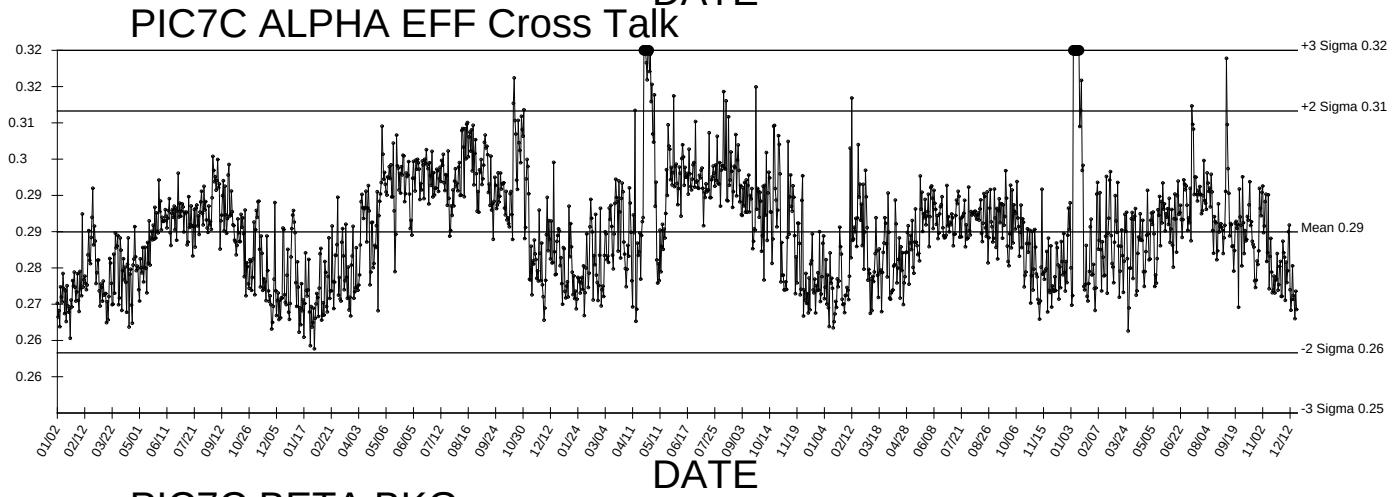


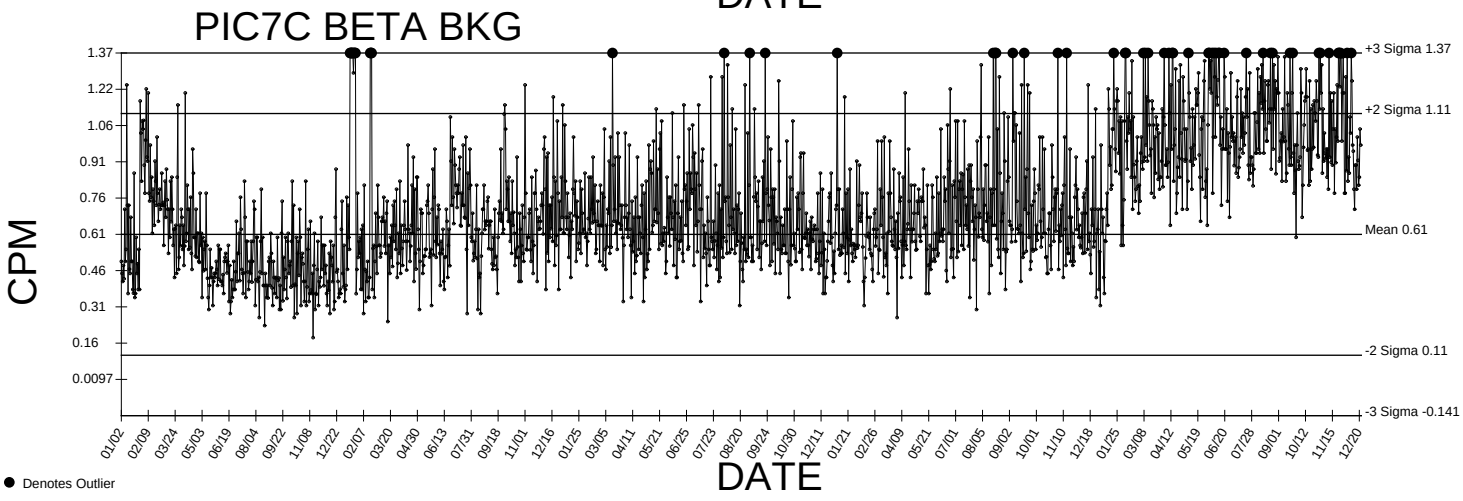


● Denotes Outlier

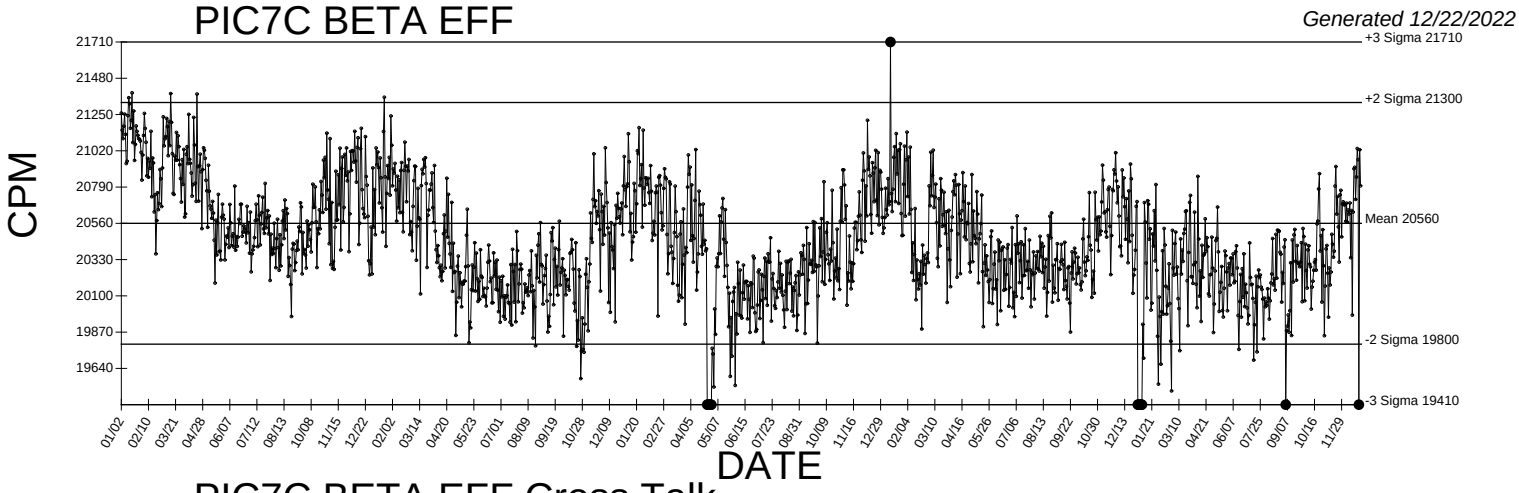


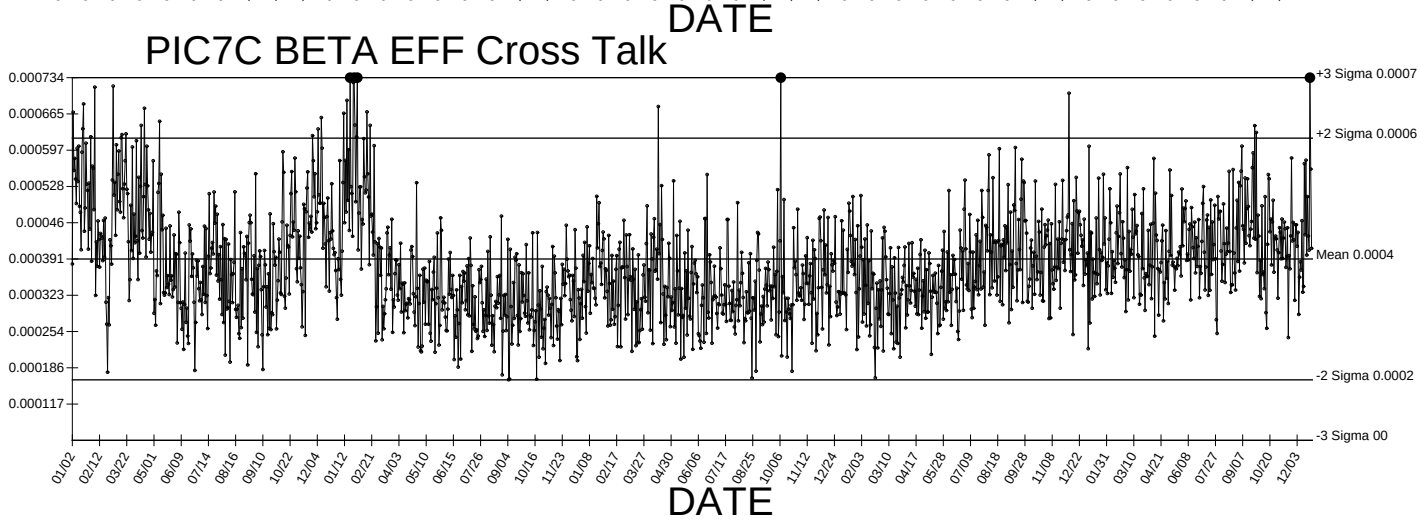




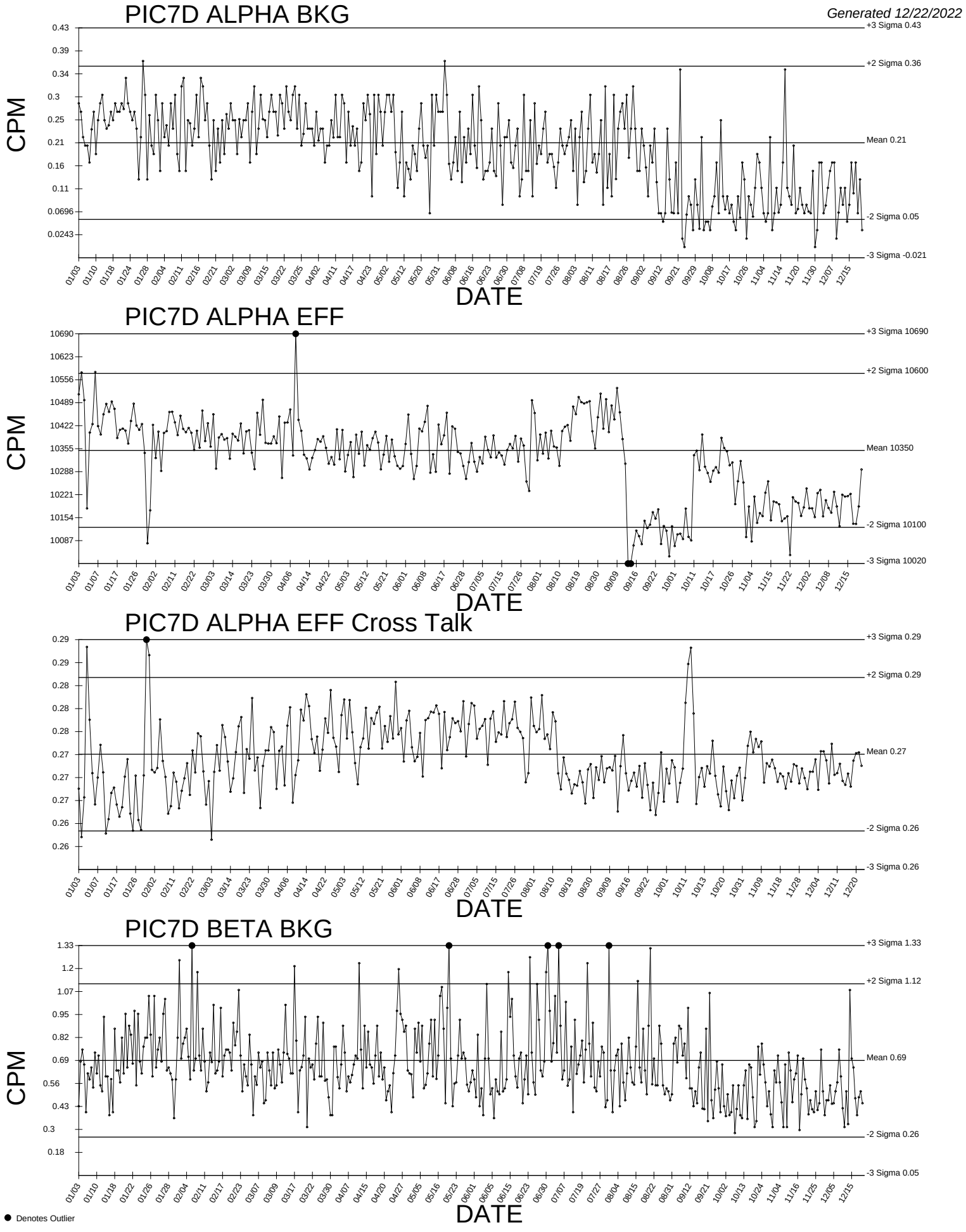


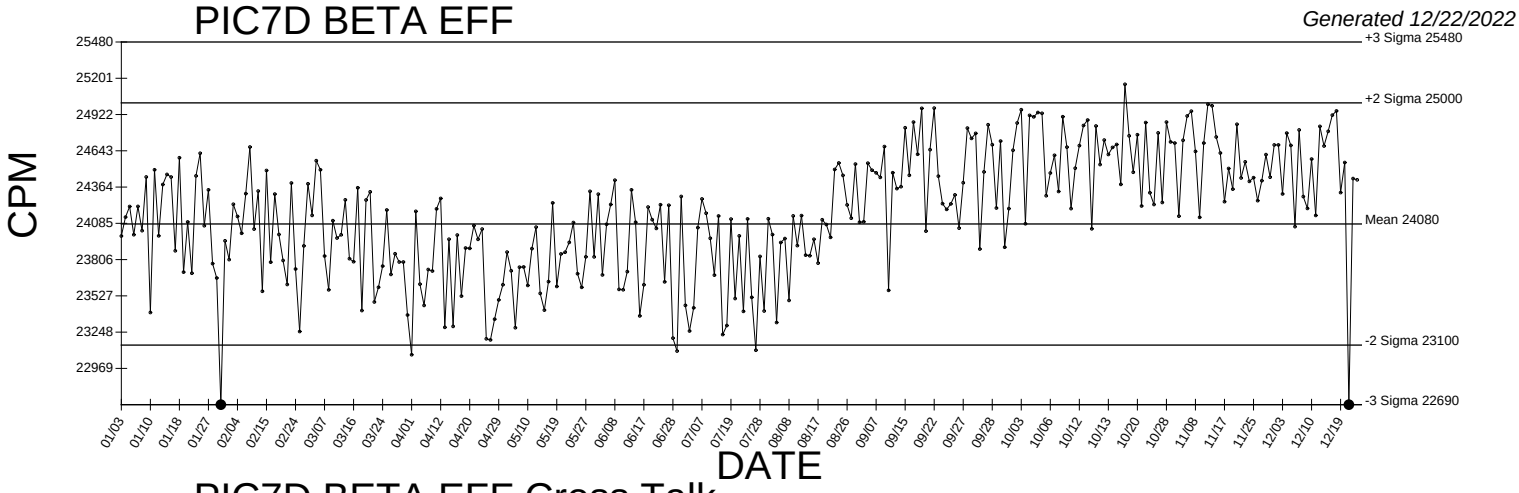
● Denotes Outlier

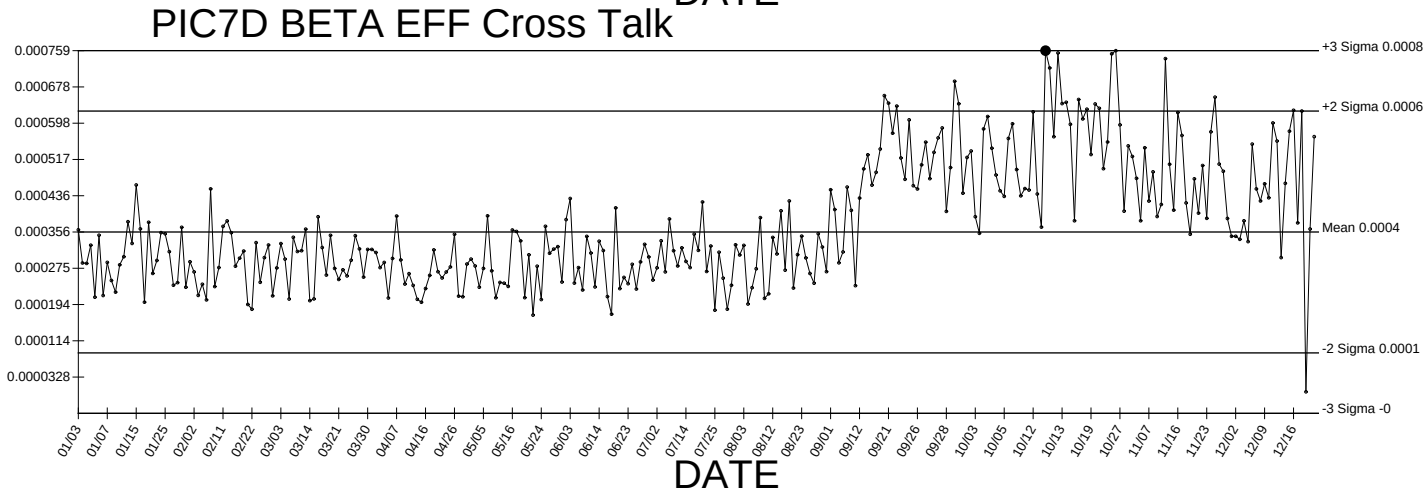




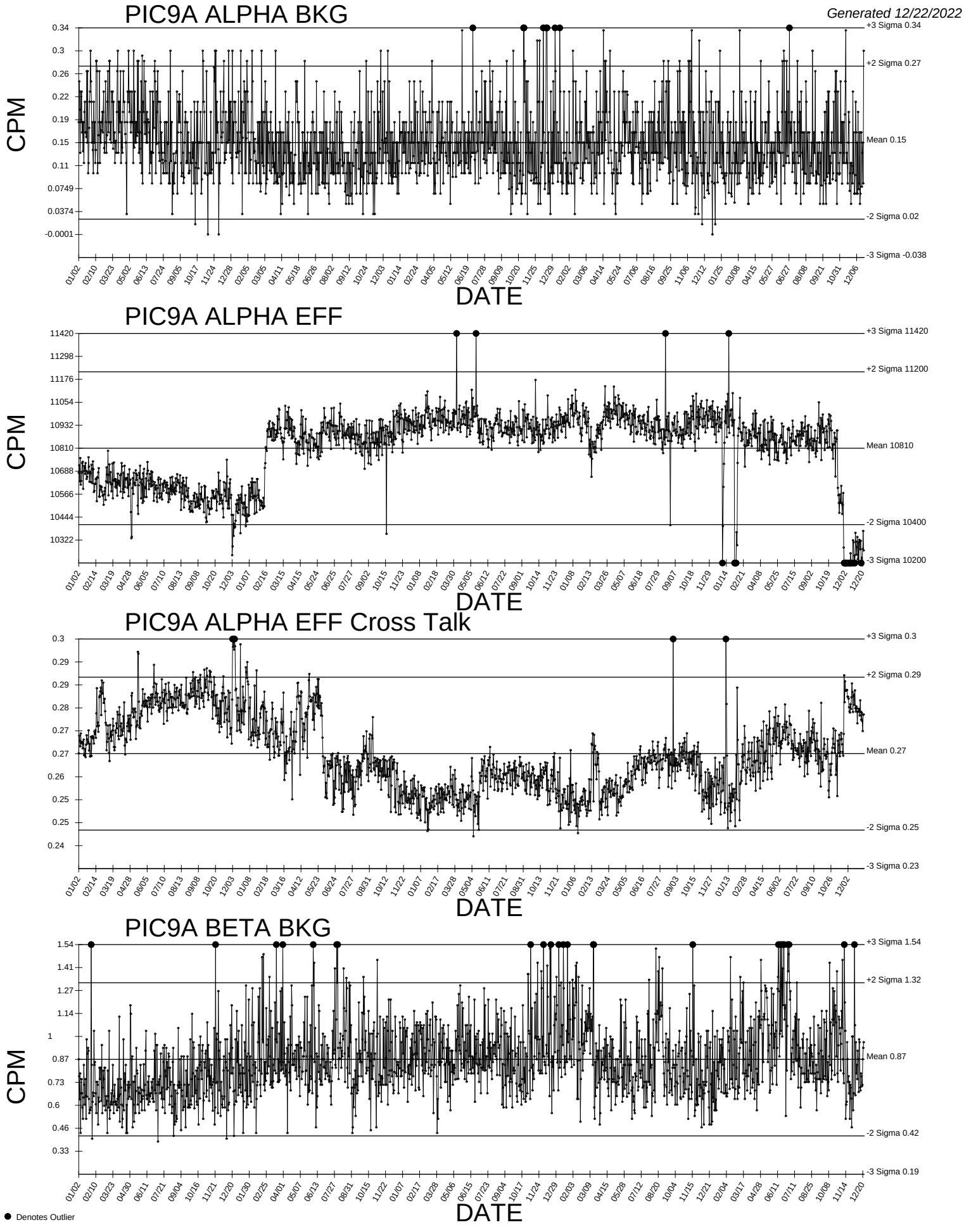
● Denotes Outlier

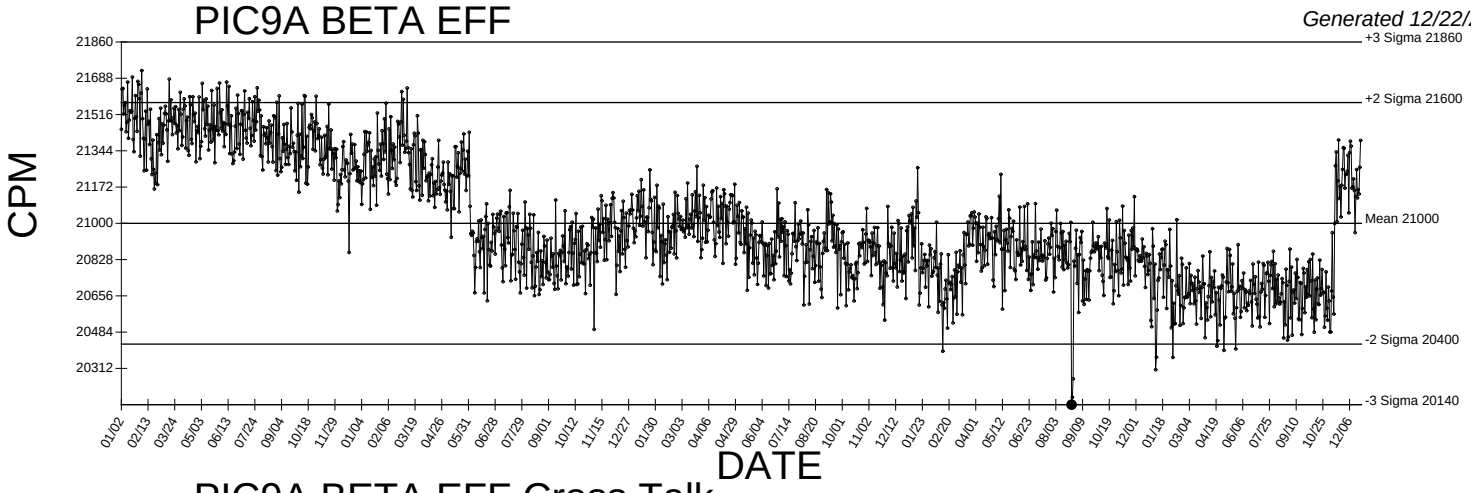

PIC7D ALPHA BKG
Generated 12/22/2022
CPM
DATE
+3 Sigma 0.43
+2 Sigma 0.36
Mean 0.21
-2 Sigma 0.05
-3 Sigma -0.021
PIC7D ALPHA EFF
+3 Sigma 10690
+2 Sigma 10600
Mean 10350
-2 Sigma 10100
-3 Sigma 10020
PIC7D ALPHA EFF Cross Talk
+3 Sigma 0.29
+2 Sigma 0.29
Mean 0.27
-2 Sigma 0.26
-3 Sigma 0.26
PIC7D BETA BKG
+3 Sigma 1.33
+2 Sigma 1.12
Mean 0.69
-2 Sigma 0.26
-3 Sigma 0.05
● Denotes Outlier

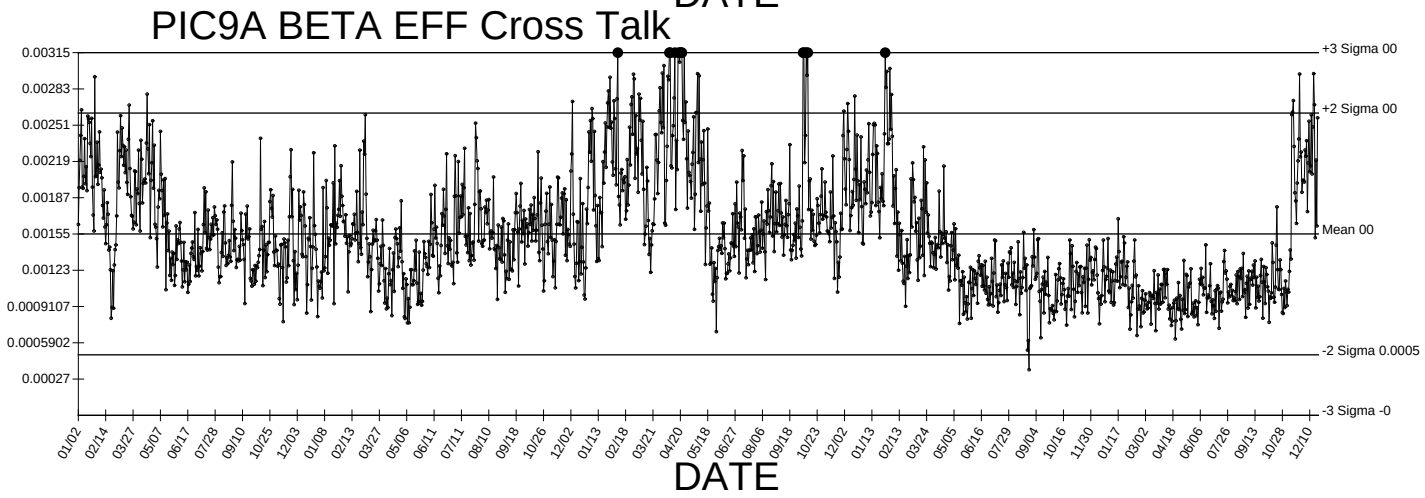




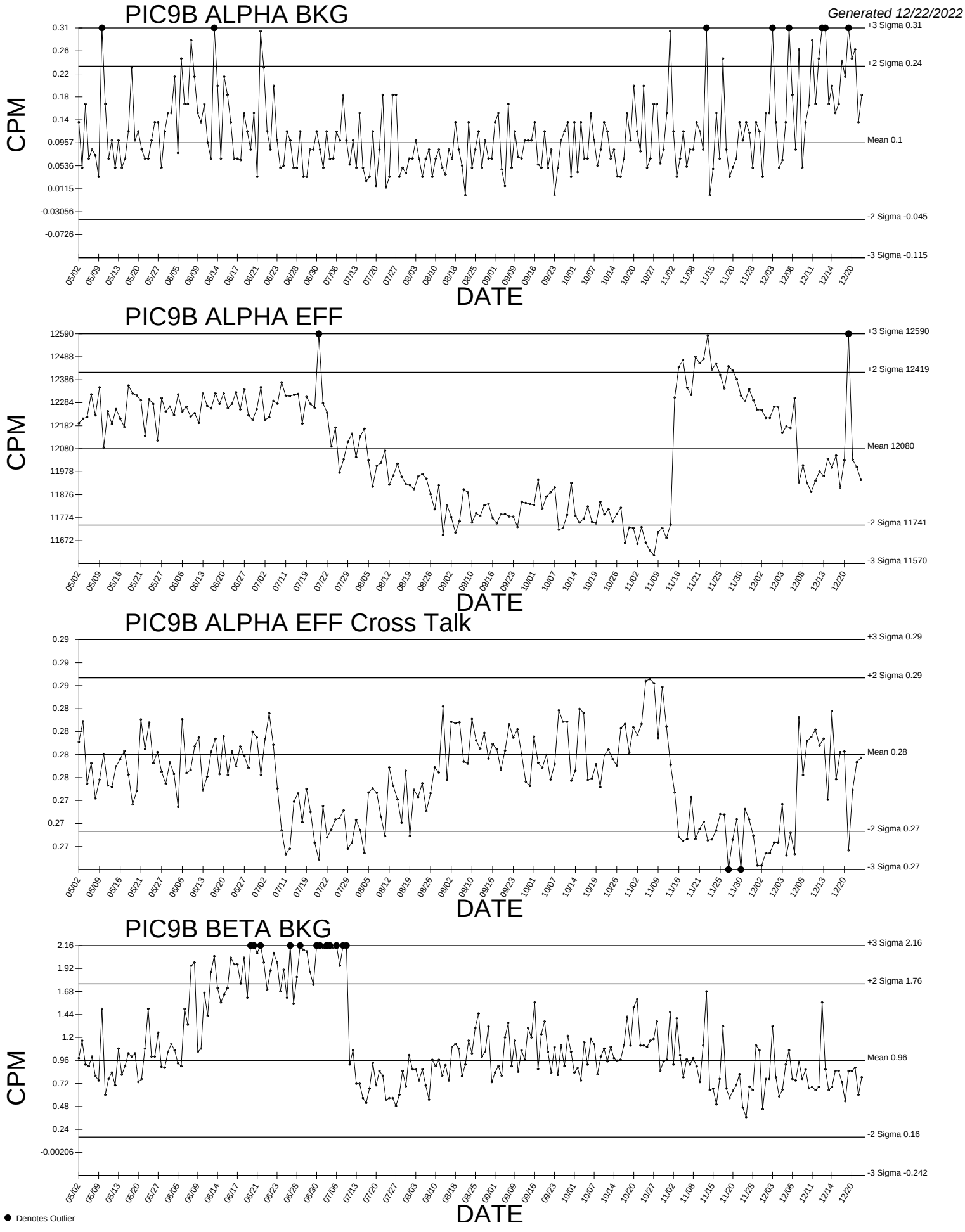
● Denotes Outlier

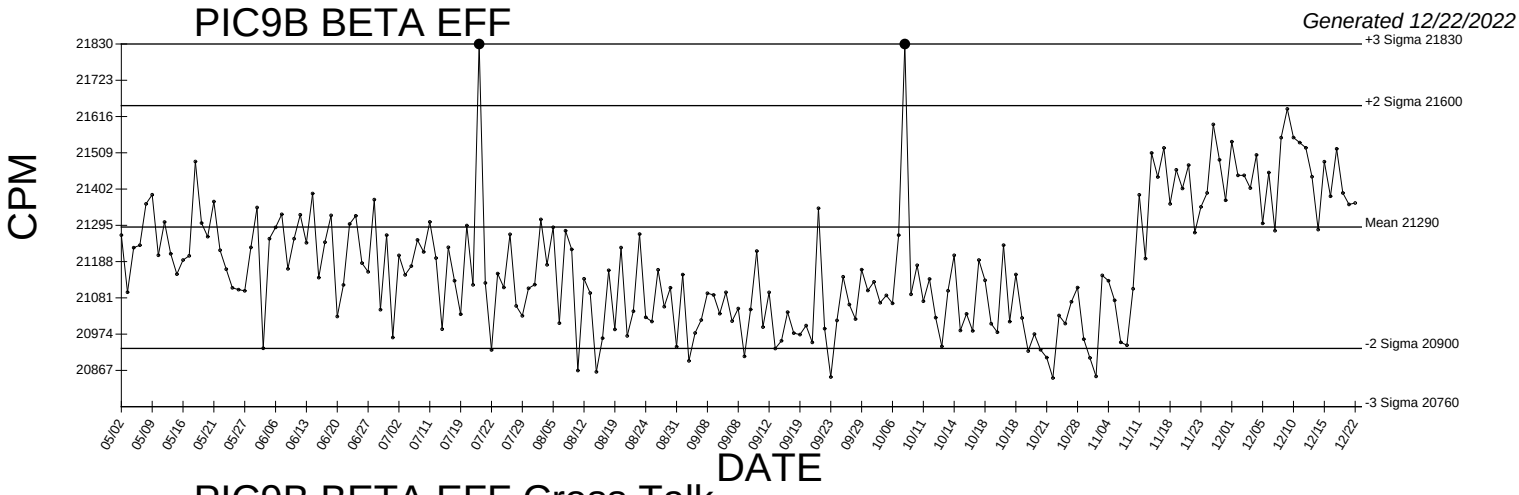

PIC9A ALPHA BKG
Generated 12/22/2022
CPM
0.34
0.3
0.26
0.22
0.19
0.15
0.11
0.0749
0.0374
-0.0001
+3 Sigma 0.34
+2 Sigma 0.27
Mean 0.15
-2 Sigma 0.02
-3 Sigma -0.038
01/02 02/10 03/23 05/02 06/13 07/24 09/05 10/17 11/24 12/28 02/05 03/05 04/11 05/18 06/26 08/02 09/12 10/24 12/03 01/14 02/24 04/05 05/12 06/19 07/28 09/09 10/20 11/25 12/29 02/02 03/06 04/14 05/24 07/06 08/16 09/25 11/06 12/12 01/25 03/08 04/15 05/27 06/27 08/08 09/21 10/31 12/06
DATE
PIC9A ALPHA EFF
CPM
11420
11298
11176
11054
10932
10810
10688
10566
10444
10322
+3 Sigma 11420
+2 Sigma 11200
Mean 10810
-2 Sigma 10400
-3 Sigma 10200
01/02 02/14 03/19 04/28 06/05 07/10 08/13 09/08 10/20 12/03 01/07 02/16 03/15 04/15 05/24 06/25 07/27 09/02 10/15 11/23 01/08 02/18 03/30 05/05 06/12 07/22 09/01 10/14 11/23 01/08 02/13 03/26 05/07 06/18 07/29 09/07 10/18 11/29 01/14 02/21 04/08 05/25 07/15 09/02 10/19 12/02 12/20
DATE
PIC9A ALPHA EFF Cross Talk
0.3
0.29
0.29
0.28
0.27
0.27
0.26
0.25
0.25
0.24
+3 Sigma 0.3
+2 Sigma 0.29
Mean 0.27
-2 Sigma 0.25
-3 Sigma 0.23
01/02 02/14 03/19 04/28 06/05 07/10 08/13 09/08 10/20 12/03 01/08 02/18 03/16 04/12 05/23 06/24 07/27 08/31 10/12 11/22 01/07 02/17 03/28 05/04 06/11 07/21 08/31 10/13 11/21 01/06 02/13 03/24 05/05 06/16 07/27 09/03 10/15 11/27 01/13 02/28 04/15 06/02 07/22 09/10 10/26 12/02
DATE
PIC9A BETA BKG
CPM
1.54
1.41
1.27
1.14
1
0.87
0.73
0.6
0.46
0.33
+3 Sigma 1.54
+2 Sigma 1.32
Mean 0.87
-2 Sigma 0.42
-3 Sigma 0.19
01/02 02/10 03/23 04/30 06/11 07/21 09/04 10/16 11/21 12/20 01/30 02/25 04/01 05/07 06/13 07/27 08/31 10/15 11/22 01/07 02/17 03/28 05/06 06/15 07/23 09/04 10/17 11/24 12/29 02/03 03/09 04/15 05/28 07/12 08/20 10/04 11/15 12/21 02/04 03/17 04/28 06/11 07/11 08/25 10/08 11/14 12/20
DATE
● Denotes Outlier

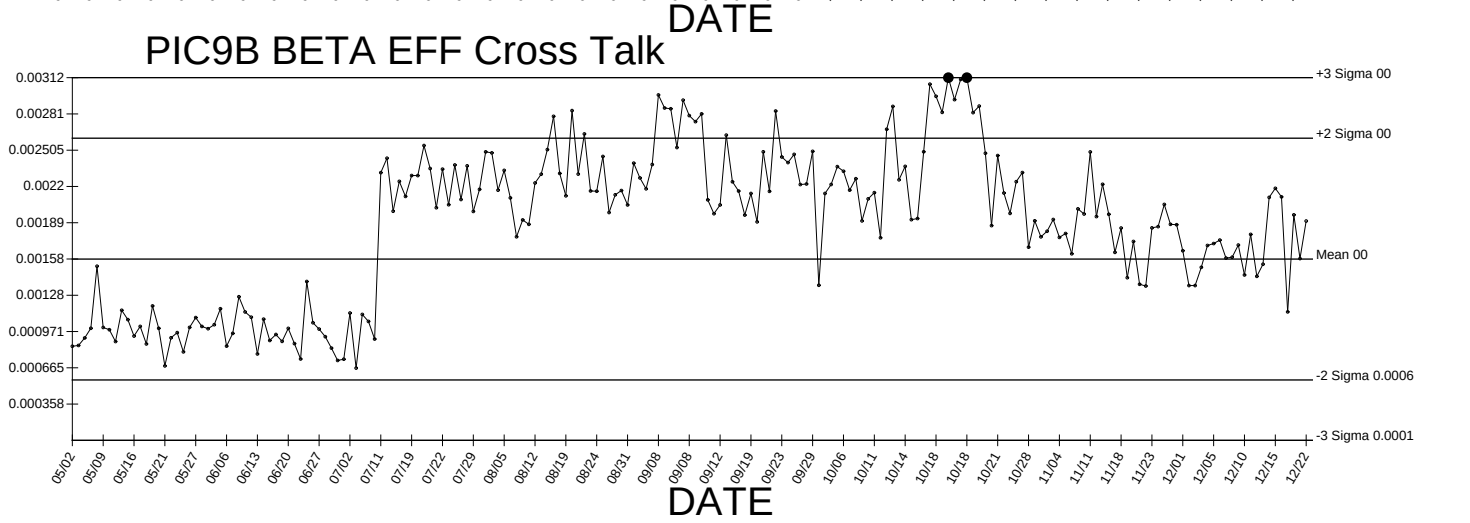




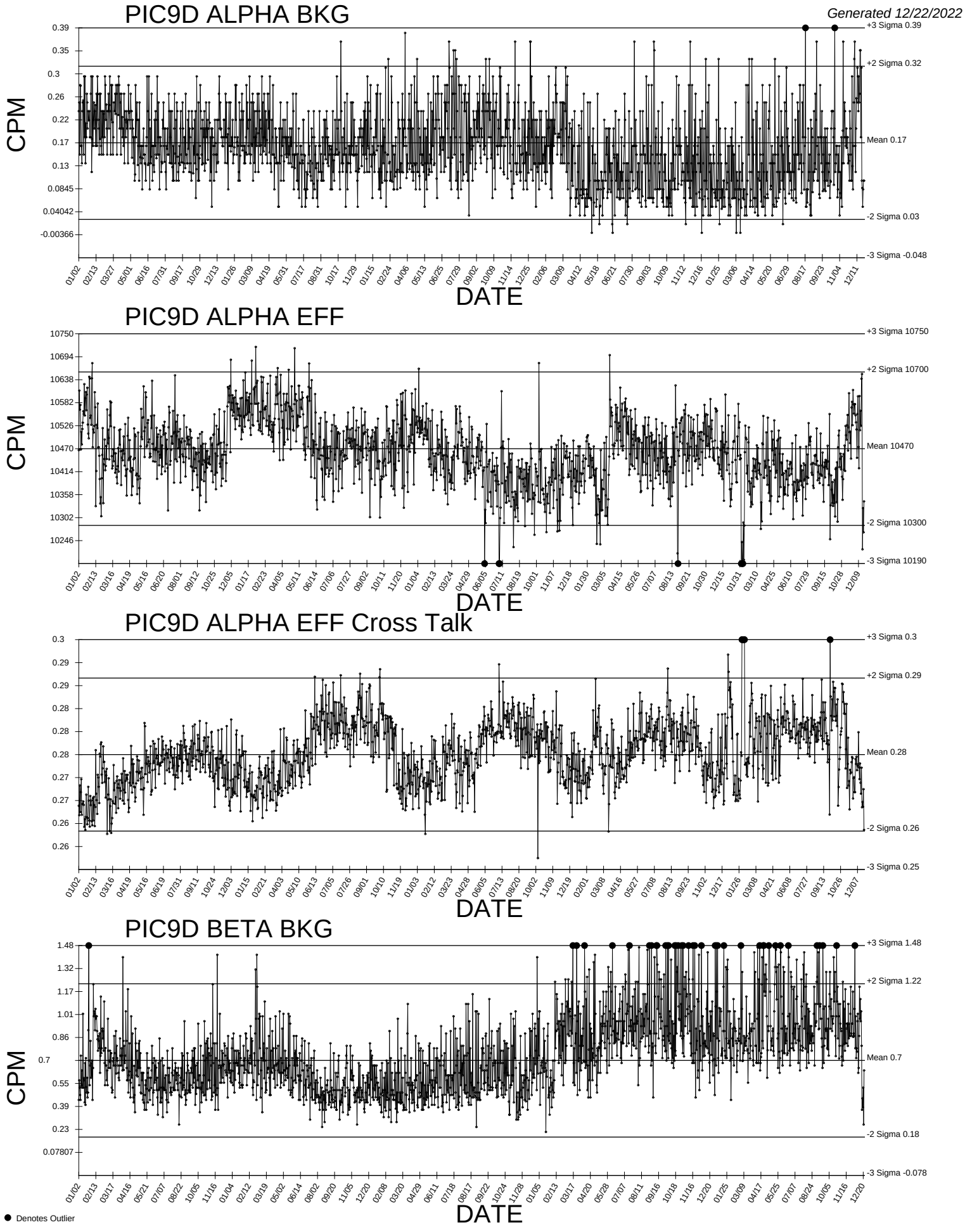
● Denotes Outlier

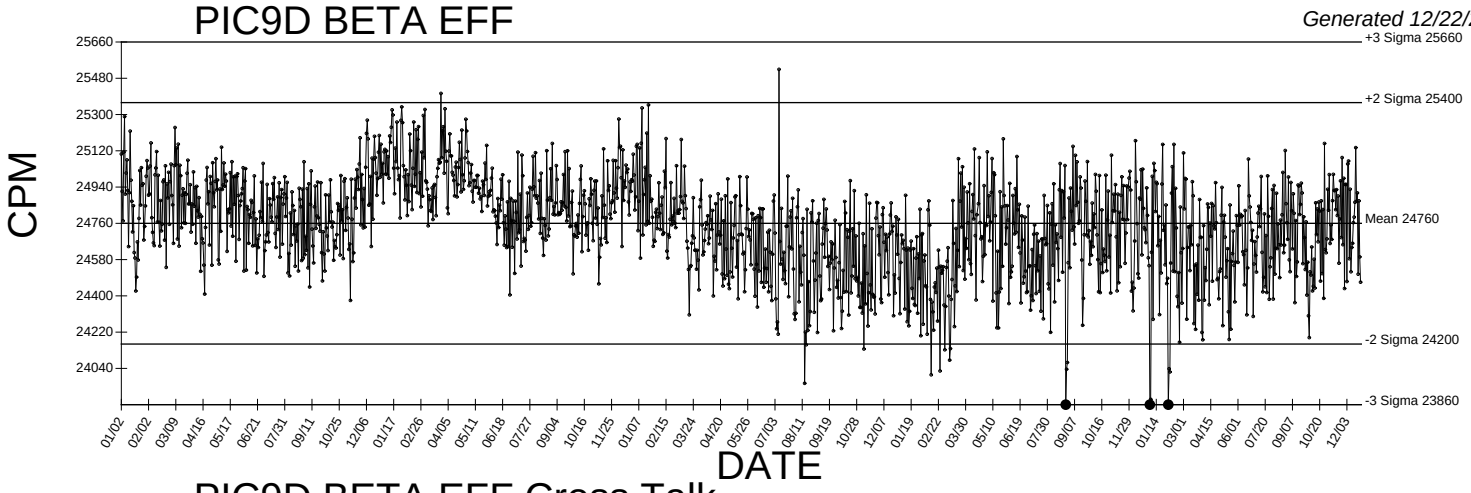

PIC9B ALPHA BKG
Generated 12/22/2022
CPM
DATE
+3 Sigma 0.31
+2 Sigma 0.24
Mean 0.1
-2 Sigma -0.045
-3 Sigma -0.115
PIC9B ALPHA EFF
+3 Sigma 12590
+2 Sigma 12419
Mean 12080
-2 Sigma 11741
-3 Sigma 11570
PIC9B ALPHA EFF Cross Talk
+3 Sigma 0.29
+2 Sigma 0.29
Mean 0.28
-2 Sigma 0.27
-3 Sigma 0.27
PIC9B BETA BKG
+3 Sigma 2.16
+2 Sigma 1.76
Mean 0.96
-2 Sigma 0.16
-3 Sigma -0.242
● Denotes Outlier

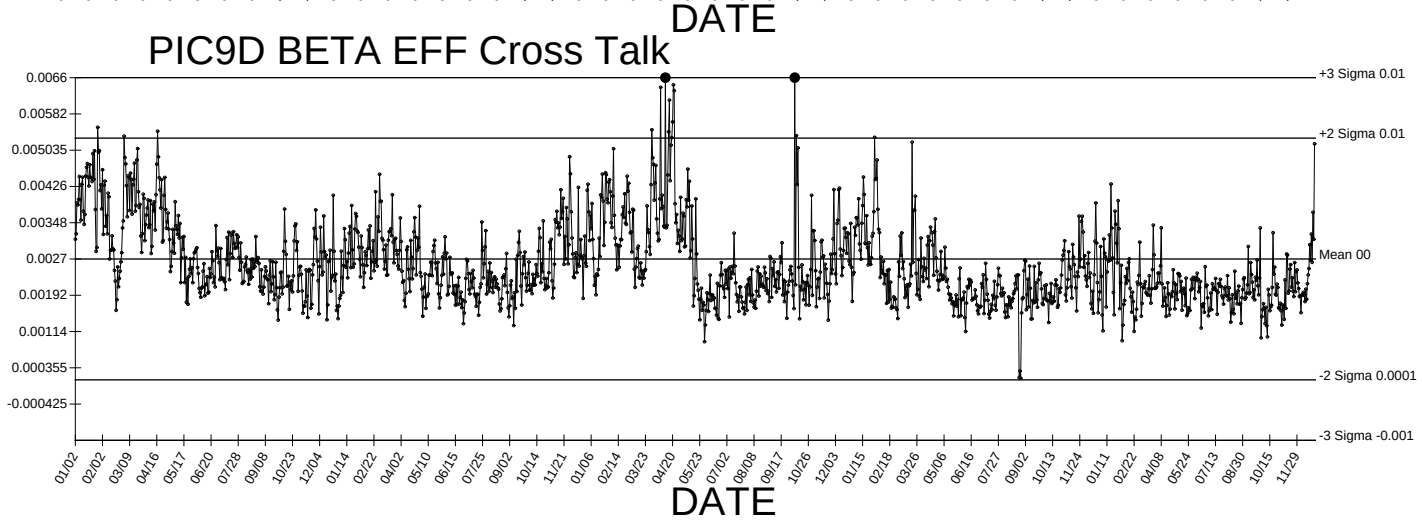




● Denotes Outlier


PIC9D ALPHA BKG
Generated 12/22/2022
CPM
DATE
+3 Sigma 0.39
+2 Sigma 0.32
Mean 0.17
-2 Sigma 0.03
-3 Sigma -0.048
PIC9D ALPHA EFF
+3 Sigma 10750
+2 Sigma 10700
Mean 10470
-2 Sigma 10300
-3 Sigma 10190
PIC9D ALPHA EFF Cross Talk
+3 Sigma 0.3
+2 Sigma 0.29
Mean 0.28
-2 Sigma 0.26
-3 Sigma 0.25
PIC9D BETA BKG
+3 Sigma 1.48
+2 Sigma 1.22
Mean 0.7
-2 Sigma 0.18
-3 Sigma -0.078
● Denotes Outlier





● Denotes Outlier

RAD Standards Traceability

National Institute of Standards & Technology

1951

Certificate

Standard Reference Material® 4251d

Received 3-31-20

Barium-133 Radioactivity Standard

This Standard Reference Material (SRM) consists of a solution of a standardized and certified quantity of radioactive Barium-133 in a suitably stable and homogeneous matrix. It is intended primarily for the calibration of instruments that are used to measure radioactivity and for the monitoring of radiochemical procedures. A unit of SRM 4251d consists of approximately 5 mL of a solution, whose composition is specified in Tables 1 and 2, contained in a flame-sealed borosilicate-glass ampoule [1].

The certified **Barium-133** massic activity, at a **Reference Time of 1200 EST, 13 July 2018**, is:

(382.6 ± 4.6) kBq•g^{-1}.

A NIST certified value, as used within the context of this certificate, is a value for which NIST has the highest confidence in its uncertainty assessment. It is a "measurement result" [2] obtained directly or indirectly from a "primary reference measurement procedure" [3]. The certified value is traceable to the derived SI unit, becquerel (Bq).

Additional physical, chemical, and radiological properties for this SRM, as well as details on the standardization method, are given in Tables 1 and 2. Uncertainties for the certified quantities are expanded ($k = 2$). The uncertainties are calculated according to the ISO/JCGM and NIST Guides [4,5]. Table 3 contains a specification of the components that comprise the uncertainty analysis.

Expiration of Certification: The certification of **SRM 4251d** is valid indefinitely, within the measurement uncertainty specified, provided that the SRM is handled and stored properly and that no evaporation or change in composition has occurred. The solution matrix, in an unopened ampoule, is homogeneous and stable within its half-life-dependent useful lifetime provided the SRM is handled in accordance with instructions given in this certificate (see "Instructions for Use and Handling"). Periodic recertification of this SRM is not required. The certification is nullified if the SRM is damaged, contaminated, or otherwise modified.

Maintenance of Certification: NIST will monitor this SRM over the period of its certification. If substantive technical changes occur that affect the certification before the expiration of this certificate, NIST will notify the purchaser. Registration (see attached sheet or register online) will facilitate notification.

Radiological and chemical hazard: Consult the Safety Data Sheet (SDS), enclosed with the SRM shipment, for radiological and chemical hazard information.

This SRM was prepared by the NIST Physical Measurement Laboratory, Radiation Physics Division, under the direction of B.E. Zimmerman, Group Leader of the Radioactivity Group. Overall technical direction and physical measurement leading to certification were provided by R. Fitzgerald, R. Collé and L. Laureano-Pérez of the NIST Radiation Physics Division, Radioactivity Group. Photon-emitting-impurity analyses were provided by L. Pibida of the NIST Radiation Physics Division, Radioactivity Group.

Support aspects involved in the issuance of this SRM were coordinated through the NIST Office of Reference Materials.

James M. Adams, Chief
Radiation Physics Division

Gaithersburg, Maryland 20899
Certificate Issue Date: 17 October 2019

Steven J. Choquette, Director
Office of Reference Materials

GL-CED-297-2944

Page 2022 of 2059 SDG: 2023-289

Table 1. Certified Massic Activity of SRM 4251d

Radionuclide	**Barium-133**
Reference time	**1200 EST, 13 July 2018**
Massic activity of the solution	**382.6 kBq•g^{-1}**
Relative expanded uncertainty (k = 2)	**1.2 %**[a]

[a] The uncertainties on certified values are expanded uncertainties, $U = ku_c$. The quantity u_c is the combined standard uncertainty calculated according to the ISO and NIST Guides [4, 5]. The combined standard uncertainty is multiplied by a coverage factor of k = 2 and was chosen to obtain an approximate 95 % level of confidence.

Table 2. Uncertified Information of SRM 4251d

Source description	Liquid in a flame-sealed 5 mL borosilicate-glass ampoule [1]
Solution composition	88 µg•g^{-1} Ba^{+2} in 0.98 mol•L^{-1} HCl
Solution density	(1.015 ± 0.002) g•mL^{-1} at 22.6 °C[a]
Solution mass	(5.063 ± 0.003) g[a]
Photon-emitting impurities	None detected[b]
Half-lifes used [6]	^{133}Ba: (10.539 ± 0.006) a[c]
Calibration methods (and instruments)	The certified massic activity for ^{133}Ba was obtained by 4π (e, X) - γ(NaI) live-timed anti-coincidence (LTAC) counting. Confirmatory measurements were performed by five other methods: (i) 4παβ liquid scintillation (LS) spectrometry (with ^{3}H standard efficiency tracing for β efficiencies) and two counters; (ii) 4παβ liquid scintillation (LS) spectrometry (with ^{55}Fe standard efficiency tracing for β efficiencies) and two counters; (iii) an LS-based 4παβ triple-to-double coincidence ratio (TDCR) method; (iv) 4πγ ionization chamber measurements using NIST chamber "A"; and (v) HPGe γ-ray spectrometry.[d]

[a] The stated uncertainty is two times the standard uncertainty [5].

[b] The estimated limits of detection for photon-emitting impurities, expressed as massic photon emission rates (numbers of photons per second per gram), are:
336 s^{-1}•g^{-1} for energies between 15 keV and 95 keV,
150 s^{-1}•g^{-1} for energies between 100 keV and 280 keV,
276 s^{-1}•g^{-1} for energies between 285 keV and 370 keV,
142 s^{-1}•g^{-1} for energies between 380 keV and 400 keV,
16 s^{-1}•g^{-1} for energies between 410 keV and 1430 keV,
24 s^{-1}•g^{-1} for energies between 1440 keV and 1480 keV, and
13 s^{-1}•g^{-1} for energies between 1490 keV and 2000 keV,
provided that the photons are separated in energy by 4 keV or more from photons emitted in the decay of ^{133}Ba.

[c] The stated uncertainty is the standard uncertainty. See reference 6.

[d] The expanded (k = 2) uncertainties for the five confirmatory methods were: (i) 2.4 %; (ii) 2.4 %; (iii) 1.2 %; (iv) 1.6 %; and (v) 1.7 %, respectively. All of the confirmatory measurements agreed with the certified value within their respective measurement uncertainties. The results for methods (iii) and (iv) agreed with the certified anti-coincidence value to better than 0.2 %.

Page 2023 of 2059 SDG: 2023-289

GI-CED-797-2446

Table 2. Uncertainty evaluation for the massic activity of SRM 4251d

	Uncertainty component	Assessment Type[a]	Relative standard uncertainty contribution on massic activity of ^{133}Ba (%)
1	Measurement repeatability; standard deviation of the distribution for 6 samples, each measured once	A	0.35
2	Background; estimated by half the difference of using the middle background measurement rather than the background measurement closest in time to each sample measurement	A	0.06
3	Extrapolation fit; median uncertainty on least-squares intercept value for a single set of γ-ray gates	A	0.05
4	Analysis model, standard deviation between extrapolation intercept for two gate settings	A	0.46
5	Dead time; from previous systematic studies	B	0.1
6	Gravimetric (mass) measurements; includes uncertainty on average sample mass and dilution to SRM solution. From previous systematic studies.	B	0.05
7	^{133}Ba decay corrections; from DDEP half-life of ^{133}Ba of (10.539 ± 0.006) a	B	0.00004
8	Impurity limit, from limit (no impurities seen) from γ-ray spectrometry	A	0.04
Relative combined standard uncertainty			**0.60**
Relative expanded uncertainty (k = 2)			**1.2**

[a] Letter A denotes evaluation by statistical methods; B denotes evaluation by other methods.

SDG: 2023-289
Page 2024 of 2059

CJ-CED-297-249

INSTRUCTIONS FOR USE AND HANDLING

Storage: SRM 4251d should be stored and used at a temperature between 5 °C and 65 °C. The ampoule (or any subsequent container) should always be clearly marked as containing radioactive material.

Handling: If the ampoule is transported, it should be packed, marked, labeled, and shipped in accordance with the applicable national, international, and carrier regulations. The solution in the ampoule is a dangerous good (hazardous material) because of both the radioactivity and the strong acid. The ampoule should be opened only by persons qualified to handle both radioactive material and alkaline and/or acidic solutions. Appropriate shielding and/or distance should be used to minimize personnel exposure. Refer to the SDS for further information.

REFERENCES

[1] NIST Physical Measurement Laboratory; *Storage and Handling of Radioactive Standard Reference Materials, Ampoule Specifications and Opening Procedure*; available at https://www.nist.gov/pml/radiation-physics/ampoule-specifications-and-opening-procedure (accessed Oct 2019). Note: This SRM is contained in the standard NIST ampoule.

[2] JCGM 200:2012; *International Vocabulary of Metrology - Basic and General Concepts and Associated Terms (VIM)*; (2008 version with Minor Corrections), 3rd edition; Joint Committee for Guides in Metrology (JCGM): BIPM, Sevres Cedex, France; p. 19 (2012); available at https://www.bipm.org/utils/common/documents/jcgm/JCGM_200_2012.pdf (accessed Oct 2019).

[3] JCGM 200:2012; *International Vocabulary of Metrology - Basic and General Concepts and Associated Terms (VIM)*; (2008 version with Minor Corrections), 3rd edition; JCGM: BIPM, Sevres Cedex, France; p. 18 (2012); available at https://www.bipm.org/utils/common/documents/jcgm/JCGM_200_2012.pdf (accessed Oct 2019).

[4] JCGM 100:2008; *Guide to the Expression of Uncertainty in Measurement*; (GUM 1995 with Minor Corrections), JCGM: BIPM, Sevres Cedex, France (2008); available at https://www.bipm.org/utils/common/documents/jcgm/JCGM_100_2008_E.pdf (accessed Oct 2019).

[5] Taylor, B.N.; Kuyatt, C.E.; *Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results*; NIST Technical Note 1297, U.S. Government Printing Office: Washington, DC (1994); available at https://www.nist.gov/pml/nist-technical-note-1297 (accessed Oct 2019).

[6] Chechev, V.P. and N.K. Kuzmenko ; *LNE-LNHB/CEA Table of Radionuclides*, ^{133}Ba; (October 2016); available at www.lnhb.fr/nuclides/Ba-133_tables.pdf (accessed Oct 2019).

Users of this SRM should ensure that the certificate in their possession is current. This can be accomplished by contacting the SRM Program at: telephone (301) 975-2200; fax (301) 948-3730; e-mail srminfo@nist.gov; or via the Internet at https://www.nist.gov/srm.

GL-CFD-297-244d

Standard Logbook

Serial ID:	1951	**Open/Reference Date:**	13 JUL 2018	**Aliquot :**	5.063 g
Name:	Barium-133	**Received:**	31 MAR 2020	**Density :**	Hand Calculated g/mL
Type:	Source Material	**Expires:**	31 MAR 2035	**Logbook Num :**	GL-CED-297-244
Employee:	Tim Chandler			**Lot Number :**	4251d
Supplier:	NIST			**Solvent :**	0.98M HCl
				Uncertainty :	.6 percent

Description: Barium-133

Comments: None

Analyte	Concentration	Analyte	Concentration
Barium-133	382.6 kBq/g		

Standard Traceability Log Rad

Source Material Info	
Parent Code:	1951
Prepared By:	Tim Chandler
Carrier Conc:	0.98M HCl
Reference Date:	07/13/2018
Ampoule Mass (g):	5.063 g
Uncertainty:	+/- .6 %
LogBook No:	GL-CED-297-244
Supplier:	NIST

A Solution Material Info			
Isotope:	Barium-133		
Prepared By:	Bethany Fiem		
Prep Date:	09/23/2020		
Verification Date:	09/16/2021		
Expiration Date:	09/16/2022		
Primary Code:	1951-A		
Dilution(mL):	100 mL		
Mass of Parent(g):	5.034 g		
Density(g/mL):	1.0167	Balance ID:	B733529066

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (kBq/g)) * (conversion dpm to kBq) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (kBq/g)) * (conversion dpm to kBq) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(5.034 g) * (382.6 kBq/g) * (60000 dpm/kBq) / (100 mL) = 1155605.0400 dpm/mL
(5.034 g) * (382.6 kBq/g) * (60000 dpm/kBq) / (1.0167 g/mL) / (100 mL) = 1136603.3060 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
09/23/2020	Bethany Fiem	19.301	1000	1951-B	21937.5804 dpm/mL	09/16/2021	09/16/2022
09/16/2021	Bethany Fiem	19.02	1000	1951-C	21618.1948 dpm/mL	09/16/2021	09/16/2022
06/02/2022	Jennie Kill-Bowden	19.0813	1000	1951-D	21687.8687 dpm/mL	06/03/2022	06/02/2023

GEL Laboratories LLC
Version 1.0 9/18/2000

Verification for Ba-133 Standard 1951-D

v1.0.2

Instrument	Purple
Analyst	JXK3
Verification Prep Date	6/2/2022

Standard Information	
Isotope	Ba-133
Serial Number	1951-D
Isotope Halflife	3.8410E+03 D
Reference Date	7/13/2018
Ref. Act. (DPM/mL)	21687.8687
Amount of Std. (mL)	1.0
Standard Prep Date	6/2/2022

Std #	Count Date	Quench Number	Gross cpm	Bkg cpm
1	6/3/2022	104.40	13752.00	42.40
2	6/3/2022	104.90	13833.33	42.40
3	6/3/2022	104.10	13909.33	42.40

Std #	Net cpm	Calculated Avg. Eff.	Standard dpm/mL	Measured dpm
1	13709.60	0.826295	16591.66	16591.66
2	13790.93	0.826295	16690.09	16690.09
3	13866.93	0.826295	16782.07	16782.07

	dpm/mL
Mean Value =	16687.94
Stdev =	95.22033877
Certificate Value* =	**16782.2**
Two sigma =	190.441
10 % of Mean =	1668.794
Rule A (Pass/Fail)	**Pass**
% Recovery	99.44%
Rule B (Pass/Fail)	**Pass**
Expiration Date	**6/2/2023**

Verification Rules

Rule A = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.

Rule B = The determined mean value shall be within 5% of the certificate value.

*** Certificate Value is decay corrected to Count Date.**

The analyst prepared three standard verification sources for Ba-133 source 1951-D by transferring 1 mL portions of the standard into glass liquid scintillation vials. 10 mL of Ecoscint Ultra liquid scintillation cocktail was added to each vial and the vials were shaken to mix. A Blank vial was prepared in a similar fashion using 10 mL of Ecoscint Ultra liquid scintillation cocktail. The standard verification vials and background source were dark adapted for at least two hours and counted on LSCPurple for Ba-133 source standard verification. The Ba-133 efficiency calibration which was used for verification calculations was performed on 6/2/2022 using Ba-133 source 1601-A.

Standard results for each verification source was calculated as follows:

Source dpm/mL = (A - B)/(C)(D)

where:

A = Ver. source cpm,
B = BKG cpm,
C = System efficiency (cpm/dpm), and
D = volume used for standard verification.

RAD-M-001

Eckert & Ziegler Analytics, Inc.
1380 Seaboard Industrial Blvd.
Atlanta, GA 30318, USA
Tel 1-404-352-8677
Fax 1-404-352-2837

Eckert & Ziegler
Analytics

1952

akkreditiert durch die / *accredited by the*

Deutsche Akkreditierungsstelle GmbH

DAkkS Deutsche Akkreditierungsstelle D-K-19023-01-00

als Kalibrierlaboratorium im / *as calibration laboratory in the*

Deutschen Kalibrierdienst

DKD

Kalibrierschein
Calibration certificate

Kalibrierzeichen
Calibration mark

001391
D-K-19023-01-00
2020-05

Gegenstand *Object*	**5 mL Liquid in Flame Sealed Ampoule**
Hersteller *Manufacturer*	**Eckert & Ziegler Analytics, Inc.**
Typ *Type*	**8328-5FSA-3700BQ-D**
Fabrikat/Serien-Nr. *Serial number*	**114436**
Auftraggeber *Customer*	**GEL Laboratories LLC**
Auftragsnummer *Order No.*	**CO-046016**
Anzahl der Seiten des Kalibrierscheines *Number of pages of the certificate*	**2**
Datum der Kalibrierung *Date of calibration*	**01-May-2020 1200 EST (1700 UTC)**

Dieser Kalibrierschein dokumentiert die Rückführung auf nationale Normale zur Darstellung der Einheiten in Übereinstimmung mit dem Internationalen Einheitensystem (SI).
Die DAkkS ist Unterzeichner der multilateralen Übereinkommen der European co-operation for Accreditation (EA) und der International Laboratory Accreditation Cooperation (ILAC) zur gegenseitigen Anerkennung der Kalibrierscheine.
Für die Einhaltung einer angemessenen Frist zur Wiederholung der Kalibrierung ist der Benutzer verantwortlich.
This calibration certificate documents the traceability to national standards, which realize the units of measurement according to the International System of Units (SI).
The DAkkS is signatory to the multilateral agreements of the European co-operation for Accreditation (EA) and of the International Laboratory Accreditation Cooperation (ILAC) for the mutual recognition of calibration certificates.
The user is obliged to have the object recalibrated at appropriate intervals.

Dieser Kalibrierschein darf nur vollständig und unverändert weiterverbreitet werden. Auszüge oder Änderungen bedürfen der Genehmigung sowohl der Deutschen Akkreditierungsstelle GmbH als auch des ausstellenden Kalibrierlaboratoriums. Kalibrierscheine ohne Unterschrift haben keine Gültigkeit.
This calibration certificate may not be reproduced other than in full except with the permission of both the Deutsche Akkreditierungsstelle GmbH and the issuing laboratory. Calibration certificates without signature are not valid.

Datum *Date*	Leiter des Kalibrierlaboratoriums *Head of the colibration laboratory*	Bearbeiter *Person in charge*
22-Apr-20	Levan Tkavadze	Karlee Eardley

GL-CED-287-245a
~~GL-RED-A-245a~~

001391
D-K-19023-01-00
2020-05

- **Customer Purchase Order No.**:
  GEL2025843, Item 1

- **Calibration Results**:

Nuclide	Half-Life *, d	Activity, Bq	Uncertainty, %	Calibration Method
Ra-228	2.100E+03	3.319E+03	4.9	HPGe

- **Calibration Method(s)**:
  This standard radionuclide source was prepared gravimetrically from a master solution calibrated by Eckert & Ziegler Analytics using a germanium gamma-ray spectrometer system (HPGe).

- **Uncertainty**:
  The uncertainty stated is the expanded uncertainty obtained by multiplying the standard uncertainty by the coverage factor $k = 2$. It has been determined in accordance with EA-4/02 M. The value of the measurand lies within the assigned range of values with a probability of approximately 95%. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

- **Traceability**:
  Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 2, July 2007, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST."

- **Impurities**:
  γ-impurities (other than decay products) < 0.1 %

- **Expiration Date**:
  No expiration date has been given for this source.

- **Wipe Test ***:
  This source was wipe tested in its inactive areas with leak test results < 185 Bq (5 nCi) of removable activity per ISO 9978:1992.

- **Additional Information**:
  - 5.00384 g of 0.1 M HCl solution with approximately 30 µg/g Ba carrier.
  - Separation date: 01-March-2018
  - *Values not calibrated by EZA (i.e. published nuclear data, uncertified values, etc.)
  - Date of Calibration corresponds to Reference Date for this source.
  - Expiration Date refers to useful life of this source.

End of Certificate

GL-CED-297-2456

Standard Logbook

Serial ID:	1952	**Open/Reference Date:**	01 MAY 2020	**Aliquot :**	5.00384 g
Name:	Radium-228	**Received:**	01 MAY 2020	**Density :**	Hand Calculated
Type:	Source Material	**Expires:**	01 MAY 2035	**Logbook Num :**	GL-CED-297-245
Employee:	Tim Chandler			**Lot Number :**	114436
Supplier:	Eckert & Zeigler			**Solvent :**	0.1M HCl
				Uncertainty :	2.45 percent

Description: Radium-228

Comments: None

Analyte	Concentration	Analyte	Concentration
Radium-228	3319 Bq		

Standard Traceability Log Rad

Source Material Info	
Parent Code:	1952
Prepared By:	Tim Chandler
Carrier Conc:	0.1M HCl
Reference Date:	05/01/2020
Ampoule Mass (g):	5.00384 g
Uncertainty:	+/- 2.45 %
LogBook No:	GL-CED-297-245
Supplier:	Eckert & Zeigler

A Solution Material Info			
Isotope:	Radium-228		
Prepared By:	Jennie Kill-Bowden		
Prep Date:	05/27/2020		
Verification Date:	08/05/2022		
Expiration Date:	08/04/2023		
Primary Code:	1952-A		
Dilution(mL):	100 mL		
Mass of Parent(g):	4.958 g		
Density(g/mL):	1.0281	Balance ID:	B733529066

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (Bq)) * (conversion dpm to Bq) / (Ampoule Mass(g) *(Dilution Vol)) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (Bq)) * (conversion dpm to Bq) / Density / (Ampoule Mass (g) * (Dilution Vol)) = Parent Activity (dpm/g)
(4.958 g) * (3319 Bq) * (60 dpm/Bq) / (5.00384 g * 100 mL) = 1973.1569 dpm/mL
(4.958 g) * (3319 Bq) * (60 dpm/Bq) / (1.0281 g/mL)/ (5.00384 g * 100 mL) = 1919.2771 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
08/10/2022	Jennie Kill-Bowden	31.236	100	1952-B	599.5054 dpm/mL	08/10/2022	08/09/2023

GEL Laboratories LLC
Version 1.0 9/18/2000

Verification for Ra-228 Standard 1952-B

v1.0.2

Instrument	BROWN
Analyst	JXK3
Verification Prep Date	8/9/2022

Standard Information	
Isotope	Ra-228
Serial Number	1952-B
Isotope Halflife	5.7500 Y
Reference Date	5/1/2020
Ref. Act. (DPM/mL)	599.5054
Amount of Std. (mL)	1.0
Standard Prep Date	8/9/2022

Std #	Count Date	Quench Number	Gross cpm	Bkg cpm
1	8/10/2022	96.80	3714.81	41.20
2	8/10/2022	98.80	3700.36	41.20
3	8/10/2022	98.60	3773.96	41.20

Std #	Net cpm	Calculated Avg. Eff.	Standard dpm/mL	Measured dpm
1	3673.61	8.004187	458.96	458.96
2	3659.16	8.004187	457.16	457.16
3	3732.76	8.004187	466.35	466.35

	dpm/mL
Mean Value =	460.82
Stdev =	4.872045215
Certificate Value* =	**455.7**
Two sigma =	9.744
10 % of Mean =	46.082
Rule A (Pass/Fail)	**Pass**
% Recovery	101.12%
Rule B (Pass/Fail)	**Pass**
Expiration Date	**8/9/2023**

Verification Rules

Rule A = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.

Rule B = The determined mean value shall be within 5% of the certificate value.

*** Certificate Value is decay corrected to Count Date.**

The analyst prepared three standard verification sources for Ra-228 source 1952-B by transferring 1 mL portions of the standard into glass liquid scintillation vials. 10 mL of Ecoscint Ultra liquid scintillation cocktail was added to each vial and the vials were shaken to mix. A Blank vial was prepared in a similar fashion using 10 mL of Ecoscint Ultra liquid scintillation cocktail. The standard verification vials and background source were dark adapted for at least two hours and counted on LSCBROWN for Ra-228 source standard verification. The Ra-228 efficiency calibration which was used for verification calculations was performed on 8/9/2022 using Ra-228 source 1965-A.

Standard results for each verification source was calculated as follows:

Source dpm/mL = (A - B)/(C)(D)

where:

A = Ver. source cpm,
B = BKG cpm,
C = System efficiency (cpm/dpm), and
D = volume used for standard verification.

RAD-M-001

Lois Brown 8/10/22
5/10/2022

Runlogs

Instrument Run Log

Instrument Type: GFPC **Batch ID: 2358072**

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
1205274775	MB	JE1	PIC9A	DEC-22-22 08:19:50	DONE	25mm Filter	01-JUN-22 00:00
1205274777	MS	JE1	PIC7C	DEC-22-22 08:19:58	DONE	25mm Filter	01-JUN-22 00:00
1205274778	LCS	JE1	PIC9B	DEC-22-22 08:20:03	DONE	25mm Filter	01-JUN-22 00:00
604449002	SAMPLE	JE1	PIC7D	DEC-22-22 08:20:11	DONE	25mm Filter	01-JUN-22 00:00
604449006	SAMPLE	JE1	PIC9D	DEC-22-22 08:20:15	DONE	25mm Filter	01-JUN-22 00:00
604449010	SAMPLE	JE1	PIC10D	DEC-22-22 08:20:22	DONE	25mm Filter	01-JUN-22 00:00
604449014	SAMPLE	JE1	PIC7A	DEC-22-22 08:20:33	DONE	25mm Filter	01-JUN-22 00:00
604449018	SAMPLE	JE1	PIC7B	DEC-22-22 08:20:37	DONE	25mm Filter	01-JUN-22 00:00
1205274776	DUP	JE1	PIC5B	DEC-22-22 10:33:58	DONE	25mm Filter	01-JUN-22 00:00

Lucas Cell Raw Data

Blank Correction Report

Batch ID 2358065

GEL ID	Sample Type	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1205274749	DUP	Radium-226	500 mL	0.711	0.214	0.454	.214	pCi/L	YES
1205274751	LCS	Radium-226	1000 mL	13.0	1.21	0.212	.107	pCi/L	NO
1205274748	MB	Radium-226	1000 mL	0.107	0.0941	0.327	.107	pCi/L	YES
1205274750	MS	Radium-226	103 mL	106	10.6	2.35	1.03883495	pCi/L	NO
604449002	SAMPLE	Radium-226	500 mL	0.326	0.194	0.625	.214	pCi/L	YES
604449006	SAMPLE	Radium-226	501 mL	0.483	0.209	0.588	.213572854	pCi/L	YES
604449010	SAMPLE	Radium-226	505 mL	0.887	0.281	0.672	.211881188	pCi/L	YES
604449014	SAMPLE	Radium-226	501 mL	0.375	0.213	0.675	.213572854	pCi/L	YES
604449018	SAMPLE	Radium-226	501 mL	0.363	0.150	0.386	.213572854	pCi/L	YES

Batch 2358065 Check-list

This check-list was completed on 22-DEC-22 by Elizabeth Krouse

This batch was reviewed by Elizabeth Krouse on 22-DEC-22 and Lyndsey Pace on 22-DEC-22.

Batch ID: 2358065

Product: LUC26RAL

Description: Lucas Cell Radium 226 GL-RAD-A-008

#	Criteria	Yes	No	Comments
Preparation Information				
1	Were all of the samples homogenous? Include sample description if not homogenous		No	
2	Was the preservation correct for this analysis?	Yes		
Internal Checklist Information				
3	Are instrument source checks within limits?	Yes		
4	Has an Aliquot Correction been completed for this batch?		No	
5	Have sample historical results been reviewed for this batch?	Yes		
Technical Information				
6	Were all the samples prepared/analyzed within the required holding time period?	Yes		
7	Are any sample results more negative than 3xTPU?		No	
Quality Control (QC) Information				
8	Was the method blank (MB) within the acceptance criteria?	Yes		
9	Is the blank result less than 1.65 times the CSU?	Yes		
10	Is the blank result less than the decision level? Use the results greater than CL report to check.	Yes		
11	Were the laboratory control sample (LCS/LCSD) recoveries within the acceptance limits?	Yes		
12	Were the matrix spike (MS/MSD) recoveries within the acceptance limits?	Yes		
13	Were the relative percent differences and/or error (RPD/RER) between the sample and its duplicate within acceptable limits?	Yes		
14	Has the method required detection limit been met?	Yes		
Miscellaneous Information				
15	Are sample-specific MDA/MDC calculated and reported?	Yes		

Prep Logbook

Radium−226 in Liquid

Batch ID: **2358065**
Analyst: Lyndsey Pace (LXP1)
Method: EPA 903.1 Modified
Lab SOP: GL−RAD−A−008 REV# 15
Instrument: LUCAS−C202389980

Due Dates for Lab: 21−DEC−2022 **Package: 23−DEC−2022** **SDG: 23−DEC−2022**

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1205274751	Radium−226 SPIKE	1715−G	.1	mL
MS	1205274750	Radium−226 SPIKE	1715−G	.1	mL

#	Sample ID	Prep Date	Min RDL (pCi/L)	Unadjusted Aliquot (g)	Aliquot (mL)	End Degas (date)	CELL #	End Transfer (date)	Start Count Time (date)	Background Counts	Total Counts
1	604449002	19−DEC−2022	1	500.07	500.07	12/19/22 09:00	104	12/22/22 06:39	12/22/22 09:50	5	12
2	604449006	19−DEC−2022	1	501.49	501.49	12/19/22 09:00	201	12/22/22 06:39	12/22/22 09:50	5	16
3	604449010	19−DEC−2022	1	505.18	505.18	12/19/22 09:00	308	12/22/22 06:39	12/22/22 09:50	6	25
4	604449014	19−DEC−2022	1	500.85	500.85	12/19/22 09:00	407	12/22/22 06:39	12/22/22 09:50	6	14
5	604449018	19−DEC−2022	1	501.41	501.41	12/19/22 09:00	502	12/22/22 06:39	12/22/22 09:50	2	11
6	1205274748 MB	19−DEC−2022	1		1000	12/19/22 09:00	601	12/22/22 06:39	12/22/22 09:50	7	12
7	1205274749 DUP (604449002)	19−DEC−2022	1	500.09	500.09	12/19/22 09:00	706	12/22/22 06:39	12/22/22 09:51	2	17
8	1205274750 MS (604449002)	19−DEC−2022	1	103.07	103.07	12/19/22 09:00	801	12/22/22 06:39	12/22/22 09:51	3	501
9	1205274751 LCS	19−DEC−2022	1		1000	12/19/22 09:00	107	12/22/22 07:06	12/22/22 10:23	2	593

Reagent/Solvent Lot ID	Description	Amount

Comments:
Data Entry Date2: 19−DEC−2022 00:00

Radium-226 Liquid

Filename : RA226.XLS
File type : Excel
Version # : 1.3.2

Batch : 2358065
Analyst : LIN01615
Prep Date : 12/19/2022
Ra-226 Method Uncertainty : 0.073648

Procedure Code : LUC26RAL
Parmname : Radium-226
Required MDC : 1 pCi/L
Halflife of Ra-226 : 1600 years
Ra-226 Abundance : 1.00
Halflife of Rn-222: 3.8235 days

Batch counted on : LUCAS CELL DETECTOR
BKG Count time : 30 min

Sample Characteristics					Count Raw Data							
Pos.	Sample ID	Sample Aliquot L	Sample Aliquot StDev. L	Sample Date/Time	Cell Number	Counting Time (min.)	Gross Counts	Gross CPM	Background Counts	Background CPM	Background Count Time (min.)	Cell Efficiency (cpm/dpm)
1	604449002.1	0.5001	2.0256E-05	12/14/2022 9:28	104	30	12	0.400	5	0.167	30	1.6160
2	604449006.1	0.5015	2.0262E-05	12/14/2022 9:36	201	30	16	0.533	5	0.167	30	1.7110
3	604449010.1	0.5052	2.0277E-05	12/14/2022 9:35	308	30	25	0.833	6	0.200	30	1.5970
4	604449014.1	0.5009	2.0259E-05	12/14/2022 13:01	407	30	14	0.467	6	0.200	30	1.6030
5	604449018.1	0.5014	2.0262E-05	12/14/2022 13:12	502	30	11	0.367	2	0.067	30	1.8630
6	1205274748.1	1.0000	2.0399E-05	12/19/2022 0:00	601	30	12	0.400	7	0.233	30	1.7610
7	1205274749.1	0.5001	2.0256E-05	12/14/2022 9:28	706	30	17	0.567	2	0.067	30	1.5900
8	1205274750.1	0.1031	1.1557E-05	12/14/2022 9:28	801	30	501	16.700	3	0.100	30	1.7180
9	1205274751.1	1.0000	2.0399E-05	12/19/2022 0:00	107	30	593	19.767	2	0.067	30	1.6990

Pipet, 0.1 ml Stdev : +/-	0.000200	ml
Pipet, 0.5 ml Stdev : +/-	0.001000	ml
Pipet, 1 ml Stdev : +/-	0.002000	ml

Analytical SOP: GL-RAD-A-008
Instrument SOP: GL-RAD-I-007

Cell Efficiency Error (%)	Cell Calibration Date	Cell Calibration Due Date	De-Gas Date/Time	Rn-222 Ingrow End Date/Time	Count Start Date/Time	Rn-222 Corrections			
						De-Gas to Ingrowth	Ingrowth to Count	During Count	Ra-226 Decay
2.000%	4/28/2022	4/30/2023	12/19/2022 9:00	12/22/2022 6:39	12/22/2022 9:50	0.409	0.976	1.002	1.000
8.900%	8/1/2022	7/31/2023	12/19/2022 9:00	12/22/2022 6:39	12/22/2022 9:50	0.409	0.976	1.002	1.000
9.600%	10/25/2022	10/31/2023	12/19/2022 9:00	12/22/2022 6:39	12/22/2022 9:50	0.409	0.976	1.002	1.000
6.600%	2/1/2022	1/31/2023	12/19/2022 9:00	12/22/2022 6:39	12/22/2022 9:50	0.409	0.976	1.002	1.000
6.700%	6/1/2022	5/31/2023	12/19/2022 9:00	12/22/2022 6:39	12/22/2022 9:50	0.409	0.976	1.002	1.000
9.400%	7/1/2022	6/30/2023	12/19/2022 9:00	12/22/2022 6:39	12/22/2022 9:50	0.409	0.976	1.002	1.000
2.900%	11/1/2022	10/31/2023	12/19/2022 9:00	12/22/2022 6:39	12/22/2022 9:51	0.409	0.976	1.002	1.000
5.000%	4/1/2022	3/31/2023	12/19/2022 9:00	12/22/2022 6:39	12/22/2022 9:51	0.409	0.976	1.002	1.000
3.900%	4/28/2022	4/30/2023	12/19/2022 9:00	12/22/2022 7:06	12/22/2022 10:23	0.411	0.976	1.002	1.000

Notes:
1 - Results are decay corrected to Sample Date/Time
2 - Reference date for Spike Activity (dpm/ml) is the batch Prep Date
3 - Spike Nominals are decay corrected to Sample Date/Time

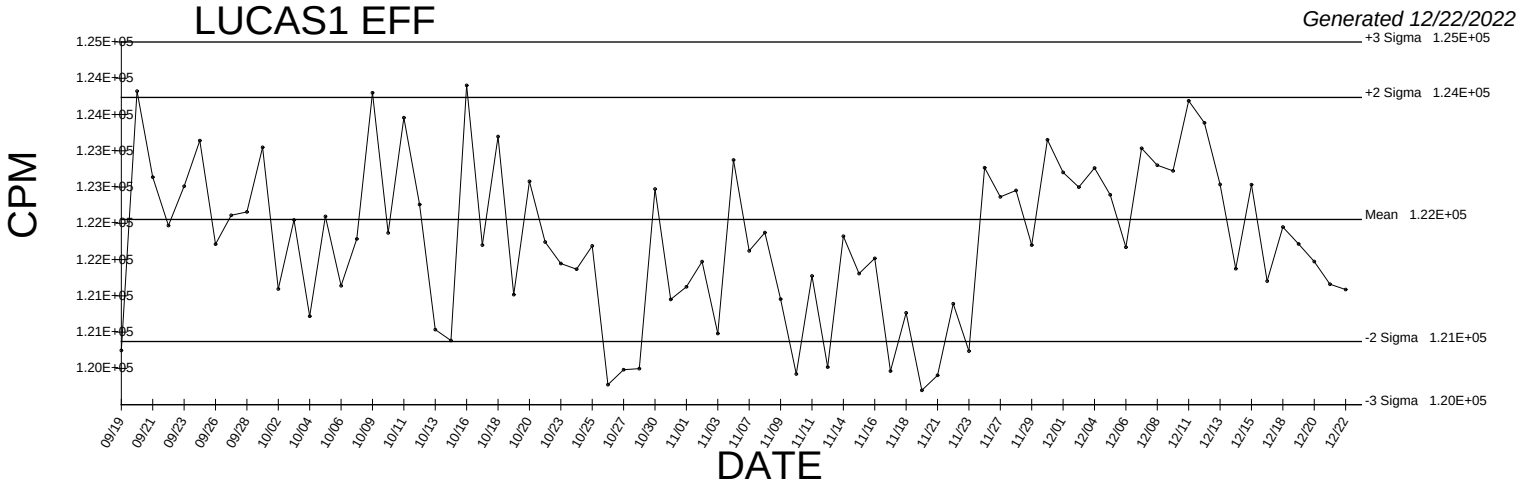
Spike S/N : 1715-G
Spike Exp Date : 9/8/2023
Spike Activity (dpm/ml): 297.46
Spike Volume Added: 0.10

LCS S/N : 1715-G
LCS Exp Date : 9/8/2023
LCS Activity (dpm/ml): 297.46
LCS Volume Added: 0.10

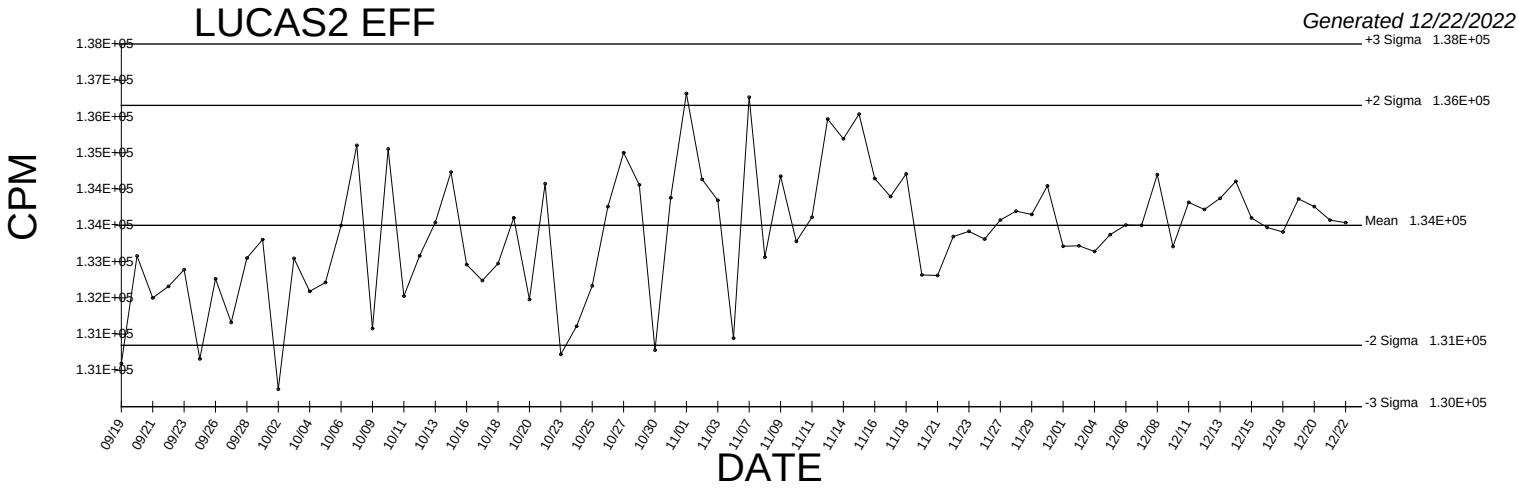
Results

Pos.	Decision Level pCi/L	Critical Level pCi/L	Required MDC pCi/L	MDC pCi/L	Sample Act. Conc. pCi/L	Sample Act. Error %	Net Count Rate CPM	Net Count Rate Error CPM	**1 SIGMA** Counting Uncertainty pCi/L	**1 SIGMA** Total Prop. Uncertainty pCi/L	Sample QC	Sample Type	RPD	RER	Nominal pCi/L	Recovery
1	0.3434	0.2425	1	0.6248	**0.3263**	58.94%	0.2333	0.1374	0.1922	0.1938		SAMPLE				
2	0.3234	0.2284	1	0.5884	**0.4829**	42.60%	0.3667	0.1528	0.2012	0.2088		SAMPLE				
3	0.3768	0.2661	1	0.6722	**0.8871**	30.84%	0.6333	0.1856	0.2600	0.2812		SAMPLE				
4	0.3787	0.2673	1	0.6754	**0.3753**	56.29%	0.2667	0.1491	0.2098	0.2131		SAMPLE				
5	0.1879	0.1327	1	0.3863	**0.3629**	40.62%	0.3000	0.1202	0.1454	0.1498		SAMPLE				
6	0.1865	0.1317	1	0.3275	**0.1069**	87.68%	0.1667	0.1453	0.0932	0.0941		MB				
7	0.2208	0.1559	1	0.4539	**0.7107**	29.20%	0.5000	0.1453	0.2065	0.2140	604449002.1	DUP	74.1%	0.4713		
8	1.2142	0.8572	1	2.3527	**105.9476**	6.73%	16.6000	0.7483	4.7761	10.5716	604449002.1	MS			130.0001	81.5%
9	0.1029	0.0726	1	0.2115	**13.0484**	5.68%	19.7000	0.8131	0.5386	1.2135		LCS			13.3990	97.4%

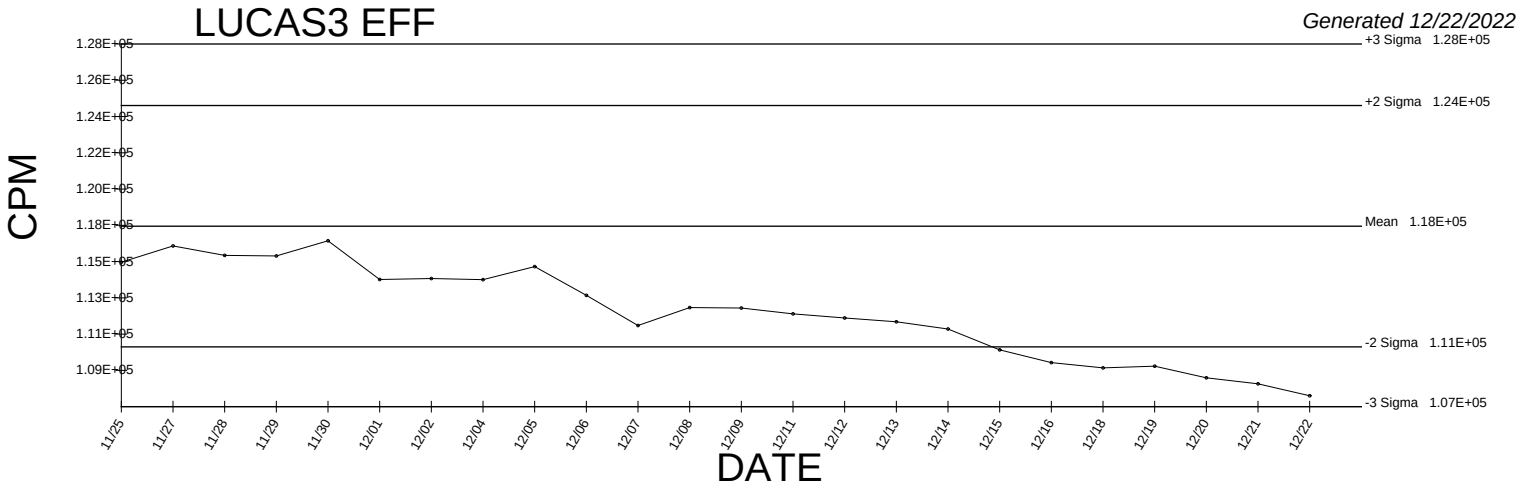
Efficiency Data



● Denotes Outlier



● Denotes Outlier



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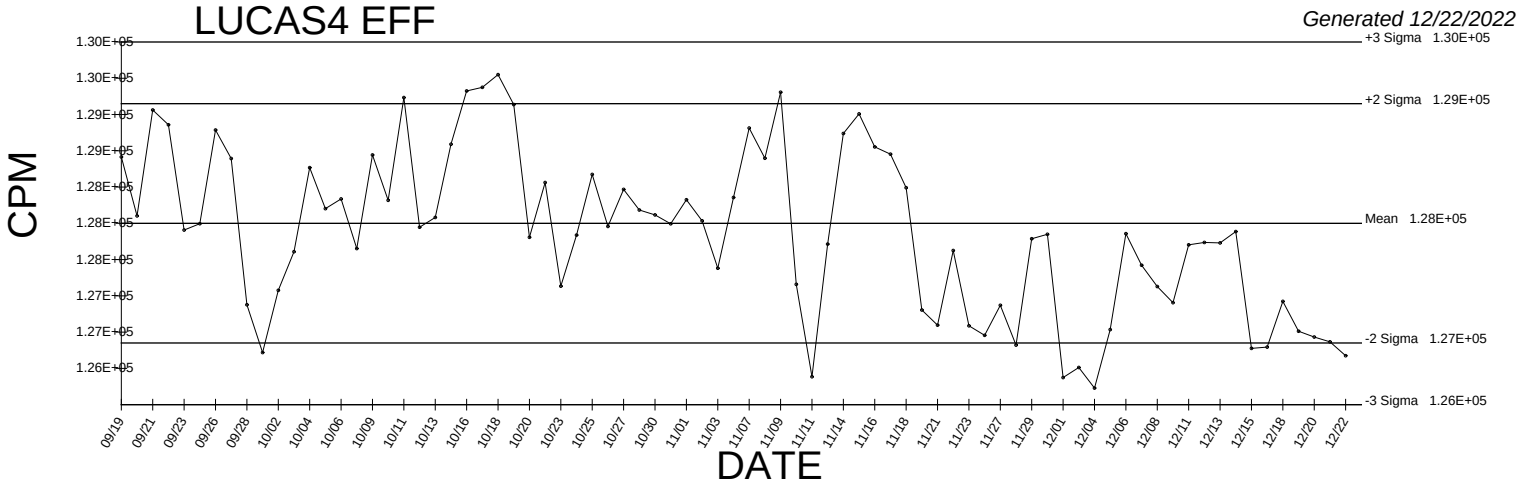

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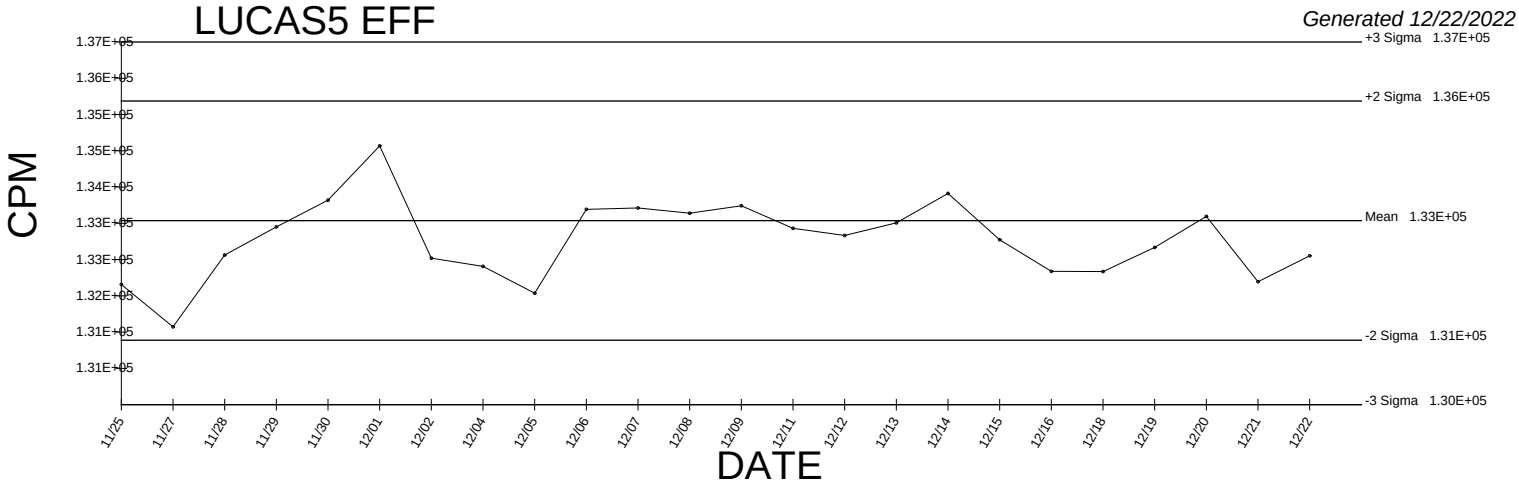

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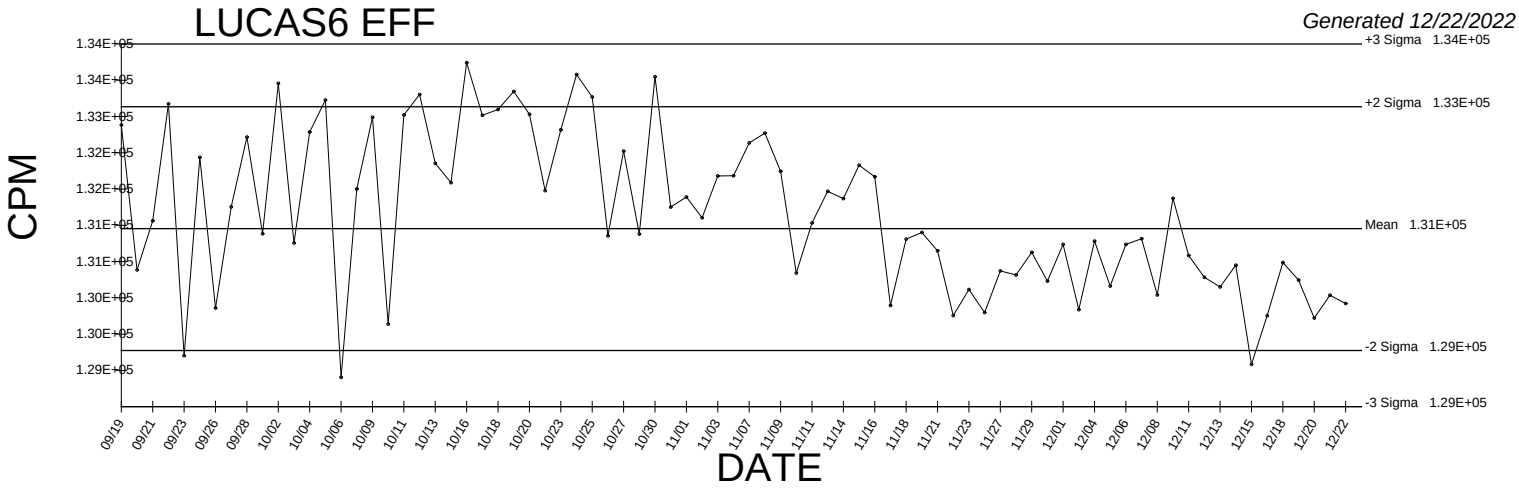

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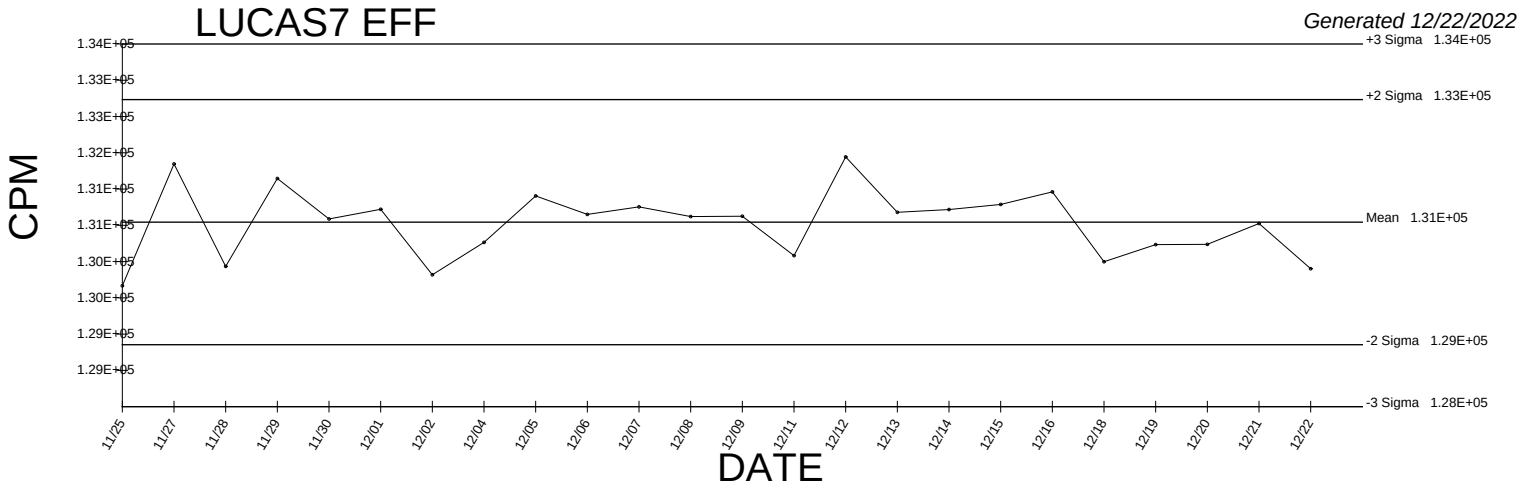
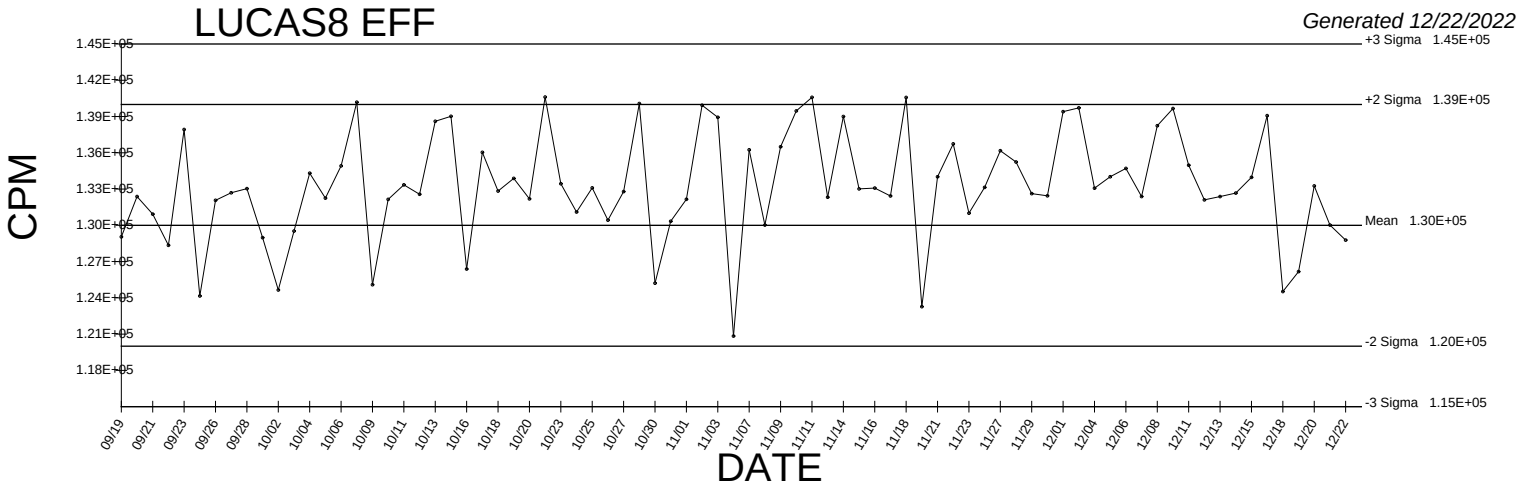


● Denotes Outlier



● Denotes Outlier

RAD Standards Traceability

Eckert & Ziegler
Analytics

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318
Tel 404·352·8677
Fax 404·352·2837
www.analyticsinc.com

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

17.5

98367

Ra-226 5 mL Liquid in Flame Sealed Vial

Customer: GEL Laboratories, LLC
P.O. No.: GEL 1408580, Item 7 Product Code: 8226

This standard radionuclide source was prepared gravimetrically from a master solution calibrated by Eckert & Ziegler Analytics, using a germanium gamma spectrometer system. Radionuclide purity and calibration were checked by germanium gamma-ray spectrometry, liquid scintillation counting, and/or alpha spectrometry, as applicable. The nuclear decay rate and reference date for this source are given below. Eckert & Ziegler Analytics (EZA) maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Revision 2, July 2007, and compliance with ANSI N42.22-1995, "Traceability of Radioactive Sources to NIST." EZA is accredited by the Health Physics Society (HPS) for the production of NIST-traceable sources, and this source was produced in accordance with the HPS accreditation requirements. Customers may report any concerns with the accreditation program to the HPS Secretariat, 1313 Dolley Madison Blvd., Ste. 402, McLean, VA 22101.

Isotope	Half-Life, Days	Activity (Bq)	Uncertainty* , % Type u_A	u_B	U	Reference Date (12:00 PM EST)
Ra-226	5.844E+05	3.676E+04	1.0	2.1	4.7	09/09/2014

***Uncertainty:** U - Relative expanded uncertainty, k = 2. See NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results."

Comments:
Impurities: γ-impurities (other than decay products)<0.1%.
5.02193 g 0.1M HCl solution with approximately 30 µg/g Ba carrier.

Source Prepared by: R. Ormsby
R. Ormsby, Radiochemist

QC Approved: L. Tk
L. Tkavadze, Nuclear Metrologist

Date: 9 Sep 14

RECEIVED 9/10/14

ACCREDITED SOURCE CALIBRATION LABORATORY HEALTH PHYSICS SOCIETY FOUNDED 1956

Corporate Office
24937 Avenue Tibbitts Valencia, California 91355

Laboratory
1380 Seaboard Industrial Blvd. Atlanta, Georgia, 30318

Standard Logbook

Serial ID:	1715	**Open/Reference Date:**	09 SEP 2014	**Aliquot :**	5.02193 g
Name:	Radium-226	**Received:**	10 SEP 2014	**Density :**	Hand Calculated
Type:	Source Material	**Expires:**	11 SEP 2115	**Logbook Num :**	GL-CED-297-008
Employee:	Gregory Ramsay			**Lot Number :**	98367
Supplier:	Eckert & Ziegler			**Solvent :**	0.1M HCl
				Uncertainty :	2.35 PERCENT

Description: ampule

Comments: None

Analyte	Concentration	Analyte	Concentration
Radium-226	36760 Bq		

Standard Traceability Log Rad

Source Material Info	
Parent Code:	1715
Prepared By:	Gregory Ramsay
Carrier Conc:	0.1M HCl
Reference Date:	09/09/2014
Ampoule Mass (g):	5.02193 g
Uncertainty:	+/- 2.35 %
LogBook No:	GL-CED-297-008
Supplier:	Eckert & Ziegler

A Solution Material Info			
Isotope:	Radium-226		
Prepared By:	Gregory Ramsay		
Prep Date:	07/06/2016		
Verification Date:	09/15/2021		
Expiration Date:	09/15/2022		
Primary Code:	1715-A		
Dilution(mL):	100 mL		
Mass of Parent(g):	4.9865 g		
Density(g/mL):	0.9967	Balance ID:	C31514

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (Bq)) * (conversion dpm to Bq) / (Ampoule Mass(g) *(Dilution Vol)) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (Bq)) * (conversion dpm to Bq) / Density / (Ampoule Mass (g) * (Dilution Vol)) = Parent Activity (dpm/g)
(4.9865 g) * (36760 Bq) * (60 dpm/Bq) / (5.02193 g * 100 mL) = 21900.3937 dpm/mL
(4.9865 g) * (36760 Bq) * (60 dpm/Bq) / (0.9967 g/mL)/ (5.02193 g * 100 mL) = 21972.4854 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
07/06/2016	Gregory Ramsay	2.6261	200	1715-B	288.51 dpm/ml	01/25/2017	11/10/2018
02/08/2017	Gregory Ramsay	21.96	250	1715-C	1930.063 dpm/ml	02/08/2017	02/08/2018
12/19/2017	Gregory Ramsay	2.63	200	1715-D	288.938 dpm/ml	01/22/2021	01/22/2022
06/17/2019	Gregory Ramsay	2.7402	200	1715-E	301.045 dpm/ml	12/03/2021	12/21/2022
01/03/2020	Bethany Fiem	.9865	100	1715-F	216.758568 dpm/mL	01/03/2020	01/03/2021
09/14/2021	Gregory Ramsay	3.3966	250	1715-G	298.527 dpm/mL	09/08/2022	09/08/2023
04/22/2022	Matelon DeFreese	.5052	200	1715-H	55.502498 dpm/mL	05/04/2022	05/04/2023

Verification for Ra-226 Standard 1715-G

v1.0.2

Instrument	BLUE
Analyst	GXR1
Verification Prep Date	9/8/2022

Standard Information	
Isotope	Ra-226
Serial Number	1715-G
Isotope Halflife	1.6000E+03 Y
Reference Date	9/9/2014
Ref. Act. (DPM/mL)	298.527
Amount of Std. (mL)	2.0
Standard Prep Date	9/14/2021

Std #	Count Date	Quench Number	Gross cpm	Bkg cpm
1	9/9/2022	64.70	807.20	14.60
2	9/9/2022	64.80	780.40	14.60
3	9/9/2022	65.00	837.90	14.60

Std #	Net cpm	Calculated Avg. Eff.	Standard dpm/mL	Measured dpm
1	792.60	1.287109	307.90	615.80
2	765.80	1.287109	297.49	594.98
3	823.30	1.287109	319.83	639.65

	dpm/mL
Mean Value =	308.40
Stdev =	11.17699926
Certificate Value* =	**297.5**
Two sigma =	22.354
10 % of Mean =	30.840
Rule A (Pass/Fail)	**Pass**
% Recovery	103.67%
Rule B (Pass/Fail)	**Pass**
Expiration Date	**9/8/2023**

Verification Rules

Rule A = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.

Rule B = The determined mean value shall be within 5% of the certificate value.

*** Certificate Value is decay corrected to Count Date.**

The analyst prepared three standard verification sources for Ra-226 source 1715-G by transferring 2 mL portions of the standard into glass liquid scintillation vials. 10 mL of Ecoscint Ultra liquid scintillation cocktail was added to each vial and the vials were shaken to mix. A Blank vial was prepared in a similar fashion using 10 mL of Ecoscint Ultra liquid scintillation cocktail. The standard verification vials and background source were dark adapted for at least two hours and counted on LSCBLUE for Ra-226 source standard verification. The Ra-226 efficiency calibration which was used for verification calculations was performed on 9/8/2022 using Ra-226 source 1926-A.

Standard results for each verification source was calculated as follows:

Source dpm/mL = (A - B)/(C)(D)

where:

A = Ver. source cpm,
B = BKG cpm,
C = System efficiency (cpm/dpm), and
D = volume used for standard verification.

RAD-M-001

9/13/2022

Runlogs

Instrument Run Log

Instrument Type: LUCAS CELL DETECTOR **Batch ID: 2358065**

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
604449002	SAMPLE	LXP1	LUCAS1	DEC-22-22 09:50:00	DONE	Lucas Cell	28-APR-22 00:00
604449006	SAMPLE	LXP1	LUCAS2	DEC-22-22 09:50:00	DONE	Lucas Cell	01-AUG-22 00:00
604449010	SAMPLE	LXP1	LUCAS3	DEC-22-22 09:50:00	DONE	Lucas Cell	25-OCT-22 00:00
604449014	SAMPLE	LXP1	LUCAS4	DEC-22-22 09:50:00	DONE	Lucas Cell	01-FEB-22 00:00
604449018	SAMPLE	LXP1	LUCAS5	DEC-22-22 09:50:00	DONE	Lucas Cell	01-JUN-22 00:00
1205274748	MB	LXP1	LUCAS6	DEC-22-22 09:50:00	DONE	Lucas Cell	01-JUL-22 00:00
1205274749	DUP	LXP1	LUCAS7	DEC-22-22 09:51:00	DONE	Lucas Cell	01-NOV-22 00:00
1205274750	MS	LXP1	LUCAS8	DEC-22-22 09:51:00	DONE	Lucas Cell	01-APR-22 00:00
1205274751	LCS	LXP1	LUCAS1	DEC-22-22 10:23:00	DONE	Lucas Cell	28-APR-22 00:00

ATTACHMENT A1507.A.b

Evaporative Sprayers

Hours of Operation

2022 Operational Data for SERF Spray Evaporators - Data entry

	Evap Sprayer #1 (SN 0053)		Evap Sprayer #2 (SN 0054)		Evap Sprayer #3 (SN 0055)		Evap Sprayer #4 (SN 0006)		Evap Sprayer #5 (SN 0008)		Evap Sprayer #6 (SN 9360)[1]	
Month	**Hours**	**Gallons**	**Hours**	**Gallons**	**Hours**	**Gallons**	**Hours**	**Gallons**	**Hours**	**Gallons**	**Hours**	**Gallons**
January	-	-	-	-	-	-	-	-	-	-	-	-
February	-	-	-	-	-	-	-	-	-	-	-	-
March	-	-	-	-	-	-	-	-	-	-	-	-
April	-	-	-	-	-	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-	-	-	-	-	-
June	-	-	672	288,977	-	-	-	-	-	-	-	-
July	-	-	-	-	-	-	-	-	-	-	-	-
August	-	-	-	-	-	-	-	-	-	-	-	-
September	-	-	-	-	-	-	-	-	-	-	-	-
October	-	-	-	-	-	-	-	-	-	-	-	-
November	-	-	-	-	-	-	-	-	-	-	-	-
December	-	-	-	-	-	-	-	-	-	-	-	-
Annual Totals	-	-	672	288,977	-	-	-	-	-	-	-	-

[1] Big Evaporative Sprayer #6 is offline and to be decomissioned, has been removed from pond.

Reviewed by: Vince Carretti 1/11/2023

ATTACHMENT A1507.B.

Evaporative Sprayers

Work Practice Standards

Maintenance and Repair Requirements and Records

SERF SIGMA BASINS EVAPORATOR PM LOG

UI-PROC-81-00-027-LOG

Date	Evaporator Number	Pond Number	Inspection		Cleaning	Performed By	Z#	Comments
			Damage? (Y/N)	Wear? (Y/N)				
1/27/2022	All Units	Land	N	Y	No	CB	280633	Normal Inspection. Waiting for components associated with CM work.
2/24/2022	All Units	Land	N	Y	No	CB	280633	Normal Inspection. Waiting for components associated with CM work.
3/31/2022	All Units	Land	N	Y	No	CB	280633	Normal Inspection. Waiting for components associated with CM work.
4/22/2022	All Units	Land	N	Y	No	CB	280633	Normal Inspection. Waiting for components associated with CM work.
6/10/2022	SN 0053	Land	N	Y	No	CB	280633	Repair work completed on 6-10-22. Unit placed online.
6/13/2022	SN 0054	Land	N	Y	No	CB	280633	Repair work completed on 6-10-22. Unit placed online.
7/20/2022	SN 0053	Land	N	Y	No	CB	280633	Offline due to electrical component failure.
7/20/2022	SN 0054	Land	N	Y	No	CB	280633	Offline due to electrical component failure.
8/24/2022	SN 0053	Land	N	Y	No	CB	280633	Offline due to electrical component failure.
8/24/2022	SN 0054	Land	N	Y	No	CB	280633	Offline due to electrical component failure.
10/1/2022	All Units	Land	N	Y	No	CB	280633	All units are offline and have been grounded and air gapped to prevent operations.

Utilities and Infrastructure	UIDO-PROC-81-00-027-R0

Operations Procedure

SERF Sigma Basin SMI 120F Evaporator Inspections

Review frequency 1 yr ☐ 2 yr ☐ 3 yr ☑

Issue date 08/23/21 **Next review** 08/23/24

Process Owner

Jared Hornberger	SERF Lead Operator	
Jared Hornberger	Digitally signed by Jared Hornberger Date: 2021.08.18 13:02:17 -06'00'	Z# 281223

Reviewed by

Randy Vigil	Water/Wastewater/Gas Operations Manager	
RANDY VIGIL (Affiliate)	Digitally signed by RANDY VIGIL (Affiliate) Date: 2021.08.23 13:25:04 -06'00'	Z# 210082

Reviewed by

Joshua Begay	SWWS/WWTF/SERF System Engineer	
JOSHUA BEGAY (Affiliate)	Digitally signed by JOSHUA BEGAY (Affiliate) Date: 2021.08.19 14:51:25 -06'00'	Z# 304395

ESH Review

Dianne Wilburn	ESHQSS-INT	
DIANNE WILBURN (Affiliate)	Digitally signed by DIANNE WILBURN (Affiliate) Date: 2021.08.20 13:53:56 -06'00'	Z# 121975

Approved by

Phillip Ulibarri	UI Operations Manager	
Phillip Ulibarri	Digitally signed by Phillip Ulibarri Date: 2021.08.23 08:29:48 -06'00'	Z# 152736

Derivative Classifier Review

James Liljenwall	Classification: VERIFIED UNCLASSIFIED	
James Liljenwall	Digitally signed by James Liljenwall Date: 2021.08.12 09:04:03 -06'00'	Z# 206614

History of Revisions

Document Number	Issue Date	Action
UIDO-PROC-81-00-027-R0	08/23/21	Review and reissue as Utilities & Infrastructure procedure. No changes.
UI-PROC-81-00-027-R1	06/18/18	Review and reissue. Minor changes.
UI-PROC-81-00-027-R0	06/01/18	New procedure.

Table of Contents

1 Purpose 5
2 Scope/Applicability 5
3 Prerequisites 5
4 Precautions and Limitations 5
5 Equipment, Supplies, etc. 6
6 Responsibilities 6
7 Work Steps 6
7.1 General Items 6
7.2 Perform Inspections 7
8 Records 7
9 Abbreviations, Acronyms, and Terms 8
10 References 8
11 Appendices and Attachments 8

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Utilities & Infrastructure
Operations Procedure

SERF Sigma Basin SMI 120F Evaporator Inspections

1 Purpose

The purpose of this procedure is to provide instructions for inspecting and removing scale and debris from SMI Evaporative Solutions 120F Floating Mechanical Evaporators used at SERF evaporation ponds at TA-60-0221/0222 on Sigma Mesa.

2 Scope/Applicability

1. The procedure includes inspecting evaporator housings and pump sleeves for scale, inspecting fan blades for wear, removing scale, removing obstructions, and cleaning evaporator pump static inlet filters.
2. Affected personnel: SERF Operations and other personnel

3 Prerequisites

1. Required training and qualifications:
   a. Utilities & Infrastructure (UIDO) procedures and work control processes
   b. Current procedure, equipment, supplies, etc.
   c. P101-3, Lockout/Tagout for Hazardous Energy Control
2. Pre-job briefing

4 Precautions and Limitations

1. Required Personal Protective Equipment (PPE)
   - Steel-toe safety shoes
   - Safety glasses with side shields
   - Personal floatation device
2. All procedure hazards, both task and site, must be addressed in accordance with UDO work control processes.
3. Refer to Integrated Work Document (IWD) for specific task and site hazards.
4. Lockout/tagout (LO/TO) must be performed per P101-3, Lockout/Tagout for Hazardous Energy Control.

5 Equipment, Supplies, etc.

1. Equipment, tools, instruments:
   - Pressure washer
   - Power generator
   - Pump
   - Flat and/or combination screwdriver
   - Hand tools
   - Flashlight

6 Responsibilities

1. Persons performing this procedure are responsible for –
   - Complying with its requirements
   - Notifying appropriate supervisory personnel of equipment damage or other conditions that could require corrective action
   - Issuing a PAUSE/STOP WORK order whenever warranted by conditions related to health or safety in accordance with P101-18, Procedure for Pause/Stop Work
2. Managers are responsible for ensuring procedure compliance.

7 Work Steps

7.1 General Items

1. Schedule performance of the procedure in coordination with SERF Operations.
   - Inform affected personnel when the inspection process is about to begin.
2. Make sure evaporators are operational.

   If an evaporator is out of service, record the following information in SERF Operator Log:
   - Reason out of service
   - Submitted Work Order/FSR number

     if MSS repair

7.2 Perform Inspections

Perform inspections yearly.

1. Turn evaporators OFF.
2. Apply LO/TO per P101-3, Lockout/Tagout for Hazardous Energy Control.
3. Remove evaporators from ponds using tethering cable.
    - Inspect cables for tear or excessive jacket wear.
4. Inspect exterior of evaporators for scale build-up.
    - Use pressure washer to remove scale.
5. Inspect fan blades for wear.
    - Note that the blades are not sharp.
    - Notify appropriate personnel of excessive wear.
6. Inspect pump sleeves through viewing port for obstructions and scale build-up.
    - Remove any obstructions.
    - Use pressure washer to remove scale.
7. Remove static inlet filters from pumps and clean them.
8. Reinstall cleaned static inlet filters.
9. Return evaporators and tethering cables where they came from in pond.
10. Remove LO/TO.
11. Turn evaporators ON and check for normal operation.
12. If a problem is found, immediately notify appropriate personnel so corrective action can be taken.

8 Records

Records generated as a result of implementing this procedure are maintained in accordance with the UI-DO records program.

9 Abbreviations, Acronyms, and Terms

Abbreviation, Acronym, or Term	Definition
ESH	Environment, Safety, and Health
IFDO, IF-DO	Institutional Facilities
IWD	Integrated Work Document
LO/TO	Lockout/tagout
PPE	Personal Protective Equipment
SERF	Sanitary Effluent Reclamation Facility
UIDO, UI-DO	Utilities & Infrastructure

10 References

P101-3, Lockout/Tagout for Hazardous Energy Control

11 Appendices and Attachments

None